

**Appropriate Assessment of the
Drogheda Borough Council Development Plan
2011-2017
in accordance with the requirements of
Article 6(3)
of the EU Habitats Directive**



**Economic Development
& Future Planning Unit**

Louth Local Authorities

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1.0 Executive Summary

This is an Appropriate Assessment - in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) of the Drogheda Development Plan 2011-2016. The Plan and the Material Amendments of this Plan have been evaluated to prepare an Appropriate Assessment. In accordance with the Methodological guidance on the provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, a screening matrix was undertaken and circulated to the environmental bodies. It was determined from the submissions received on this process and the Drogheda Development Plan 2011-2017 that an Appropriate Assessment was required.

The principal trigger for an Appropriate Assessment would be if the Plan were likely to have significant effects on a Natura 2000 site which include Special Areas of Conservation (SAC) and Special Protection Areas (SPA). The Plan has been formulated to ensure that uses, developments and effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) shall not give rise to significant adverse impacts on the integrity of any Natura 2000 sites, having regard to their conservation objectives. The screening process and this Appropriate Assessment was carried out not only on those sites contained within the plan area but also on those within 20km of the Plan area in accordance with best practice.

2.0 Introduction

2.1 Purpose of the EU Habitats Directive

The purpose of Article 6(3) of the EU Habitats Directive 92/43/EEC is to ensure that certain plans and programmes do not impact negatively on any Natura 2000 site. It states that a Habitats Directive Assessment (HDA) is required where a project or plan may give rise to significant effects upon a Natura 2000 site. An HDA is an evaluation, based on best scientific knowledge, by a person with ecological expertise, of the potential impacts of a Plan or scheme on the conservation objectives of any Natura 2000 site. This is understood to include Natura 2000 sites not situated in the area encompassed by the draft Plan or scheme which could potentially be impacted upon through ex-situ impacts. Best practice would indicate that sites lying within a 20km radius of the plan area should be included in the assessment. In the case of the Drogheda Development Plan 2011-2017 the assessment of impact must also encompass the Stabannan-Braganstown SPA and Clogherhead SAC. HDA should also develop, where necessary, mitigation or avoidance measures to prevent negative effects on a Natura 2000 site. The impacts assessed must include the indirect and cumulative impacts of approving the plan, considered with any current or proposed activities, developments or policies impacting on the site.

2.2 Legislation

The requirements for a Habitats Directive Assessment (HDA) are set out in the E.U. Habitats Directive 92/43/EEC. Articles 6(3) and 6(4) of this Directive state:

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

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

In addition, Article 10 of the Habitats Directive states that;

10 Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.

2.3 EU Birds Directive

The EU Birds Directive (Council Directive 79/409/EEC on the conservation of wild birds) is the EU's oldest piece of nature legislation and one of the most important. It created a comprehensive scheme of protection for all wild bird species naturally occurring in the Union. It was adopted unanimously by the Member States in 1979 as a response to increasing concern about the declines in Europe's wild bird populations resulting from pollution, loss of habitats as well as unsustainable use. It was also in recognition that wild birds, many of which are migratory, are a shared heritage of the Member States and that their effective conservation required international co-operation.

The directive recognises that habitat loss and degradation are the most serious threats to the conservation of wild birds. It therefore places great emphasis on the protection of habitats for endangered as well as migratory species (listed in Annex I), especially through the establishment of a coherent network of **Special Protection Areas (SPAs)** comprising all the most suitable territories for these species. Since 1994 all SPAs form an integral part of the NATURA 2000 ecological network.

2.4 EU Habitats Directive

The Habitats Directive (together with the Birds Directive) forms the cornerstone of Europe's nature conservation policy. It is built around two key factors which are the Natura 2000 network of protected sites and a strict system of species protection. The directive protects over 1000 animals and plant species and over 200 location based "habitat types" (e.g. special types of forests, meadows, wetlands, etc.), which are of European importance. The aim of the directive is *"to contribute towards ensuring biodiversity through the conservation of natural habitats of wild fauna and flora in the European territory of the Member States to which the treaty applies"*. Any actions taken must be designed to *"maintain or restore at a favourable conservation status natural habitats and species of wild fauna and flora of Community interest"*. The directive provides for the creation of protected sites known as **Special Areas of Conservation (SACs)** for a number of habitat types and certain species of flora and fauna. The Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations, SI 94/1997.

Article 6(3) of the Directive requires that an Appropriate Assessment (AA), or screening for Appropriate Assessment, be undertaken to determine the impact of plans and projects on Natura 2000 sites, which would include land use plans such as the Drogheda Borough Development Plan 2011-2016. The Department of the Environment Heritage and Local Government (DoEHLG) has prepared guidelines on the incorporation of the Habitats Directive Assessment including the Appropriate Assessment process into Irish plan making.

2.5 Strategic Environmental Assessment and Habitats Directive Assessment

The purpose of the SEA Directive (Directive 2001/42/EC of the European Parliament and of the Council on the Assessment of the Effects of certain Plans and Programmes on the Environment; June 2001) is to ensure that environmental consequences of certain plans and programmes are identified and assessed during their preparation and before their adoption and that the plans or programmes are modified where adverse impacts are likely and/or that appropriate mitigation measures are incorporated to alleviate potential impacts

It is a legal requirement that all land-use plans in Ireland comply with the provisions of both the SEA Directive and the Habitats Directive. The main difference between the two processes is the extent of focus of protection. The Habitats Directive Assessment process focuses on Natura 2000 sites while SEA has a wider scope on biodiversity and environmental issues arising from its proposed implementation, including impacts on other areas of importance for nature, including (proposed) Natural Heritage Areas and Nature Reserves and undesignated habitats and areas important for birds.

2.6 Methodology for Habitats Directive Assessment (HDA)

Stage 1: Screening

The process which identifies that likely impacts upon a Natura 2000 Site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage 2: Appropriate Assessment

The consideration of the impact of the project or plan on the integrity of the Natura 2000 Site, either alone or in combination with other projects or plans to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

Stage 3: Assessment of Alternative Solutions

The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site; and

Stage 4: Assessment where Adverse Impacts Remain

An assessment of compensatory measures where, in the light of an assessment of Imperative Reasons of Overriding Public Interest (IROPI), it is deemed that the project or plan should proceed.

Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 site, there is no requirement to proceed further.

3.0 Stage 1 – Screening Matrix

3.1 Introduction

The first stage is HDA Screening. The purpose of HDA Screening is to evaluate the effects of a project or plan, either alone or in combination with other projects or plans, upon a Natura 2000 site and determine whether it cannot be objectively shown that the plan will, or will not, have adverse impacts on the Natura 2000 site. The competent authority (i.e. Louth County Council) cannot approve the Plan unless it can be objectively shown that the Plan will not have adverse impacts on any Natura 2000 site.

The HDA Screening process was used to determine whether the Draft Drogheda Borough Development Plan 2011- 2017 and any material amendments were likely to have a significant effect on the conservation objectives of the relevant Natura 2000 sites. This process required an initial review of the Draft Plan in order to identify any policies or objectives within the Plan that may potentially impact upon the Natura sites.

3.2 Submissions on the Screening of the Appropriate Assessment and the Draft Drogheda Borough Development Plan 2011-2017.

The screening for an Appropriate Assessment was submitted to the Environmental agencies in tandem with the public consultation period for the draft Plan from the 18th of March to the 10th of June 2010.

- Department of Environment Heritage and Local Government
- Environmental Protection Agency
- Department for Communications, Energy and Natural Resources
- Eastern Regional Fisheries Board

The following environmental bodies responded with regard to the draft plan, environmental report and the screening for an Appropriate Assessment.

Environmental Protection Agency

The EPA stated in their submission that Appropriate Assessment Guidance should be included within the Plan

1. Buffer zones should be applicable for ecological sites and areas zoned for development especially Policy CH4.

Where feasible, buffer zones between designated Natura 2000 sites and surrounding development may be created. However, in many instances due to the prevailing topography, built environment and limited physical extent of the Boyne River corridor, it may not be possible to create such zones.

The following additional wording was inserted into Policy CH 4 to address EPA concerns:

“Where feasible and appropriate outside the core town area, buffer zones between Natura 2000 sites and surrounding development may be established.”

2. Appropriate Assessment Guidance should be included within the Plan.

Changes made to the Draft Drogheda Development Plan include additional policies and accompanying inserted in Chapter 8 Conservation and Heritage following Policy CH 4 & 5 This text and associated polices detailed an approach to Appropriate Assessment / Habitats Directive Assessment.

“The Habitats Directive requires that the impacts of any plans or projects likely to affect Natura 2000 sites are assessed by the planning authority. This process is known as Appropriate Assessment or Habitats Directive Assessment. Appropriate Assessment means an assessment, based on best scientific knowledge, of the potential impacts of a plan or project, wherever located, on the conservation objectives of any Natura 2000 site and the development, where necessary, of mitigation or avoidance measures to preclude negative effects. The impacts assessed must include the indirect and cumulative impacts of approving the plan or project. While the responsibility for carrying out appropriate assessment lies with the planning authority, applicants for planning permission must provide sufficient information with a planning application to enable the authority to complete the screening process and full appropriate assessment if screening cannot exclude significant effects on Natura 2000 sites. For projects requiring full appropriate assessment it is the responsibility of the project proponents to have a Statement for Appropriate Assessment prepared for submission to the planning authority as part of the planning application.

Drogheda Borough Council will consult with the Prescribed Bodies, and other Government agencies where appropriate, when considering plans or projects which are likely to affect Natura 2000 sites. In accordance with Article 6(3) of the Habitats Directive the Council will normally only grant permission in cases where it is clearly demonstrated that, a proposed development either individually, or in combination with other plans and projects, will not adversely affect the ecological integrity of a Natura 2000 site or sites. Following a finding that a proposed development will adversely affect the integrity of a Natura 2000 site, planning permission may only be granted in exceptional cases, in the absence of any alternatives, for imperative reasons of overriding public interest subject to the strict requirements of Article 6(4) of the Habitats Directive”.

Policy CH 4

“Ensure Screening for Appropriate Assessment and, where required, full Appropriate Assessment is carried out for any plan or project, which individually, or in combination with other plans and projects, is likely to have a significant direct or indirect impact on any Natura 2000 site or sites”.

Policy CH 5

“Ensure planning applications for proposed developments likely to have significant direct or indirect impacts on any Natura 2000 site or sites is accompanied by a Statement for Appropriate Assessment prepared in accordance with the Guidance issued by the Department of the Environment, Heritage and Local Government (Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, December 2009). Strictly protect areas designated or proposed to be designated area plans) or amendment/variation to it proposed under the Planning and Development Act 2000 (as amended) must be screened for any potential impact on areas designated as Natura 2000 sites [normally called Special Areas of Conservation (SACs) or Special Protection Areas (SPAs)].”

Minister of Environment Heritage and Local Government :

Submission:

1. Nature Conservation

Polices CH2, CH3, CH4 and RA 6 are welcomed. The Department has concerns that policies RA7 and TC11 would conflict with the aforementioned policies. The projects outlined in RA7 and RA11 may have significant impact upon biodiversity, protected species and Natura 2000 sites. The SEA and AA have not adequately assessed these issues.

Material amendments to the Draft plan included a change of wording of Policy RA 7 (Chapter 7, Recreation & Amenity, Section 7.1.9, The Boyne River) be amended to read:

“To investigate the potential of facilitating non invasive access to the River Boyne utilising, where feasible buffer zones between Natura 2000 sites and surrounding development Any proposals which might impinge upon the integrity of a Natura 2000 site shall ensure that a screening exercise for Appropriate Assessment is carried out. Where required, full Appropriate Assessment shall be carried out for any plan or project which, individually, or in combination with other plans or projects, is likely to have a significant direct or indirect impact on any Natura 2000 site”.

Submission:

1.0 It is the Departments opinion that the impact of Policies RA 7 and TC11 need to be assessed further in the SEA. In addition, in relation to the Appropriate Assessment (AA) screening prepared for the Plan, it has been concluded that appropriate assessment is not required. The statements in the screening matrix do not give adequate explanations as to why there will be no impacts. In order for the screening to be acceptable these must be backed up by fact and explained.

Changes to Draft Plan.

It was recommend that the wording of Policy TC 11 (Chapter 4, Town Centre, section 4.8, River Boyne Riverside Walkway p75) be amended. The following sentence was omitted from the Draft Plan:

“Any walkway proposal which impinges upon a Natura 2000 site must be the subject of an appropriate assessment”

And replaced by:

“Any walkway proposals which might impinge upon the integrity of a Natura 2000 site must ensure that a screening exercise for Appropriate Assessment is carried out. Where required, full Appropriate Assessment must be carried out for any plan or project which, individually, or in combination with other plans or projects, is likely to have a significant direct or indirect impact on any Natura 2000 site”.

2.0 In order to carry out Appropriate Assessments information about the relevant Natura 2000 sites including their conservation objectives need to be collected.

It is accepted that the conservation objectives of the relevant Natura 2000 sites is included in the Appropriate Assessment and in response to the screening with the Department of Environment, Heritage and Local Government it was proceeded to Stage 2 of the Appropriate Assessment.

3.3 Submissions on the Report for the proposed Material Amendments to the Draft Drogheda Borough Development Plan 2011-2017.

The Report on the proposed Material Amendments was submitted to the environmental agencies during the public consultation period which extended from the 27th October 2010 to the 24th November 2010. 11no. Submissions were received within the statutory timeframe.

Environmental Protection Agency

On the 22nd November 2010 a submission was received from the EPA. The EPA were broadly satisfied with the alterations made to the draft Plan but stated that Policy DS7 in relation to permitting new Seveso sites should be amended to ensure that an appropriate Environmental Impact Assessment (EIA) and AA are required when considering the same. Policy DS7 was subsequently amended to read:

“Any proposed development of new Seveso sites will be subject to an appropriate Environmental Impact Assessment (EIA) as necessary under the prevailing legislation for such sites”.

The EPA also raised concerns regarding flooding, re-zoning of land, phasing and the requirement for an SEA information statement. These issues were addressed in the Manager Report on the submissions to the Proposed Material Amendments.

National Parks and Wildlife Section

On the 23rd November 2010 a submission was received from the National Parks and Wildlife Section, they had no comment to make aside from two issues. One was concerning the addition of an Architectural Conservation Area and the other was with regard to the SEA and AA screening report for the proposed material alterations. It was requested that the aforementioned reports be forwarded to the National Parks and Wildlife Section. The SEA and AA screening reports were forwarded to the National Parks and Wildlife Section on the 6th December 2010, to date no response has been received.

4.0 Stage 2 – Natura Impact Statement

4.1 Determination of Appropriate Assessment

Stage 1 of the Appropriate Assessment stage was undertaken as a screening exercise of the Draft Drogheda Borough Development Plan 2011-2017. The Screening of the Appropriate Assessment was on public display with the Draft Plan and the Environmental Report. The above two submissions were received from the Environmental Protection Agency and the Department of Environment, Heritage and Local Government relating to the Appropriate Assessment. It was determined, following these submissions, which the Council would proceed to Stage 2 of the Appropriate Assessment on the draft Plan with the material amendments as per public consultation. The “Appropriate Assessment of Plans and Projects in Ireland- Guidance for Planning Authorities” indicates that Stage 2 of the Appropriate Assessment includes investigates if there will be any adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects.

During this stage of the Appropriate Assessment a Natura Impact Statement is included. This is a report of a targeted professional scientific examination of the plan or project and the relevant Natura 2000 sites, to identify and characterise any possible implications for the site in view of the sites conservation objectives, taking account of in combination effects. This feeds into the undertaking of the Appropriate Assessment. If the assessment is negative the process must proceed to Stage 4. This Natura Impact Assessment (NIS) provides support for the Appropriate Assessment.

4.2 Natura 2000 Sites

Introduction

There are two types of EU designated sites adjacent to the town; these comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). EU law requires planning authorities to have regard to the integrity and conservation objectives of these sites when considering development proposals in their vicinity. There are two SAC sites in the vicinity of Drogheda Borough designated under the Habitats Directive on the conservation of natural habitats and wild flora and fauna and one SPA designated under an EU Directive on the conservation of wild birds. Beyond the plan area there is one SPA within the County of Louth. Best practice dictates that sites lying within 20km of any plan area which may be impacted through the implementation of the plan or programme should also be included within the screening procedure.

A summary of each of the designated site is outlined in the following sub sections below and each site is discussed with respect to the HDA.

Map 1 : County Louth Natura 2000 sites.

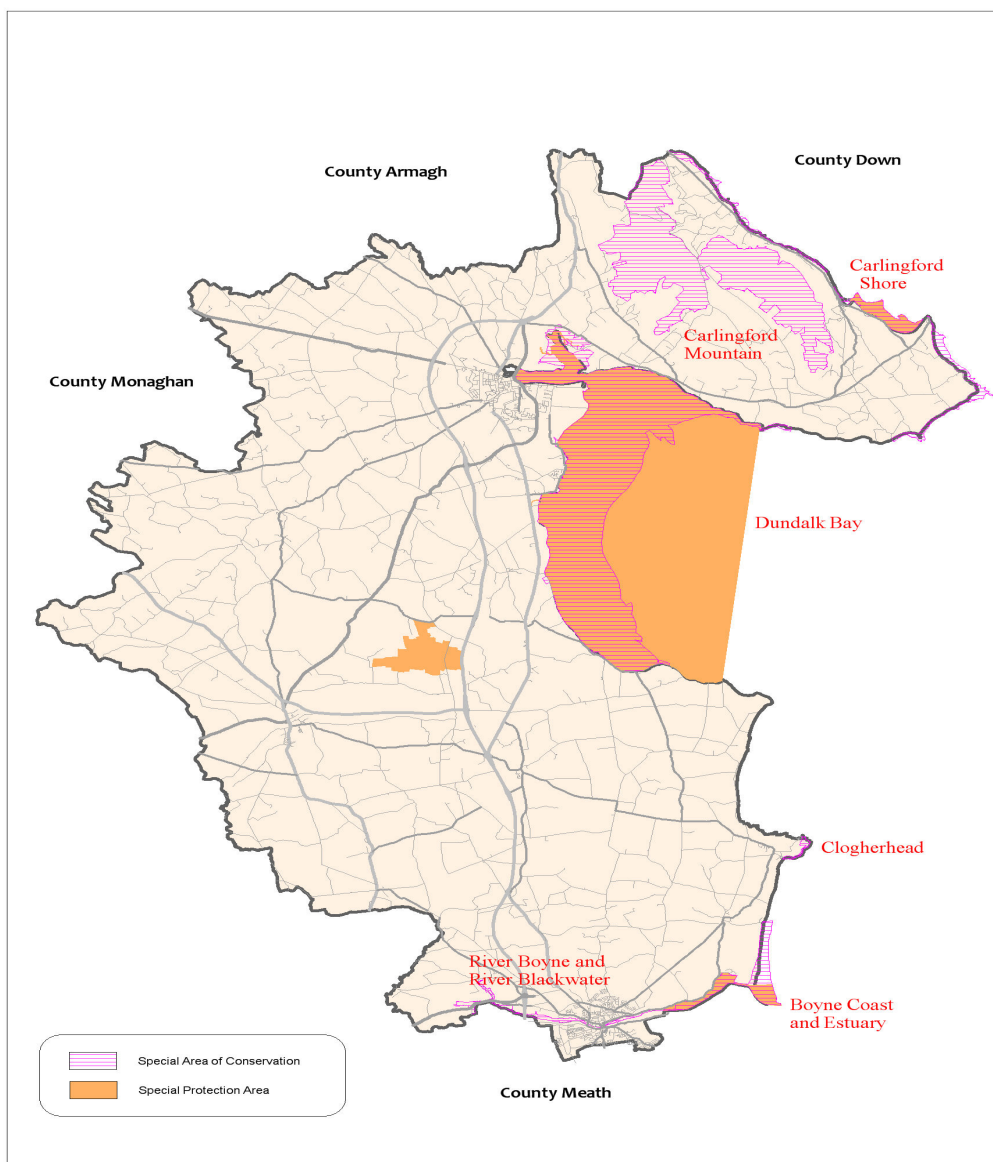


Table 1: Natura 2000 Sites in the Drogheda Plan Area and within 20km of the Plan area.

Site Code	Site Name	Site Characterisation
004091	Stabannan– Braganstown (SPA)	Alluvial Plain
001459	Clogher Head	Coastal/Estuarine
002299	River Boyne & River Blackwater (SAC)	Coastal/Estuarine
001957	Boyne Coast & Estuary (SAC)	Coastal/Estuarine
004080	Boyne Estuary (SPA)	Coastal/Estuarine

Note; Detailed descriptions of the Natura 2000 Sites which lie beyond the boundary of the Drogheda Borough Development Plan are given in Annex 1.

Map 2: Drogheda: Special Area of Conservation and Special Protection Area

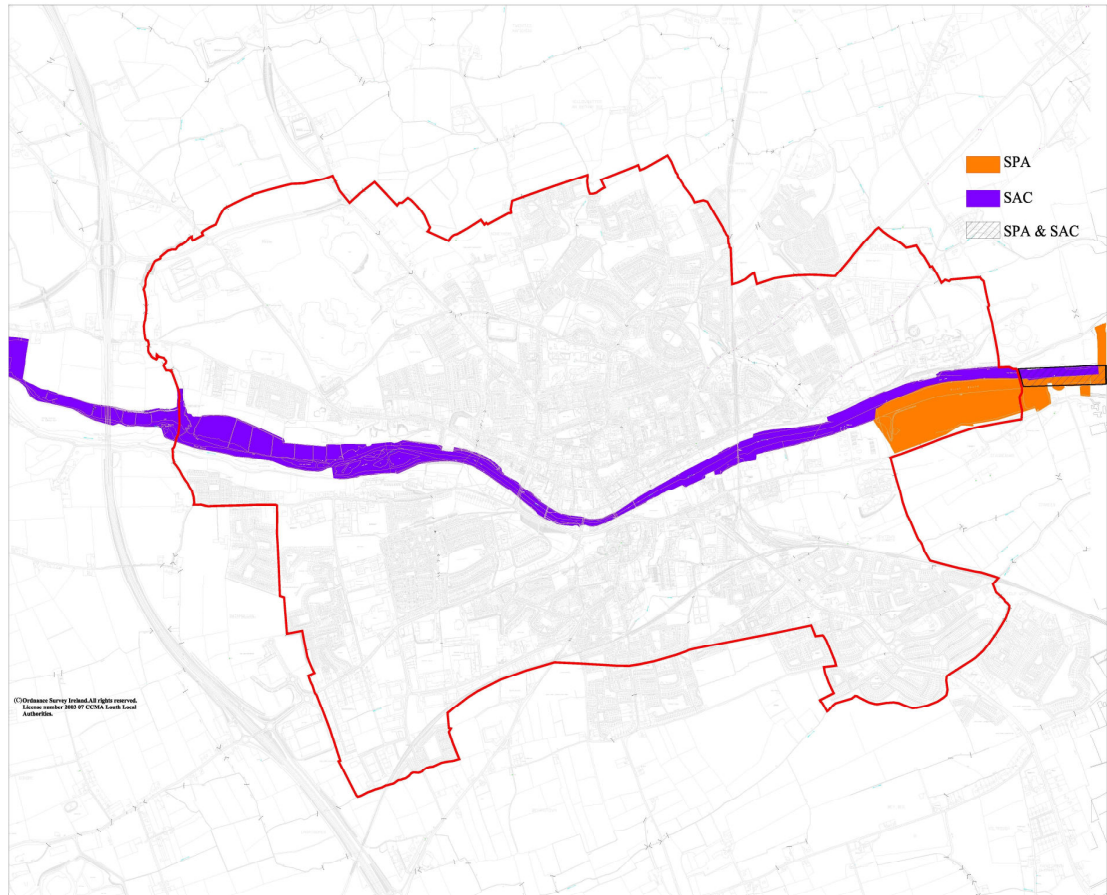


Table 2: Name and Location of Natura 2000 sites within the Drogheda Borough Plan area.

Special Areas of Conservation

Site Code	Site Name	Site Characterisation
002299	River Boyne & River Blackwater	Coastal/Estuarine
001957	Boyne Coast & Estuary	Coastal/Estuarine

Special Protection Areas

Site Code	Site Name	Site Characterisation
004080	Boyne Estuary	Coastal/Estuarine

Map 3: Lands within 20km of the Drogheda Council Development Plan 2011-2017.



Table 3: Natura 2000 sites beyond the Drogheda Borough Plan area.

Special Areas of Conservation

Site Code	Site Name	Site Characterisation
004091	Stabannan–Braganstown SPA	Alluvial Plain
001459	Clogher Head	Coastal/Estuarine

Note; Detailed descriptions of the Natura 2000 Sites which lie beyond the boundary of the Drogheda Borough Development Plan are given in Annex 1.

4.3 Conservation Objectives

These conservation objectives have been compiled in conjunction with Louth County Council and the Department of Environment, Heritage and Local Government. In addition to these the site synopsis of each of these designated sites is included within Appendix 1 and these have fed into this Natura Impact Statement.

Table 4: Conservation Objectives

Site code name	Site	Qualifying interests [code] [habitat] [species' scientific name] [species' common name]	Conservation objectives	Potential threats to site integrity
Special Area of Conservation				
River Boyne and River Blackwater 2299		7230 alkaline fens 91E0 alluvial woodlands (priority), <i>Salmo salar</i> Atlantic Salmon, <i>Lutra lutra</i> Otter <i>Lampetra fluviatilis</i> River Lamprey	To maintain the special conservation interests for this SAC at favourable conservation status:	Water quality/pollution Changes in flow rates Arterial drainage/water abstraction/ lowering of the regional water table Siltation Loss of fringe vegetation Changes in seasonal water levels/fluctuations Direct loss of habitat to development Loading from effluents (WWTP) Recreation/Amenity Use Developments - marinas, fishing
Boyne Coast and Estuary 1957		1130 estuaries, 1140 tidal mudflats, 1310 <i>Salicornia</i> mud, 1330 Atlantic salt meadows, 1410 Mediterranean salt meadows, 2110 embryonic	To maintain the special conservation interests for this SAC at favourable conservation status:	Water quality/pollution/quantity Development/expansion of marinas and ports Dredging

	shifting dunes, 2120 Marram dunes 2130 fixed dunes (priority)		Disturbance to marine mammals Dumping at sea Direct loss of habitat to development Shellfisheries (including collection of spawn) Recreational/Amenity Use Sea level rise Coastal defences
Special Protection Area			
Boyne Estuary 4080	Golden Plover, Knot, Black-tailed Godwit, Turnstone , Shelduck, Oystercatcher, Grey Plover, Lapwing, Sanderling, Redshank, Little Tern, Wetland & Waterbirds	To maintain the special conservation interests for this SPA at favourable conservation status: Golden Plover, Knot, Black-tailed Godwit, Turnstone , Shelduck, Oystercatcher, Grey Plover, Lapwing, Sanderling, Redshank, Little Tern, Wetland & Waterbirds.	Water quality/pollution/quantity Development/expansion of marinas and ports Dredging Disturbance to marine mammals Dumping at sea Direct loss of habitat to development Shellfisheries (including collection of spawn) Recreational/Amenity Use Sea level rise/erosion Coastal defences

5.0 Appropriate Assessment

5.1 Introduction

The investigation on the likely impact the draft Plan and Material Amendments may have on the Natura sites in Drogheda and within 20km. The above data and information (in conjunction with Appendix 1) provides the key elements for which the appropriate assessment of the draft plan and the material amendments may be undertaken as below.

5.2 Investigation on Impact of the Drogheda Plan on Natura 2000 sites.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site.

Size and Scale;

No projects giving rise to significant adverse direct, indirect or secondary impacts on the integrity of any Natura 2000 sites arising from their size or scale shall be permitted on the basis of this Plan (either individually or in combination with other plans or projects). Policy CH4, CH5 (both new additions introduced from the material amendments), DS7, TC11 and RA7 (amended policies) have either been introduced or strengthened to provide additional support for Appropriate Assessments of proposed developments.

Land Take

No projects are proposed within the Drogheda Development Plan 2011- 2017 which would give rise to significant adverse direct, indirect or secondary impacts on the integrity of any Natura 2000 sites. Policy CH 4 requires Appropriate Assessment for projects or development which may potentially impact on a Natura 2000 site. Policy DS 7 required that an appropriate Environmental Impact Assessment be carried out for new Seveso development.

Distance from the Natura 2000 site or key features of the site;

There are three Natura 2000 sites within the plan area and a further two within 20km of the plan area. There are no intentional plans or projects that would significantly impact on these sites but as previously stated policies DS7, CH4, CH5, RA7 and TC11 have been either introduced or amended to strengthen the position of the Natura 2000 sites.

- **Resource Requirements (water abstraction etc.)**
- **Duration of construction, operation, decommissioning, etc.;**
- **Excavation Requirements;**
- **Other;**

There are no proposals for any excavation or water abstraction within the policies contained within the plan and therefore there should be no adverse effects on the Natura 2000 sites.

- **Emissions (disposal to land, water or air);**
- **Transportation Requirements;**

The inclusion of policies within the Development Plan for sustainable transport proposals supporting the emergence of new integrated transport systems. The

provision of pedestrian and cyclist routes , bus services, traffic management initiative and consolidation of parking should all contribute to the reduction in transportation requirements and the impact on the environment.

Describe any likely changes to the sites arising as a result of:

- **Reduction of habitat area;**
- **Disturbance to key species;**
- **Habitat or species fragmentation;**
- **Reduction in species density;**
- **Changes in key indicators of conservation value (water quality etc.);**
- **Climate change;**

There are no plans or projects contained within the Drogheda Borough Development Plan 2011-2017 which would give rise to significant adverse changes in climatologically, habitat, density or conservation values of the Natura 2000 sites. Should any plans or projects propose to have a significant effect on these sites they shall not be permitted on the basis of this Plan and / or be subject to an Appropriate Assessment.

Describe any likely impacts on the Natura 2000 sites as a whole in terms of:

- **Interference with the key relationships that define the structure of the site;**
- **Interference with key relationships that define the function of the site;**

There are no plans or projects within the Development Plan that should interfere with the structure or functioning of any of the Natura sites within the plan area or beyond within the recommended 20km radius. Should any plans or projects propose to have a significant effect on these sites they shall not be permitted on the basis of this Plan and / or be subject to an Appropriate Assessment.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

- **Loss;**
- **Fragmentation;**
- **Disruption;**
- **Disturbance;**
- **Change to key elements of the sites (e.g. water quality etc.);**

At this stage there no indicators provided to identify the effects of loss or change to the Natura 2000 sites as there are no proposals that should cause any significant effects. The mitigation measures provided in the Development Plan, and detailed below in Section 6.0, include a requirement for an Appropriate Assessment should any proposals potentially have an impact on these sites.

Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.

Not applicable.

Describe any likely changes to the site arising as a result of:

- **Reduction of habitat area;**
- **Disturbance to key species;**
- **Habitat or species fragmentation;**
- **Reduction in species density;**
- **Changes in key indicators of conservation value (water quality etc.);**
- **Climate change.**

At this stage there no changes identified as to the effects of loss or change to the Natura 2000 sites as there are no proposals that should cause any significant effects. The mitigation measures provided in the development plan, and detailed below in section 6.0, include a requirement for an Appropriate Assessment should any proposals potentially have an impact on these sites.

Report on finding of significant effects on sites.

- **Name of project or plan**

Drogheda Development Plan 2011-2016.

- **Description of the project or plan**

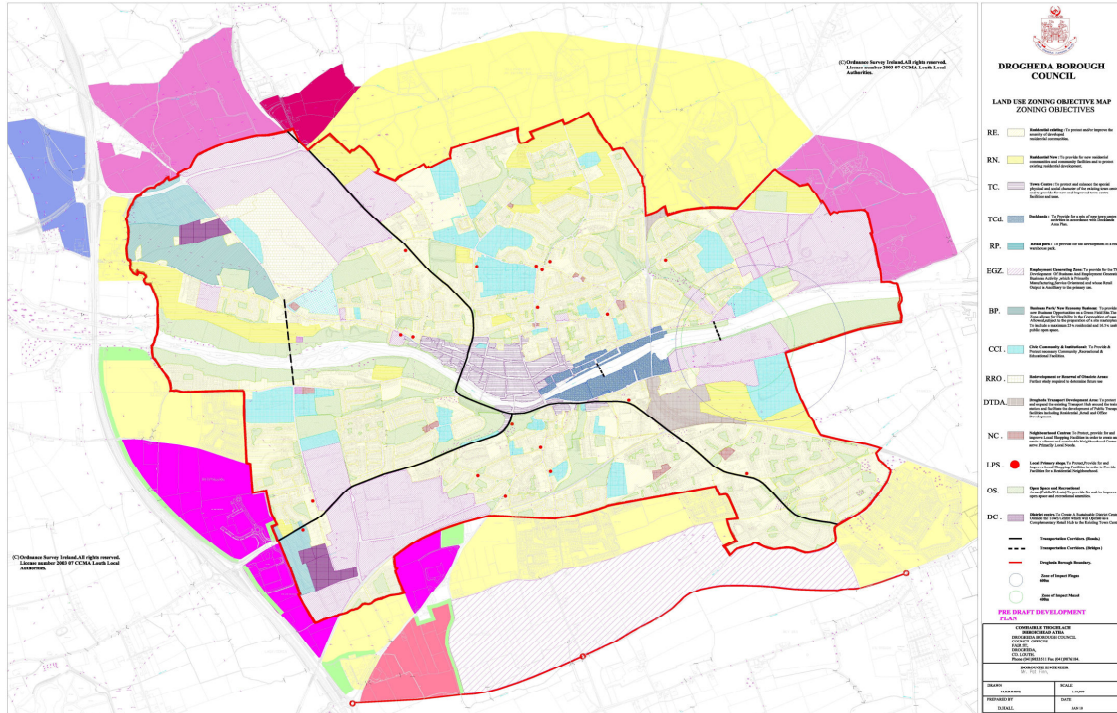
County Louth has three planning authorities operating within its boundaries. Louth County Council, Drogheda Borough Council and Dundalk Town Council each of which are independent local authorities which produce their own Development Plans albeit in co-operation with the County Council principally in relation to those suburban environs areas of Drogheda and Dundalk which are administratively within the county's territory. The Drogheda Development Plan will be the new statutory plan for the Borough of Drogheda for the period 2011- 2017. Some suburban areas of Drogheda are administered by Louth County Council as detailed above.

The current Drogheda Development Plan will remain in force until the Drogheda Development Plan 2011- 2017 has been formally adopted by the elected representatives. The new Plan, once adopted will supersede the previous plan which covered the period 2005 – 2011. The plan has two main purposes, firstly to provide a framework of acceptable uses within the plan area, defining acceptable forms of development and where it should be directed and secondly to provide a detailed basis for the promotion and control of development. The Plan thus provides a framework for the development of Drogheda over the plan period, incorporating the relevant strategic objectives at a national and regional level.

The Development Plan establishes a framework for the future development of the Borough as a strong and energetic community, with a beautiful, clean environment, a rich and varied heritage and a vibrant and diverse social, cultural and economic life. The Development Plan seeks to realise this vision both directly in its role as planning,

housing, sanitary and roads authority and indirectly by facilitating and promoting the social, economic and cultural development of the Borough.

Map 4 Drogheda Borough Council Plan Area including continuous analogous Local Area Plan areas in adjacent jurisdictions



Is this project or plan directly connected with or necessary to the management of the sites (provide details)?

The Plan includes policies and objectives to protect, conserve and manage in a prudent and sustainable manner those lands under the jurisdiction of Drogheda Boroughs natural and built heritage and therefore, its Natura 2000 sites. The plan also seeks to enhance these resources where appropriate.

Are there other projects or plans that together with the project or plan being assessed could affect the sites (provide details)?

The Plan has been formulated to ensure that uses, developments and effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) shall not give rise to significant adverse impacts on the integrity of the Natura 2000 sites.

The assessment of significance of effects

Describe how the project or Plan (alone or in combination) is likely to affect the Natura 2000 sites

The Plan has been formulated to ensure that uses, developments and effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) shall not give rise to significant adverse impacts on the integrity of any Natura 2000 site.

Explain why these effects are not considered significant.

The policies and provisions of the Plan have been devised to anticipate and avoid the need for developments that would be likely to significantly and adversely affect the integrity of any Natura 2000 sites. Furthermore, such developments as will be permitted on foot of the provisions of this Plan shall be required to conform to the relevant regulatory provisions at national and EU level for the prevention of pollution, nuisance or other environmental effects likely to significantly and adversely affect the integrity of any Natura 2000 sites. In addition to the above mitigation measures have been included within the Development Plan in the form of policies as per Section 6.0 below and relate to policies

Data collected to carry out the assessment

National and local data sources as a desktop survey and in conjunction with public consultation at various stages of the environmental collaboration of the development plan.

- Louth Local Authority GIS system
- NPWS public information on each Natura 2000 site
- Drogheda Biodiversity Plan
- Drogheda Borough Development Plan 2011-2017
- Strategic Environmental Assessment of the Drogheda Borough Development Plan 2011-2017.

Who carried out this assessment?

Louth County Council, Forward Planning Unit in collaboration with Louth County Council Heritage Section.

Where the full results of the assessment can be accessed and viewed?

This screening report was displayed along with the Environmental Report and Draft Drogheda Development Plan 2011-2017. This final Appropriate Assessment and Natura Impact Statement (NIS) is on public display with the Plan.

6.0 Mitigation Measures

The draft Plan policies amended and those which were introduced are aimed at cancelling out or avoiding negative impacts of the final plan and the policies contained within it during implementation. These mitigation measures are integral to the management of the Natura 2000 sites in Drogheda. There was no requirement to address Stage 4 of the Appropriate Assessment guidance with regard to addressing the “Imperative Reasons of Overriding Public Interest (IROPI)” as the Draft Plan and the material amendments should not give rise to any significant impact on any of the Natura Sites.

Table 5 : Mitigation Measures.

Policy no		Mitigation
DS7	<p>Additional Wording:</p> <p><i>“Any proposed development of new Seveso sites will be subject to an appropriate Environmental Impact Assessment (EIA) as necessary under the prevailing legislation pertaining to such sites.”</i></p>	<p>The inclusion of this policy insists that the Appropriate Environmental Impact Assessment shall be carried out for any new Seveso Developments.</p>
CH 4	<p>New Policy:</p> <p><i>“Ensure Screening for Appropriate Assessment and, where required, full Appropriate Assessment is carried out for any plan or project, which individually, or in combination with other plans and projects, is likely to have a significant direct or indirect impact on any Natura 2000 site or sites.</i></p>	<p>The inclusion of this policy insists that detailed screening exercises are carried out to ensure the plans or projects in Drogheda may also be subject to an Appropriate Assessment.</p>
CH 5	<p>New Policy:</p> <p><i>“Ensure planning applications for proposed developments likely to have significant direct or indirect impacts on any Natura 2000 site or sites is accompanied by a Statement for Appropriate Assessment prepared in accordance with the Guidance issued by the Department of the Environment, Heritage and Local Government (Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, December 2009). Strictly protect areas designated or proposed to be designated area plans) or amendment/variation to it proposed under the</i></p>	<p>The inclusion of this policy insists that detailed information is included within the development management process as per the guidelines.</p>

	<i>Planning and Development Act 2000 (as amended) must be screened for any potential impact on areas designated as Natura 2000 sites [normally called Special Areas of Conservation (SACs) or Special Protection Areas (SPAs)]</i>	
TC 11	<p>Additional Wording:</p> <p><i>“Any walkway proposals which might impinge upon the integrity of a Natura 2000 site must ensure that a screening exercise for Appropriate Assessment is carried out. Where required, full Appropriate Assessment must be carried out for any plan or project which, individually, or in combination with other plans or projects, is likely to have a significant direct or indirect impact on any Natura 2000 site”</i></p>	This policy relates to proposed walkways along or beside the Boyne which should not have an adverse effect on the Natura 2000 sites.
RA 7	<p>Additional Wording:</p> <p><i>“To investigate the potential of facilitating non invasive access to the River Boyne utilising, where feasible buffer zones between Natura 2000 sites and surrounding development any proposals which might impinge upon the integrity of a Natura 2000 site shall ensure that a screening exercise for Appropriate Assessment is carried out. Where required, full Appropriate Assessment shall be carried out for any plan or project which, individually, or in combination with other plans or projects, is likely to have a significant direct or indirect impact on any Natura 2000 site”.</i></p>	This policy relates to the development proposals for access to the River Boyne and the need to prevent any adverse effects on the Natura 2000 sites.

7.0 Appropriate Assessment Conclusion Statement.

Following the review of the Plan in accordance with the 'Methodological guidance on the provision of Article 6(3) and (4) of the Habitats Directive 92/43', a Screening Matrix and Findings of No Significant Effects Matrix have been completed. This screening process is carried out to ascertain if the Plan is likely to have significant effects on any Natura 2000 sites. Following public consultation and consultation with the Environmental Authorities it was deemed that an Appropriate Assessment of the Plan is required and as such it has been prepared in tandem with the finalisation of the Drogheda Borough Council Development Plan 2011-2017. The Plan has been formulated to ensure that developments and effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) shall not give rise to significant adverse impacts on the integrity of any Natura 2000 sites.

Appendix 1

Site descriptions for Natura 2000 Sites.

SPECIAL AREAS OF CONSERVATION

SITE NAME: RIVER BOYNE AND RIVER BLACKWATER SAC SITE CODE: 002299

This site comprises the freshwater element of the River Boyne as far as the Boyne Aqueduct, the Blackwater as far as Lough Ramor and the Boyne tributaries including the Deel, Stoneyford and Tremblestown Rivers. These riverine stretches drain a considerable area of Meath and Westmeath and smaller areas of Cavan and Louth.

The underlying geology is Carboniferous Limestone for the most part with areas of Upper, Lower and Middle well represented. In the vicinity of Kells Silurian Quartzite is present while close to Trim are Carboniferous Shales and Sandstones. There are many large towns adjacent to but not within the site. Towns both small and large, include Slane, Navan, Kells, Trim, Athboy and Ballivor.

The site is a candidate SAC selected for alkaline fen and alluvial woodlands, both habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive – Atlantic Salmon, Otter and River Lamprey.

The main areas of alkaline fen are concentrated in the vicinity of Lough Shesk, Freehan Lough and Newtown Lough. The hummocky nature of the local terrain produces frequent springs and seepages which are rich in lime. A series of base-rich marshes have developed in the poorly-drained hollows, generally linked with these three lakes. Open water is usually fringed by Bulrush (*Typha latifolia*), Common Club-rush (*Scirpus lacustris*) or Common Reed (*Phragmites australis*) and this last species also extends shorewards where a dense stand of Great Fen Sedge or Saw Sedge (*Cladium mariscus*) frequently occurs. This in turn grades into a sedge and grass community (*Carex* spp., *Molinia caerulea*) or one dominated by the Black Bogrush (*Schoenus nigricans*). An alternative direction for the aquatic/terrestrial transition to take is through a floating layer of vegetation. This is normally based on Bogbean (*Menyanthes trifoliata*) and Marsh cinquefoil (*Potentilla palustris*). Other species gradually become established on this cover, especially plants tolerant of low nutrient status e.g. bog mosses (*Sphagnum* spp.). Diversity of plant and animal life is high in the fen and the flora, includes many rarities. The plants of interest include Narrow-leaved Marsh Orchid (*Dactylorhiza traunsteineri*), Fen Bedstraw (*Galium uliginosum*), Cowbane (*Cicuta virosa*), Frogbit (*Hydrocharis morsus-ranae*) and Least Bur-reed (*Sparganium minimum*). These species tend to be restricted in their distribution in Ireland. Also notable is the abundance of aquatic Stoneworts (*Chara* spp.) which are characteristic of calcareous wetlands.

The rare plant, Round-leaved Wintergreen (*Pyrola rotundifolia*) occurs around Newtown Lough. This species is listed in the Red Data Book and is protected under the Flora Protection Order, 1999, and this site is its only occurrence in Co. Meath.

Wet woodland fringes many stretches of the Boyne. The Boyne River Islands are a small chain of three islands situated 2.5 km west of Drogheda. The islands were formed by the build up of alluvial sediment in this part of the river where water movement is sluggish. All of the islands are covered by dense thickets of wet, Willow (*Salix* spp.) woodland, with the following species occurring: Osier (*S. viminalis*), Crack Willow (*S. fragilis*), White Willow (*S. alba*), Purple Willow (*Salix purpurea*) and Grey Willow (*S. cinerea*). A small area of Alder (*Alnus glutinosa*) woodland is found on soft ground at the edge of the canal in the north-western section of the islands. Along other stretches of the rivers of the site Grey Willow scrub and pockets of wet woodland dominated by Alder have become established, particularly at the river edge of mature deciduous woodland. Ash (*Fraxinus excelsior*) and Birch (*Betula pubescens*) are common in the latter and the ground flora is typical of wet woodland with Meadowsweet (*Filipendula ulmaria*), Angelica (*Angelica sylvestris*), Yellow Iris, Horsetail (*Equisetum* spp.) and occasional tussocks of Greater Tussocksedge (*Carex paniculata*).

The dominant habitat along the edges of the river is freshwater marsh - the following plant species occur commonly here: Yellow Flag (*Iris pseudacorus*), Creeping Bent (*Agrostis stolonifera*), Canary Reed-grass (*Phalaris arundinacea*), Marsh Bedstraw (*Galium palustre*), Water Mint (*Mentha aquatica*) and Water Forget-me-not (*Myosotis scorpioides*). In the wetter areas of the marsh Common Meadow-rue (*Thalictrum flavum*) is found. In the vicinity of Dowth, Fen Bedstraw (*Galium uliginosum*), a scarce species mainly confined to marshy areas in the midlands, is common in this vegetation. Swamp Meadow-grass (*Poa palustris*) is an introduced plant which has spread into the wild (naturalised) along the Boyne approximately 5 km south-west of Slane. It is a rare species which is listed in the Red Data Book and has been recorded among freshwater marsh vegetation on the banks of the Boyne in this site. The only other record for this species in the Republic is from a site in Co. Monaghan.

The secondary habitat associated with the marsh is wet grassland and species such as Tall Fescue (*Festuca arundinacea*), Silverweed (*Potentilla anserina*), Creeping Buttercup (*Ranunculus repens*), Meadowsweet (*Filipendula ulmaria*) and Meadow Vetchling (*Lathyrus pratensis*) are well represented. Strawberry Clover (*Trifolium fragiferum*), a plant generally restricted to coastal locations in Ireland, has been recorded from wet grassland vegetation at Trim. At Rosnaree river bank on the River Boyne, is Round-Fruited Rush (*Juncus compressus*) found in alluvial pasture, which is generally periodically flooded during the winter months. This rare plant is only found in three counties in Ireland.

Along much of the Boyne and along tributary stretches are areas of mature deciduous woodland on the steeper slopes above the floodplain marsh or wet woodland vegetation. Many of these are planted in origin. However the steeper areas of King Williams Glen and Townley Hall wood have been left unmanaged and now have a more natural character. East of Curley Hole the woodland has a natural appearance with few conifers. Broad-leaved species include Oak (*Quercus* spp.), Ash (*Fraxinus excelsior*), Willows, Hazel (*Corylus avellana*), Sycamore (*Acer pseudoplatanus*), Holly (*Ilex aquifolium*), Horse chestnut (*Aesculus* sp.) and the shrubs Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and Elder (*Sambucus nigra*).

South-west of Slane and in Dowth, the addition of some more exotic tree species such as Wych Elm (*Ulmus glabra*), Beech (*Fagus sylvatica*), and occasionally Lime (*Tilia*

cordata), are seen. Coniferous trees, Larch (*Larix* sp.) and Scots Pine (*Pinus sylvestris*) also occur. The woodland ground flora includes Barren Strawberry (*Potentilla sterilis*), Enchanter's Nightshade (*Circaea lutetiana*) and Ground-ivy (*Glechoma hederacea*), along with a range of ferns. Variation occurs in the composition of the canopy, for example, in wet patches alongside the river, White Willow and Alder form the canopy.

Other habitats present along the Boyne and Blackwater include lowland dry grassland, improved grassland, reedswamp, weedy wasteground areas, scrub, hedge, drainage ditches and canal. In the vicinity of Lough Shesk, the dry slopes of the morainic hummocks support grassland vegetation which, in some places, is partially colonised by Gorse (*Ulex europaeus*) scrub. Those grasslands which remain unimproved for pasture are species-rich with Common Knapweed (*Centaurea nigra*), Creeping Thistle (*Cirsium arvense*) and Ribwort Plantain (*Plantago lanceolata*) commonly present.

Fringing the canal alongside the Boyne south-west of Slane, are Reed Sweet-grass (*Glyceria maxima*), Great Willowherb (*Epilobium hirsutum*) and Meadowsweet.

The Boyne and its tributaries is one of Ireland's premier game fisheries and it offers a wide range of angling from fishing for spring salmon and grilse to seatrout fishing and extensive brown trout fishing. Atlantic Salmon (*Salmo salar*) use the tributaries and headwaters as spawning grounds. Although this species is still fished commercially in Ireland, it is considered to be endangered or locally threatened elsewhere in Europe and is listed on Annex II of the Habitats Directive. Atlantic Salmon run the Boyne almost every month of the year. The Boyne is most important as it represents an eastern river which holds large three-sea-winter fish from 20 –30 lb. These fish generally arrive in February with smaller spring fish (10 lb) arriving in April/May.

The grilse come in July, water permitting. The river gets a further run of fish in late August and this run would appear to last well after the fishing season. The salmon fishing season lasts from 1st March to 30th September.

The Blackwater is a medium sized limestone river which is still recovering from the effects of the arterial drainage scheme of the 70's. Salmon stocks have not recovered to the numbers pre drainage. The Deel, Riverstown, Stoneyford and Tremblestown Rivers are all spring fed with a continuous high volume of water. They are difficult to fish in that some are overgrown while others have been affected by drainage with the resulting high banks.

The site is also important for the populations of two other species listed on Annex II of the E.U. Habitats Directive, namely River Lamprey (*Lampetra fluviatilis*) which is present in the lower reaches of the Boyne River while the Otter (*Lutra lutra*) can be found throughout the site. In addition, the site also supports many more of the mammal species occurring in Ireland. Those which are listed in the Irish Red Data Book include Pine Marten, Badger and Irish Hare. Common Frog, another Red Data Book species, also occurs within the site. All of these animals with the addition of the Stoat and Red Squirrel, which also occur within the site, are protected under the Wildlife Act.

Whooper Swans winter regularly at several locations along the Boyne and Blackwater Rivers. Parts of these areas are within the cSAC site. Known sites are at Newgrange (c. 20 in recent winters), near Slane (20+ in recent winters), Wilkinstown (several

records of 100+) and River Blackwater from Kells to Navan (104 at Kells in winter 1996/97, 182 at Headfort in winter 1997/98, 200-300 in winter 1999/00). The available information indicates that there is a regular wintering population of Whooper Swans based along the Boyne and Blackwater River valleys. The birds use a range of feeding sites but roosting sites are not well known. The population is substantial, certainly of national, and at times international, importance. Numbers are probably in the low hundreds.

Intensive agriculture is the main landuse along the site. Much of the grassland is in very large fields and is improved. Silage harvesting is carried out. The spreading of slurry and fertiliser poses a threat to the water quality of this salmonid river and to the lakes. In the more extensive agricultural areas sheep grazing is carried out.

Fishing is a main tourist attraction on the Boyne and Blackwater and there are a number of Angler Associations, some with a number of beats. Fishing stands and styles have been erected in places. The Eastern Regional Fishery Board have erected fencing along selected stretches of the river as part of their salmonid enhancement programme. Parts of the river system have been arterially dredged. In 1969 an arterial dredging scheme commenced and disrupted angling for 18 years. The dredging altered the character of the river completely and resulted in many cases in leaving very high banks. The main channel from Drogheda upstream to Navan was left untouched, as were a few stretches on the Blackwater. Ongoing maintenance dredging is carried out along stretches of the river system where the gradient is low.

This is extremely destructive to salmonid habitat in the area. Drainage of the adjacent river systems also impacts on the many small wetland areas throughout the site. The River Boyne is a designated Salmonid Water under the EU Freshwater Fish Directive.

The site supports populations of several species listed on Annex II of the EU Habitats Directive, and habitats listed on Annex I of this directive, as well as examples of other important habitats. Although the wet woodland areas appear small there are few similar examples of this type of alluvial wet woodland remaining in the country, particularly in the north-east. The semi-natural habitats, particularly the strips of woodland which extend along the river banks and the marsh and wet grasslands, increase the overall habitat diversity and add to the ecological value of the site as does the presence of a range of Red Data Book plant and animal species and the presence of nationally rare plant species.

SITE NAME: BOYNE COAST AND ESTUARY SAC
SITE CODE: 001957

Boyne Coast and Estuary is a coastal site which includes most of the tidal sections of

the River Boyne, intertidal sand and mud flats, salt marshes, marginal grassland, and the stretch of coast from Bettystown to Termonfeckin that includes the Mornington and Baltray sand dune systems.

The Boyne River channel, which is navigable and dredged, is defined by training walls, these being breached in places. Intertidal flats occur on the sides of the channelled river. The sediments vary from fine muds in the sheltered areas to sandy muds or sands towards the river mouth. The linear stretches of intertidal flats to the north and south of the river mouth are mainly composed of sand. One or more species of Eelgrass (*Zostera* spp.) occur in the estuary.

Parts of the intertidal areas are fringed by salt marshes, most of which are of the Atlantic type, and dominated by Sea-purslane (*Halimione portulacoides*). Other species present include Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Lax-flowered Sea-lavender (*Limonium humile*) and Glasswort (*Salicornia* spp.). Common Cord-grass (*Spartina anglica*) occurs frequently on the flats and salt marshes.

The two sand dune systems in the site, at Baltray and Mornington, are of conservation value, despite the restricted distribution of the intact areas and the high recreational pressure to which they are subjected. A gradient from embryonic dunes to Marram dunes and then fixed dunes is shown at both systems. The embryonic dunes are particularly well-developed at Baltray where there is active accretion. Species present include Sand Couch (*Elymus farctus*), Lyme-grass (*Leymus arenarius*), Marram, (*Ammophila arenaria*), Sea Sandwort (*Honkenya peploides*) and Prickly Saltwort (*Salsola kali*). The embryonic dunes grade into a narrow band of shifting Marram dunes. Marram is dominant, though there are also such species as Cat's-ear (*Hypochoeris radicata*), Mouse-ear Hawkweed (*Hieracium pilosella*) and Dandelion (*Taraxacum officinale*). The areas of fixed dunes on the site have a typical diversity of species, including Marram, Red Fescue (*Festuca rubra*), Wild Carrot (*Daucus carota*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Restharrow (*Ononis repens*), Wild Thyme (*Thymus praecox*), Lady's Bedstraw (*Galium verum*) and Wild Pansy (*Viola tricolor*). Vegetation dominated by bryophytes and lichens is limited, though such species as *Brachythecium albicans*, *Hypnum cupressiforme*, *Peltigera canina* and *Cladonia* spp. occur. Some dune slacks may still occur at the site. A number of scarce plants such as Viper's-bugloss (*Echium vulgare*), Adder's-tongue (*Ophioglossum vulgatum*), Variegated Horsetail (*Equisetum variegatum*) and Wild Sage (*Salvia verbenaca*) have been recorded from the site in the past. The last-named species is of particular note as it is a Red Data Book species at its most northern known Irish station. The site supports a population of the rare snail, *Helix pisana*, in Ireland known only from the coast between counties Louth and Dublin.

The Boyne is the second most important estuary for wintering birds on the Louth-Meath coastline. From a recent wetland survey carried out over 4 seasons (1994/95-97/98), it is known that this site supports nationally important numbers of Shelduck (176 individuals), Golden Plover (5,338), Lapwing (4,755), Knot (1,559), Black-tailed Godwit (414), Redshank (539), Turnstone (104), Oystercatcher (922), Grey Plover (112) and Sanderling (93).

Other species of regional or local importance include Brent Goose (142), Wigeon

(485), Teal (185), Mallard (160), Dunlin (627), Curlew (352) and Ringed Plover (c. 100). An area of shingle at Baltray Dunes is also an important breeding site for Little Tern, with 14 pairs recorded in 1995. Little Tern is the rarest Irish tern species, and is listed on Annex I of the E.U. Birds Directive. Part of the estuary is a Wildfowl Sanctuary and has been designated a Special Protection Area under the E.U. Birds Directive.

In general the site has been somewhat modified by human activities. The river is regularly dredged to accommodate cargo ships, which can cause disturbance to the bird, fish and invertebrate communities in the estuary. Several factories operate upstream from the estuary and pollution and disturbance associated with them has had an impact on the ecology of the area. There is a proposal to create a deep water facility at the north end of Mornington Dunes on the mouth of the Boyne estuary.

The site is of considerable conservation as a coastal complex that supports good examples of eight habitats that are listed on Annex I of the E.U. Habitats Directive (estuaries, tidal mudflats, *Salicornia* mud, Atlantic salt meadows, Mediterranean salt meadows, embryonic shifting dunes, Marram dunes and fixed dunes) and for the important bird populations that it supports.

SITE NAME: CLOGHER HEAD
SITE CODE: 001459

Clogher Head is a promontory of Silurian quartzite, located approximately 10 km north-east of Drogheda. The rocks are covered with a thin layer of soil that, in places, supports a coastal heath community. Areas of sea cliff, bedrock shore and dry grassland also occur within the site. Two habitats listed on Annex I of the E.U. Habitats Directive are represented, namely dry heath and vegetated sea cliffs.

The heath is dominated by Gorse (*Ulex europaeus*), Bell Heather (*Erica cinerea*), Heather (*Calluna vulgaris*), Crested Dog's-tail (*Cynosurus cristatus*), Sweet Vernalgrass (*Anthoxanthum odoratum*), English Stonecrop (*Sedum anglicum*) and Common Bird's-foot trefoil (*Lotus corniculatus*). Other species at the site include Lousewort (*Pedicularis sylvatica*), Cock's-foot (*Dactylis glomerata*) and Ribwort Plantain (*Plantago lanceolata*).

Cliff-top vegetation at the site includes such species as Thrift (*Armeria maritima*), Sea Campion (*Silene vulgaris* subsp. *maritima*), Wild Carrot (*Daucus carota*), Buck'shorn Plantain (*Plantago coronopus*), Burnet Rose (*Rosa pimpinellifolia*), amongst others. Spring Squill (*Scilla verna*), Golden-samphire (*Inula crithmoides*), Knotted Clover (*Trifolium striatum*) and Bird's-foot Clover (*Trifolium ornithopodioides*), all scarce plants in Ireland, have also been recorded from the site. A salt-tolerant community, comprised of Thrift, Common Scurvygrass (*Cochlearia officinalis*), Sea Rush (*Juncus maritimus*) and Distant Sedge (*Carex distans*), occurs along the shore.

The main landuse at Clogher Head is sheep grazing. The site is very susceptible to damage from a variety of sources including fire, over-grazing and amenity pressures such as littering and building.

This headland supports one of the best known examples of coastal heath in County Louth. It contains two habitats listed on Annex I of the E.U. Habitats Directive and supports a good diversity of coastal heath plants.

Special Protection Areas

SITE NAME: BOYNE ESTUARY SPA

SITE CODE: 004080

This moderately sized coastal site, which is situated below the town of Drogheda, comprises most of the estuary of the Boyne River, a substantial river which drains a large catchment. Apart from one section which is over 1 km wide, its width is mostly less than 500 m. The river channel, which is navigable and dredged, is defined by training walls, these being breached in places. Intertidal flats occur along the sides of the channelled river. The sediments vary from fine muds in the sheltered areas to sandy muds or sands towards the river mouth. The linear stretches of intertidal flats to the north and south of the river mouth are mainly composed of sand. One or more species of Eelgrass (*Zostera* spp.) occur in the estuary. Parts of the intertidal areas are fringed by salt marshes, most of which are of the Atlantic type, and dominated by Seapurslane (*Halimione portulacoides*). Other species present include Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Laxflowered Sea lavender (*Limonium humile*) and Glasswort (*Salicornia* spp.). Common Cord-grass (*Spartina anglica*) occurs frequently on the flats and salt marshes.

The Boyne Estuary is the second most important estuary for wintering birds on the Louth-Meath coastline. It has a total of ten species with populations of national importance, i.e. Shelduck (218), Oystercatcher (1,099), Golden Plover (6,070), Grey Plover (98), Lapwing (4,657), Knot (1,771), Sanderling (69), Black-tailed Godwit (471), Redshank (583) and Turnstone (175) - all figures are average peaks for the 5 year period 1995/96-1999/00. Of particular note is that the site supports 7% of the national population of Knot and 4% of the total for Golden Plover. Other species which occur include Bar-tailed Godwit (76), Cormorant (97), Brent Goose (172), Wigeon (454), Teal (230), Dunlin (480), Curlew (395), Mallard (197), Red-breasted Merganser (14), Greenshank (6), Ringed Plover (80) and Mute Swan (13). The site provides both feeding and high-tide roost areas for the birds. The estuary also attracts large numbers of gulls in winter, including Black-headed Gull (593), Common Gull (145), Herring Gull (403) and Great Black-backed Gull (160).

Little Tern bred in the past but successful breeding has not occurred since 1996. In 1998 and 1999 part of the shingle bank where the birds nested was washed away by storms. Also, human pressure in the beach areas has increased in recent years.

In general, the site has been modified by human activities. The river is regularly dredged to accommodate cargo ships, which can cause disturbance to the bird, fish and invertebrate communities in the estuary. Several factories operate upstream from the estuary and pollution and disturbance associated with these has had an impact on the ecology of the area. Significant developments within the site could cause

disturbance to the wintering birds. Nowadays there are no significant shooting pressures as the site is a Wildfowl Sanctuary

The site is of considerable ornithological importance for wintering waterfowl, with ten species having populations of national importance. Little Tern has bred in the recent past and could do so again in the future. Of particular significance is that two of the wintering species, Golden Plover and Bar-tailed Godwit are listed on Annex I of the E.U. Birds Directive. Little Tern, which last bred successfully at the site in 1996, is also listed on Annex I of this directive.

STABANNAN-BRAGANSTOWN SPA
SITE CODE: 004091

Stabannan-Braganstown SPA, situated approximately 4 km inland from Dundalk Bay in Co. Louth, is a small, very flat alluvial plain adjacent to the River Glyde. It is bounded to the north and south by low, rolling hills. Much of the site was formerly marshland or wet grassland, but is now drained and agriculturally improved. It is farmed intensively for grass, cereals and root crops. The site is of high ornithological importance as a feeding area for wintering waterfowl. In particular, it supports an internationally important wintering population (1,391) of Greylag Goose, with over 35% of the national total. (bird numbers given here and below are the average maximum figures in the winters 1995/96-1999/00). It also has a regular population of Greenland White-fronted Goose, though numbers are relatively low (24). It formerly supported an internationally important population of Whooper Swan though numbers have declined in recent years and the flock now (60) is only of regional importance. Numbers of Bewick's Swan have dwindled to only a few each winter, reflecting a decline throughout Ireland. Other species typical of agricultural land also occur, notably Golden Plover (878) and Lapwing (300). At night most of the geese and swans roost in Dundalk Bay. While the site is privately owned and actively farmed, it is not under threat as there is a management agreement in place to benefit the waterfowl. The site is of most importance as the largest Greylag Goose site in the country, but it also regularly supports three species which are listed on Annex I of the E.U. Birds Directive – Greenland White-fronted Goose, Whooper Swan and Golden Plover.