



**Draft Greystones-Delgany
and Kilcoole Local Area Plan
2013-2019 and Proposed
Variation No. 3 of Wicklow
County Development Plan
2010-2016**

**Stage 1 Appropriate
Assessment (AA)
Screening Report**

December 2012

Section 1 Introduction and Background to Appropriate Assessment

1.1 Introduction

This is the Appropriate Assessment screening report of the Draft Greystones - Delgany and Kilcoole Local Area Plan 2013 – 2019 and Proposed Variation No. 3 to the Wicklow County Development Plan (CDP) 2010-2016.

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 Draft LAP and the proposed variation to the CDP, either separately, together 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.

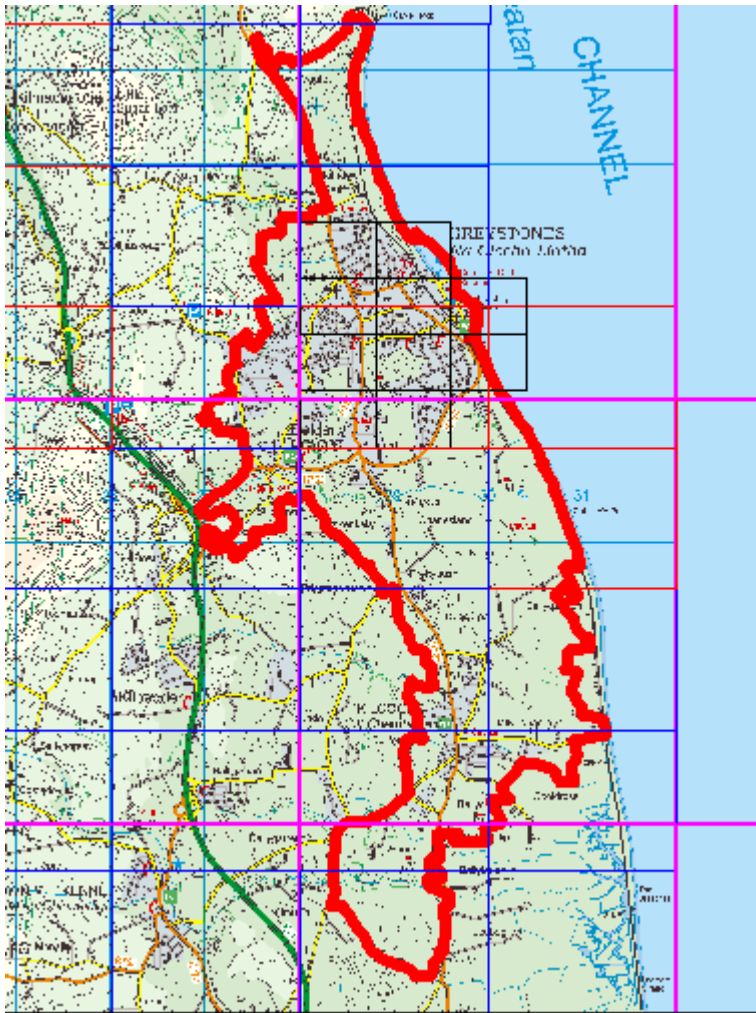
The report has taken into consideration the European Commissions publication - *Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Articles 6 (3) and (4) of the Habitats Directive 92/43/EEC*, Circular Letter SEA 1/08 & NPWS 1/08 from 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 Greystones - Delgany & Kilcoole Local Area Plan (LAP) and Proposed Variation No. 3 to the CDP

It is the purpose of the LAP to establish a framework for the planned, co-ordinated and sustainable development of Greystones-Delgany and Kilcoole (as detailed in Map1.1 below) for the period 2013 to 2019. The aim of the plan is 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.

The Draft LAP for the area has a number of knock on effects on the County Development Plan 2010 – 2016. The purpose of the proposed variation No. 3 is to ensure consistency between the LAP and the CDP. For the purposes of clarity, from this point forward “the Plan” will refer to both the Draft Greystones – Delgany & Kilcoole Local Area Plan and Proposed Variation No. 3 to the CDP.

Map 1.1 Greystones - Delgany & Kilcoole Draft Local Area Plan boundary (in red)



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

The Habitats Directive and the Development Plan

In accordance with Section 11 of Part II of the Planning and Development Acts 2000 (as amended), Wicklow County Council has carried out its review of the Greystones-Delgany Local Area Plan 2009 – 2012 and Kilcoole Local Area Plan 2008 - 2014.

The Planning and Development Acts 2000 (as amended) under section 10(2)(c) states that a Development Plan shall include objectives for the “*the conservation and protection of the environment including, in particular, the archaeological and natural heritage and the conservation*

¹ Council Directive 92/43/EEC

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

and protection of European sites and any other sites which may be prescribed for the purposes of this paragraph”.

The consequences of this piece of legislation ensure that prior to the plan stage, a formal systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme are carried out. This process is carried out under the SEA Directive (2001/42/EC).

A Strategic Environmental Assessment of the Draft Greystones- Delgany and Kilcoole Local Area Plan has been carried out in accordance with this legislation; however in addition to this process and following the EU ruling under case 418/04 EC Commission v Ireland, an Appropriate Assessment screening of the land use plan must also be carried out.

An Appropriate Assessment is an assessment carried out under Article 6(3) of the Habitats Directive. As discussed above Article 6(3) alongside Article 6(4) sets 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(3) specifically states that:

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

This Appropriate Assessment screening exercise evaluates, based on scientific knowledge the potential impacts of a plan on the conservation objectives of any Natura 2000 site. The impacts assessed include the indirect and cumulative impacts of the plan, considered with any current or proposed activities, developments or policies impacting on the site.

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 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 one 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 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 Draft Greystones-Delgany and Kilcoole LAP & CDP variation

It is the purpose of the draft LAP is to establish a framework for the planned, co-ordinated and sustainable development of Greystones-Delgany and Kilcoole. The aim of the plan is 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. While the plan provides for the development of the plan area for a six year period between 2013 and 2019, it is framed within the nine year period up to 2022. In addition, the plan has been prepared mindful of a long term background context of a further ten years or so beyond 2019, based on CSO long term projections.

The draft LAP is consistent with the core strategy of the Wicklow County Development Plan 2010-2016, and the Regional Planning Guidelines for the Greater Dublin Area 2010-2012. For the most part the draft LAP is consistent with the objectives of the CDP, however where minor inconsistencies present themselves these are addressed by the proposed variation to the CDP. The draft LAP includes a written statement and maps indicating objectives. These objectives include zoning objectives, objectives for phased development, community facilities and services, infrastructure and amenities, and the protection of built and natural environment, and objectives for the design of developments.

The proposed CDP variation contains written text for each proposed amendment, along with a reason for the amendments and such maps/ tables as are required for illustration purposes.

2.2.2 Vision and Strategic Goals

The overarching purpose of the plan is set out under Section 2.1 of the plan under 'Vision' as follows:

To build on the dynamism between the settlements of Greystones-Delgany and Kilcoole, so that the area develops in a mutually dependent and complementary manner as a prosperous and growing community. Each settlement shall have a distinct identity and shall perform a function in sustaining its own local community and in providing enhanced opportunities for the creation of new local enterprise. The area shall be a high quality, attractive and sustainable place to live, visit

and conduct business. The combined area shall maximise the potential opportunities associated with its strategic location at the edge of the Dublin Metropolitan Area.

The development strategy to achieve this vision is set out as follows:

- The retention of a suitable greenbelt buffer between Greystones-Delgany and Kilcoole.
- Greystones is to develop in a sustainable manner at a relatively large-scale in accordance with its role as a county significant 'growth' town. The town shall provide a high order economic and social function, and shall capitalize on its accessible location with good road, bus and DART/rail links to the Dublin metropolitan area. The town shall provide for the retail needs of its population and its catchment, in the form of a mixture of both comparison and convenience retail offer. The town should aim to attract a concentration of major employment-generating investment and shall target investment from foreign and local sources in a mixture of 'people' and 'product' intensive industries. In accordance with the Settlement Strategy, as set out in the Wicklow CDP 2010-2016, Greystones-Delgany shall accommodate a high level of housing growth, from a current population of approximately 17,208 to a target population of 21,000 by 2016 and 24,000 by 2022.
- The identity of Kilcoole as a separate stand alone entity in the wider area shall be re-enforced by protecting its distinct character and by encouraging its continued growth as a small, locally important commercial town. Kilcoole shall provide for the service and social infrastructure needs of its residents and its local hinterland. Development of social infrastructure is to keep pace with population growth. Kilcoole should aim to be an economically active town, which targets a variety of investment types, primarily local in nature, in the form of 'product intensive' industries with some 'people' emphasis. In accordance with the Settlement Strategy, as set out in the Wicklow CDP 2010-2016, Kilcoole shall accommodate a moderate level of housing growth, from a current population of approximately 4,063 to a target population of 4,500 by 2016 and 5,000 by 2022.
- The role of Delgany as a village, to serve the day-to-day service and social needs of its local population, shall be strengthened. The identity of the village shall be re-enforced by facilitating the development of village services and through protecting the unique character and heritage value of the Delgany ACA. Development at the outskirts of Delgany shall generally remain for low density and rural housing, in reflection of the natural heritage of these areas and the environmental and infrastructural shortfalls in these areas.
- To provide for a mix of housing in all areas, in a range of house types, sizes and tenures. In particular, new housing in Greystones-Delgany should focus on increasing the number of affordable private homes for families and increasing housing options for older people. New housing in Kilcoole should focus on ensuring that there is an appropriate balance between the amount of social, affordable and private tenure housing.
- To support social and community development and in particular, to link the development of new housing to the delivery of necessary community facilities, including schools, playing pitches, health facilities and other community facilities.
- To promote the development of a sustainable transportation and land use pattern. In particular, throughout all areas, promote the concept of a 'walkable' neighbourhood, whereby all residents are within walking distance of a local service, community facility and public transport option.
- To capitalize on the tourist potential of the area, and to improve tourist infrastructure for the benefit of the combined area.
- Protect the natural and built heritage, and scenic quality of the area, and in particular protect features including the 'Breaches' (Murrough SPA/SAC), Bray Head, the coast, rivers, Architectural Conservation Areas (ACAs), protected structures, monuments and trees, amenity areas and protected views/prospects.
- Maximise the use of existing infrastructure and target new investment in infrastructure where there is a shortfall in infrastructure provision and where new infrastructure can generate the highest returns to the community.

2.2.3 Strategic Environmental Assessment and AA

As part of the Development Plan process and in accordance with Directive 2001/42/EC a Strategic Environmental Assessment was carried out where potential impacts on Biodiversity Flora and Fauna have been examined. As part of the SEA process the objectives of the plan were evaluated against Strategic Environmental Objectives such as those relating to biodiversity flora and fauna. Where potential/probable conflicts were found to exist between the objectives that make up the plan and the strategic environmental objectives (SEOs), the objectives were in the first instance amended or where this was not possible, appropriate mitigation measures were put in place in order to ensure that impacts were avoided.

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 will principally be related to land use zonings in or adjacent to sites.

Human pressure on sites can be manifested in a number of ways either directly in the form of land take, trampling and disturbance by people themselves; or indirectly, for example, in the form of water quality deterioration resulting from a run off of pollutants during construction phases. It is therefore essential that zonings in the Plan take account of these indirect impacts and ensure adequate buffering and other mitigation measures are put in place.

Objectives of the plan 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 and as a result of the SEA process.

2.2.5 Other Instruments

Numerous other higher-level measures further mitigate potential impacts of the Plan. These measures include EU Directives, national legislation and various guidelines. Principal among these are the following:

The Habitats Directive (HD): The European Council Directive on the Conservation of natural habitats and of wild fauna and flora (92/43/EEC) (Habitats Directive)

The Water Framework Directive (WFD): The Water Framework Directive 2000/60/EC

The National Biodiversity Plan (NBP): UN Convention on Biological Diversity 1992 – National Biodiversity Plan 2010- 2016 is as a result of this.

The Wildlife Act (WA): Wildlife Act 1976 and Wildlife (Amendment) Act 2000 (Wildlife Act)

The Birds Directive (BD): The 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) (Birds Directive)

The Ramsar Convention (R): Convention on Wetlands of International Importance (Ramsar)

The Bathing Water Directive (BW): Bathing Water Directive (76/160/EEC)

The Urban Waste Water Treatment Directive (WW): (91/271/EEC) (amended by Directive 98/15/EEC)

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 three Natura sites that occur within or immediately adjacent to the Plan boundary, these are: the Murrough Wetlands SPA and SAC occurs adjacent to Kilcoole, to the south of the Plan area, the Glen of the Downs SAC lies adjacent to the plan boundary to the west of Delgany, and Bray Head SAC lies within the plan area to the north of Greystones.

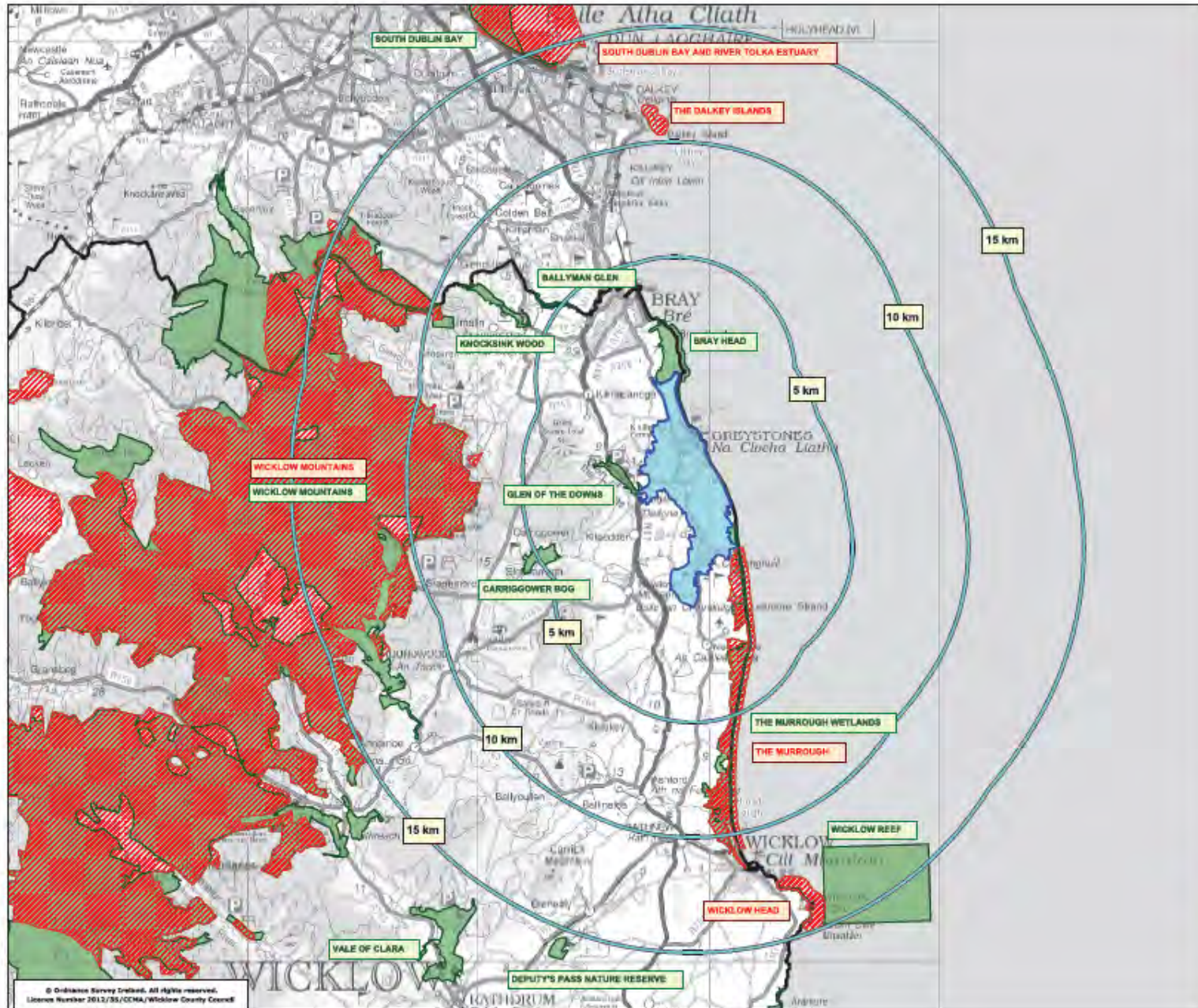
Table 1 (cSACs) and Table 2 (SPAs) list the Natura 2000 sites that are within a 15km range of the plan area. The Qualifying Features for each SAC site, and the Features of Interest and Special Conservation Interests of the SPAs have been obtained through a review of the documentation available on each 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 (e.g. *Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210]). 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).



NATURA 2000 SITES WITHIN 15 KM. OF PROPOSED DRAFT GREYSTONES - DELGANY AND KILCOOLE LOCAL AREA PLAN 2013-2019

- LEGEND
- Buffer Boundary
 - ▨ Special Protection Area
 - Special Area of Conservation
 - Development 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
002249	The Murrough Wetlands	<ul style="list-style-type: none"> • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • *Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] • Alkaline fens [7230] 	
000719	Glen of the Downs	<ul style="list-style-type: none"> • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles [91A0] 	
000714	Bray Head	<ul style="list-style-type: none"> • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] • Semi- natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>) (*important orchid sites) [6210] 	
000716	Carriggower Bog	<ul style="list-style-type: none"> • Transition mires and quaking bogs [7140] 	
000713	Ballyman Glen	<ul style="list-style-type: none"> • *Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] • Alkaline fens [7230] 	
000725	Knocksink Wood	<ul style="list-style-type: none"> • *Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] • *Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91EO] 	
002122	Wicklow Mountains	<ul style="list-style-type: none"> • Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoto-Nanojuncetea</i> [3130] • Natural dystrophic lakes and ponds [3160] • Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] • European dry heaths [4030] • Alpine and Boreal heaths [4060] • Species-rich <i>Nardus</i> 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 (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110] • Calcareous rocky slopes with chasmophytic vegetation [8210] • Siliceous rocky slopes with chasmophytic vegetation [8220] • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles [91A0] 	Otter (<i>Lutra lutra</i>) [1355]
002274	Wicklow Reef	<ul style="list-style-type: none"> • Reefs [1170] 	

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]
004172	Dalkey Islands	<ul style="list-style-type: none"> • Roseate Tern (<i>Sterna dougallii</i>) [A192] • Common Tern (<i>Sterna hirundo</i>) [A193] • Arctic Tern (<i>Sterna paradisaea</i>) [A194]
004024	South Dublin Bay and River Tolka Estuary	<ul style="list-style-type: none"> • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Ringed Plover (<i>Charadrius hiaticula</i>) [A137] • Grey Plover (<i>Pluvialis squatarola</i>) [A140] • Knot (<i>Calidris canutus</i>) [A143] • Sanderling (<i>Calidris alba</i>) [A144] • Dunlin (<i>Calidris alpina</i>) [A149] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Redshank (<i>Tringa totanus</i>) [A162] • Black-headed Gull (<i>Croicocephalus ridibundus</i>) [A179] • Roseate Tern (<i>Sterna dougallii</i>) [A192] • Common Tern (<i>Sterna hirundo</i>) [A193] • Arctic Tern (<i>Sterna paradisaea</i>) [A194] • Wetlands & Waterbirds [A999]

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*”. Conservation management plans have not been prepared for Natura sites in the Plan area; therefore information has been sourced from the site synopsis. Conservation Statements, listing the relevant management issues and threats are available for Bray Head and Carrigower Bog. A Management Plan is available for the Wicklow Mountains National Park which encompasses the Wicklow Mountains SAC and SPA and provides a source of information on management issues and threats.

The process is underway by NPWS for setting detailed site-specific conservation objectives for habitats and species, however as of yet these have not been identified for Natura sites within the scope of the Plan area. Generic conservation objectives have been compiled for the SAC and SPAs within the Plan area. These are based on maintaining/restoring the favourable conservation condition of the habitats and species for which sites are selected.

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 NPWS has identified the following as the Conservation Objective for the SACs in County Wicklow: *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* (see Table 1)

For all the SPAs in Wicklow the NPWS has identified the following as the Conservation Objective: *To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA* (See Table 2)

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 1.

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 Greystones-Delgany and Kilcoole Development Plan and Proposed Variation No. 3 (the 'Plan') on each of the Natura 2000 sites located within 15 km of the Plan area. Table 3 provides details of each Natura site's conservation objectives and its management issues and threats. These are largely derived from available data in the form of site synopsis and/or conservation statements. 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 2008). 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 or 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 3.1 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 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>Annual vegetation of drift lines [1210]</p> <p>Perennial vegetation of stony banks [1220]</p> <p>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]</p> <p>Mediterranean salt meadows (Juncetalia maritimi) [1410]</p> <p>*Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]</p> <p>Alkaline fens [7230]</p>	<p>Human disturbance</p> <p>Development pressure</p> <p>Water pollution risk</p> <p>Nutrient enrichment from surrounding farmland</p> <p>Access and recreational pressure</p> <p>The inclusion of the BirdWatch reserve and the state-owned foreshore in the site gives additional protection.</p> <p>Grazing</p> <p>Sand and Gravel extraction</p> <p>Sea defence or coastal protection works</p> <p>Infilling and reclamation</p> <p>Invasive species</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</p>	<p>None</p>	<p>None</p>	<p>None</p>	<p>HER1, HER2, HER 3, HER 4, HER 5, HER 6, HER 9, HER 10</p> <p>TS1, TS2, TS4, TS5, TS6, TS7</p> <p>RES3, RES7</p> <p>TOUR2, TOUR3</p> <p>RO15</p>	<p>None</p>

Assessment

The Plan puts in place a number of provisions to ensure that there are no direct adverse impacts of the Plan on this site. Where land in the Plan lies adjacent to

the site this has been zoned as Greenbelt. The Greenbelt zoning seeks to protect the open nature and landscape quality of lands, to protect and enhance local biodiversity, and to maintain the primary use of the land for agricultural purposes. Furthermore, rural development objectives of the County Development Plan apply to Greenbelt areas, and there is a stated commitment to protecting the integrity of Natura 2000 sites. This zoning mitigates against surrounding landuses that would have an adverse impact on the site, and against habitat fragmentation.

The boundary of the Plan to the south of Sea Road retains a buffer between the Plan and the Natura site which is beneficial to the site. The inclusion of a Strategic Land Bank zoning in this area of the Plan identifies that this area may be open for consideration for development at a future stage, beyond the lifetime of the Plan however this would be subject to further detailed consideration of appropriateness. The objectives HER1 and HER2 safeguard against potential negative impacts on the site at a future stage. This protection is further strengthened through HER 3 which affords protection to areas of biodiversity lying outside of Natura sites in keeping with Article 10 of the Habitats directive.

Human disturbance and recreational pressures are key management issues for this site which is currently heavily used for recreation. The Plan strives to promote tourism and recreation in a sustainable manner at suitable locations (TOUR2) and formalise existing recreational use (TOUR3). The existence of Birdwatch Ireland's reserve is identified by NPWS as giving additional protection to the site; this too is recognised in the Plan whereby a commitment is given to increasing awareness of, and connectivity with the East Coast Nature Reserve (TOUR2). These provisions should help to address recreational issues and contribute positively to the conservation of the site.

The objective in the Plan of improving Sea Road and developing a footpath along the road as far as the train station (RO15) is aimed at managing existing commuter use. Given that the objective will not increase parking capacity, it is considered unlikely that there will be any significant impact on the integrity of the site as a result of increased visitor recreation.

The site is water dependant, and therefore vulnerable to land use changes which could in turn effect changes in water quality or hydrology. This issue is addressed through the Greenbelt zone and also through the Flood Management objectives, derived through the Flood Risk Management Assessment carried out for the CDP. Objectives TS 5, TS6 and TS7 ensure that development is restricted in Flood zones A and B in accordance with Flood Risk Management guidelines (DOEHLG / OPW 2009) and that Flood Risk Assessments can be required for developments outside known flood areas at the discretion of the local authority in response to local site conditions. The Plan has undergone a Strategic Environmental Assessment, with both the SEA and plan-making processes being informed from an early stage, by the requirements of the Habitats Directive and Floods Directive, in terms of ensuring protection of Natura 2000 sites and ensuring that flood risk is appropriately addressed in plan making decisions.

The waste water treatment capacity of the Plan area is adequate to meet current and future needs and adequate mitigation measures are in place regarding water services provision, drainage waste management, energy recycling and communications infrastructure (TS1, TS2 and TS4). It is not considered that the Plan will give rise to any changes in water quality or hydrology at the site.

Existing sea defence and/or coastal protection works are identified as management issues for the site. While HER9 in the Plan facilitates the undertaking of works to protect the coastline from erosion these would be in accordance with the Coastal Zone management Plan set out in the CDP (which has previously been screened for Appropriate Assessment in accordance with the Habitats Directive).

The Plan sets out a framework for the proper planning and sustainable development of the plan area and includes numerous objectives designed to mitigate against flood risk and to safeguard the natural environment generally, all of which should have positive impacts on the conservation objectives of the site.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 this Natura 2000 site

Table 3.2 Glen of the Downs SAC

Natura 2000 Site

Glen of the Downs SAC is situated in a glacial overflow channel cut in a NW-SE direction through Cambrian quartzite. In the valley bottom there is a narrow band of alluvium associated with a small stream, but the steep slopes are covered with a thin, sandy brown-earth/brown podzolic soil which becomes progressively thinner up the slopes. This is reflected in the trees which become shorter and more stunted up the slopes. The soil is very dry over much of the site, particularly so on the NE side.

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
Old sessile oak woods with Ilex and Blechnum in British Isles [91A0]	Future Road Widening Invasive and alien 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	None	None	None	RES3, RES7, TS1, TS2, TS4 TS5, TS6, TS7 TOUR2 HER1, HER2, HER3, HER4, HER5, HER10	None

Assessment

The southern part of the Natura site lies adjacent to the Plan boundary. The zoning in this area is Greenbelt. The Greenbelt zoning seeks to protect the open nature and landscape quality of lands, to protect and enhance local biodiversity, and to maintain the primary use of the land for agricultural purposes. Furthermore, rural development objectives of the County Development Plan apply to Greenbelt areas, and there is a stated commitment to protecting the integrity of Natura 2000 sites. This zoning mitigates against surrounding landuses that would have an adverse impact on the site, and against habitat fragmentation.

Residential objectives in the Plan (RES 3 and RES7) will ensure that development in the surrounding area is of low density and is for infill.

The waste water treatment capacity of the Plan area is adequate to meet current and future needs and adequate mitigation measures are in place regarding water services provision, drainage waste management, energy recycling and communications infrastructure (TS1, TS2 and TS4). It is not considered that the Plan will give rise to any changes in water quality or hydrology at the site. Objectives TS 5, TS6 and TS7 ensure that development is restricted in Flood zones A and B in accordance with Flood Risk Management guidelines (DOEHLG / OPW 2009) and that Flood Risk Assessments can be required for developments outside known flood areas at the discretion of the local authority in response to local site conditions. The Plan has undergone a Strategic Environmental Assessment, with both the SEA and plan-making processes being informed from an early stage, by the requirements of the Habitats Directive and Floods Directive, in terms of ensuring protection of Natura 2000 sites and ensuring that flood risk is appropriately addressed in plan making decisions.

There is an objective (TOUR2) to promote the development of tourism and recreational related developments in a sustainable manner at suitable locations that are of an appropriate scale and design. As part of this it is a stated objective to link Kindlestown Wood with the site through a recreational trail. Objective HER2 however mitigates against potential negative impact of this proposed route, as those the ownership of the site, whereby, as a state owned property there is a structure in place to deal with management issues and threats, including accessibility and regulation of uses.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and includes numerous objectives designed to mitigate against flood risk and to safeguard the natural environment generally, all of which should have positive impacts on the conservation objectives of the site.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The site in question falls within the jurisdiction of the Wicklow County Development Plan where a number of policies and objectives are set out in order to protect and preserve such sites.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site.

Table 3.3 Bray Head SAC

Natura 2000 Site

Site is situated in the north-east of Co. Wicklow between the towns of Bray and Greystones. Bedrock geology is Cambrian quartzites and shales (with mudstones and greywackes). Bray Head consists of a plateau of high ground, with five prominent quartzite knolls and a maximum height of 241 m. The more exposed higher ground has a covering of shallow acidic soils, with protruding bedrock and scree. Elsewhere, deeper soils are formed by drift deposits, calcareous in character. In addition to heath and cliff habitats, the site supports calcareous grassland, some native woodland and scrub, and a sandy/shingle beach. An area of shallow marine water is included for ornithological reasons. Main landuse within site is recreation, especially walking.

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
[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts [4030] European dry heaths	Burning Development Erosion Grazing Reclamation Spread of Bracken Trampling damage	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	None	None	None	HER1, HER2, HER3, HER4, HER5, HER6, HER7, HER8, HER9, HER10 TS11 TS1, TS2, TS4 TS5, TS6, TS7 RES1, RES2 Tour2, tour3 AP3	None

Assessment

The southern part of the site is included within the Plan area and is included in a Greenbelt zoning. The Greenbelt zoning seeks to protect the open nature and landscape quality of lands, to protect and enhance local biodiversity, and to maintain the primary use of the land for agricultural purposes. Furthermore, rural development objectives of the County Development Plan apply to Greenbelt areas, and there is a stated commitment to protecting the integrity of Natura 2000 sites. This zoning mitigates against surrounding landuses that would have an adverse impact on the site, and against habitat fragmentation.

The Plan area to the immediate south of the site is included in the 'Greystones Harbour and North Beach Action Plan' (AP3). This action plan sets out a planning framework for the area extending from the Harbour, north as far as the Natura site. The action plan area is divided into 3 zones, with zone 3 lying adjacent to the Natura site. The vision for zone 3 is to preserve the land and natural landscape for future development of a Heritage Park at the site of medieval Rathdown. This objective is compatible with tourism objectives in the Plan to promote the coastal amenity and to enhance the existing coastal walkway and develop a cycle route (TOUR 2 and TOUR3). Furthermore there is an objective (HER7) to support the implementation of the Bray Head SAAO. The retention of this land for recreational purposes, coupled with mitigating objective HER2 should provide the opportunity to increase the recreational management of the area, which in turn will be positive for the conservation of the Natura site. The relevant Natura data form for the site refers to its potential educational importance, owing to its proximity to urban areas.

South of zone3, the vision in zone 2 is to create a public park which would allow for more active recreational use, while the vision for zone 1 is the development of the integrated Harbour and marina. This phased approach, whereby recreational use is directed away from the Natura site is to be welcomed. All developments are subject to HER2 and it is not considered that there will be any significant impacts on the conservation objectives of the site arising from these objectives in the Plan.

The waste water treatment capacity of the Plan area is adequate to meet current and future needs and adequate mitigation measures are in place regarding water services provision, drainage waste management, energy recycling and communications infrastructure (TS1, TS2 and TS4). It is not considered that the Plan will give rise to any changes in water quality or hydrology at the site. Objectives TS 5, TS6 and TS7 ensure that development is restricted in Flood zones A and B in accordance with Flood Risk Management guidelines (DOEHLG / OPW 2009) and that Flood Risk Assessments can be required for developments outside known flood areas at the discretion of the local authority in response to local site conditions. TS11 specifically prohibits the development of a road on the lower slopes of Bray Head, with the exception of minor access roads. The plan clarifies that any potential minor access roads will be subject to a screening in line with the requirements of the Habitats Directive.

Residential objectives in the Plan ensure that development in the surrounding area is for infill, and will avoid encroachment into undeveloped residential areas, this is positive for the conservation of the site.

The Plan has undergone a Strategic Environmental Assessment, with both the SEA and plan-making processes being informed from an early stage, by the requirements of the Habitats Directive and Floods Directive, in terms of ensuring protection of Natura 2000 sites and ensuring that flood risk is appropriately addressed in plan making decisions.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site.

Table 3.4 Carrigower Bog SAC

Natura 2000 Site

Carrigower Bog SAC is an upland valley bog complex on the Calary plateau on the eastern side of the Wicklow Mountains. It comprises a mosaic of wet blanket bog and poor fen vegetation, along with such related habitats as heath, wet grassland and Betula-Salix scrub. There is no open water other than pools. The Vartry River skirts the western side of site. The bog was exploited for peat up to about 100 years ago but now old cuttings are well revegetated. An area of conifer plantation is included. Surrounding landuse is mostly semi-improved grassland and forestry.

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
Transition mires and quaking bogs [7140]	Dumping Forestry Grazing Run-off Water management level Drainage Reclamation Pollution	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	None	None	None	TS1, TS2, TS4 TS5, TS6, TS7 RES1, RES2, RES7 HER1, HER2, HER3, HER4, HER5, HER10	None

Assessment

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, given the distance of this site at over 5kms from the Plan boundary.

The site is vulnerable to changes in hydrology, the main threat being a lowering of the water table due to drainage attempts in the locality. Part of the site is semi-improved grassland and any intensification of grazing could be damaging. Forestry is widespread in the area and is a general threat. The site falls within the jurisdiction of the Wicklow County Development Plan where a number of policies and objectives are set out in order to protect and preserve such sites.

It is not considered that the Plan will give rise to any changes in water quality, hydrology or air quality at the site. While drinking water to the Plan area is provided from the Vartry Reservoir at Roundwood, the protection, improvement and sustainable use of all waters in the Plan area is in accordance with the EU Water Framework Directive, the River Basin Management Plans and associated Programme of Measures. (The Eastern Region River Basin Management Plan itself has undergone an appropriate assessment to ensure that it does not give rise to adverse effects on Natura sites.) The Plan sets out a framework for the proper planning and sustainable development of the plan area and includes numerous objectives designed to mitigate against flood risk and to safeguard the natural

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environment generally, all of which may give rise to indirect positive impacts on the conservation objectives of the site.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The Development Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site

Table 3.5 Ballyman Glen SAC

Natura 2000 Site

A small glen cut through calcareous sands and gravels, with a tributary stream of the Dargle river flowing west to east through it. The site supports a strip of wet woodland, a small area of alkaline fen fed by petrifying springs, and grades to scrub and dry calcareous grassland on the upper edges of the valley sides.

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
*Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230]	Nutrient run-off from surrounding agricultural land Over extraction of water locally	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	None	None	None	TS1, TS2, TS4 TS5, TS6, TS7 RES1, RES2, RES7 HER1, HER2, HER3, HER4, HER5, HER10	None

Assessment

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 vulnerable to changes in water quality and water levels. The site falls within the jurisdiction of the Wicklow County Development Plan where a number

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of policies and objectives are in place to control adjacent land uses to ensure prevention of pollution. The site is not linked hydrologically to the Plan area, and it is therefore not considered that the Plan will give rise to any changes in water quality or hydrology at the site.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site

Table 3.6 Knocksink Wood SAC

Natura 2000 Site

A wooded valley cut through calcareous glacial drift, with the fast flowing Glencullen river flowing west to east through it. Vegetation types include broadleaf deciduous woods, including wet woodland near the river, heath and a number of tufa – forming springs and seepage areas.

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
*Petrifying springs with tufa formation (Cratoneurion) [7220] *Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91EO]	Disturbance Littering	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	None	None	None	TS1, TS2, TS4 TS5, TS6, TS7 RES1, RES2, RES7 HER1, HER2, HER3, HER4, HER5, HER10	None

Assessment

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.

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The site is a popular amenity area and is thus vulnerable to human disturbance. The site falls within the jurisdiction of the Wicklow County Development Plan where a number of policies and objectives are in place to control adjacent land uses and recreational amenity. The site is not linked hydrologically to the Plan area, and it is therefore not considered that the Plan will give rise to any changes in water quality or hydrology at the site.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site

The Development Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site

Table 3.7 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
Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoto-Nanojuncetea</i> [3130] Natural dystrophic lakes and ponds [3160] Northern	Overgrazing Peat extraction Burning Invasive and alien 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	None	None	None	TS1, TS2, TS4 TS5, TS6, TS7 RES1, RES2, RES7 HER1, HER2, HER3, HER4, HER5, HER10	

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Atlantic wet heaths with Erica tetralix [4010]	Recreational activities	selected					
European dry heaths [4030]	Erosion						
Alpine and Boreal heaths [4060]	Water quality						
Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* [6230]	Afforestation						
	Water pollution						
Blanket bog (*active only) [7130]	Clearance of riparian vegetation.						
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]							
Otter (Lutra lutra) [1355]							

Assessment

Given the distance of this site at over 10kms 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.

Indirectly, it is not considered that the Plan will give rise to any changes in water quality, hydrology or air quality at the site, given the distance from the Plan area

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combined with the fact that the waste water treatment capacity of the Plan area is adequate to meet current and future needs, and adequate mitigation measures are in place regarding air and water pollution.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The site in question falls within the jurisdiction of the Wicklow County Development Plan and the Laragh Glendalough Settlement and Tourism Plan, where a number of policies and objectives are set out in order to protect and preserve such sites.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 this Natura 2000 site.

3.8 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 *Sabellaria alveolata*

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]	Extent of impact of offshore fisheries on this habitat has not been documented	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	None	None	None	TS1, TS2, TS4 TS5, TS6, TS7 RES1, RES2, RES7 HER1, HER2, HER3, HER4, HER5, HER10	None

Assessment

Given the distance of this site at over 10kms from the plan boundary, plus the fact that the site lies offshore, 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 a scarcity of information about documented threats or management issues for this site with offshore fisheries activity identified as the only potential threat. The Plan is a land use plan that will have no impact on the nature or extent of offshore fisheries activity. It is also considered unlikely that the Plan will give rise to

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any other impacts indirectly on the site, given that it sets out a framework for the proper planning and sustainable development of the plan area and puts in place adequate mitigation measures regarding environmental protection, water and air quality and the avoidance and mitigation of coastal flood risk, offshore wind energy and coastal erosion measures.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 this Natura 2000 site

Table 3.9 The Murrough SPA

Natura 2000 Site

The Murrough 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.

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)	Human disturbance Development pressure Water pollution risk Nutrient enrichment from surrounding farmland Access and recreational pressure is	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	None	None	None	HER1, HER2, HER 3, HER 4, HER 5, HER 6, HER 9, HER 10 TS1, TS2, TS4, TS5, TS6, TS7 RES3, RES7 TOUR2, TOUR3 RO15	None

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<p>[A052]</p> <p>Black-headed Gull (<i>Larus ridibundus</i>) [A179]</p> <p>Herring Gull (<i>Larus argentatus</i>) [A184]</p> <p>Little Tern (<i>Sterna albifrons</i>) [A195]</p> <p>Wetlands & Waterbirds [A999]</p>	<p>affecting the vegetation of the shingle shore which, in turn, causes disturbance to birds.</p> <p>The inclusion of the BirdWatch reserve and the state-owned foreshore in the site gives additional protection</p>						
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Assessment

The Plan puts in place a number of provisions to ensure that there are no direct adverse impacts of the Plan on this site. Where land in the Plan lies adjacent to the site this has been zoned as Greenbelt. The Greenbelt zoning seeks to protect the open nature and landscape quality of lands, to protect and enhance local biodiversity, and to maintain the primary use of the land for agricultural purposes. Furthermore, rural development objectives of the County Development Plan apply to Greenbelt areas, and there is a stated commitment to protecting the integrity of Natura 2000 sites. This zoning mitigates against surrounding landuses that would have an adverse impact on the site, and against habitat fragmentation.

The boundary of the Plan to the south of Sea Road retains a buffer between the Plan and the Natura site which is beneficial to the site. The inclusion of a Strategic Land Bank zoning in this area of the Plan identifies that this area may be open for consideration for development at a future stage, beyond the lifetime of the Plan however this would subject to further detailed consideration of appropriateness. The objectives HER1 and HER2 safeguard against potential negative impacts on the site at a future stage. This protection is further strengthened through HER 3 which affords protection to areas of biodiversity lying outside of Natura sites in keeping with Article 10 of the Habitats directive.

Human disturbance and recreational pressures are key management issues for this site which is currently heavily used for recreation. The Plan strives to promote tourism and recreation in a sustainable manner at suitable locations (TOUR2) and formalise existing recreational use (TOUR3). The existence of Birdwatch Ireland's reserve is identified by NPWS as giving additional protection to the site; this too is recognised in the Plan whereby a commitment is given to increasing awareness of, and connectivity with the East Coast Nature Reserve (TOUR2). These provisions should help to address recreational issues and contribute positively to the conservation of the site.

The objective in the Plan of improving Sea Road and developing a footpath along the road as far as the train station (RO15) is aimed at managing existing commuter use. Given that the objective will not increase parking capacity, it is considered unlikely that there will be any significant impact on the integrity of the site as a result of increased visitor recreation.

The site is water dependant, and therefore vulnerable to land use changes which could in turn effect changes in water quality or hydrology. This issue is addressed through the Greenbelt zone and also through the Flood Management objectives, derived through the Flood Risk Management Assessment carried out for the CDP. Objectives TS 5, TS6 and TS7 ensure that development is restricted in Flood zones A and B in accordance with Flood Risk Management guidelines (DOEHLG / OPW 2009) and that Flood Risk Assessments can be required for developments outside known flood areas at the discretion of the local authority in response to local site conditions. The Plan has undergone a Strategic Environmental Assessment, with both the SEA and plan-making processes being informed from an early stage, by the requirements of the Habitats Directive and Floods Directive, in terms of ensuring protection of Natura 2000 sites and ensuring that flood risk is appropriately addressed in plan making decisions.

The waste water treatment capacity of the Plan area is adequate to meet current and future needs and adequate mitigation measures are in place regarding water

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services provision, drainage waste management, energy recycling and communications infrastructure (TS1, TS2 and TS4). It is not considered that the Plan will give rise to any changes in water quality or hydrology at the site.

Existing sea defence and/or coastal protection works are identified as management issues for the site. While HER9 in the Plan facilitates the undertaking of works to protect the coastline from erosion these would be in accordance with the Coastal Zone management Plan set out in the CDP (which has previously been screened for Appropriate Assessment in accordance with the Habitats Directive).

The Plan sets out a framework for the proper planning and sustainable development of the plan area and includes numerous objectives designed to mitigate against flood risk and to safeguard the natural environment generally, all of which should have positive impacts on the conservation objectives of the site.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 this Natura 2000 site

Table 3.10 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 500 m 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 Overfishing	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	None	None	None	HER1, HER2, HER 3, HER 4, HER 5, HER 6, HER 9, HER 10 TS1, TS2, TS4, TS5, TS6, TS7 RES3, RES7 TOUR2, TOUR3 RO15	None

Assessment

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, due to the distance of over 10kms of the site from the Plan area.

Overfishing and recreation are the two potential management issues identified for this site. The Plan is a land use plan that will have no impact on the nature or extent of offshore fisheries activity.

Regarding recreation, the Plan strives to promote tourism and recreation in a sustainable manner at suitable locations (TOUR2) and formalise existing recreational use (TOUR3). These provisions may result in indirect benefits to the site by public awareness raising generally about coastal heritage.

It is considered unlikely that the Plan will give rise to any other impacts indirectly on the site, given that it sets out a framework for the proper planning and sustainable development of the plan area and puts in place adequate mitigation measures regarding environmental protection, water and air quality and the avoidance and mitigation of coastal flood risk, offshore wind energy and coastal erosion measures.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site.

Table 3.11 Wicklow Mountains SPA

Natura 2000 Site

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

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 Water quality	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	None	None	None	HER1, HER2, HER 3, HER 4, HER 5, HER 6, HER 9, HER 10 TS1, TS2, TS4, TS5, TS6, TS7 RES3, RES7 TOUR2, TOUR3 RO15	None

Assessment

Given the distance of this site at over 10kms 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.

Indirectly, it is not considered that the Plan will give rise to any changes in water quality, hydrology or air quality at the site, given the distance from the Plan area combined with the fact that the waste water treatment capacity of the Plan area is adequate to meet current and future needs, and adequate mitigation measures are in place regarding air and water pollution.

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The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The site in question falls within the jurisdiction of the Wicklow County Development Plan and the Laragh Glendalough Settlement and Tourism Plan, where a number of policies and objectives are set out in order to protect and preserve such sites.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 this Natura 2000 site.

Table 3.12 Dalkey Islands SPA

Natura 2000 Site

Site comprises Dalkey Island, Lamb Island, Maiden Rock, the intervening rocks and reefs between Dalkey Island, Lamb Island and Clare Rock, and the sea area around Maiden Rock to a distance of 100 m. Dalkey Island, which is the largest in the group, lies ca.400m off Sorrento Point and is separated by a deep channel. The island is low-lying, the highest point at c.15m is marked by a Martello Tower. Soil cover consists mainly of thin peaty layers, though in a few places there are boulder clay deposits. Vegetation cover is low, consisting mainly of grasses. Lamb Island lies to the north of Dalkey Island, attached at low-tided by a rocky reef. It has thin soil cover and a sparse vegetation cover. Further north lies Maidens Rock, a bare angular granite rock up to 5m high. There is no vegetation cover. Dalkey Island is grazed by a herd of feral goats.

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
Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194]	Predation Disturbance	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	None	None	None	HER1, HER2, HER 3, HER 4, HER 5, HER 6, HER 9, HER 10 TS1, TS2, TS4, TS5, TS6, TS7 RES3, RES7 TOUR2, TOUR3 RO15	None

Assessment

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, given that there is a distance of over 10kms between the site and the Plan area.

Predation and disturbance are the two potential management issues identified for this site. It is unlikely that the Plan will have any impact on these issues directly, indirectly or cumulatively. The Plan strives to promote tourism and recreation in a sustainable manner at suitable locations (TOUR2) and formalise existing recreational use (TOUR3). These provisions may result in indirect benefits to the site by raising public awareness generally about coastal heritage.

It is considered unlikely that the Plan will give rise to any other impacts indirectly on the site, given that it sets out a framework for the proper planning and sustainable development of the plan area and puts in place adequate mitigation measures regarding environmental protection, water and air quality and the avoidance and mitigation of coastal flood risk, offshore wind energy and coastal erosion measures.

The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site

Table 3.13 South Dublin Bay and River Tolka Estuary SPA

Natura 2000 Site

This site comprises a substantial part of Dublin Bay. It includes virtually all of the intertidal area in the south bay, as well as much of the Tolka Estuary to the north of the River Liffey. A portion of the shallow bay waters is also included. In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. The sands support the largest stand of *Zostera noltii* on the East Coast. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. Sediments in the Tolka Estuary vary from soft thixotropic muds with a high organic content in the inner estuary to exposed, well aerated sands off the Bull Wall. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes.

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
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Grey Plover (<i>Pluvialis squatarola</i>) [A140] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>)	Reclamation Disturbance Pollution Commercial baiting	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	None	None	None	HER1, HER2, HER 3, HER 4, HER 5, HER 6, HER 9, HER 10 TS1, TS2, TS4, TS5, TS6, TS7 RES3, RES7 TOUR2, TOUR3 RO15	None

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<p>[A157]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Black-headed Gull (<i>Croicocephalus ridibundus</i>) [A179]</p> <p>Roseate Tern (<i>Sterna dougallii</i>) [A192]</p> <p>Common Tern (<i>Sterna hirundo</i>) [A193]</p> <p>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</p> <p>Wetlands & Waterbirds [A999]</p>							
<p>Assessment</p> <p>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, given that there is a distance of approx 15km between the site and the Plan area.</p> <p>Pollution, reclamation and disturbance are the main potential management issues identified for this site. It is unlikely that the Plan will have any impact on these issues directly, indirectly or cumulatively. The Plan strives to promote tourism and recreation in a sustainable manner at suitable locations (TOUR2) and formalise existing recreational use (TOUR3). These provisions may result in indirect benefits to the site by raising public awareness generally about coastal heritage.</p> <p>It is considered unlikely that the Plan will give rise to any other impacts indirectly on the site, given that it sets out a framework for the proper planning and sustainable development of the plan area and puts in place adequate mitigation measures regarding environmental protection, water and air quality and the avoidance and mitigation of coastal flood risk, offshore wind energy and coastal erosion measures.</p> <p>The Plan sets out a framework for the proper planning and sustainable development of the plan area and does not relate to lands outside the plan boundary. The Plan has been prepared in accordance with the European, National and Regional legislation 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 Development 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 this Natura 2000 site</p>							

4.3 Summary of Assessment of significance

Tables 3.1 to 3.13 assess the potential impact of the Greystones-Delgany & Kilcoole Local Area Plan 2013-2019 and Proposed No. 3 Variation to the Wicklow County Development Plan 2010-2016 on Natura 2000 sites situated within 15 km. 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 12 Natura 2000 sites indicates that the Plan will not cause any significant adverse impacts on the conservation interests of any of these sites.

Each of the four Natura 2000 sites (The Murrough Wetlands SAC, The Murrough SPA, Glen of the Downs SAC and Bray Head SAC) that are located either in, or at proximity to the Plan boundary are potentially the most vulnerable to impacts from the Plan.

Land adjoining each of these sites has been given a 'Greenbelt' (GB) zoning. The objective associated with this zoning is *"To generally protect the open nature and landscape quality of lands, to protect and enhance local biodiversity, and to maintain the primary use of the land for agricultural purposes"*. This land use is compatible with the conservation of the sites, in that it mitigates against surrounding landuses that would have an adverse impact on the sites, and against habitat fragmentation.

The inclusion of Action Plan 3 to the south of and adjacent to Bray Head SAC boundary is also considered compatible with protecting the conservation interests of the site. The land in question is Zone 3 of the Action Plan, where there is a stated intention of preserving the land and natural landscape for future archaeological study and for the development of a Heritage Park. The retention of this land for recreational purposes, coupled with mitigating objective HER2 should provide the opportunity to increase the overall management and formalisation of recreational in the area, which in turn will be positive for the conservation of the Natura site.

The boundary of the Plan to the south of Sea Road, Kilcoole retains a buffer between the Plan and the Natura sites which is beneficial to the sites. The inclusion of a Strategic Land Bank (SLB) zoning beyond this buffer indicates that this land will not be developed within the lifetime of the Plan, but that, given its proximity and accessibility to infrastructure; it is open to consideration at a future time. It is clarified in the Plan that such consideration would be subject to further detailed analysis of appropriateness. For the purposes of planning this SLB land is part of the rural area, and standards and objectives of the Wicklow County Development Plan (CDP) currently apply. It should be noted that, following its own screening process the CDP is in compliance with the terms of the Habitats Directive. Given the above, coupled with mitigating objective HER2, it is not considered likely that the land use zoning in this area is likely to give rise to any significant impacts on the conservation interests of the Natura site.

Overall there is a commitment in the Plan in objectives HER1 and HER2 to protecting Natura sites. It is stated that this is to be achieved through; assessing potential impacts of proposed developments on Natura sites in accordance with Part XAB of the Planning and Development Act 2000 (as amended) and Article 6 of the Habitats Directive; avoiding encroachment on Natura sites and implementing appropriate buffer zones on adjacent lands; and by directing recreational use away from sensitive areas within Natura sites in consultation with NPWS. This protection is further strengthened through HER3 which affords protection to areas of biodiversity lying outside of Natura sites in keeping with Article 10 of the Habitats Directive.

The Plan sets out objectives to restrict types of development in the Plan area to uses that are appropriate as per the Guidelines for Flood Risk Management (DoEHLG/OPW, 2009) and in accordance with the CDP.

Furthermore it is an objective of the Plan to look for flood risk assessments to be carried out (even in areas identified as low or no risk of flooding) where deemed necessary, as part of the planning process. These objectives set out to ensure that flood risk has been reduced and mitigated throughout the plan area. It is therefore not considered that the Plan will lead to changes in water level or hydrology at any Natura site.

Water Quality: Overall the Plan sets out to achieve the targets of the CDP and the Eastern River Basin District Management Plan 2009-2015. Objectives of the Plan specifically seek to protect waterbodies and associated habitats, and the Open Space zoning along the Three Trouts River and the other waterbodies serves to strengthen this objective.

Objectives for the promotion of tourism and recreation activities in the Plan area are primarily based upon consolidating and improving the existing tourism assets in the Plan area, improving recreational connectivity in the Plan area, and improving management of existing recreational trails and activities to help alleviate existing threats and pressures. This approach should bring positive benefits for the conservation objectives of those sites within or close to the Plan area.

The Plan has been prepared in accordance with the European, National and Regional legislation 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 Recommendations

The likely impacts that will arise from the Draft Greystones – Delgany & Kilcoole Local Area Plan 2013-2019 and Proposed No. 3 Variation to the Wicklow County Development Plan 2010-2016 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 3.1-3.13. 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 1 Natura Site Descriptions

Derived from www.npws.ie

The Murrough Wetlands SAC

Site characteristics

The Murrough 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 Murrough SPA

Site characteristics

The Murrough 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.

Glen of the Downs SAC

Site characteristics

This site is situated in a glacial overflow channel cut in a NW-SE direction through Cambrian quartzite. In the valley bottom there is a narrow band of alluvium associated with a small stream, but the steep slopes are covered with a thin, sandy brown-earth/brown podzolic soil which becomes progressively thinner up the slopes. This is reflected in the trees which become shorter and more stunted up the slopes. The soil is very dry over much of the site, particularly so on the NE side.

Quality and importance

This wood, situated in an impressive glacial overflow channel, is a good example of the Blechno-quercetum petraeae association which is characteristic of the dry valleys of the Wicklow Mountains. Oak is dominant over about half the site, the remainder being mostly mixed deciduous woodland. There is a range of habitats from the very dry oak dominated upper slopes to ash-hazel woodland on the valley floor and wet areas beside the stream. The juxtaposition of habitats on the valley floor is particularly valuable for invertebrates, some of those found being very rare in Ireland. Of particular note is the occurrence of *Mycetobia obscura*, known from only one other site in Britain and Ireland. The avifauna of the site is characteristic of Irish woodlands. This wood is the most easterly in a series of oakwoods in Co. Wicklow which extend to the Glendalough area.

Vulnerability

Further road widening is planned which will reduce and modify the habitats on the valley floor.

Bray Head

Site Characteristics

Site is situated in the north-east of Co. Wicklow between the towns of Bray and Greystones. Bedrock geology is Cambrian quartzites and shales (with mudstones and greywackes). Bray Head consists of a plateau of high ground, with five prominent quartzite knolls and a maximum height of 241 m. The more exposed higher ground has a covering of shallow acidic soils, with protruding bedrock and scree. Elsewhere, deeper soils are formed by drift deposits, calcareous in character. In addition to heath and cliff habitats, the site supports calcareous grassland, some native woodland and scrub, and a sandy/shingle beach. An area of shallow marine water is included for ornithological reasons. Main landuse within site is recreation, especially walking.

Quality and importance

Site supports a fine diversity of maritime habitats and is particularly important for vegetated sea cliffs and dry heath. Both of these are good representatives of the types which occur in eastern Ireland, and are generally of good quality. Four Red Data Book plant species occur within site. Has breeding *Falco peregrinus* and a significant seabird colony, especially for *Rissa tridactyla* and *Cephus grylle* (both nationally important). Site is noted for the presence of the fossil *Oldhamia radiata* which is of Cambrian age. Owing to its proximity to urban areas, site has important educational potential.

Vulnerability

The main threats to this site are reclamation of heath and grassland habitats, burning and recreational pressures. Reclamation for agriculture has occurred in the past and continues to be a threat. Burning of heath is a regular event and may be occurring too frequently. The site is a popular area for recreational activities, especially walking. Recreational pressures are likely to increase in the future owing to a growing population in surrounding areas.

Ballyman Glen SAC

Site Characteristics

A small glen cut through calcareous sands and gravels, with a tributary stream of the Dargle River flowing west to east through it. The site supports a strip of wet woodland, a small area of alkaline fen fed by petrifying springs, and grades to scrub and dry calcareous grassland on the upper edges of the valley sides.

Quality and importance

A small, but extremely species-rich site, with a high diversity of habitats in a predominantly agricultural area. The site is notable for the presence of many petrifying springs, for alkaline fen and for wet woodland.

Vulnerability

Ballyman Glen is surrounded by intensively managed agricultural grassland and is vulnerable to nutrient run-off from this source.

Knocksink Wood SAC

Site Characteristics

A wooded valley cut through calcareous glacial drift, with the fast-flowing Glencullen River flowing west to east through it. Vegetation types include broadleaf deciduous woods, including wet woodland near the river, heath and a number of tufa-forming springs and seepage areas.

Quality and importance

A relatively small, but diverse wooded valley, notable for the occurrence of good examples of tufa-forming springs and associated alluvial forest. The site is also important for a number of rare plants, including *Erigeron acer*, *Lamium galeobdolon* and *Wahlenbergia hederacea*, and a particularly diverse woodland invertebrate fauna. Its proximity to Dublin adds to its value as an educational and amenity resource.

Vulnerability

As a popular amenity area the site is vulnerable to disturbance and littering.

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.

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.

Carriggower Bog SAC

Other site characteristics

The site is an upland valley bog complex on the Calary plateau on the eastern side of the Wicklow Mountains. It comprises a mosaic of wet blanket bog and poor fen vegetation, along with such related habitats as heath, wet grassland and *Betula-Salix* scrub. There is no open water other than pools. The Vartry River skirts the western side of site. The bog was exploited for peat up to about 100 years ago but now old cuttings are well revegetated. An area of conifer plantation is included. Surrounding landuse is mostly semi-improved grassland and forestry.

Quality and importance

Transition mires are well represented at this site and likely to be one of the larger examples of the habitat in eastern Ireland. A range of characteristic species occur. The bryophyte flora is probably well developed (though not fully investigated). It supports a suite of invertebrate species of international importance. It also supports important wintering concentrations of *Gallinago gallinago* and *Lymnocyrtus minimus*, and is actually the top site in the country for *Lymnocyrtus minimus*. The site is partly owned by State (NPW).

Vulnerability

A main threat to this site is lowering of the water table due to drainage attempts. A drainage channel has already been dug at the eastern end of site though its impact on the bog is not known. Part of the site is semi-improved grassland and any intensification of grazing could be damaging. Forestry is widespread in the area and is a general threat.

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 *Cepphus 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 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.

Dalkey Islands SPA

Site characteristics

Site comprises Dalkey Island, Lamb Island, Maiden Rock, the intervening rocks and reefs between Dalkey Island, Lamb Island and Clare Rock, and the sea area around Maiden Rock to a distance of 100 m. Dalkey Island, which is the largest in the group, lies c.400m off Sorrento Point and is separated by a deep channel. The island is low-lying, the highest point at c.15m is marked by a Martello Tower. Soil cover consists mainly of thin peaty layers, though in a few places there are boulder clay deposits. Vegetation cover is low, consisting mainly of grasses. Lamb Island lies to the north of Dalkey Island, attached at low-tide by a rocky reef. It has thin soil cover and a sparse vegetation cover. Further north lies Maidens Rock, a bare angular granite rock up to 5m high. There is no vegetation cover. Dalkey Island is grazed by a herd of feral goats.

Quality and importance

Site is of importance for both breeding and staging *Sterna* terns. There is a well established colony of *Sterna hirundo* and smaller numbers of *Sterna paradisaea*. *Sterna dougallii* bred in 2003 and 2004, one of only three known sites in the country - this came about after several years of conservation management aimed at attracting the species. The site along with other parts of south Dublin Bay is used by the three *Sterna* tern species as a major post-breeding/pre-migration autumn roost area. The origin of the birds is likely to be the Co. Dublin breeding sites though numbers also suggest birds from other sites, perhaps outside the state. The site also has breeding *Larus marinus*, *Tadorna tadorna* and *Haematopus ostralegus*. The site is known to be frequented in winter by significant numbers of *Arenaria interpres* and *Calidris maritima* but recent count data is unavailable.

Vulnerability

Traditionally, the nesting terns are vulnerable to severe weather, predation and disturbance and breeding success has often been low. Since 1995 a conservation programme, co-ordinated by BirdWatch Ireland / National Parks and Wildlife Service, has aimed at improving conditions for the terns with the provision of nest boxes and shelters, some wardening and monitoring of productivity. This has led to more successful breeding and is likely to have been responsible for attracting *Sterna dougallii* to breed.

South Dublin Bay and River Tolka Estuary SPA

Site characteristics

This site comprises a substantial part of Dublin Bay. It includes virtually all of the intertidal area in the south bay, as well as much of the Tolka Estuary to the north of the River Liffey. A portion of the shallow bay waters is also included. In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. The sands support the largest stand of *Zostera noltii* on the East Coast. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. Sediments in the Tolka Estuary vary from soft thixotropic muds with a high organic content in the inner estuary to exposed, well aerated sands off the Bull Wall. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes.

Quality and importance

The site possesses extensive intertidal flats which support wintering waterfowl which are part of the overall Dublin Bay population. It regularly has an internationally important population of *Branta bernicla hrota*, which feeds on *Zostera noltii* in the autumn. It has nationally important numbers of a further 6 species: *Haematopus ostralegus*, *Charadrius hiaticula*, *Calidris canutus*, *Calidris alba*, *Calidris alpina* and *Limosa lapponica*. It is an important site for wintering gulls, especially *Larus ridibundus* and *Larus canus*. South Dublin Bay is the premier site in Ireland for *Larus melanocephalus*, with up to 20 birds present at times. Is a regular autumn roosting ground for significant numbers of terns, including *Sterna dougallii*, *S. hirundo* and *S. paradisaea*.

Vulnerability

The main threat to this site is further reclamation for industrial and/or infrastructural purposes. The intertidal areas receive water that is somewhat polluted though there are no apparent impacts on the associated flora and

fauna. Owing to its location in Dublin Bay, pollution such as oil spillages from Dublin Port and shipping is a threat. Commercial bait digging may be a problem and can cause disturbance to wintering birds. Disturbance to birds is also caused by walkers and dogs.