

DRAFT RATHDRUM LOCAL AREA PLAN 2017

APPENDIX B

AA SCREENING REPORT



Wicklow County Council
February 2017

Section 1 Introduction & Background to Appropriate Assessment

1.1 Introduction

This is the appropriate assessment screening report of the Rathdrum Local Area Plan 2017. This report is being carried out in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC). The purpose of this report is to assess the likely effects of the proposed Plan either alone or in combination with other projects or plans, on any Natura 2000 site and to consider whether these impacts are likely to be significant and thus require an appropriate assessment.

The report has taken into consideration the European Commission's publication - *Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Articles 6 (3) and (4) of the Habitats Directive 92/43/EEC*, Circular Letter SEA 1/08 & NPWS 1/08 from the Department of the Environment, Heritage and Local Government and *Appropriate Assessment of Plans and Project in Ireland – Guidance for Planning Authorities* (December 2009) from the Department of the Environment, Heritage and Local Government.

1.2 The Rathdrum Local Area Plan

The Rathdrum Local Area Plan will set out an overall strategy for the proper planning and sustainable development of the administrative area of Rathdrum up to 2022, and includes a written statement and a plan indicating development objectives for the settlement.

1.3 Legislative Context

The EU Habitats Directive

The assessment of impacts on Designated European Sites i.e. Special Areas of Conservation and Special Protection Areas, finds its origins in the EU Directive on the Conservation of Habitats, Flora and Fauna (92/43/EEC), more commonly known as the "Habitats Directive" which came into force in 1994 and was transposed into Irish law in 1997. "The Habitats Directive" provides legal protection for habitats and species of European importance.

The Habitats Directive was formulated as a direct result of the continuous deterioration of natural habitats and the increasing impacts on wild species arising in the most part as a result of development and agricultural activity. The main aim of the EC Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance.

The conservation status of a habitat is defined in Article 1 of the Directive as the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions, as well as the long-term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and the areas 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,

- The conservation status of its typical species is favourable¹.

Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs), designated under the Habitats Directive and Special Protection Areas (SPAs), designated under the Conservation of Wild Birds Directive (79/409/ECC).

In its implementation the Habitats Directive introduces the ‘Precautionary Principle’ approach towards proposals whereby projects can only be permitted having ascertained that there is not likely to be any significant impact on the conservation status of the designated site.

As set out in MN2000², the conservation of natural habitats and habitats of species forms the most ambitious and far-reaching challenge of the Habitats Directive. This is set out in Article 6 of the Directive, which governs the conservation, and management of Natura 2000 sites. In this context Article 6 is viewed as one of the most important of the 24 articles of the directive being the one which determines the relationship between conservation and land use.

Article 6 of the Directive has three main provisions. This structure provides for a clear distinction between Article 6(1) and (2) which define a general regime while Article 6(3) and (4) define the procedures to be applied to specific circumstances.

- A. Article 6(1) makes provision for the establishment of the necessary conservation measures, and is focused on positive and proactive interventions. This relates to the development of conservation Management Plans specifically designed for designated sites.
- B. Article 6(2) makes provision for avoidance of habitat deterioration and significant species disturbance. Its emphasis is therefore preventive.
- C. Article 6(3) and (4) set out a series of procedural and substantive safeguards governing plans and projects likely to have a significant effect on a Natura 2000 site.

Article 6 is seen to reflect the overall aim of the Habitats Directive “*promoting biodiversity by maintaining or restoring certain habitats and species at ‘favourable status’ within the context of Natura 2000 sites*” while taking into account economic, social, cultural and regional requirements as a means to achieving sustainable development

1.4 Stages of the Appropriate Assessment

This appropriate assessment has been prepared in accordance with the European Commission Environment DG document *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*, referred to as the “EC Article 6 Guidance Document (EC2000)”. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and 6(4) of the Habitats Directive, and is viewed as an interpretation of the EU Commission’s document “*Managing Natura 2000 sites*” (2002).

This Assessment has also taken into consideration the Department of the Environment, Heritage and Local Government publication *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning*

¹ Council Directive 92/43/EEC

² MANAGING NATURA 2000 SITES, The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC (2000)

Authorities (December 2009). This guidance is not a legal interpretation, but represents the current situation and understanding, and is regarded as a work in progress.

Stage 1 of the Methodological Guidance is the screening process, which examines the likely effects of a project, either alone or in combination with other projects or plans upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. This stage of the screening process involves four steps, which fall under the following headings:

1. **Management of the site** - *Involves determining whether or not the project or plan is directly connected with or necessary to the management of the site*
2. **Description of the project or plan** - *Describing the project or plan and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the Natura 2000 site*
3. **Characteristics of the site** - *Identifying the potential affects on the Natura 2000 site(s)*
4. **Assessment of Significance** - *Assessing the significance of any effects on the Natura 2000 site(s).*

Stage 2 of the process "Appropriate Assessment" follows Stage 1 where, following an evaluation of the plan it has been established the plan is likely to have a significant affect on any Natura 2000 site. This stage involves the following:

- A description of the Natura 2000 sites that will be considered further in the Appropriate Assessment process;
- A description of significant impacts on the conservation feature of these sites likely to occur from the proposed development;
- Recommendations.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the plan should aim to avoid any negative impacts on European sites by identifying possible impacts early in the plan-making, and writing the plan in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the Appropriate Assessment process to the point where no adverse impacts on the site(s) remain. If the plan is still likely to result in adverse effects, and no further practicable mitigation is possible, then it is rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

Section 2 Screening

2.1 Management of the site

Determining whether or not the project or plan is directly connected with or necessary to the management of the site.

Plans or projects that are directly connected with or necessary to the nature conservation and management of a Natura 2000 site are exempt from the need for Stage 2 Appropriate Assessment. For this exemption to apply, management should be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive, for example the relationship between the proposed plan and the management of the Natura site should be shown to be direct and not a by-product of the plan.

The proposed plan is a land use management plan and is not directly connected with or necessary to the nature conservation management of Natura sites, and as such the exemption does not apply.

2.2 Description of the project or plan

Describing the project or plan and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the Natura 2000 site

2.2.1 The Rathdrum Local Area Plan

The Plan puts in place a structure that will guide the future sustainable development of Rathdrum. This plan, in conjunction with the County Development Plan, will inform and manage the future development of the town. The Plan seeks to establish a framework for the planned, co-ordinated and sustainable development of Rathdrum, and to enhance and facilitate the balancing of economic, social and environmental infrastructure in order to maintain and develop a high quality of life without compromising the protection of the environment and the needs of future generations.

2.2.2 Vision and Strategic Goals

A key aim of a Local Area Plan is to set out the vision and development strategy for the future development of a settlement and from this vision, all policies and objectives can be developed and implemented with the overall aim of achieving this vision. The vision and development strategy must be consistent with the 'Core Strategy' of this County Development Plan and reflect the characteristics, strengths and weaknesses of Rathdrum.

The vision for Rathdrum is:

- To ensure a high quality living environment for existing and future residents;
- To provide a framework for the growth of the town, in order to provide housing for current and future generations, to revitalise the economy of the town and to allow improvements of social and community facilities;
- Sustain a revitalised core town centre with commercial, residential and community developments being consolidated and promoted within this area;
- Create increased connectivity between a revitalised town core and the existing and proposed residential areas within the town;
- Promote and foster economic development;

- Develop the tourism potential of the area as a visitor / tourist destination in itself and in its role as a 'gateway' to surrounding attraction such as Avondale House and the Wicklow Mountains;
- Protect the built and natural heritage of the area.

In recognition of the historical pattern of development, the profile of the settlement, the demands of higher order strategies and the vision for the town set out above, the development strategy is as follows:

- To reinforce and improve the visual appearance of the central area of the town and encourage development that will enhance the town's vitality and vibrancy;
- To identify key sites suitable for development in the town centre and set out design criteria capable of meeting the overall vision for the town core area;
- To support and encourage actions to address congestion on the Main Street; in particular the development of alternative car parking arrangements around the town core and the development of alternative routes through the town, particularly from existing or planned new residential areas that avoid the need to use the Main Street to access essential services and to enter / exit the town;
- To encourage the regeneration of the Low Town area, to reduce the number of derelict and underutilised buildings and to protect and enhance the architectural character of this area;
- To plan for and encourage the provision of high quality housing, concentrated principally around Rathdrum town centre and lands within 1km of the town centre;
- To improve linkages between Rathdrum core town centre/existing community infrastructure and lands earmarked for future housing development;
- To plan for and encourage the development of new employment opportunities, in the form of both new mixed use developments at the old Mill and old Railway Hotel sites, and the development of new employment lands on the R752 (Avoca Road);
- To identify tourism assets and opportunities for the town and put in place a framework that supports and facilitates the development of tourism and tourism infrastructure, such as visitor attractions, accommodation and linkages to established tourism sites;
- To identify and address deficits in social, community and recreational services; to require developers to provide such facilities in tandem with new housing development where appropriate and to require the payment of development levies for the provision of such facilities by the local authority;
- To ensure that only appropriate land uses are provided on lands identified as being at risk of flooding;
- To create functional public spaces and pedestrian routes linked to new development that maximise the natural features of the area;
- To ensure the protection and enhancement of natural habitats, cultural heritage, ecological resources and biodiversity and in particular, to safeguard the integrity of the Avonmore River.

2.2.3 Strategic Environmental Assessment and Appropriate Assessment

In accordance with Article 14A of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (as amended), the Planning Authority makes a determination of need for the environmental assessment of a local area plan. Article 14A applies to a local area plan for an area the population or the target population of which is less than 5000 persons or where the area covered by the local area plan is less than 50 square kilometres (5000ha). The proposed Rathdrum Local Area Plan 2017 has a total plan area of c.197ha and total target population of 3,500 in 2028. As such, Article 14A applies to the Rathdrum Local Area Plan 2017.

Where a Planning Authority proposes to make a local area plan under Section 20 of the Planning Act, it shall, before giving notice under Section 20 (3) of the Planning Act, consider whether or not the proposed local area

plan would be likely to have significant effects on the environment, taking into account of relevant criteria set out in Schedule 2A of the SEA Regulations.

Having assessed the draft Local Area Plan in accordance with Schedule 2A and having consulted with the statutory SEA Environmental Authorities, it has been concluded that the draft LAP, including all mitigation measures contained therein as well as in the County Development Plan to address any potential environmental impacts, is not likely to have new significant adverse effects on the environment and therefore Strategic Environmental Assessment is not warranted for the draft LAP.

2.2.4 Features of the plan that could impact upon Natura 2000 sites

The key aspects of the plan that could give rise to direct/indirect impacts upon Natura 2000 sites relate to the plan's objectives and associated zonings to facilitate the proposed increased population growth and employment opportunities. Human pressure on sites can be manifested in a number of ways either directly or indirectly in the form of land take, trampling and disturbance or air and water quality deterioration. It is therefore essential that zonings in the plan take account of these direct and indirect impacts and ensure adequate buffering and other mitigation measures are put in place.

Policies and Objectives that will contribute towards the protection of Natura 2000 sites in accordance with the requirements of the Habitats Directive have been included by the plan makers in the Wicklow County Development Plan as result of the Appropriate Assessment and Strategic Environmental Assessment process for that higher order plan. The provisions of the County Development Plan apply directly to Rathdrum, being a subsidiary plan.

Section 3 Description of Natura 2000 Sites

3.1 Natura sites located within 15km of the plan area

This section of the screening process describes the Natura 2000 sites within a 15km radius of the plan area. A 15km buffer zone was chosen as a precautionary measure to ensure that all potentially affected Natura 2000 sites are included in the screening process (Map 2).

There are no Natura 2000 sites located within the plan area, however the Vale of Clara (Rathdrum Woods) SAC lies adjacent to, and north of the town boundary (see Map 1)

There are 10 Natura 2000 sites in total that lie within a 15km range of the plan area. These are listed in Table 1 (cSACs) and Table 2 (SPAs). The Qualifying Features for each SAC site and the Features of Interest and Special Conservation Interests of the SPAs have been obtained through a review of the documentation available on each site from the National Parks and Wildlife Service (NPWS) website www.npws.ie. Each qualifying feature also has a standard EU code and these are presented in brackets.

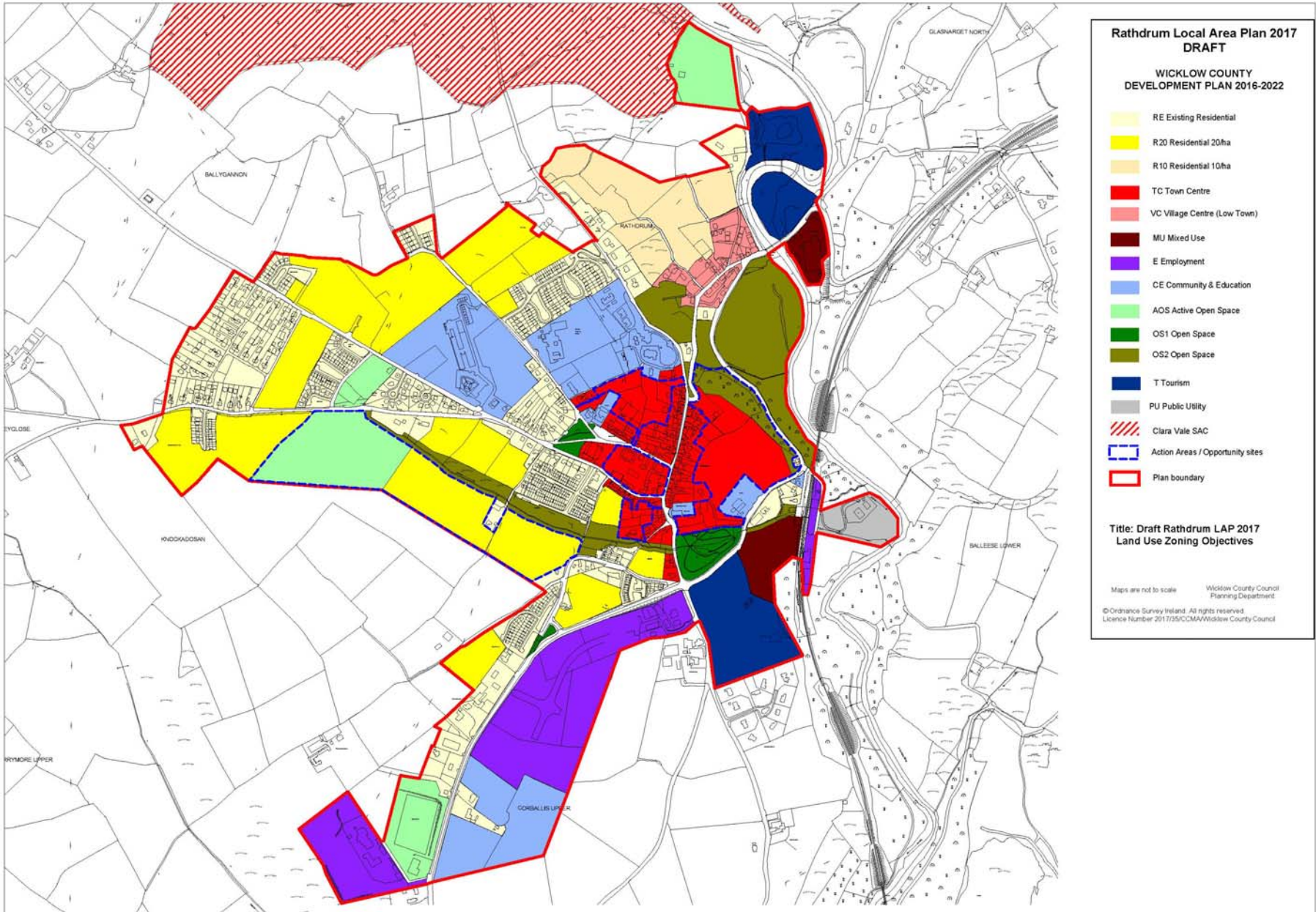
3.2 Priority Species and Habitats

A number of species and habitats are given 'Priority' status in the Habitats Directive by the EU because they are considered to be particularly vulnerable and are mainly, or exclusively, found within the European Union.

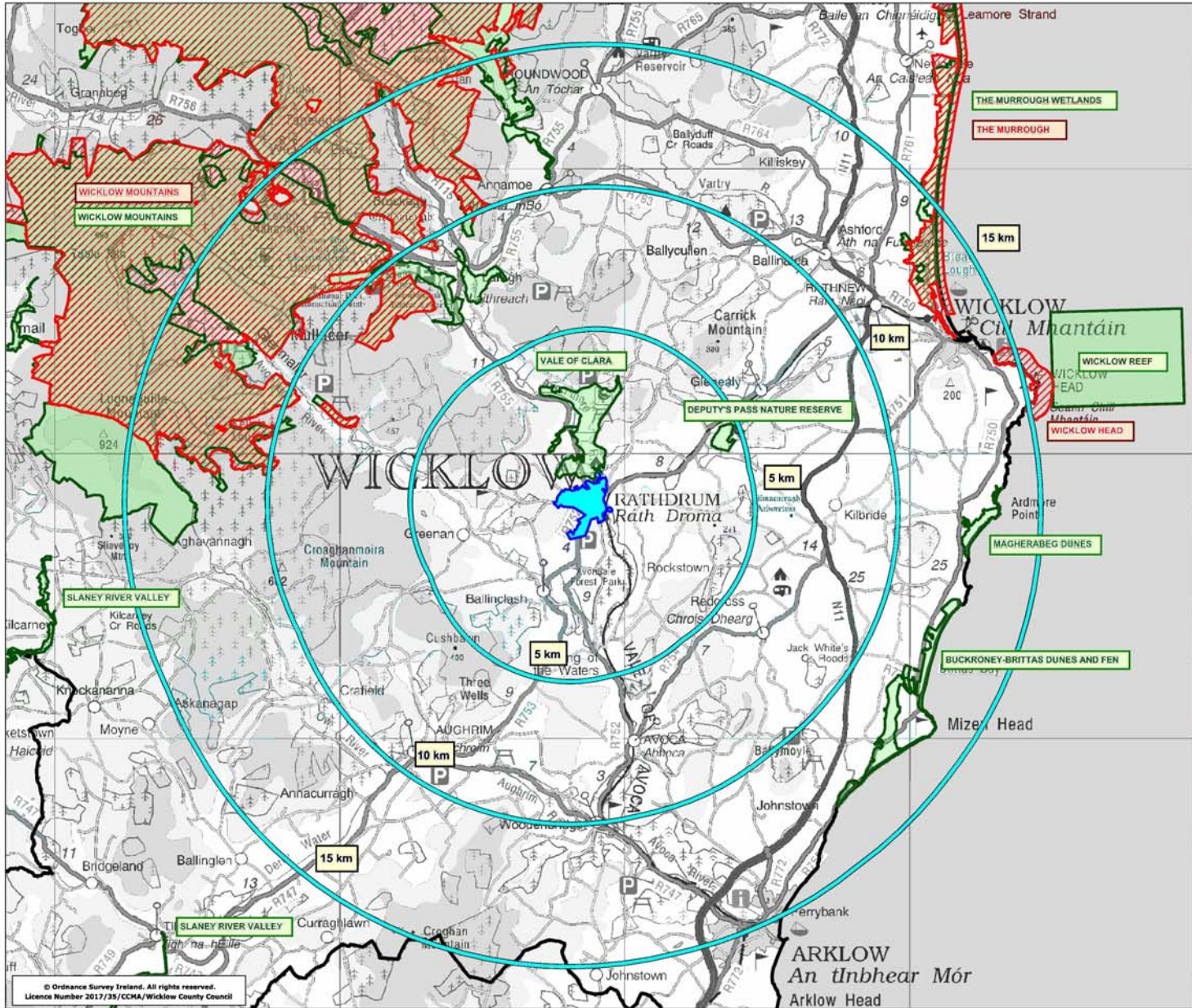
There are no 'Priority Species' known from Ireland.


Priority Habitats are present in Ireland and a number of them are present in Wicklow's cSACs. These are prefixed with an asterisk in Table 1. The importance of Priority habitats is emphasised at several places in the Directive (Articles 4 and 5 and Annex III), not only in terms of the selection of sites, but also in the measures required for site protection (Article 6) and surveillance (Article 11).

MAP 1 Draft Rathdrum LAP 2017-2023




MAP 2 Natura 2000 sites within 15km of Rathdrum plan boundary





WICKLOW COUNTY COUNCIL



31/01/2017

**APPROPRIATE ASSESSMENT
NATURA 2000 SITES WITHIN 15 KM. OF PROPOSED
RATHDRUM LOCAL AREA PLAN 2017- 2023**

LEGEND





-  Buffer Boundary
-  Special Protection Area
-  Special Area of Conservation
-  Rathdrum Local Area Boundary

Table 1 Special Areas of Conservation (SACs) within 15km of the plan boundary

Site Code	Site Name	Qualifying Features	
		Annex 1 Habitat (* Indicates priority habitat)	Annex II Species
000733	Vale of Clara (Rathdrum Wood)	<ul style="list-style-type: none"> • Old sessile oak woods with Ilex and Blechnum in British Isles [91A0] 	
000717	Deputy's Pass Nature Reserve	<ul style="list-style-type: none"> • Old sessile oak woods with Ilex and Blechnum in British Isles [91A0] 	
002122	Wicklow Mountains	<ul style="list-style-type: none"> • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoto-Nanojuncetea [3130] • Natural dystrophic lakes and ponds [3160] • Northern Atlantic wet heaths with Erica tetralix [4010] • European dry heaths [4030] • Alpine and Boreal heaths [4060] • Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* [6230] • Blanket bog (*active only) [7130] • Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] • Calcareous rocky slopes with chasmophytic vegetation [8210] • Siliceous rocky slopes with chasmophytic vegetation [8220] • Old sessile oak woods with Ilex and Blechnum in British Isles [91A0] 	<p>Otter (Lutra lutra) [1355]</p>
002249	The Murrrough Wetlands	<ul style="list-style-type: none"> • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330] • Mediterranean salt meadows (Juncetalia maritimi) [1410] • *Calcareous fens with Cladium mariscus and species of the Caricion davalliana [7210] • Alkaline fens [7230] 	
002274	Wicklow Reef	<ul style="list-style-type: none"> • Reefs [1170] 	
001766	Maherabeg Dunes	<ul style="list-style-type: none"> • Annual vegetation of drift lines [1210] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] 	

		<ul style="list-style-type: none"> • *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] • *Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150] • *Petrifying springs with tufa formation (Cratoneurion) [7220] 	
000729	Buckroney-Brittis Dunes and Fen	<ul style="list-style-type: none"> • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes)* [2130] • Atlantic decalcified fixed dunes (Calluno-Ulicetea)* [2150] • Dunes with <i>Salix repens ssp. argentea</i> (<i>Salix arenariae</i>) [2170] • Humid dune slacks [2190] • Alkaline fens [7230] 	

Table 2 Special Protection Areas (SPAs) within 15km of the plan boundary

Site Code	Site Name	Special Conservation Interests & Features of Interest
004186	The Murrough	<ul style="list-style-type: none"> • Red-throated Diver (<i>Gavia stellata</i>) [A001] • Greylag Goose (<i>Anser anser</i>) [A043] • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Wigeon (<i>Anas penelope</i>) [A050] • Teal (<i>Anas crecca</i>) [A052] • Black-headed Gull (<i>Larus ridibundus</i>) [A179] • Herring Gull (<i>Larus argentatus</i>) [A184] • Little Tern (<i>Sterna albifrons</i>) [A195] • Wetlands & Waterbirds [A999]
004040	Wicklow Mountains National Park	<ul style="list-style-type: none"> • Merlin (<i>Falco columbarius</i>) [A098] • Peregrine (<i>Falco peregrinus</i>) [A103]
004127	Wicklow Head	<ul style="list-style-type: none"> • Kittiwake (<i>Rissa tridactyla</i>) [A188]

3.3 Conservation objectives

The Habitats Directive aims, *inter alia*, to maintain or restore the favourable conservation status of habitats and species which have been identified as the qualifying features of sites designated as Special Areas of Conservation (SACs) and the Special Conservation Interests of Special Protection Areas (SPAs). These two designations are collectively known as the Natura 2000 network.

A Natura 2000 site's Conservation Objectives are defined by NPWS and are "*intended to ensure that the relevant Annex 1 habitats and Annex II species present on a site are maintained in a favourable condition*" (Guidelines produced by the DEHLG on Appropriate Assessment 2010).

The DOEHLG Guidelines state that, "The conservation objectives derive from the qualifying interests, the Natura 2000 standard data form, and the management plan for the site, with summary information contained in the site synopsis".

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.

The qualifying features and special conservation interests of the Natura sites are listed in tables 1 and 2. Further descriptive detail of site characteristics, quality and importance, and vulnerability of these features, are available on the Natura 2000 standard data forms for each site on www.npws.ie. These have been collated and are included in the individual site descriptions in Appendix B1.

Section 4 Assessment of Impacts

4.1 Introduction

Assessment is the process of evaluating the importance or significance of project/plan impacts (whether adverse or beneficial). This is essentially a judgment, built up from the collation of available information and the use of objective criteria and standards.

4.2 Assessment of Likely impacts on Natura 2000 sites

This Assessment will examine and evaluate the significance on impact, if any, of the Rathdrum Local Area Plan on each of the Natura 2000 sites located within 15 km of the plan area. The distance of 15km is derived from the recommendation in the DoE document *Appropriate Assessment of Plans and Projects – Guidance for Planning Authorities* and is considered sufficient in the case of Rathdrum where there are no hydrological links or other pathways to sites beyond this distance.

Table 3 provides details of each Natura site as sourced from the National Parks and Wildlife Service of the Department of Arts, Heritage and the Gaeltacht. The principal sources of information include the following:

- Site synopses
- NATURA 2000 Standard Data Forms
- Conservation objective (Generic Versions)
- Detailed Site Specific Conservation Objectives (SSCO) and supporting documents (where available).

Additional threats have been identified, based on documented threats to Habitats Directive Annex 1 habitats and Annex II species in Ireland as set out in *“The Status of EU Protected Habitats and Species in Ireland” (NPWS 2013)*. Not all of these threats will apply to all SACs in which these species and habitats are present; however gathering this information on the perceived threats to the qualifying features of the sites is an important prerequisite for assessing what are the ‘likely significant effects’ on the sites resulting from the plan.

The possible impacts that might arise from the plan have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 sites. These factors are as follows; Reduction in Habitat area; Disturbance to Key Species; Habitat of Species Fragmentation; Reduction in Species Density; Changes in Key Indicators of Conservation Value (Water Quality etc). The assessment of significance is based on Direct¹, Indirect² and Cumulative³ Impact assessment criteria.

The ‘Assessment of Significance’ table also references and discusses as relevant, specific objectives within the plan that may have an impact on the designated sites in accordance with their individual conservation objectives.

¹ Direct Impacts of the plan on the designated site are those impacts which arise directly from the objectives of the plan i.e. land take, excavation works etc.

² Indirect Impacts of the plan on the designated site relate to those impacts of the plan which have a knock on effect on the designated site i.e. the provision of a new water supply scheme serving the plan area may not be located within a designated site however the abstraction of such water may indirectly impact on the habitat itself.

³ Cumulative= individual affects from disparate projects may add up or interact to cause additional effects not apparent when looking at the individual effect at one time or in isolation.

Table 3 Assessment of Likely Impacts

Table 3.1 Vale of Clara (Rathdrum Wood) SAC							
Natura 2000 Site							
Vale of Clara (Rathdrum Wood) SAC is situated in a deep, steeply-sided valley through which runs the Avonmore River. Underlying rock is schist, which weathers to an orange-brown, sandy loam of Ph 4.1-4.9. A distinct mor humus, often several centimetres thick, overlies the mineral soil. Apart from the oak-dominated woods, there is much mixed wood with non-native species, as well as commercial conifer stands. Old river terraces are present along parts of the valley, and there are occasional rock outcrops.							
Qualifying interests	Threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Old sessile oak woods with Ilex and Blechnum in British Isles [91A0]	Regeneration of exotic conifer species Overgrazing by deer	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 <i>[NPWS (2016) Conservation objectives for Vale of Clara (Rathdrum Wood) SAC [000733]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs].</i>	None	None	None	<i>RT13</i> <i>AOS</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH9, NH11, NH12, NH18, NH35, CD45</i>	None
Assessment							
The provisions set out in the Plan will not cause any direct impacts on this Natura site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density. Objective RT13 of the draft LAP provides for the protection and enhancement of the character, setting and environmental quality of natural, architectural and archaeological heritage, and in particular those features of the natural landscape							

and built structures that contribute to its special interest. The natural, architectural and archaeological heritage of the area shall be protected in accordance with the objectives set out in the Wicklow County Development Plan.

The only area of the Plan that lies directly adjacent to the Natura site is zoned for Active Open Space.

It is considered that potential indirect impacts on the Natura site through the future development of active open space is adequately mitigated for by the County Development Plan objectives NH2, NH4 and CD45, wording as follows;

NH2 *No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).*

NH4 *All projects and plans arising from this plan (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:*

- 1) The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or*
- 2) The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and / or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or*
- 3) The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of 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. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.*

CD45 *All open spaces shall be provided with environmentally friendly lighting in order to ensure their safe usage after day light hours (refer to 'Light Pollution' section of Chapter 9 of this plan).*

Plans / projects considered in the assessment of 'cumulative impacts' are:

- i. the Wicklow County Development Plan 2016-2022
- ii. the Laragh – Glendalough land use and tourism plan; this plan is contained in the Wicklow County Development Plan 2016-22. This plan has undergone separate Appropriate Assessment through the County Development Plan process.
- iii. Planning application 16/1099; permission for Solar PV energy development at Garrymore, Rathdrum. While site was 1.3km from Clara Vale SAC, grid connection route options were located in Clara Vale. This project was subject to Appropriate Assessment screening and impacts were not deemed

likely.

Table 3.2 Deputy's Pass Nature Reserve SAC							
Natura 2000 Site							
Deputy's Pass Nature Reserve SAC is situated on the eastern flank of a glacial overflow channel, aligned in a south west to north east direction. The underlying rock is a mixture of cambrian and lower silurian deposits. Soils are acid brown earths to podzolics. Deputy's Pass wood is the most intact remnant of the once extensive Glenealy Oakwoods, now largely replaced with conifers. Apart from afforestation, the main landuse in the area surrounding the site is pastoral farming.							
Qualifying interests	Threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Old sessile oak woods with Ilex and Blechnum in British Isles [91A0]	Regeneration of exotic conifer species Overgrazing by deer	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 <i>[NPWS (2016) Conservation objectives for Deputy's Pass Nature Reserve SAC [000717]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.]</i>	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH9, NH11, NH12, NH18, NH35</i>	None
Assessment							
Given the distance of this site at 4km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this Nature Reserve in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density. The site is in state ownership with a structure in place to deal with management issues and threats, including accessibility and regulation of uses. It is considered that the provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.							

Table 3.3 Wicklow Mountains SAC							
Natura 2000 Site							
Wicklow Mountains SAC is an extensive upland site comprising much of the Wicklow Mountains and extending into Co. Dublin. The solid geology is mainly Leinster granites, flanked by Ordovician schists, mudstones and volcanics. The area has been glaciated and features fine examples of high corrie lakes, deep valleys and moraines. Most of the site is over 300m, with much ground over 600m and the highest peak of Lugnaquilla at 925m. The site includes the headwaters of several major rivers, including the Liffey, the Dargle and the Slaney. The substrate over much of the site is peat, with poor mineral soil on the slopes and lower ground. Exposed rock and scree is a feature. The dominant habitats on the site are blanket bog, heaths and upland grassland.							
Qualifying interests	Management issues and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
<p>Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoetes-Nanojuncetea [3130]</p> <p>Natural dystrophic lakes and ponds [3160]</p> <p>Northern Atlantic wet heaths with Erica tetralix [4010]</p> <p>European dry heaths [4030]</p> <p>Alpine and Boreal heaths [4060]</p> <p>Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* [6230]</p> <p>Blanket bog (*active only) [7130]</p> <p>Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]</p> <p>Calcareous rocky slopes with chasmophytic vegetation [8210]</p> <p>Siliceous rocky slopes with chasmophytic vegetation [8220]</p> <p>Old sessile oak woods with Ilex and Blechnum in British Isles [91A0]</p>	<p>Overgrazing</p> <p>Peat extraction</p> <p>Burning</p> <p>Invasive and alien species</p> <p>Recreational activities</p> <p>Erosion</p>	<p>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 [NPWS (2016) Conservation objectives for Wicklow Mountains SAC [002122]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.]</p>	None	None	None	<p>RT13</p> <p>Objectives of Wicklow County Development Plan</p> <p>NH1, NH2, NH3, NH4, NH6, NH7, NH8, NH9, NH11, NH12, NH18, NH35</p>	None

Otter (<i>Lutra lutra</i>) [1355]							
-------------------------------------	--	--	--	--	--	--	--

Assessment

Given the distance of this site at approx 8km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density.

The site is in state ownership. The main management issues for the site are identified in the National Park Management Plan and are addressed through that structure. Management of the site is addressed through the regulation of access, grazing, peat extraction, recreation and other uses.

It is not considered that the Plan is likely to give rise to any indirect impacts on the Natura site. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.

Table 3.4 Wicklow Mountains SPA							
Natura 2000 Site							
<p>Wicklow Mountains SPA is an extensive upland site, comprising a substantial part of the Wicklow Mountains. The underlying geology of the site is mainly of Leinster granites, flanked by Ordovician schists, mudstones and volcanics. The area was subject to glaciation and features fine examples of glacial lakes, deep valleys and moraines. Most of site is over 300 m, with much ground over 600 m and the highest peak of Lugnaquilla at 925 m. The substrate over much of site is peat, with poor mineral soil occurring on the slopes and lower ground. Exposed rock and scree are features of the site. The dominant habitats present are blanket bog, heaths and upland grassland. Fine examples of native Oak woodlands are found in the Glendalough area. The site, which is within the Wicklow Mountains National Park, is fragmented into about 20 separate parcels of land</p>							
Qualifying interests	Management issues and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103]	Overgrazing Peat extraction Burning Non-native species Recreational activities Erosion	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA [NPWS (2016) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs]	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH7, NH8, NH9, NH11, NH12, NH18, NH35</i>	None
Assessment							
<p>Given the distance of this site at approx 8km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density. The site is in state ownership. The main management issues for the site are identified in the National Park Management Plan and are addressed through that structure. Management of the site is addressed through the regulation of access, grazing, peat extraction, recreation and other uses. It is not considered that the Plan is likely to give rise to any indirect impacts on the Natura site. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.</p>							

Table 3.5 The Murrough Wetlands SAC								
Natura 2000 Site								
The Murrough Wetlands SAC comprises a coastal wetland complex that stretches for 13 km from Kilcoole Station, east of Kilcoole village in the north, to Wicklow town in the south, and extends inland for up to 1 km. The site includes area of marine water to a distance of 200 m from low water mark. There is a railway on top of the beach and much agricultural reclamation of the marshes/ salt marshes.								
Qualifying interests	Management and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts	
Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] *Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Alkaline fens [7230]	Modification of hydrographic functioning Erosion Sea defence or coast protection works, tidal barrages Walking, horseriding and non-motorised vehicles Development pressure Water pollution risk Nutrient enrichment from surrounding farmland Access and recreational pressure	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 [NPWS (2016) <i>Conservation objectives for The Murrough Wetlands SAC [002249]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs</i>]	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH8, NH11, NH12, NH20, NH21, NH22, NH23, NH35, NH36, NH37</i>	None	

Assessment

Given the distance of this site at over 12km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density.

There is no hydrological connection between Rathdrum and the Natura site and it is not considered likely that the Plan will to give rise to any indirect impacts on the Natura site. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.

Table 3.6 The Murrough SPA								
Natura 2000 Site								
The Murrough SPA comprises a coastal wetland complex that stretches for 13km from Kilcoole Station, east of Kilcoole village in the north, to Wicklow town in the south, and extends inland for up to 1km. The site includes area of marine water to a distance of 200m from low water mark. There is a railway on top of the beach and much agricultural reclamation of the marshes/salt marshes.								
Qualifying interests	Management issues and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts	
Red-throated Diver (Gavia stellata) [A001] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Black-headed Gull (Larus ridibundus) [A179] Herring Gull (Larus argentatus) [A184] Little Tern (Sterna albifrons) [A195] Wetlands & Waterbirds [A999]	Reclamation for infrastructural purposes Human disturbance Development pressure Water pollution risk Nutrient enrichment from surrounding farmland Access and recreational pressure is affecting the vegetation of the shingle shore which, in turn, causes disturbance to birds. The inclusion of the BirdWatch reserve and the state-owned foreshore in the site gives additional protection	To maintain or restore the favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. <i>[NPWS (2016) Conservation objectives for The Murrough SPA [004186]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.]</i>	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH8, NH11, NH12, NH20, NH21, NH22, NH23, NH35, NH36, NH37</i>	None	

Assessment Given the distance of this site at over 12km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density. There is no hydrological connection between Rathdrum and the Natura site and it is not considered likely that the Plan will to give rise to any indirect impacts on the Natura site. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future							

Table 3.7 Wicklow Reef SAC							
Natura 2000 Site							
Wicklow Reef SAC is located on the mid-east coast of Ireland and is just offshore from Wicklow Head, Co. Wicklow. There are strong tidal streams in the area. The substrate is a mixture of cobbles, bedrock and sand that is subject to the strong tidal streams of the east coast. The reef is a biogenic reef constructed by the polychaete <i>Sabellaria alveolata</i>							
Qualifying interests	Management issues and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Reefs [1170]	Fishing and harvesting aquatic resources Dumping, depositing of dredged deposits	To maintain the favourable conservation condition of Reefs in Wicklow Reef SAC [as defined by a list of attributes and targets] <i>[NPWS (2013) Conservation Objectives: Wicklow Reef SAC 002274. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht].</i>	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH8, NH11, NH12, NH20, NH21, NH22, NH23</i>	None
Assessment							
Given that this site lies offshore at a distance of over 15km, it is not considered that the Plan will give rise to any direct impacts on the site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.							

Table 3.8 Wicklow Head SPA							
Natura 2000 Site							
Wicklow Head is a rocky headland with extensive exposures of mica-schist. It is situated approximately 3 km south of Wicklow town. A lighthouse is located near the base of the cliffs. The cliffs, which extend for about 3 km, are highest immediately south of the lighthouse where they rise to about 60 m and it is here that most of the seabirds breed. The site comprises the cliffs and cliff-top vegetation, as well as some heath vegetation. The marine area to a distance of 50m from the base of the cliffs, where seabirds forage, bathe and socialise, is included in the site.							
Qualifying interests	Management issues and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Kittiwake (Rissa tridactyla) [A188]	Recreation/ disturbance Overfishing	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA [NPWS (2016) Conservation objectives for Wicklow Head SPA [004127]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs]	None	None	None	RT13 Objectives of Wicklow County Development Plan NH1, NH2, NH3, NH4, NH6, NH8, NH11, NH12, NH20, NH21, NH22, NH23, NH35, NH37	None
Assessment							
Given the distance of this site at c. 15km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.							

Table 3.9 Magherabeg Dunes SAC							
Natura 2000 Site							
Magherabeg Dunes SAC is situated on the south Co. Wicklow coast and extending south from Ardmore Point for up to 2km, this site comprises a mature dune system and adjacent drift banks. The Three Mile Water River flows through the site before entering the sea. Some swamp vegetation occurs behind the dunes. The drift banks are covered by deciduous woodland and dense scrub. Bedrock and low cliffs are exposed at Ardmore Point, and Ardmore Head is covered by dry grassland and scrub.							
Qualifying interests	Management and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Annual vegetation of drift lines [1210] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] *Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) [2150]	Recreational use Grazing Succession to scrub and woodland	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: <i>[NPWS (2016) Conservation objectives for Magherabeg Dunes SAC [001766]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.]</i>	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH8, NH9, NH11, NH12, NH20, NH21, NH22, NH23, NH24, NH35, NH36, NH37</i>	None

*Petrifying springs with tufa formation (Cratoneurion) [7220]							
<p>Assessment</p> <p>Given the distance of this site at over 12km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density.</p> <p>There is no hydrological connection between Rathdrum and the Natura site and it is not considered likely that the Plan will to give rise to any indirect impacts on the Natura site. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future</p>							

Table 3.10 **Buckroney- Brittas Dunes and Fen SAC**

Natura 2000 Site

Buckroney- Brittas Dunes and Fen SAC is an extensive sand dune and fen system that covers an 8 km stretch of the coastline of Co. Wicklow. The site contains three sand dune systems – Brittas Bay, Buckroney and Pennycomequick. Sediment source is mainly siliceous (low shell fragment content), with maximum carbonate levels of 3.5%. The dunes have cut off the outflow of a small river at Mizen Head and a large fen has developed. Its proximity to Dublin City makes Brittas Bay a very popular recreational area. Parts of the dune systems have already been developed as caravan parks and golf course. Part of the Buckroney dune system has been acquired by National Parks and Wildlife for conservation use.

Qualifying interests	Management issues and threats	Conservation objectives	Direct Impact(s) of Plan	Indirect Impact(s) of Plan	Cumulative impact(s) of Plan	Relevant objectives included in the Plan	Residual Impacts
Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey	Agricultural stocking pressures Recreational pressure Development Drainage and water abstraction Diffuse groundwater pollution Land reclamation Grazing Sand and Gravel extraction Sea defence or coastal protection works Non native species	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 <i>[NPWS (2016) Conservation objectives for Buckroney-Brittas Dunes and Fen SAC [000729]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs]</i>	None	None	None	<i>RT13</i> Objectives of Wicklow County Development Plan <i>NH1, NH2, NH3, NH4, NH6, NH8, NH9, NH11, NH12, NH20, NH21, NH22, NH23, NH24, NH35, NH36, NH37</i>	None

dunes)* [2130] Atlantic decalcified fixed dunes (Calluno- Ulicetea)* [2150] Dunes with Salix repens ssp.argentea (Salix arenariae) [2170] Humid dune slacks [2190] Alkaline fens [7230]	spread						
--	--------	--	--	--	--	--	--

Assessment

Given the distance of this site at over 12km from the plan boundary it is not considered that the provisions set out in the Plan will cause any direct impacts on this site in terms of reduction in habitat area, disturbance to key species, habitat or species fragmentation or reduction in species density.

There is no hydrological connection between Rathdrum and the Natura site and it is not considered likely that the Plan will to give rise to any indirect impacts on the Natura site. The existing provisions of the County Development Plan, namely NH2 and NH4 adequately mitigate against potential indirect impacts in the future.

4.3 Summary of Assessment of Significance

Tables 3.1 to 3.10 assess the potential impact of the Rathdrum Local Area Plan 2017 on Natura 2000 sites situated within 15km of the plan boundary. This assessment has taken in direct, indirect and cumulative potential impacts arising from the provisions and objectives of the plan.

The assessment of each of the 10 Natura 2000 sites indicates that the plan will not cause any significant adverse impacts on any of these sites.

The plan has been prepared in accordance with the provisions of the County Development Plan and in accordance with European, National and Regional requirements which set the framework for the achievement of the optimal balance of social, economic and physical development within the plan area. The effects of higher-level strategies and plans are considered insofar as they inform the plan. Subsidiary plans and projects will be subject to separate assessment procedures in accordance with all applicable regulations and directives.

Having regard to the purpose and provisions of the plan it is considered that the 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.

4.4 Conclusions and AA Determination

The likely impacts that will arise from the Rathdrum Local Area Plan have been examined in the context of a number of factors that could potentially affect the integrity of Natura 2000 sites and have been presented in Tables 3.1-3.10.

It is the conclusion of this screening statement that there will be no adverse impacts on the integrity of any Natura 2000 sites located within 15km of the plan area and that a Stage 2 Appropriate Assessment is not required.

Appendix B1 Natura Site Descriptions

Vale of Clara (Rathdrum Wood) SAC

Site characteristics

Situated in a deep, steeply-sided valley through which runs the Avonmore River. Underlying rock is schist, which weathers to an orange-brown, sandy loam of Ph 4.1-4.9. A distinct mor humus, often several centimetres thick, overlies the mineral soil. Apart from the oak-dominated woods, there is much mixed wood with non-native species, as well as commercial conifer stands. Old river terraces are present along parts of the valley, and there are occasional rock outcrops.

Quality and importance

A relatively large oak-dominated woodland and a good example of the dry acid oakwoods of eastern Ireland. Evidence indicates that the site has been wooded to varying degrees since at least the early 1700's. Despite damage from afforestation with conifers the wood is still of high quality, with a wide range of age classes. The red data species *Cephalanthera longifolia* has been recorded. Past management practices since 1700's are well documented with continued management for conservation, this site will become one of the most extensive oak woods in Ireland.

Vulnerability

The main threat to this site is the regeneration of exotic conifers.

The Vale of Clara woodland, situated mostly on the east side of the Avonmore River, immediately north of Rathdrum, between 107m and 244 m above sea level, forms an integral part of one of the most scenic valleys in Wicklow. The Oak woods are good examples of the species-poor *Blechno-Quercetum* vegetation community, a habitat listed on Annex I of the EU Habitats Directive and are best developed in the Cronybyrne area.

Deputy's Pass Nature Reserve SAC

Site Characteristics

This site is situated on the eastern flank of a glacial overflow channel, aligned in a south west to north east direction. The underlying rock is a mixture of cambrian and lower silurian deposits. Soils are acid brown earths to podzolics. Deputy's Pass wood is the most intact remnant of the once extensive Glenealy Oakwoods, now largely replaced with conifers. Apart from afforestation, the main landuse in the area surrounding the site is pastoral farming.

Quality and Importance

This wood is a good example of the *Blechno-quercetum petraeae* association which is characteristic of the valleys of Wicklow mountains. Oak is dominant over more than half of the site, the remainder being a mix of deciduous (native and nonnative species) and coniferous woodland. The structure and species composition of the oak-dominated areas appear typical and there is natural regeneration. A narrow area of wet woodland (*Fraxinus icorylus*) along a small stream adds diversity to the site. This wood, although relatively small, is an important link in a series of oakwoods which extend from Glen of the Downs across to the Glendalough area.

Vulnerability

Site is a Nature Reserve and not considered vulnerable.

Wicklow Mountains SAC

Site characteristics

An extensive upland site comprising much of the Wicklow Mountains and extending into Co. Dublin. The solid geology is mainly Leinster granites, flanked by Ordovician schists, mudstones and volcanics. The area has been glaciated and features fine examples of high corrie lakes, deep valleys and moraines. Most of the site is over 300m, with much ground over 600m and the highest peak of Lugnaquilla at 925m. The site includes the headwaters of several major rivers, including the Liffey, the Dargle and the Slaney. The substrate over much of the site is peat, with poor mineral soil on the slopes and lower ground. Exposed rock and scree is a feature. The dominant habitats on the site are blanket bog, heaths and upland grassland.

Quality and importance

The site comprises the largest complex of upland habitats in eastern Ireland, with important examples of blanket bog, wet heath and dry heath, extensive in area and mostly of good quality. Alpine heath occurs at high levels, along with calcareous and siliceous rocky habitats harbouring an arctic-alpine flora. A fine series of upland oligotrophic lakes occur and some have *Salvelinus alpinus*. Several oakwoods of moderate quality, typical of the dry acidic woods of eastern Ireland, are found. Seven Red Data Book plant species occur, including the rare *Alchemilla alpina* and *Nitella gracilis* at its only Irish station. The site supports significant populations of breeding *Falco columbarius* and *Falco peregrinus*. The site is important for rare breeding passerines of oakwoods, notably *Phoenicurus phoenicurus* and *Phylloscopus sibilatrix*. The site also has breeding *Turdus torquatus* and *Lagopus lagopus*. *Lutra lutra* occurs on several of the riverine systems.

Vulnerability

The main threat to the quality of habitats on the site is overgrazing by sheep, affecting the bog, heath and rocky habitats and both deer and sheep affecting the woodlands. Localised peat extraction and heavy burning is a threat to the blanket bog. The spread of non-native species is a threat to the quality of the woodlands. Many recreational activities occur within the site and some, such as hill walking and climbing, have potential for disturbance to habitats and species. Peat erosion is frequent on the peaks - this may be a natural process but is likely to be accelerated by activities such as grazing.

Wicklow Mountains SPA

Site characteristics

This is an extensive upland site, comprising a substantial part of the Wicklow Mountains. The underlying geology of the site is mainly of Leinster granites, flanked by Ordovician schists, mudstones and volcanics. The area was subject to glaciation and features fine examples of glacial lakes, deep valleys and moraines. Most of site is over 300 m, with much ground over 600 m and the highest peak of Lugnaquilla at 925 m. The substrate over much of site is peat, with poor mineral soil occurring on the slopes and lower ground. Exposed rock and scree are features of the site. The dominant habitats present are blanket bog, heaths and upland grassland. Fine examples of native Oak woodlands are found in the Glendalough area. The site, which is within the Wicklow Mountains National Park, is fragmented into about 20 separate parcels of land.

Quality and importance

The site supports good examples of both upland and woodland bird communities. It has breeding *Falco columbarius* and *Falco peregrinus*, as well as *Turdus torquatus* and *Lagopus lagopus*, both of the latter being Red-listed in Ireland. It is the only site in Ireland where *Mergus merganser* breeds regularly. It is important for rare breeding passerines of oakwoods, notably *Phoenicurus phoenicurus* and *Phylloscopus sibilatrix*. It also has *Sylvia borin* and *Sylvia atricapilla*.

Vulnerability

As the site is largely State-owned and within a National Park, there are no significant threats to the bird populations. Some of the peatland habitats are affected by overgrazing by sheep, whilst both deer and sheep reduce regeneration within the woodlands. Localised peat extraction and burning is a threat to the blanket bog and heath habitats. Many recreational activities occur within the site and some, such as hill walking and climbing, could have potential for disturbance to habitats and species if not properly controlled.

The Murrrough Wetlands SAC

Site characteristics

The Murrrough SPA comprises a coastal wetland complex that stretches for 13 km from Kilcoole Station, east of Kilcoole village in the north, to Wicklow town in the south, and extends inland for up to 1 km. The site includes area of marine water to a distance of 200 m from low water mark. There is a railway on top of the beach and much agricultural reclamation of the marshes/ salt marshes.

Quality and importance

The site is of high importance for the good numbers and wide variety of waterfowl species that it holds in winter and on passage. The improved grassland provides feeding for Greylag Geese (*Anser anser*). This is one of a handful of sites around the south and east coasts at which Reed Warbler (*Acrocephalus scirpaceus*) has in recent years proved to be a regular breeding species. For some years in the 1980s, Bearded Tit (*Panurus biarmicus*) bred here at its only site in Ireland, emphasizing the potential of this site to hold the community of reedswamp species present in Great Britain, but largely absent in Ireland. The shingle beach is a breeding site for the country's largest colony of Little Tern (*Sterna albifrons*), and supports 19% of the all-Ireland population.

Vulnerability

The proximity of the site to Wicklow town and Kilcoole village is a threat in that there is pressure on the area for housing and increased disturbance. From that flows the risk of water pollution. It is suspected that the system is receiving high nutrient loading from the surrounding farmland. Access and recreational pressure is affecting the vegetation of the shingle shore which, in turn, causes disturbance to birds. The inclusion of the BirdWatch reserve and the state-owned foreshore in the site gives additional protection.

The Murrrough SPA

Site characteristics

The Murrrough SPA comprises a coastal wetland complex that stretches for 13 km from Kilcoole Station, east of Kilcoole village in the north, to Wicklow town in the south, and extends inland for up to 1 km. The site includes area of marine water to a distance of 200 m from low water mark. There is a railway on top of the beach and much agricultural reclamation of the marshes/saltmarshes.

Quality and importance

The site is of high importance for the good numbers and wide variety of waterfowl species that it holds in winter and on passage. The improved grassland provides feeding for Greylag Geese (*Anser anser*). This is one of a handful of sites around the south and east coasts at which Reed Warbler (*Acrocephalus scirpaceus*) has in recent years proved to be a regular breeding species. For some years in the 1980s, Bearded Tit (*Panurus biarmicus*) bred here at its only site in Ireland, emphasizing the potential of this site to hold the community of reedswamp species present in Great Britain, but largely absent in Ireland. The shingle beach is a breeding site for the country's largest colony of Little Tern (*Sterna albifrons*), and supports 19% of the all-Ireland population.

Vulnerability

The proximity of the site to Wicklow town and Kilcoole village is a threat in that there is pressure on the area for housing and increased disturbance. From that flows the risk of water pollution. It is suspected that the system is receiving high nutrient loading from the surrounding farmland. Access and recreational pressure is affecting the vegetation of the shingle shore which, in turn, causes disturbance to birds. The inclusion of the BirdWatch reserve and the state-owned foreshore in the site gives additional protection.

Wicklow Head SPA

Site characteristics

Wicklow Head is a rocky headland with extensive exposures of mica-schist. It is situated approximately 3 km south of Wicklow town. A lighthouse is located near the base of the cliffs. The cliffs, which extend for about 3 km, are highest immediately south of the lighthouse where they rise to about 60 m and it is here that most of the seabirds breed. The site comprises the cliffs and cliff-top vegetation, as well as some heath vegetation. The marine area to a distance of 500 m from the base of the cliffs, where seabirds forage, bathe and socialise, is included in the site.

Quality and importance

Wicklow Head SPA has a good diversity of breeding seabirds, with nationally important populations of *Rissa tridactyla* and *Cephus grylle*, and regionally important numbers of *Fulmarus glacialis*, *Uria aalge* and *Alca torda*. This seabird colony has developed mostly since the 1970s and has been monitored regularly since. The site also supports a pair of breeding *Falco peregrinus*, and has some typical heathland species, including *Sylvia communis*.

Vulnerability

There are no known significant threats to the seabird colony at present. Casual visitors to the site could cause disturbance though most of the seabirds are on an inaccessible cliff face. Over-fishing in local waters could put pressure on food supplies for the birds. Interference is caused to the nesting peregrines in some years

Wicklow Reef

Site characteristics

The site is located on the mid-east coast of Ireland and is just offshore from Wicklow Head, Co. Wicklow. There are strong tidal streams in the area. The substrate is a mixture of cobbles, bedrock and sand that is subject to the strong tidal streams of the east coast. The reef is a biogenic reef constructed by the polychaete *Sabellaria alveolata*.

Quality and Importance

This biogenic reef is well developed with sections of reef up to 0.6 m thick. It is the only documented example in Ireland making this a site of very high importance.

Vulnerability

This reef is vulnerable to any mechanical disturbance by pots and in particular fishing gear being dragged across the surface of the reef. If only a small part of the reef is disturbed, and this disturbance is not repeated with any frequency, the reef should be able to repair itself.

Maherabeg Dunes

Site characteristics

Situated on the south Co. Wicklow coast and extending south from Ardmore Point for up to 2 km, this site comprises a mature dune system and adjacent drift banks. The Three Mile Water River flows through the site before entering the sea. Some swamp vegetation occurs behind the dunes. The drift banks are covered by deciduous woodland and dense scrub. Bedrock and low cliffs are exposed at Ardmore Point, and Ardmore Head is covered by dry grassland and scrub.

Quality and importance

Despite its small size, this site is important as a fine example of an intact sand dune system which shows the various developmental stages of dunes, with embryonic dunes, white dunes, grey fixed dunes and decalcified fixed dunes all represented. A fine transition is also shown between sand dunes and drift banks, the latter wooded with native deciduous species. Also present is a good example of petrifying springs on the cliff-face at Ardmore. The quality of all the habitats is good. A rare hybrid sedge, *Carex x grossii* (*C. hirta* x *C. vesicaria*), has been recorded.

Vulnerability

At present, this site does not appear to be vulnerable to any particular pressures. There is no public access to the area and therefore recreational pressures are low. Natural erosion is evident in the southern part of site. The dry grassland at Ardmore Point is grazed by cattle but the dunes have not been grazed in recent years.

Buckronev – Brittas Dunes & Fen SAC

Site characteristics

An extensive sand dune and fen system that covers an 8km stretch of the coastline of Co. Wicklow. The site contains three sand dune systems – Brittas Bay, Buckronev and Pennycomequick. Sediment source is mainly siliceous (low shell fragment content), with maximum carbonate levels of 3.5%. The dunes have cut off the outflow of a small river at Mizen Head and a large fen has developed. Its proximity to Dublin City makes Brittas Bay a very popular recreational area. Parts of the dune systems have already been developed as caravan parks and golf course. Part of the Buckronev dune system has been acquired by National Parks and Wildlife for conservation use.

Quality and importance

The site contains a range of well-developed dune types, which are typical of those found in eastern Ireland. The dune systems are fairly extensive in area and generally of good quality. Of particular note are the fixed dunes, the decalcified fixed dunes (*Calluno-Ulicetea*), the humid dune slacks, the dunes with *Salix repens* and the shifting Marram dunes. Buckronev fen is a fine example of a diverse wetland system, including alkaline fen, and is one of the most important examples in eastern Ireland. The site is particularly notable for its eastern flora and fauna. In addition to five Red Data Book plant species, there are a number of nationally scarce species including an abundance of *Thelypteris palustris* and *Galium uliginosum*. The invertebrate fauna is of high interest, with some rare species including *Machimus cowini*. *Sterna albifrons* has bred at the site in the past.

Vulnerability

Brittas Bay dunes are subject to intensive agricultural and recreational pressures. Stocking at high densities threatens the older dunes and dune heath. The recent development of a golf course on part of Buckronev dunes may threaten the hydrology of the overall system. Buckronev fen is threatened by a general lowering of the

water table through drainage and water abstraction. Further reclamation of marginal areas of the fen would be detrimental.

Appendix B2 Objectives of Rathdrum LAP & Wicklow County Development Plan 2016-2022

RT13 Protect and enhance the character, setting and environmental quality of natural, architectural and archaeological heritage, and in particular those features of the natural landscape and built structures that contribute to its special interest. The natural, architectural and archaeological heritage of the area shall be protected in accordance with the objectives set out in the Wicklow County Development Plan.

NH1 To ensure that the impact of new developments on biodiversity is minimised and to require measures for the protection and enhancement of biodiversity in all proposals for large developments.

NH2 No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects¹).

NH3 To contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs); Wildlife Sites (including proposed Natural Heritage Areas); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs). To contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents:

- EU Directives, including the Habitats Directive (92/43/EEC, as amended)², the Birds Directive (2009/147/EC)³, the Environmental Liability Directive (2004/35/EC)⁴, the Environmental Impact Assessment Directive (85/337/EEC, as amended), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).
- National legislation, including the Wildlife Act 1976⁵, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) and the European Communities (Environmental Liability) Regulations 2008⁶.
- National policy guidelines (including any clarifying Circulars or superseding versions of same), including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.
- Catchment and water resource management Plans, including Eastern and South Eastern River Basin Management Plan 2009-2015 (including any superseding versions of same).

¹ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

² Including Annex I habitats, Annex II species and their habitats and Annex IV species and their breeding sites and resting places (wherever they occur).

³ Including Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur).

⁴ Including protected species and natural habitats.

⁵ Including species of flora and fauna and their key habitats.

⁶ Including protected species and natural habitats.

- Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: Ireland's 2nd National Biodiversity Plan (including any superseding version of same).
- Ireland's Environment 2014 (EPA, 2014, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.

NH4 All projects and plans arising from this plan¹ (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

- 1) The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
- 2) The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and / or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
- 3) The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of 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. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

NH5 To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) and to protect other designated ecological sites² in Wicklow.

NH6 Ensure ecological impact assessment is carried out for any proposed development likely to have a significant impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Annex I habitats, or rare and threatened species including those species protected by law and their habitats. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

NH7 The Council recognises the natural heritage and amenity value of the Wicklow Mountains National Park and shall consult at all times with National Park management regarding any developments likely to impact upon the conservation value of the park, or on issues regarding visitor areas.

NH8 To protect non-designated sites from inappropriate development, ensuring that ecological impact assessment is carried out for any proposed development likely to have a significant impact on locally

¹ Such projects include but are not limited to those relating to: agriculture; amenity and recreation; contaminated sites; electricity transmission; flood alleviation and prevention; forestry; mineral extraction; renewable energy projects; roads; telecommunications; tourism; wastewater and discharges; and water supply and abstraction.

² Along with cSACs, SPAs and pNHA these include Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs).

important natural habitats or wildlife corridors. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

- NH9** To support, as appropriate, relevant public bodies (such as the National Parks and Wildlife Service), efforts to seek to control and manage alien / invasive species within the County.
- NH10** To facilitate, in co-operation with the relevant statutory authorities and other groups, the identification of valuable or vulnerable habitats of local or regional importance, not otherwise protected by legislation.
- NH11** To support the Department of the Arts, Heritage, Regional, Rural and Gaeltacht Affairs and the National Parks and Wildlife Service in the development of site specific conservation objectives (SSCOs).
- NH12** To support the protection and enhancement of biodiversity and ecological connectivity within the plan area in accordance with Article 10 of the Habitats Directive, including linear landscape features like watercourses(rivers, streams, canals, ponds, drainage channels, etc), woodlands, trees, hedgerows, road and railway margins, semi-natural grasslands, natural springs, wetlands, stonewalls, geological and geomorphological systems, features which act as stepping stones, such as marshes and woodlands, other landscape features and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones that taken as a whole help to improve the coherence of the Natura 2000 network in Wicklow.
- NH14** To promote the preservation of trees, groups of trees or woodlands in particular native tree species, and those trees associated with demesne planting, in the interest of amenity or the environmental, as set out in Schedule 10.08 and Map 10.08 A, B & C of this plan.
- NH15** To consider the making of Tree Preservation Orders (TPOs) to protect trees and woodlands of high value, where it appears that they are in danger of being felled.
- NH16** Development that requires the felling of mature trees of environmental and/or amenity value, even though they may not have a TPO in place, will be discouraged.
- NH17** To discourage the felling of mature trees to facilitate development and encourage tree surgery rather than felling where possible.
- NH18** To encourage the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, as part of the development management process, and require the planting of native, and appropriate local characteristic species, in all new developments.
- NH19** To encourage the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the County. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site (unless otherwise agreed by the Planning Authority).
- NH20** To facilitate the implementation of the *EU Water Framework Directive* and associated River Basin and Sub-Basin Management Plans and the *EU Groundwater Directive* to ensure the protection, improvement and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and estuarine waters, and to restrict development likely to lead to a deterioration in water quality.

- NH21** To resist development that would interfere with the natural water cycle to a degree that would interfere with the survival and stability of natural habitats.
- NH22** To prevent development that would pollute water bodies and in particular, to regulate the installation of effluent disposal systems in the vicinity of water bodies that provide drinking water or development that would exacerbate existing underlying water contamination
- NH23** To minimise alterations or interference with river / stream beds, banks and channels, except for reasons of overriding public health and safety (e.g. to reduce risk of flooding); a buffer of generally 10m along watercourses should be provided (or other width, as determined by the Planning Authority) free from inappropriate development, with undeveloped riparian vegetation strips, wetlands and floodplains generally being retained in as natural a state as possible. In all cases where works are being carried out, to have regard to Regional Fisheries Board "Requirements for the protection of fisheries habitat during the construction and development works at river sites"
- NH24** To ensure that any development or activity with the potential to impact on ground water has regard to the GSI Groundwater Protection Scheme (as shown on Map 10.09).
- NH25** Geological and soil mapping where available shall be considered in planning decisions relating to settlement, excavation, flooding, food production value and carbon sequestration, to identify prime agricultural lands (for food production), degraded/contaminated lands (which may have implications for water quality, health, fauna), lands with unstable soils / geology or at risk of landslides, and those which are essential for habitat protection, or have geological significance.
- NH26** Protect and enhance 'County Geological Sites' (Schedule 10.10 and Map 10.10 of this plan) from inappropriate development at or in the vicinity of a site, such that would adversely affect their existence, or value.
- NH27** To consult with the Geological Survey of Ireland as is deemed necessary, when dealing with any proposals for major developments, which will entail 'significant' ground excavation, such as quarrying, road cuttings, tunnels, major drainage works, and foundations for industrial or large buildings and complexes.
- NH28** To facilitate public access to County Geological Heritage Sites, on the principle of "agreed access" subject to appropriate measures being put in place to ensure public health and safety and subject to the requirements of Article 6 of the Habitats Directive.
- NH29** To facilitate the Geological Survey of Ireland, and other interested bodies with the interpretation of geological heritage in Wicklow, and to facilitate the development of a "Wicklow Rock Trail", Geopark or other similar geo-tourism initiatives.
- NH30** To facilitate the exploitation of mineral resources, in an environmentally sensitive manner, in accordance with the objectives and control measures set out in Chapter 5 and in the Design * Development standards of this plan.
- NH31** To recognise the importance and contribution of Green Infrastructure throughout the region for the maintenance of biodiversity and ensuring that the region will be able to, or be ecologically robust enough to, adapt and respond to climate change issues.

- NH32** To protect existing green infrastructure resources and to facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the benefits that can be achieved with regard to the following:
- Provision of open space amenities,
 - sustainable management of water,
 - protection and management of biodiversity,
 - protection of cultural heritage, and
 - protection of protected landscape sensitivities.
- NH33** During the review process of the existing local plans, to consider identifying Green Infrastructure resources within and on the edge of the settlement boundary and to consider the inclusion of local green infrastructure proposals in each plan in line with the Green Infrastructure proposals and objectives set out in this section.
- NH34** New development and redevelopment proposals, where considered appropriate, are required to contribute towards the protection, management and enhancement of the existing green infrastructure of the local area in terms of the design, layout and landscaping of development proposals.
- NH35** To facilitate the development and enhancement of suitable access to and connectivity between areas of interest for residents, wildlife and biodiversity, with focus on promoting river corridors, Natura 2000 sites, nature reserves and other distinctive landscapes as focal features for linkages between natural, semi natural and formalised green spaces where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of Natura 2000 sites.
- NH36** To identify and facilitate the provision of linkages along and between river corridors within the county and adjoining counties to create inter connected routes and develop riverside parks and create linkages between them to form 'necklace' effect routes including development of walkways, cycleways and wildlife corridors where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of Natura 2000 sites.
- NH37** To promote and facilitate the development of coastal paths linking up with existing recreational paths/strategic walkways/cycleways, creating new linkages between coastal sites and inward linkages to settlements and green spaces in built up areas and extensions to existing facilities where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of Natura 2000 sites.
- NH38** To facilitate the development of green bridges / wildlife crossings over existing physical transport barriers to repair fragmentation of the green infrastructure network caused by such grey infrastructure developments.