

STAGE 1: SCREENING FOR APPROPRIATE ASSESSMENT

**PURSUANT TO ARTICLE 6 (3) OF THE HABITATS DIRECTIVE
92/43/EEC ON PLANS & PROJECTS SIGNIFICANTLY
AFFECTING NATURA 2000 SITES.**

Plan or Project:

**DRAFT CAVAN TOWN & ENVIRONS DEVELOPMENT PLAN
(2014 – 2020)**

On behalf of:

CAVAN COUNTY COUNCIL

AUGUST 2013

ecologists
IRELAND

Collooney
Co. Sligo
Ireland
Tel: +353 (0) 719 118 428
www.ecologists.ie
info@ecologists.ie

STAGE ONE: SCREENING

1.0	INTRODUCTION	1
1.1	Requirement for an Appropriate Assessment (AA)	1
1.2	Legislative Context.....	2
1.3	Stages in the Appropriate Assessment Process	3
1.4	Scope of Appropriate Assessment	4
1.5	Main Sources of Formal Guidance	4
1.6	Main Sources of Consultation.....	5
1.7	Key Statutory Instruments Related to the Assessment Process	5
2.0	DESCRIPTION & FEATURES OF THE PLAN	6
2.1	Review of the Draft Cavan Town & Environs Development Plan (2014 – 2020)	6
2.2	Development Plan Screening Process	6
2.3	Proximity of Cavan Town to Natura 2000 sites	6
2.4	Proposed Development Plan Policies & Objectives	7
3.0	NATURA 2000 SITES	10
3.1	Natura 2000 Sites within 15km of Cavan Town.....	10
3.2	Conservation Objectives.....	13
4.0	SCREENING OF POTENTIAL LIKELY SIGNIFICANT EFFECTS	14
4.1	Assessment Criteria.....	14
4.2	Policies & Objectives Protecting Natura 2000 sites.....	19
5.0	CONCLUSIONS	22
6.0	REFERENCES	23

TABLES

Table 1: Qualifying Features of Natura 2000 sites.....	10
---	----

FIGURES

Figure 1: Natura 2000 sites included in the Screening for Appropriate Assessment.	9
---	---

APPENDIX I

Findings of No Significant Impacts Report (FONSE)

APPENDIX II

Site Synopsis and Conservation Objectives

STAGE ONE: SCREENING

1.0 INTRODUCTION

1.1 Requirement for Appropriate Assessment (AA)

This Screening for Appropriate Assessment was prepared by Ecologists Ireland on behalf of Cavan County Council. It provides information on the potential for the proposed Draft Cavan Town & Development Plan 2014 – 2020 to impact on designated sites of conservation importance within a European context.

This document is a draft version of the Screening for Appropriate Assessment and is submitted for consideration alongside the Draft Cavan Town & Environs Development Plan 2014 – 2020 and serves as a documented record of the process and objective criteria used to determine whether the plan poses any risks of having significant effects on Natura 2000 sites in view of their conservation objectives.

In accordance with the Planning and Development (Amendment) Act 2010, Cavan County Council is required to develop a Development Plan and incorporate within that a Core Strategy. The purpose of the Core Strategy is to formulate a plan to meet the land use requirements within Cavan Town & Environs for the period of the County Development Plan in accordance with the requirements of the Regional Planning Guidelines 2010 – 2020.

In addition to incorporating a Core Strategy the Draft County Development Plan will also:

- Update the policies and objectives of the Council in accordance with the National Development Plan 2014 - 2020, National Spatial Strategy 2002 - 2020, Border Regional Planning Guidelines 2010 – 2022; National Policy; including national policy guidance issued under section 28 of the Planning and Development Act, as amended, the Water Framework Directive and respective River Basin District Management Plans; European Communities Environmental Objectives (Surface Water) Regulations 2009; and, the European Communities (Birds and Habitats) Regulations 2011. The planning authority has a duty to:
- Determine whether the proposal is directly connected with or necessary to site management for conservation; and if not,
- Determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and if so,
- Make an appropriate assessment of the implications (of the proposal) for the site in view of the Natura 2000's conservation objectives.

1.2 Legislative Background to Appropriate Assessment

European Directive 92/43/EEC (The Habitats Directive) requires competent authorities to carry out an Appropriate Assessment (AA) of plans and projects that, either alone or in combination with other plans and projects are likely to have a significant effect on European designated sites.

The preparation of the Draft Cavan Town & Environs Development Plan has regard to Article 6 of the Council Directive 92/43/EEC of 21st May 1992 on the Conservation of Natural Habitats and Wild Fauna and Flora (as amended). Hereafter referred to the Habitats Directive. This is transposed to Irish legislation under the European Communities (Birds and Natural Habitats) Regulations 2011 and the Planning and Development (Amendment) Act 2010.

The European Communities (Birds and Natural Habitats) Regulations 2011 lists priority habitats and species that are of European and International importance and require protection. This protection is afforded through the designation of areas that represent significant populations of listed species within a European context (Natura 2000 sites). Areas designated for bird species are classed as Special Protection Areas (SPA), and areas designated for other protected species and habitats are classed as Special Area of Conservation (SAC). Species that occur in SPAs (Annex I of Birds Directive) or SACs (Habitats listed on Annex I and/or Annex II Species listed on the Habitats Directive) in which they are designated features have full European protection. Species listed on Annex IV of the Habitats Directive are strictly protected wherever they occur in the country, whether inside or outside a Natura 2000 site. Habitats that are equivalent to those listed, but not within SACs are still classed as priority habitats of international and national importance and under Article 27 (4(b)), the planning authority has a duty to avoid the pollution or deterioration of Annex I habitats.

The Habitats Directive specifies scientific criteria on the basis on which Natura 2000 sites must be selected and sets out various procedures and obligations in relation to the conservation objectives of those sites.

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

Article 6(3) establishes the requirement to screen all plans and projects for likely impacts (referred to as a Stage 1: Screening for Appropriate Assessment) and to carry out further detailed assessment if required (referred to as a Stage 2: Appropriate Assessment):

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

The fore mentioned paragraph 4 allows for proposed plans and projects to be approved in certain conditions, as follows:

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

1.3 Stages in the Appropriate Assessment Process

The process of assessing the Draft Cavan Town & Environs Development Plan is a structured exercise with a series of steps. The stages proposed in the European Commission guidance are:

Stage One: Screening — the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;

Stage Two: Appropriate Assessment — consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect 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 Three: Assessment of alternative solutions — processes which examine alternative ways of achieving the objectives of the project or plan while avoiding adverse impacts on the integrity of the Natura 2000 site;

Stage Four: Where no alternative solutions exist and 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.

This report provides a Stage 1: Screening for Appropriate Assessment and is intended to address all issues regarding the Draft Cavan Town & Environs Development Plan 2014 - 2020 and the potential impacts on all Natura 2000 sites within 15km of Cavan Town and allow Cavan County Council as the “Competent Authority” to comply with Article 6 (3) and (4) of the Habitats Directive 92/43/EEC.

1.4 Scope of the Appropriate Assessment.

The scope of the AA considers the following information:

Description of Draft Development Plan

- Extent and influence of the Draft Development Plan including spatial context of Natura 2000 sites in within 15km of Cavan Town;
- Projected Strategy, including: the population targets and housing demand allocation; and,
- Zoning policies and objectives relevant to the Natura 2000 network.

Potential Impacts on Natura 2000 sites with respect to their prescribed Conservation Objectives:

- The impact of the Draft Development Plan 2014 - 2020 on the defining structure and function of Natura 2000 sites;
- Likely direct, indirect or secondary impacts of proposed zoning policies and objectives on designated features of Natura 2000 sites;

Mitigation

- Details of policies within the Core Strategy of the Draft Development Plan that guide the protection and conservation of qualifying features within Natura 2000 sites;
- Details of the measures that could be employed to avoid the risk of impacts.

1.5 Main Sources of Formal Guidance

- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities;
- European Community Habitats Directive (92/43/EEC) – The Habitats Directive;
- European Communities (Natural Habitats) Regulations 2011;
- European Commission Environment DG (2001). 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;
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC;
- Conserving Natura 2000 Rivers: Ecology Series No. 7;
- Conserving Natura 2000 Rivers: Ecology Series No. 10; and,
- Conserving Natura 2000 Rivers: Ecology Series No. 11.

1.6 Main Sources of Consultation

- The Stage 1: Screening for Appropriate Assessment of the Draft Cavan Town & Environs Development Plan was carried out concurrently and with consideration of overlapping issues pertinent to the Strategic Environmental Assessment of the Draft Plan with consultation and direction provided by the Executive Planner at Cavan County Council (Eve Harrison);
- Consultation with Heritage Council: Heritage Officers for County Cavan (Ann-Marie Ward);
- Consultation with National Parks & Wildlife Service (NPWS): Conservation Officers (John Matthews (Cavan West)); David McDonagh (Cavan East)).

1.7 Key Statutory Instruments Relevant to the Assessment Process

- The Water Framework Directive (WFD) 2000/60/EC
- European Communities Environmental Objectives on (Surface Waters) Regulations (2009) (S.I. No. 272 of 2009);
- European Communities Environmental Objectives Groundwater Regulations 2010 (S.I. No. 9 of 2010).
- The Strategic Environmental Assessment (SEA) Directive 2001/42/EC

2.0 DESCRIPTION & FEATURES OF PLAN

2.1 Review of the County Cavan Development Plan 2014 - 2012

The Plan establishes a framework for the co-ordinated and sustainable economic, social, cultural and environmental development of Cavan Town & Environs. The Plan details the policies and objectives of Cavan County Council's vision for the spatial and sectoral development of Cavan Town over the period from 2014 – 2020. The Plan also serves as a point of reference for statutory authorities, planners, developers and the general public on how development proposals are likely to be assessed. The Regional Planning Guidelines 2010-2022 have indicated that Cavan Town, as a Hub Town, will grow from its 2006 population of 7,883 to 11,600 in 2016 and 12,800 by 2022. These population targets will be addressed in this Core Strategy document.

The Plan comprises 9 chapters detailing general policies and objectives for Cavan Town & Environs. The introductory chapter details the role, content and context of the Plan. Chapter 2 details the Settlement Strategy for the County, analysing how demographics and populations have changed during the life time of the previous Plan, and projecting population growth within a settlement hierarchy. Chapters 3 – 8 outline the development strategy for County Cavan on a thematic basis with each chapter outlining strategic themes, policies and objectives. Chapter 9 details zoning objectives.

2.2 Development Plan Screening Process

There is no restriction on when the screening of any plan or project likely to significantly effect Natura 2000 sites can take place. The screening is intended to provide a review of the plan and if the plan triggers the requirement for more detailed level of assessment (Stage 2: Appropriate Assessment) and which Natura 2000 sites will be affected. This screening process is undertaken during the preparation of the Draft Cavan Town & Environs Development Plan and serves to highlight particular impacts of policies and objectives on Natura 2000 sites and provides scope for amending policies that would have a direct conflict with the conservation objectives of Natura 2000 sites.

2.3 Proximity of Cavan Town to Natura 2000 sites.

ArcView software using Ordnance Survey maps and NPWS shapefiles were used to identify the boundaries of Natura 2000 Sites in Cavan Town and within 15km of the Town boundary. The location of Natura 2000 sites are shown in Figures 1.

2.4 Proposed Development Plan Policies and Objectives.

The following relevant information contained within the Draft Cavan Town & Environs Development Plan 2014 – 2020 provides the strategic direction and policy against which proposed developments are based. Relevant policies and objectives within the context of the Screening process are detailed below. Also of material consideration in that strategy and respective policy platform is the regulatory and legal instruments protecting designated sites with a specific focus on the key conservation objectives of those sites, however these are discussed in Section 4.2.

Chapter 2: Settlement/Core Strategy

In order to encourage the growth of a sustainable Cavan Town, it is considered that development in the Town Core area and immediate lands should be supported in this Core Strategy. The Housing Land Availability Returns 2012, carried out by the Planning Department in Cavan County Council indicate that there is adequate housing stock in vacant and permitted developments (total 791 units vacant and un-commenced with 2 years left on planning permission) to meet the housing needs of Cavan Town and environs for this plan period (2014 - 2020).

The required area of land and housing units for the Cavan Town and Environs area for the Plan period, 2014 – 2020 is considered to be for 1170 housing units, the equivalent of 65 hectares of Residential Zoned land for the lifetime of the Plan. Relevant policies to the Screening for Appropriate Assessment are detailed below.

Policy CSP2:

To permit residential development on Town Core and Phase 1 lands only during the plan period.

Chapter 3: Economic Development

Sustainable Economic Development seeks to achieve the balance of optimising the output from available resources to achieve modern day objectives in a way that enables future generations to meet their own needs and objectives in due course.

E-O2 Promotion of more mixed forms of development should be encouraged in the expanded town centre.

E-O3 Encourage development that is likely to generate significant levels of freight traffic to locate at sites close to the existing national roads network.

E-O4 Support the development of high-end science and technology parks at appropriate locations within the Town and County in order to try to encourage and support the start-up and incubation of innovation led, high growth, and knowledge based businesses.

EG-P1 To encourage the use of waste biomass in energy production.

EG-P2 To support the waste-to energy projects under REFIT scheme.

EG-O1 To encourage the production of energy from renewable sources, including in particular that from biomass, waste material, solar, hydro and wind energy, subject to normal proper planning considerations, including in particular, the potential impact on areas of environmental or landscape sensitivity.

R-P3 To encourage and facilitate the re-use and regeneration of derelict buildings for retail uses.

Chapter 4: Physical Infrastructure

W&C- OBJ 2 To promote the development of cycling by the development of cycle links.

RI-O3 To improve the capacity of the road infrastructure within County Cavan in accordance with national and regional policy. Many of the policies and objectives within this section of the Plan relate to the provision of public amenities. The policies regarding water resources focus on compliance to environmental standards, details of which are provided in Section 4.2 below.

Chapter 5: Housing

HP2 To implement the provisions of the Housing Strategy.

Chapter 6: Social Strategy and Community Facilities

SI-O2 Promote the provision of community infrastructure in areas which may experience a deficit.

OP-O4 Encourage the provision of facilities at amenity areas such as public seating and toilets to make them fully assessable.

R –P1 Seek to ensure the provision of recreation facilities to cater for different abilities, ages and interests within the County, as far as is practical.

Chapter 7: Built Heritage and Archaeology

No policies or objectives in Chapter 7 represent a potential threat to Natura 2000 site integrity as all relate to the retention and protection of built heritage and sites of archaeological interest within the Town & Environs.

Chapter 8: Natural Heritage

No policies or objectives in Chapter 8 represent potential threats to Natura 2000 site integrity as all relate to the promotion and protection of natural heritage and sites of nature conservation interest within the Town & Environs.

Chapter 9: Development Management

This chapter provides descriptions of zoning and masterplans during the lifetime of project with relevant land uses permitted in principle as per previous Chapters in the Development Plan.

3.0 NATURA 2000 SITES

3.1 Natura 2000 sites within 15km of Cavan Town

All Natura 2000 sites entirely or partially within a 15km buffer from Cavan Town have been included in this assessment in accordance with the Department of Environment, Heritage and Local Government guidance (DoEHLG, 2010). This distance was deemed to be sufficient to cover all likely significant effects which may arise from the implementation of the Draft Cavan Town & Environs Development Plan on Natura 2000 sites. ArcView software using Ordnance Survey maps and NPWS shapefiles were used to identify the boundaries of Natura 2000 Sites.

Table 1. Qualifying Features of Natura 2000 Sites.

NATURA 2000 Site	Qualifying Features	Extent and Character	Threats to Site Integrity
<p>Lough Oughter & Associated Loughs Special Area of Conservation [000007]</p> <p>Site Area: 4757.9ha</p> <p>Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Cavan between Upper Lough Erne, Killashandra and Cavan town consisting of some 90 inter-drumlin lakes and 14 basins in the course of the Erne River.</p>	<p>Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i>-type vegetation [3150] Natural eutrophic lakes have nutrient levels that are higher than those of oligotrophic, dystrophic or mesotrophic lakes, resulting in higher natural productivity, and are typically species-rich. However, many such lakes have been damaged by over-enrichment with nutrients, resulting in hypertrophic conditions and a reduction in species-richness.</p>	<p>This habitat represents approximately 67% of the land cover within the SAC (3187.8ha). This habitat occurs in 87% of suitable 10km squares in Ireland. 11 SACs are designated for this habitat type. Lough Oughter & Associated Loughs represent 24% of the total SAC contribution within the Member State.</p>	<p>Water quality and pollution (waste water treatment / effluent); Arterial drainage; Water abstraction (lowering of the regional water table); Loss of fringe vegetation to development; Illegal dumping; and, Introduction of non-native invasive species.</p>

<p>Lough Oughter Complex Special Protection Area [004049] Site Area: 1466.5ha</p> <p>The Lough Oughter Complex SPA is of ornithological importance for its wintering waterbird populations. Of particular note is the internationally important population of Whooper Swan that is based in the area. The site also supports nationally important populations of a further two wintering species and, notably, holds the highest breeding concentrations of Great Crested Grebe in the country.</p>	<p>Great Crested Grebe [A005] is a widespread breeder across much of Europe, which accounts for less than half of its global breeding range. Its European breeding population is large (>300,000 pairs). The species breeds on fresh or brackish waters with abundant emergent and submerged vegetation showing a preference for non-acidic eutrophic waterbodies with flat or sloping banks and muddy or sandy substrates usually 0.5-5 m deep and with large areas of open water. Suitable habitats include small pools or lakes, backwaters of slow-flowing rivers and artificial waterbodies (e.g. reservoirs, fish-ponds, gravel pits and ornamental lakes).</p>	<p>Ireland supports approximately 2,074 breeding pairs. It is estimated that c.24% of the breeding population in Ireland occurs within SPAs. Lough Oughter is at the centre of the Irish breeding range of Great Crested Grebe and the site supports in excess of 5.5% of the estimated national breeding total of this species (115 individuals), equivalent to 23% of the SPA contribution for this species respectively.</p> <p>Ireland supports approximately 3,500 wintering Great Crested Grebe. It is estimated that c.43% occur in SPAs. Lough Oughter Complex support an average peak count of 85 individuals each year, equivalent to 2.4% of the wintering population in the Member State, and 6.5% of the SPA contribution for this species respectively.</p>	<p>Changes in local hydrology; nutrient enrichment from agricultural run-off and waste-water; loss of fringe vegetation or damage to the vegetation sequence as a result of development (e.g., private jetties). Disturbance of roosting birds from recreation. Lough Oughter is on the list of Wildfowl Sanctuaries and is an exclusion zone from Open Season Orders; however there is anecdotal evidence that illegal hunting of Wigeon within the complex does occur.</p> <p>Policies & Objectives: CSP2, E-02, EG-P1, EG-P2, R1-03, HP2, R-P1.</p>
	<p>Whooper Swan [A038] Four discrete populations of the Whooper Swan have been identified in western Eurasia. Icelandic breeding stock winters in Iceland, Britain and Ireland comprising of c.16,000 birds.</p>	<p>Ireland supports approximately 10,320 wintering Whooper Swan. It is estimated that c.1,853 of these birds winter in SPAs. Lough Oughter supports 318 roosting Whooper Swan (five year mean peak 1995</p>	

		<p>– 2000), equivalent to 3% of the wintering population in the Member State, and 17% of the SPA contribution for this species. The Icelandic population is believed to be stable or declining slightly.</p>	
	<p>Wigeon [A050] In winter, Wigeon are highly gregarious, and occur in large, mobile flocks. Wigeon is largely a coastal species, feeding on mud-flats, coastal flooded grassland and saltmarsh pastures, however are also widespread on inland flooded grassland.</p>	<p>Ireland supports approximately 125,000 wintering Wigeon. It is estimated 3% (3,863) of wintering Wigeon occur within the SPA network. Lough Oughter Complex supports 903 (five year mean peak 1995 – 2000) Wigeon, equivalent to 0.7% of the wintering population within the Member State, and 23.3% of the total SPA contribution for this species.</p>	
	<p>Wetland & Waterbirds [A999]</p>	<p>The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the wetlands and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.</p>	

3.2 Conservation Objectives

To maintain the annexed habitats and species for which the Natura 2000 sites have been designated at a favourable conservation status. The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. The favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

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

4.0 SCREENING OF POTENTIAL LIKELY SIGNIFICANT EFFECTS

4.1 Assessment Criteria

4.1.1 Description of the Elements of the Project likely to give rise to Impacts on Natura 2000 sites.

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.

The Draft Cavan Town & Environs Development Plan 2014 – 2020 is a robust strategic document developed in combination with a range of European, National and Regional legislation; and, planning guidelines and policy documents pertinent to environmental management. The plan is guided by, and operates within the context of the National Plans and Guidance documents, notably the Border Regional Authority Regional Planning Guidelines 2010 – 2022 and Planning and Development (Amendment) Act 2010.

A key requirement within the planning guidelines is that the Draft Development Plan is subject to a Strategic Environmental Screening Report and Assessment, and to be consistent with the Habitats Directive, subject to an Appropriate Assessment. The Draft Plan serves to clarify and strengthen the core strategy for planning and sustainable development within Cavan Town & Environs, detailing the locations and projected spatial extent of development and the required provision of key amenities.

The strategic development proposals in the Draft Cavan Town & Environs Development Plan are:

- To consolidate the Core Strategy through the provision of appropriate land use objectives in accordance with Regional and National spatial and economic policy; and,
- To ensure that high level strategic spatial policy and more specific objectives potentially impacting on the environment are a material legal and procedural consideration in the planning process, including the potential for significant impacts on the conservation objectives of Natura 2000 sites.

The Core Strategy determines the level of residential zoning, changes to zoning and the expected or desired land use targets during the lifetime of the Plan. Projected population growth within Cavan Town from its 2006 population of 7,883 to 11,600 in 2016 and 12,800 by 2022 provides an evidence base for the requirement for 65ha of land to be made available for residential development.

4.1.2 Description of the Likely Impact of the Plan on the Natura 2000 sites.

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

Size, scale, area and land take:

The total area of land cover subject to land use zoning objectives in the Draft Cavan Town & Environs Development Plan 2014 – 2020 is 65ha. These lands areas are allocated to meet the projected demand for residential development on the basis of trends in population growth. The Draft Cavan Town & Environs Development Plan does not propose any zoning of land within Natura 2000 sites. Notwithstanding this

zoning, the Council shall take appropriate steps to avoid the deterioration of these designated sites in accordance with the policies and objectives set out in the Draft Cavan Town & Environs Development Plan (please refer to Section 4.2 below). The protection of the Natura 2000 network of sites is further strengthened by the additional policies and objectives of the Council relating to Flood Risk Management, the Water Framework Directive and the EU Habitats Directive.

The promotion and development of cycle links will provide improved resources for recreation and tourism within the Town & Environs. However, it is important that this infrastructure is delivered in an environmentally sensitive way. The delivery of new cycle pathways shall be subject to an Appropriate Assessment in accordance with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC).

No projects giving rise to significant adverse direct, indirect or secondary impacts upon the integrity of any Natura 2000 sites, having regard to their conservation objectives, arising from their size, scale, area and land take, shall be permitted on the basis of the Draft Cavan Town & Environs Development Plan 2014 - 2020 (either alone or in combination with other plans or projects).

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

The policies and objectives in the Draft Cavan Town & Environs Development Plan 2014 – 2020 relevant to the Core Strategy; those conforming to National Strategies, Policies and Guidance; and, the expansion of industry sectors do not apply to any specific location and are considered applicable to the entire Cavan Town & Environs.

Cavan Town is located within close proximity to Lough Oughter & Associated Loughs SAC and Lough Oughter Complex SPA. The main potential impacts to these sites are changes in hydrology, drainage and deterioration of water quality through nutrient enrichment from agricultural surface water run-off and wastewater treatment.

Emission (disposal to land, water or air):

The level of water supply and extraction has been considered within the Draft Cavan Town & Environs Development Plan 2014 - 2020. It is anticipated that population growth will continue and the demand for water resources will increase. As detailed in Chapter 3 of the Draft Cavan Town & Environs Development Plan, water conservation and network management is now an integral component of the Water Services Investment Programme – Assessment of Needs 2009 – 2015 and is key to the sustainable use of water resources. The Water Framework Directive has set procedures and obligations for managing water resources at River Basin District level and has expedited a comprehensive assessment of water quality within the region and its catchment area. Accordingly, the updated policy in respect of implementation of the recommendations of the River Basin District Plans as set out in the Draft Plan will assist in securing good water quality standards and associated habitats within the region.

Duration:

The period of the Draft Cavan Town & Environs Development Plan extends to 2020 and will not continue or be applicable beyond this date.

4.1.3 Description of Likely Changes to the Natura 2000 sites.

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

- *Reduction of habitat area*

The Draft Plan does not propose any additional land take within Natura 2000 sites. Cavan Town & Environs require the development of 65ha during the lifetime of the Plan and due to the proximity of the settlement to the Lough Oughter & Associated Loughs SAC and Lough Oughter Complex SPA there likely to be pathways of risk to this site via changes in land use within zoned development areas in the absence of appropriate policies and objectives regarding environmental protection. Prior to any proposed plans or projects commencing each shall be subject to an Appropriate Assessment in accordance with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC).

- *Disturbance to key species*

No specific plans or proposals in the Draft Plan are considered to represent any significant impacts to key species through disturbance. The Council shall take appropriate steps to avoid the disturbances of key species within designated sites in accordance with the policies and objectives set out in Chapter 8 of the Draft Cavan Town & Environs Development Plan 2014 - 2020.

- *Habitat or species fragmentation*

No specific plans or proposals in the Draft Plan are considered to represent any significant impacts to habitat or species through fragmentation. The Council shall take appropriate steps to avoid the fragmentation of habitat or isolation of populations of annexed species within designated sites in accordance with the policies and objectives set out in Chapter 8 of the Draft Cavan Town & Environs Development Plan 2014 - 2020.

- *Reduction in species density*

No specific plans or proposals in the Draft Plan are considered to represent any decline to species distribution or abundance within Natura 2000 sites. The Council shall take appropriate steps to avoid the reduction in species density within designated sites in accordance with the policies and objectives set out in Chapter 8 of the Draft Cavan Town & Environs Development Plan 2014 - 2020.

- *Changes in key indicators of conservation value (e.g., water-quality, etc.).*

Cavan County Council is involved in the management and monitoring of four River Basin Districts (RBDs) each include specific River Basin Management Plans (RBMPs) for the Neagh Bann International River Basin District (NBIRNBF), the Eastern River Basin District (ERBD), Shannon

International River Basin District (SIRBD) and the North Western International River Basin District (NWIRBD). Under the Water Framework Directive it is an objective for all waters to achieve at least good water quality status within prescribed timeframes. Cavan County Council is required to meet the environmental objectives of these River Basin Management Plans and the Draft Plan incorporates these principles/targets through the spatial planning process by way of specific development management policies and objectives.

Intrinsically linked to meeting the objectives of the four River Basin Districts is Regulation 42(21(f)) of the European Communities (Birds and Natural Habitats) Regulations 2011 which requires Cavan County Council to consider for Appropriate Assessment consents / licences for Waste Water Treatment Plants. Potential impacts on the conservation objectives of Natura 2000 sites from discharges through deterioration in water quality shall be considered for each Waste Water Discharge Authorisation and that operational discharges conform to the Emission Limit Values (ELVs).

The legal provision of the Water Framework Directive, the European Communities (Birds & Natural Habitats) Regulations 2011 overlap with the requirement of the Planning & Development Acts (as amended) 2010 and the basic measures undertaken by Statutory Authorities to ensure linkages between planning, water services and the environment achieve the objectives of the RBDs.

The implementation of these requirements during the timeline of the Draft Cavan Town & Environs Development Plan will assist in improving and securing good water quality standards; the favourable extent and condition of habitats dependant on water quality; and, the maintenance of designated species associated with these habitats in the region.

4.1.4 The Likely Impacts on the Natura 2000 sites as a whole.

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

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

The Draft Plan does not propose any development, plan or projects within any specific Natura 2000 site and therefore it is considered that there will be no potential negative impacts on the relationships that define the structure of Natura 2000 sites.

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

The Draft Plan does not propose any development, plan or projects within any specific Natura 2000 site and therefore it is considered that there will be no potential impacts on the relationships that define the structure of Natura 2000 sites.

4.1.5 Indicators of Significance of the Impacts.

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 site (e.g., water quality etc.)*

The Draft Cavan Town & Environs Development Plan 2014 - 2020 has been formulated to ensure that uses, development and effects arising from permissions based upon this Draft (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. Cavan County Council shall take appropriate steps to avoid the deterioration of these designated sites in accordance with the policies and objectives set out in Chapter 8 of the Draft Cavan Town & Environs Development Plan.

4.1.6 Likely Significance of Potential Impacts

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

The screening process identified all impacts and relevant significance indicators of the Draft Cavan Town & Environs Development Plan 2014 – 2020. A significant weighting on the conclusions of no significant impacts is based on the following rationale:

That in implementation of the Plan, no areas of habitat that are important for the survival of the designated habitats or species within the Natura 2000 will be:

- Modified or fragmented, destroyed or isolated. No key biogeochemical processes necessary for the survival of the designated features will be impacted, directly or indirectly or in the short to long term.

No ecologically meaningful proportion of habitat, or designated feature dependant on that habitat within the Natura 2000 sites examined in this screening will be:

- Seriously impacted (either through loss, damage or deterioration in water quality).

4.2 Policies and Objectives protecting Natura 2000 sites

A material consideration in defining the strategy and policies within the Draft Cavan Town & Environs Development Plan 2014 – 2020 is the regulatory and legal instruments protecting designated sites and their respective conservation objectives. The Plan contains numerous policies and measures which contribute to the conservation objectives of Natura 2000 sites and compliment Cavan County Council's obligation to ensure that the Plan complies with the requirements of the Habitats Directive. All relevant policies within the Draft Plan, and those that support the ecological coherence and protection of the Natura 2000 network are detailed below.

Policy CSP6

Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature areas where the nature conservation and landscape interest of the land will be protected and enhanced.

RI-O10 To have regard to the Local Action Biodiversity Plan for County Cavan in the provision of any new Council roads.

F-03 To ensure that development that is sensitive to the effects of flooding will generally not be permitted in flood prone or marginal areas.

F-05 Prevent the alteration of natural drainage schemes and in the case of development works, require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts to water quality.

PSS-P1 To require that the septic tanks and proprietary effluent treatment systems comply in full with the requirements of the Environmental Protection Agency Wastewater Treatment EPA Code of Practice 2009 or any subsequent Guidelines/Code of Practice.

WQ-01 To participate in the implementation and promote compliance with the requirements of the Water Framework Directive through the River Basin Management Plans and associated programmes of measures.

WQ-02 To co-operate with relevant stakeholders^[2] in the implementation of the River Basin Management Plans and the associated programmes of measures.

WQ-03 To ensure the protection and improvement of all drinking water, surface water and ground waters throughout the county by implementing the EU Water Framework Directive, and any other associated legislation.

WQ-04 To work in co-operation with all organisations and all major stakeholders to ensure a co-ordinated approach to the protection and improvement of the water resources.

WQ-05 To continue to improve water quality and maintain water quality which is already at Good and High Ecological Status.

HO2 All new residential developments must submit, at planning application state, a design brief which demonstrates clear compliance with the Department of the Environment, Heritage (Community) and Local Government Publications; 'Quality Housing for Sustainable Communities, Best Practice Guidelines for Delivering Homes and Sustaining Communities' and 'Delivering Homes Sustaining Communities, Statement on Housing Policy'.

NH&EN -P 1 To conserve, protect and manage Cavan Town Council and Cavan County Councils natural heritage assets for future generations while encouraging appreciation / understanding and enjoyment of the amenity value for the present generation.

NH&B -P1 To protect, manage and conserve and seek to enhance the County's biodiversity.

NH&B- P2 To integrate biodiversity consideration into all Cavan Town Council and Cavan County Council activities through the County Biodiversity Action Plan process.

NH&B- P3 To ensure the protection of species of flora and fauna afforded legal protection under Irish and European Legislation.

NH&B -P4 To assess the impact on biodiversity of proposals for large developments, particularly those on greenfield sites, or in environmentally sensitive areas. Any such developments where they do occur must include measures for enhancement of biodiversity.

NH&B-O3 To Protect and enhance important landscape features including streams, rivers, canals, lakes, and associated wetlands such as reedbeds and swamps; ponds, springs, bogs, fens, trees, woodland and scrub, wildlife and riparian corridors, hedgerows and other boundary types such as stone walls and ditches which are of importance for wild flora and fauna.

DS -P1 Development on or adjacent to National or European designated sites or proposed designated sites during the lifetime of this plan will be permitted only where an assessment has being carried out to the satisfaction of Cavan County Council, in consultation with National Parks and Wildlife Service and indicates that the overall integrity of the site will not be compromised or adversely affected.

DS-P2 To have regard to the views of the National Parks and Wildlife Service in respect of proposed development where such development may have an impact on a designated National or European site or proposed site for designation.

DS-P3 To continue to undertake surveys and collect data that will assist Cavan Town Council and Cavan County Council in building its knowledge base and meeting its obligations under Article 6 of the Habitat Directives.

WL-P1 To protect existing wetlands from destruction, infilling, fragmentation and degradation.

WL-O1 To resist development that would destroy, fragment and degrade wetlands.

GI-P1 To undertake a Green Infrastructure Strategy for Cavan Town during the lifetime of this Development Plan and to ensure that County Cavan's Natura 2000 sites are central to this strategy.

Designated Sites Objectives:

DS-O1 To ensure an Appropriate Assessment in accordance with Article 6(3) and Article 6(4) of the Habitats Directive, and in accordance with the Department of the Environment, Heritage and Local Government *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009* and relevant EPA and European Commission guidance documents, is carried out in respect of any Plan or Project not directly connected with or necessary to the management of the site but likely to have significant effect on a Natura 2000 site(s), either individually or in combination with other plans or projects, in view of the site's conservation objectives.

DS-O2 To protect and conserve the conservation value of Special Protection Areas, Special Areas of Conservation, Natural Heritage Areas and proposed Natural Heritage Areas as identified by the Minister for Arts, Heritage and the Gaeltacht and any other sites that may be proposed for designation during the lifetime of this plan.

As detailed above the Draft Cavan Town & Environs Development Plan 2014 – 2020 has many amendments within policies and objectives that serve to pre-emptively avoid and minimise risks to Natura 2000 sites. Many of these policies and objectives reinforce the statutory authorities' obligation to comply with environmental legislation and serve to promote the importance of other areas designated for conservation interest and strengthen the protection of ecologically importance networks within the County.

5.0 CONCLUSIONS

This Stage 1: Screening for Appropriate Assessment of the Draft Cavan Town & Environs Development Plan 2014 – 2020 has been conducted in accordance with the “Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC” as published by the European Commission and “Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities” published by the Department of Environment, Heritage and Local Government. In view of the information presented for consideration from the statutory consultees, and on implementation of the Draft Core Strategy and, Zoning policies, it is objectively concluded that there are likely to be no significant effects on the Natura 2000 sites and that appropriate protection and mitigation, where necessary, in respect of Natura 2000 Network has been formulated within the Draft Cavan Town & Environs Development Plan (as outlined in 4.2) to ensure that changes in land utility, development and the potential impacts from permissions based on policies and objectives detailed in the Plan conform to the requirements of the European Communities (Birds & Natural Habitats) Regulations 2011.

6.0 REFERENCES

- Alabaster JS & Lloyd R (1982). Water quality criteria for freshwater fish. Butterworths, London.
- Bornette G., Amoros, C. & Lamouroux, N. (1998). Aquatic plant diversity in riverine wetlands: the role of connectivity. *Freshwater Biology* 39, 267–283.
- CRFB, 2009. Western River Basin District Rivers: Sampling of fish for the Water Framework Directive – Rivers 2008 & 2009. The Central and Regional Fisheries Board. (As of 2010 now Inland Fisheries Ireland).
- Dawson, F.H. & Szoszkiewicz, K. (1999). Relationships of some ecological factors with the associations of vegetation in British rivers. *Hydrobiologia* 415, 117–122.
- CIEEM (Chartered Institute of Ecology and Environmental Management). (2006). Guidelines for Ecological Impact Assessment in the United Kingdom.
- Heritage Council, 2006. Cavan County Heritage Plan 2006 – 2011.
- Inland Fisheries Ireland, 2013. www.fisheriesireland.ie [accessed 5th April 2013]. Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites. (Previously published by Eastern Regional Fisheries Board).
- Magette, W.L., Brinsfield, R.B., Palmer, R.E., Wood, J.D., Dillaha, T.A. and Reneau, R.B. (1987). "Vegetated Filter Strips for Agriculture Runoff Treatment." United States Environmental Protection Agency Region III, Report #CBP/TRS 2/87-003314-01.
- Maltby, L., Forrow, D. M., Boxall, A. B., Calow, P. & Betton, C. I., 2009. The effects of motorway runoff on freshwater ecosystems: 1. Field Study. *Environmental Toxicology and Chemistry*. 14 (6), 1079 – 1092.
- Nadin, P., Smith, B., Jarvie, H., Llewellyn, N., Matthiessen, P., Dawson, H., Scarlett, S. & Hornby, D. (2003). Siltation in the Rivers. A Review of Monitoring Techniques. Conserving Natura 2000 River s Conservation Techniques Series No.6 English Nature, Peterborough.
- Thiebaut, G. (2006). Aquatic Macrophyte approach to assess the Impact of disturbances on the diversity of the ecosystem and on river quality. *International Review of Hydrobiology*. 91 (5), 483 – 497.
- Weijters, M. J., Janse, J. H., Alkemade, R. & Verhoeven, J. T. A. (2008). Quantifying the effect of catchment land use and water nutrient concentrations on freshwater river and stream biodiversity. *Aquatic Conservation: Marine and Freshwater Ecosystems*. 19 (1), 104 - 112.
- Yuan, Y., Binger, R. L. & Locke, M. A. (2009). A Review of effectiveness of vegetative buffers on sediment trapping in agricultural areas. *Ecohydrology*. 2 (3), 321 – 336.

STAGE 1 SCREENING FOR APPROPRIATE ASSESSMENT

FINDING OF NO SIGNIFICANT EFFECTS REPORT MATRIX (FONSE)

In accordance with Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC

Development Type	Draft Cavan Town & Environs Development Plan 2014 - 2020
Development Location	Cavan Town including surrounding lands within 15km.
Natura 2000 site(s) within impact zone *Sites listed in bold within County Cavan	Lough Oughter & Associated Loughs Special Area of Conservation [000007] Lough Oughter Complex Special Protection Area [004049]
Qualifying interests of Natura 2000 site(s)	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation [3150] Wetland & Waterbirds [A999] Great Crested Grebe [A005] Whooper Swan [A038] Wigeon [A050]

1.0 Name of project or plan: Draft Cavan Town & Environs Development Plan 2014 - 2020	
Name and location of Natura 2000 site:	The Draft Cavan Town & Environs Development Plan does not relate to any one Natura 2000 site and considers all sites within a recommended 15km buffer zone.
Description of the project or plan	The Plan establishes a framework for the co-ordinated and sustainable economic, social, cultural and environmental development of Cavan Town and surrounds. The Plan details the policies and objectives of Cavan County Council's vision for the spatial and sectoral development of Cavan Town over the period from 2014 – 2020. The Plan also serves as a point of reference for statutory authorities, planners, developers and the general public on how development proposals are likely to be assessed.
Is the project or plan directly connected with or necessary to the management of the site	The Draft Cavan Town & Environs Development Plan 2014 - 2020 is not directly connected with or necessary to the management of the Natura 2000 Network. The Plan provides the strategic direction and policy against which proposed developments are based. A material

(provide details)?	consideration in that strategy and respective policy platform is the regulatory and legal instruments protecting designated sites with a specific focus on the key conservation objectives of those sites.
Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?	This Draft Plan once adopted will form the Cavan Town & Environs Development Plan. The Plan sets the framework for the sustainable development of the Town over a six year period. It is the primary document for the setting out of the councils aim, policies and objectives in terms of land use planning. In doing so it must be consistent with, and ensure the implementation of National and Regional Plans and Guidelines as well as a host of other European, National and Regional Legislation, in terms of the management of the environment.
2.0 The assessment of significance of effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 Site.	The policies and objectives detailed in Draft Plan will have the effect of strengthening the management of and enhancing the protection of Natura 2000 sites.
Explain why these effects are not considered significant.	<p>Specific policies and objectives have been formulated within the Draft Cavan Town & Environs Development Plan 2014 - 2020 to allow the Council to take appropriate steps to avoid the deterioration of Natura 2000 sites.</p> <p>The legal provisions of the Water Framework Directive and the European Communities (Birds & Natural Habitats) Regulations 2011 overlap with the requirement of the Planning & Development Acts (as amended) 2010 and ensure linkages between planning and environment legislation in achieving the conservation objectives of the Natura 2000 Network.</p> <p>The Draft Cavan Town & Environs Development Plan 2014 – 2020 has many amendments within policies and objectives that serve to pre-emptively avoid and minimise risks to Natura 2000 sites. Many of these policies and objectives reinforce the statutory authorities' obligation to comply with environmental legislation and serve to promote the importance of other areas designated for conservation interest and strengthen the protection of ecologically importance networks within the County.</p> <p>The implementation of these policies and objectives during the timeline of the Draft Cavan Town & Environs Development Plan therefore serve to provide a proactive approach to environmental legislation, promote awareness of environmental issues within the County; and protect the favourable extent and condition of habitats within and out-with Natura 2000 sites.</p>
List of agencies consulted: provide contact name and telephone or email address	<p>National Parks & Wildlife Service John Matthews (West Cavan) John.Matthews@ahg.gov.ie</p> <p>David McDonagh (East Cavan) David.McDonagh@ahg.gov.ie</p>

	<p>Heritage Council Anne-Marie Ward (Cavan Heritage Officer) amcurley@cavancoco.ie</p>
Response to consultation:	<p><i>Provision of information relating to existing and potential future threats to Lough Oughter & Associated Loughs SAC and Lough Oughter Complex SPA.</i></p>

3.0 Data collected to carry out the assessment			
Who carried out the assessment?	Sources of data	Level of assessment completed	Where can the full results of the assessment be accessed and viewed
<p>Ryan Wilson-Parr B.Sc (Hons) M.Res CMIEEM Director Ecologists Ireland</p> <p>For and on behalf of Cavan County Council.</p>	<p>National Parks and Wildlife Services; Heritage Council;</p> <p>Draft Cavan Town & Environs Development Plan 2014-2020;</p> <p>The Draft Strategic Environmental Assessment (SEA) Screening Report for the Draft Cavan Town & Environs Development Plan 2014 – 2020.</p>	<p>Stage 1: Screening for Appropriate Assessment</p>	<p>This report titled: Wilson-Parr, 2013. Stage 1: Screening for Appropriate Assessment pursuant to Article 6(3) of the Habitats Directive 92/43/EEC on Plans & Projects significantly affecting Natura 2000 Sites. Draft Cavan Town & Environs Development Plan 2014 – 2020.</p>

Overall Conclusions

The screening process identified all impacts and relevant significance indicators of the Draft Cavan Town & Environs Development Plan 2014 – 2020.

No areas of habitat that are important for the survival of the designated features/species within the Natura 2000 sites will be:

- Modified or fragmented, destroyed or isolated. No key biogeochemical processes necessary for the survival of the designated features will be impacted, directly or indirectly or in the short to long term.

No ecologically meaningful proportion of the habitat of designated feature of the Natura 2000 sites will be:

- Seriously impacted (either through loss, damage or deterioration in water quality).

It can be objectively concluded that there are not likely to be significant effects on the Natura 2000 site(s) arising from the Draft Cavan Town & Environs Development Plan 2014 – 2020.

SITE SYNOPSIS

SITE NAME: LOUGH OUGHTER AND ASSOCIATED LOUGHS

SITE CODE: 000007

Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Cavan between Upper Lough Erne, Killeshandra and Cavan town. The site is a maze of waterways, islands, small lakes and peninsulas including some 90 inter-drumlin lakes and 14 basins in the course of the Erne River. The area lies on Silurian and Ordovician strata with Carboniferous limestone immediately surrounding.

This site is a candidate Special Area of Conservation for natural eutrophic lakes and bog woodland, two habitats listed on Annex I of the E.U. Habitats Directive and for the otter, a species listed on Annex II of the same Directive. The site also contains areas of dry woodland, marsh, reedbed and wet pasture.

Drainage within the area is inefficient and the water levels prone to natural fluctuation as a result. The regularly flooded areas still accommodate a variety of specialist plant species such as Amphibious Bistort (*Polygonum amphibium*) and Marsh Foxtail (*Alopecurus geniculatus*), as well as rarer species such as Needle Spike-Rush (*Eleocharis acicularis*) and Lesser Marshwort (*Apium inundatum*).

The lakes and basins are shallow, and the water well mixed and nutrient rich (eutrophic). The aquatic flora is varied with several pondweed species such as Blunt-leaved Pondweed (*Potamogeton obtusifolius*), Shining Pondweed (*Potamogeton lucens*), Broad-leaved Pondweed (*Potamogeton natans*), Reddish Pondweed (*Potamogeton alpinus*) and Various-leaved Pondweed (*Potamogeton gramineus*). Typical in the zone of aquatic plants are Yellow Water-lily (*Nuphar lutea*), Canadian Pondweed (*Elodea canadensis*), Mare's Tail (*Hippuris vulgaris*), Water Milfoil (*Myriophyllum spicatum*), Brooklime (*Veronica beccabunga*), Water Dropwort (*Oenanthe spp.*) and Starwort (*Callitriche sp.*). The aquatic community includes species of limited distribution in Ireland such as the Duckweed species *Lemna gibba* and *Spirodela polyrhiza*.

Around much of the shoreline there are well developed swamp and marsh communities, typically with a zone of Bulrush (*Schoenoplectus lacustris*) in front of a zone of Common Reed (*Phragmites australis*) which is in turn backed by a more species rich zone of sedges, grasses and herbs, particularly Bottle Sedge (*Carex rostrata*), Common Sedge (*Carex nigra*), Creeping Bent (*Agrostis stolonifera*), Meadowsweet (*Filipendula ulmaria*), Marsh Helleborine (*Epipactis palustris*), Water Plantain (*Alisma plantago-aquatica*), Rough Horsetail (*Equisetum hyemale*), Water Horsetail (*Equisetum fluviatile*) and Wild Angelica (*Angelica sylvestris*). Less widespread species also occur on the wet lake margins; species such as Water Dock (*Rumex hydrolapathum*), Greater Water-parsnip (*Sium latifolium*), Cowbane (*Cicuta virosa*), Tufted Sedge (*Carex elata*), Water Soldier (*Stratiotes aloides*), Arrowhead

(*Sagittaria sagittifolia*), Flowering Rush (*Butomus umbellatus*) and Greater Spearwort (*Ranunculus lingua*) may be locally prominent.

There are many variations on this typical zonation of sheltered shores with species such as Reedmace (*Typha* spp.), Branched Bur-Reed (*Sparganium erectum*) and Reed Canary-grass (*Phalaris arundinacea*) gaining local prominence. More exposed shores lack the extensive swamp zones, here smaller species such as Common Spike Rush (*Eleocharis palustris*) can be found.

Level, wet pastures tend to be dominated by Creeping Bent (*Agrostis stolonifera*) and Rush species (*Juncus* sp.) with a scattering of marshland and wet grassland plants such as Marsh Marigold (*Caltha palustris*), Water Forget-me-not (*Myosotis scorpiodes*) and Yellow Iris (*Iris pseudacorus*). Soft Rush (*Juncus effusus*) is most abundant with frequent Hard Rush (*Juncus inflexus*) and Sharp-Flowered Rush (*Juncus acutiflorus*) and less widespread Conglomerate Rush (*Juncus conglomeratus*) also occurring.

Where a general lack of grazing pressure or a particular slope has allowed it, deciduous woodland has re-established itself behind the reedbeds. Two species of Willow (*Salix caprea* and *Salix cinerea*) are common constituents along with Alder (*Alnus glutinosa*), Downy Birch (*Betula pubescens*), Hazel (*Corylus avellana*) and Hawthorn (*Crataegus monogyna*). Along submerged margins Alder and Willow are most commonly found with a flooded understorey typically containing Reed Canary-grass, Meadow Sweet, Yellow Flag and in places Tufted Sedge (*Carex elata*) and Greater Tussock Sedge (*Carex paniculata*). Downy Birch occurs along lake edges and also forms stands of wet woodland on cutover bog with varying degrees of wet and dry peat. Purple Moor-grass (*Molinia caerulea*), Marsh Cinquefoil (*Potentilla palustris*) and Bog Moss (*Sphagnum* sp.) occur in areas with pools and dry areas. Where there is dry peat, Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus* agg.) and Gorse (*Ulex* sp.) occur under the Birch canopy. Birch dominated wood is also found in association with Ling Heather (*Calluna vulgaris*) bog.

In areas of wet bog with good *Sphagnum* cover, bog woodland has developed. Downy Birch characterises this habitat; other typical species include Purple Moor-grass (*Molinia caerulea*) and Bottle Sedge (*Carex rostrata*).

Dry broad-leaved woodland is characterised by Ash (*Fraxinus excelsior*), Hazel, Holly (*Ilex aquifolium*) and Oak (*Quercus* spp.), while shrubs include Blackthorn (*Prunus spinosa*), Spindle (*Euonymus europaeus*) and Guelder Rose (*Viburnum opulus*). The Red Data Book species Bird Cherry (*Prunus padus*) has also been recorded from the site. The clayey soils have a characteristic flora, including Wood Avens (*Geum urbanum*), Wood Sorrel (*Oxalis acetosella*), Primrose (*Primula vulgaris*), Herb Robert (*Geranium robertianum*) and Wood Sedge (*Carex sylvatica*).

The site supports a substantial population of water birds including internationally important numbers of Whooper Swan (average peak 231) and nationally important numbers of Tufted Duck (average peak 247) and Cormorant (average peak 130) as well as important numbers of species such as Greenland White-fronted Goose, Great Crested Grebe, Wigeon, Teal and Pochard. Lapwing, Snipe and Golden Plover also

utilise the wet grassland areas. Wildfowl Sanctuaries exist at Inchin Lough, Derrygid Lough, Farnham Lough, Derrybrick Lough, Derrinishbeg Lough and Annagh Lough. Part of the site is designated an SPA under the EU Birds Directive.

Otter, a species listed on Annex II of the E.U. Habitats Directive occurs at the site. Irish Hare has also been recorded. Both of these species are listed in the Irish Red Data Book and are legally protected under the Wildlife Act 1976.

The main threats to the quality of the site are water polluting activities such as run-off from fertiliser and slurry application and sewage discharge which have raised the nutrient status of some lakes to hypertrophic. Housing and boating developments are on the increase, adjacent to and within the site respectively. There is also significant fishing and shooting pressure on and around the lakes. Increased afforestation has resulted in some loss of wetland habitat and also loss of feeding ground for wintering birds such as Greenland White-fronted Geese.

The Lough Oughter area contains important examples of two habitats listed on Annex I of the E.U. Habitats Directive and supports a population of the Annex II species, otter. The site as a whole is the best inland example of a flooded drumlin landscape in Ireland and has many rich and varied biological communities. Nowhere else in the country does such an intimate mixture of land and water occur over a comparable area, and many of the species of wetland plants, some considered quite commonplace in Lough Oughter and its associated loughs, are infrequent elsewhere.

27.11.2002

Conservation Objectives for Lough Oughter and Associated Loughs SAC [000007]

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

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

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

- ◆ [1355] *Lutra lutra*
- ◆ [3150] Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation
- ◆ [91D0] * Bog woodland

Citation:

NPWS (2011) Conservation objectives for Lough Oughter and Associated Loughs SAC [000007]. Generic Version 3.0. Department of Arts, Heritage & the Gaeltacht.

For more information please go to: www.npws.ie/protectedsites/conservationmanagementplanning

SITE SYNOPSIS

SITE NAME: LOUGH OUGHTER COMPLEX SPA

SITE CODE: 004049

Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Co. Cavan between Belturbet, Killashandra and Cavan town. This area comprises a maze of waterways, islands, small lakes and peninsulas. Lough Oughter, the largest lake in the site, is relatively shallow (maximum depth of 10 m) and considered to be a naturally eutrophic system. Its main inflowing rivers are the River Erne and the Annalee River, whilst the main outflow is the River Erne, which connects the lake to Upper Lough Erne and Lower Lough Erne to the north.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Whooper Swan, and Wigeon. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The Lough Oughter Complex is of importance for a range of wintering waterfowl. Of particular note is an internationally important population of Whooper Swan (318) that is based in the area and which uses the lakes as a roost - all figures are five year mean peaks for the period 1995/96 to 1999/2000. A population of Greenland White-fronted Goose (75) of regional importance also roosts on the lakes and feeds mainly on agriculturally improved grassland nearby. The site supports nationally important wintering populations of two species, Great Crested Grebe (89) and Wigeon (903). Other species which occur regularly include Mute Swan (139), Teal (220), Mallard (336), Pochard (58), Tufted Duck (105), Goldeneye (117), Lapwing (381), Curlew (33), Little Grebe (8), Cormorant (81) and Black-headed Gull (311). A small colony of Common Tern occurs (10 pairs recorded at Farnham Lough in 1995).

Lough Oughter is at the centre of the Irish breeding range of Great Crested Grebe and the site supports in excess of 10% of the estimated national breeding total of this species (115 individuals in 1986-88).

The Lough Oughter Complex SPA is of ornithological importance for its wintering waterbird populations. Of particular note is the internationally important population of Whooper Swan that is based in the area. The site also supports nationally important populations of a further two wintering species and, notably, holds the highest breeding concentrations of Great Crested Grebe in the country. Two of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan and Greenland White-fronted Goose.

29.9.2010



Conservation Objectives for Lough Oughter Complex SPA [004049]

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

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

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

- | | |
|-----------------------------|-------------|
| ◆ <i>Podiceps cristatus</i> | [wintering] |
| ◆ <i>Cygnus cygnus</i> | [wintering] |
| ◆ <i>Anas penelope</i> | [wintering] |
| ◆ Wetlands | [] |

Citation:

NPWS (2011) Conservation objectives for Lough Oughter Complex SPA [004049]. Generic Version 4.0.
Department of Arts, Heritage & the Gaeltacht.

For more information please go to: www.npws.ie/protectedsites/conservationmanagementplanning