

**South Dublin County
Habitats Directive Assessment**

Screening of the draft proposed

**SOUTH DUBLIN COUNTY COUNCIL
DEVELOPMENT PLAN 2010-2016**

PROPOSED VARIATION NO. 1

for Appropriate Assessment

**in accordance with the requirements of
Article 6(3) of the EU Habitats Directive**

September 2011

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SECTION 1

1.1 INTRODUCTION

This document represents South Dublin County Council's Appropriate Assessment (AA) Screening Report for a proposed variation to the South Dublin County development Plan 2011-2016, namely proposed Variation No.1, Retirement Village, Newcastle.

This report has been prepared in accordance with the requirements of Article 6(3) of the Habitats Directive (Directive 92/43/EEC). Council directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna – 'The Habitats Directive' was transposed into Irish law by the European Community (Natural Habitats) Regulations 1997 (S.I. No. 94/1997).

Article 6 (3) of the 'Habitats' Directive 92/43/EEC 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 sites conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, If appropriate, after having obtained the opinion of the general public.

Article 6(4) states:

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

Article 6(3) therefore requires that an "appropriate assessment" be undertaken for any plan or project which is not necessary for the management of a Natura 2000 site and which has the potential to have an impact on the integrity of a Natura 2000 site *i.e.* a Special Area of Conservation (SAC) or a Special Protection Area for Birds (SPA), or on the conservation objectives of such a site.

Following guidance issued by the Department of Environment, Heritage and Local Government, 2010 (*Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*), plans and projects requiring to be considered for AA screening include:

- Regional Planning Guidelines (RPGs);
- City and County Development Plans (CDPs) and any material amendments/variations;
- Development Plans by Town Councils (TCDPs) and any amendments/variations;
- Local Area Plans (LAPs) and any amendments; and
- Planning Schemes in respect of Strategic Development Zones (SDZs).

In effect, the Commission's ruling requires a robust and thorough application by all consent authorities, including planning authorities, of the requirement to undertake an appropriate assessment of the ecological implications of any plan or project, or material variation of a plan or project, whether within or outside of a designated site, which may impact upon its stated conservation objectives.

1.2 METHODOLOGY

This Screening Statement for Appropriate Assessment has been prepared with regard to the following guidance documents where relevant:

- *Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate General, 2001)
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC* (EC Environment Directorate General, 2000)
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities Circular NPW 1/10 & PSSP 2/10*
- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision)
- *Guidelines for Good Practice, Appropriate Assessment of Plans under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011)
- *Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC*. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Over-riding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission (European Commission, January 2007)

There are four stages in an Appropriate Assessment as outlined in the European Commission Guidance Document (2001), summarised below:

• **Stage 1: Screening**

The first step to establishing if an appropriate assessment is required is referred to as 'screening' and its purpose is to determine on the basis of a preliminary assessment and objective criteria if the plan or project, alone or in combination with other plans or projects, could have a significant effect on a Natura 2000 site in view of the sites conservation objectives. The process identifies any likely impacts upon a Natura 2000 Site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

• **Stage 2: Appropriate Assessment**

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

• **Stage 3: Alternative Solutions**

This stage examines alternative means of achieving the objectives of the project or plan that aim to avoid adverse impacts on the integrity of the Natura 2000 site.

• **Stage 4: Imperative Reasons of Overriding Public Interest**

This stage is the main derogation process outlined in Article 6(4) which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project which will have adverse effects on the integrity of a Natura 2000 site to proceed.

1.3 FRAMEWORK FOR PROPOSED VARIATION NO.1

The current document presents the results of the first of the four stages in the Appropriate Assessment process *i.e.* screening, to determine whether the proposed variation to the South Dublin County Development Plan, Variation No.1, Retirement Village, Newcastle, is likely to have a negative impact on a Natura 2000 site.

The Proposed Variation No.1 will sit within the framework of the South Dublin County Development Plan 2010-2016 which was adopted in October 2010. The County Development Plan was accordingly screened for Appropriate Assessment and the outcome of this process was that the Development Plan had generally been formulated to ensure that uses, developments, and effects arising from permissions based upon 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. The assessment process for the County development Plan 2010-2016 was therefore concluded at Stage 1.

The current screening exercise for the Proposed Variation No.1, Retirement Village, Newcastle, was undertaken to determine whether the addition of the proposed variation would alter the original screening outcome for the County Development Plan, thereby requiring a revision of the Appropriate Assessment Screening of the County Development Plan 2011-2016.

The current screening exercise was based on a desk-top study, drawing on information sources which included the following: NPWS on-line data for Natura 2000 sites; Ordnance Survey of Ireland mapping and aerial photography; geological, hydrological and soils data available from GSI; water quality data (EPA and SDCC); and in-house data.

SECTION 2

SCREENING MATRIX

2.1 DESCRIPTION OF THE PLAN OR PROJECT – Proposed Variation No.1, Retirement Village, Newcastle

2.1.1 Context for the Proposed Variation No. 1

South Dublin County Council (the Planning Authority) has initiated the procedures for making a Variation of the County Development Plan 2004-2010 under Section 13 of the Planning and Development Act 2000 (as amended) (the Act). At a County Council meeting on July 11th 2011, it was proposed and agreed to initiate the procedure for the making of a variation to the County Development Plan in line with a motion regarding facilitating unfinished development at a site in Ballynakelly, Newcastle, County Dublin.

On the 30th January 2007, permission was granted (planning reference SD06A/0659) to Johny and Katy Janssens on a site of 8.53 hectares for the development of a Hotel and Leisure Centre. This permission incorporated a 255 bedroom hotel, restaurant, and spa-leisure centre with underground parking. Construction commenced on site in September 2007 but works, however, have ceased for the past number of years. The basement foundations of the hotel and the access road to serve the site are currently the only constructed elements on site. Planning Permission for this proposed development will expire on the 29th January 2012.



Rationale for the motion at the July 2011 Council meeting centres on ensuring the sustainable and orderly planning and development of Newcastle by facilitating the completion of the unfinished development of this site. This would further meet the social needs of the community by providing suitable and sustainable accommodation for elderly persons in the area.

2.1.2 Description of the Proposed Variation No.1

Following the adoption of the motion to vary the South Dublin County Development Plan 2010-2016, Council therefore proposes to amend Development Map No.3 and to insert a new Specific Local Objective No. 94 into the Written Statement of the South Dublin County Development Plan 2010-2016 as follows:

Ballynakelly, Newcastle- Retirement Village

“It is an objective of the Council to provide for the development of a retirement village at Ballynakelly. The retirement village will facilitate the provision of a range of purpose-built accommodation for older people and will include a mix of independent and care supported facilities in a secure and managed environment.

The retirement village will comprise of:

- individual retirement homes that provide for assisted living designed to HIQA 2008 Standard
- a nursing home (for less mobile residents of the retirement village)
- a new medical/health centre and
- a community centre which will provide dining, recreation, hygiene and health care facilities to be shared by the residents on a communal basis

The development of the nursing home element and communal centre for the retirement village shall be undertaken in tandem with the retirement homes “

The proposed variation relates to the site as granted under SD06A/0659, with an additional 3.8 Ha of land, a total of 10.38 Ha in all; the existing zoning objective (Objective B-to protect and improve Rural Amenity and to provide for the development of agriculture) as per the South Dublin County Development Plan 2010-2016, would remain unchanged.

2.1.3 Location of the Proposed Retirement Village, Newcastle

The site is located to the south and east of Newcastle Village and to the south west of Greenogue Industrial Estate. The subject site is located directly to the south-west of a small housing estate known as Ballynakelly Cottages. The cottages are either single storey or dormer-type dwellings. Two large detached dwellings are located to the south of the subject site and are raised significantly above the site by way of their setting on higher ground. A large residential scheme is largely constructed to the north of the site by. To the south, east and west of subject site are large hedged fields.

Access to the site is through the housing development by Tenbury Developments currently under construction to the north of the site; an access road has been partially constructed from the estate distributor road to serve the subject site. This access road links to the R120 (Rathcoole Road), which runs through the village. Access to the road is presently closed off by a gate.

The boundary with the Ballynakelly housing development is demarcated by differing boundary treatments to the rear of the respective dwellings. The boundary with the adjoining housing development to the north comprises of a concrete block wall running east to west. The north-western and south-eastern boundaries consist of mature hedging.

The southern half of the subject site has been largely excavated to date and the south eastern corner of the site contains the foundations of a hotel, permitted under SD06A/0659.



The majority of this part of the site has been fully archaeologically excavated by license, Excavation Licence No: 07E0245. All construction works have ceased on site to date. The northern area of the site (to the east of the access road), which was outside the boundary of SD06A/0659, remains largely undisturbed as grassland.

The subject site is located on lands zoned ‘B’ in the South Dublin County Development Plan 2010-2016- where it is an objective “To protect and improve Rural Amenity and to provide for the development of agriculture.” The hotel, recreational facility/sports club and restaurant leisure centre, as granted permission under SD06A/0659, and which lies largely unfinished, was listed as being open for consideration under Table 10.4 of the County Development Plan 2004 – 2010.

The lands to the north of the site consist of lands zoned ‘A1’ “To provide for new residential communities in accordance with approved Area Plans”. The adjoining lands to the northeast of the site are zoned Objective ‘A’ “To protect and or improve residential amenity.”

TABLE 1. Natura 2000 sites within 15km of the proposed Retirement Village, Newcastle

Natura 2000 sites within South Dublin County	Site Code	Other Natura 2000 sites within 15km of proposed LAP	Site Code
Glenasmole Valley SAC	001209	Rye Water Valley/Carton SAC	001398
Wicklow Mountains SAC	002122	Red Bog, Kildare, SAC	000397
Wicklow Mountains SPA	004040	Poulaphouca Reservoir SPA	004006
		Other Natura 2000 sites on the limit of 15km from proposed LAP	
		North Dublin Bay SAC	000206
		South Dublin Bay SAC	000210
		South Dublin Bay and River Tolka Estuary SPA	004024

There are three Natura 2000 sites located within South Dublin County - Glenasmole valley SAC (Site Code 001209), Wicklow Mountains SAC (002122), and Wicklow Mountains SPA (004040). These three sites are located at altitude within the Dublin Mountains, greater than 10km from the proposed Retirement Village lands and in a separate river catchment area. There are therefore no relevant ecological or hydrological links (source-pathway-receptors) between the Newcastle lands and South Dublin County's three Natura 2000 sites.

Similarly, there are no direct ecological or hydrological links between the Retirement Village lands and any Natura 2000 sites located in adjacent counties, within 15km of the site: Poulaphouca Reservoir SPA (004006), Red Bog (000397), and Rye Water/Carton SAC (001398).

As negative impacts on these Natura 2000 sites are therefore highly unlikely by virtue of the small scale of proposed development, the distance of the Retirement Village lands from these Natura 2000 sites, and the absence of source-pathway-receptors, the proposed Variation No.1 is deemed to have no direct relevance to these protected sites.

A suite of Natura 2000 sites occur in Dublin Bay which, when assessed during the screening process for the South Dublin County development Plan 2010-2016, were deemed to have some hydrological links with the county area of South Dublin County. These include North Dublin Bay SAC (000206), South Dublin Bay SAC (000210), and South Dublin Bay and River Tolka Estuary SPA (004024). During the AA Screening of the South Dublin County Development Plan 2010-2011, poor water quality originating within South Dublin County and entering Dublin Bay was identified as being the County's principal potential threat to the conservation objectives of the Dublin Bay Natura 2000 sites. Although technically these sites are located outside of the recommended 15km zone of influence, these sites are considered here in relation to any hydrological link with the Proposed Retirement Village.

2.3 AVOIDANCE OF IMPACTS

The matter of downstream effects on Natura 2000 sites located within Dublin Bay is seen to be the primary relevant issue for assessment in relation to the Proposed Variation No.1, Retirement Village, Newcastle. These Natura 2000 sites downstream of the Proposed Retirement Village lands rely on water quality for the maintenance of their conservation objectives. In conjunction with the inputs from the three other Dublin Local Authorities of Fingal, Dublin City, and Dun Laoghaire-Rathdown, in addition to that from County Kildare, this potential impact arises from both the direct run-off into the streams and rivers that eventually empty into the Bay and also the volume of waste water requiring treatment in Dublin City prior to discharge into the Bay.

There are no rivers or streams draining the lands of the proposed Retirement Village in Newcastle which could potentially act as direct hydrological/ecological links to the Dublin Bay Natura 2000 sites. In addition, sewer and surface water discharges will be connected to local mains networks and will be subject to the over-arching policies and objectives of the South Dublin County Development Plan 2010-2016, and to regional and national guidelines.

These sewers flow into the wastewater treatment works in Ringsend which are discharged into Dublin Bay. In order to allow for development growth, South Dublin County Council is cognisant of the need to ensure the provision of requisite wastewater treatment, without which development would conflict with the requirements of the Urban Wastewater Treatment Directive which requires the collection and high level treatment of wastewater.

The SDCC County Development Plan 2010-2016, within which framework the Proposed Variation sits, contains a range of policies and objectives that relate to the protection of the environment, landscape, water quality, and Natura 2000 sites. The protection of SACs and pNHAs is specifically referred to in Policy LHA 6 of the CDP:

Policy LHA 6: *It is the policy of the Council to protect and preserve areas designated or proposed as Special Areas of Conservation (E.U. Habitats Directive) and proposed Natural Heritage Areas’.*

In addition, the requirements for appropriate assessment of potential impacts on Natura 2000 sites are detailed in Policy LHA 7:

Policy LHA 7: *It is the policy of the Council that projects giving rise to significant direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall not be permitted on the basis of this Plan (either individually or in combination with other plans or projects); Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:*

- (a) No alternative solution available;*
- (b) Imperative reasons of overriding public interest for the plan to proceed and*
- (c) Adequate compensatory measures in place.*

All subsequent plan-making and adoption of plans arising from this Plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. Where relevant, projects will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive.

A range of other policies in the County Development Plan 2010-2016 relate specifically to water quality and waste water treatment, all of which aim to eliminate or reduce the potential for

deterioration of water quality, both ground water and surface water (see Appendix 2). In particular, Policy WD2 of the County Development Plan specifically relates to the requirement that sufficient capacity in public waste water treatment must precede development.

Policy WD 2 Wastewater Treatment Plants and Wastewater Collection Systems
It is the policy of the Council that development shall be preceded by sufficient capacity in the public wastewater treatment plants and appropriate extensions in the existing public wastewater collection systems.

Adherence to the above quoted protective policies and objectives in the SDCC County Development Plan, will act to avoid significant downstream impacts on Natura 2000 sites.

2.4 OTHER INSTRUMENTS CONSIDERED

The Proposed Variation No.1, Retirement Village, Newcastle, is considered in the context of a range of other higher level measures, all of which assist in mitigating any potential negative impacts. These include the following National Plans, Regional Plans and Local Plans: Sustainable Development – A Strategy for Ireland (1997); National Spatial Strategy 2002-2020; National Climate Change Strategy, 2000; National Heritage Plan (2002); The Planning System and Flood Risk Management Guidelines 2009; Regional Planning Guidelines 2010 – 2020: A Platform For Change And Transport 21; Sustainable Residential Development In Urban Areas 2009; The Retail Planning Strategy For The Greater Dublin Area (2008-2016); South Dublin County Council Development Plan 2010 – 2016; Green City Guidelines’ (UCD Urban Institute Ireland 2008).

SECTION 3 DESCRIPTIONS OF NATURA 2000 SITES

There are no Natura 2000 sites located within the proposed Retirement Village Lands. The Natura 2000 sites located within 15km of the proposed Retirement Village are listed in Table 1. There are no other designated biodiversity areas affected by the proposed Retirement Village which have a recognised European Union or International protection status. However, there is one proposed Natural Heritage Area (pNHA), Lugmore Glen pNHA, located 7km to the southeast of the plan lands. This pNHA is a small wooded glen cut in glacial drift. There are no ecological or hydrological links between the proposed Retirement Village and Lugmore Glen pNHA.

Full site descriptions of the Natura 2000 sites listed in Table 1 are provided in Appendix 1. A summary of the main elements of interest for each of these sites follows:

Glenasmole Valley SAC contains a high diversity of habitats and plant communities and lists three habitats listed on Annex I of the EU Habitats Directive: petrifying springs with tufa formation, semi-natural dry grassland and scrubland facies on calcareous substrate (*Festuco-Brometalia*) (important orchid sites), and *Molinia* meadows on calcareous, peaty, or clayey-silt-laden soils (*Molinion caeruleae*). Both petrifying springs and orchid-rich calcareous grasslands also qualify as Priority Habitats under the Habitats Directive. The presence of four Red Data Book plant species further enhances the value of the site as does the presence of populations of several mammal and bird species of conservation interest. The River Dodder flows through the valley and has been impounded here to form two reservoirs which supply water to south Dublin.

Draft Conservation Objectives:

- 1 To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status – *Petrifying springs with tufa formation, Semi-natural dry grassland and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (*important orchid sites), *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
- 2 To maintain the extent, species richness and biodiversity of the entire site.
- 3 To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Wicklow Mountains SAC is an important complex, extensive, upland site covering much of the Wicklow Mountains and a portion of the Dublin Mountain range. Within the boundaries of South Dublin County, the SAC encompasses the mountains of Ballymorefinn, Corrig, Kilakee, and Cruagh, stretching south to the summit of Kippure Mountain at the border with County Wicklow. While the entire SAC lists ten habitats listed in Annex I of the EU Habitats Directive, the vegetation within the South Dublin County portion of the site mainly provides good examples of the typical upland habitats of heath, blanket bog and upland grassland. Several rare, protected plant and animal species also occur in this SAC.

Draft Conservation Objectives:

- 1 To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status:– Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea; Natural dystrophic lakes and ponds; Northern Atlantic wet heaths with *Erica tetralix*; European dry heaths; Alpine and Boreal heaths; Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe); Blanket bog; Siliceous scree of the montane to snow levels; (*Androsacetalia alpinae* and *Galeopsietalia ladani*); Calcareous rocky slopes with chasmophytic vegetation; Siliceous rocky slopes with chasmophytic vegetation; Old sessile oak woods with *Ilex* and *Blechnum* in British Isles.

- 2 To maintain the Annex 2 species for which the cSAC has been selected at favourable conservation status: - *Lutra lutra*
- 3 To maintain the extent, species richness and biodiversity of the entire site.
- 4 To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Wicklow Mountains SPA (Site Code 4040) is an extensive upland site, comprising a substantial part of the Wicklow Mountains (See Appendix for full site description). The site, which is within the Wicklow Mountains National Park, is fragmented into about twenty separate parcels of land. Much of the site is State-owned and managed for nature conservation based on traditional landuses for the uplands. The site is of high ornithological importance as it supports very good examples of upland and woodland bird communities, several of which are very rare at a national level. Two species, Ring Ouzel and Red Grouse, are Red-listed and their status is of high conservation concern.

Main Conservation Objective:

To maintain the special conservation interests for the SPA at favourable conservation status – Merlin, Peregrine.

Poulaphouca Reservoir SPA (Site Code 4063) is located in the western foothills of the Wicklow Mountains (See Appendix for full site description). The principal interest of the site is the Greylag Goose population, which is of international importance. The site provides the main roost for the birds, with feeding occurring mostly on improved grassland outside of the site. A range of other wildfowl species also occurs, including Whooper Swan, a species that is listed on Annex I of the E.U. Birds Directive. The site is also notable as a winter roost for gulls, especially Lesser Black-backed Gull.

Main Conservation Objective:

To maintain the special conservation interests for the SPA at favourable conservation status – Greylag Goose, Lesser Black-backed Gull, Wetland and Waterbirds.

Red Bog SAC (Site Code 000397)

Red Bog, Co. Kildare, is located 3km north of the village of Blessington in east Co. Kildare. It comprises a wetland complex of Lake, fen and bog, situated in a hollow between ridges of glacially-deposited material and it is underlain by rocks of Ordovician age. The site is of particular conservation significance as it supports transition mire, a habitat listed in Annex 1 of the Habitats Directive.

Draft Conservation Objectives:

- 1 To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status – Transition mires and quaking bogs.
- 2 To maintain the extent, species richness and biodiversity of the entire site.
- 3 To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Rye Water Valley/Carton (Site Code 001398)

This site is located between Leixlip and Maynooth in Co. Kildare. It extends along the Rye Water, a tributary of the River Liffey. The woodlands at Carton Demesne are the site of a rare fungus, *Diderma deplanatum* and also support birds such as Blackcap, Woodcock, and Long-eared Owls. On or about the lake, birds such as Little Grebe, Coot, Moorhen, Tufted Duck, Teal, and Kingfisher have been recorded. Kingfisher are listed in Annex 1 of the EU Birds Directive. The mineral spring occurring on the site is also listed as an Annex 1 habitat of the EU Habitats Directive. The Rye Water is a spawning ground for Trout and Salmon while White-clawed crayfish *Austropotomobius pallipes* has been recorded at Leixlip. Rare snail species and dragonflies also occur in the marsh vegetation near to Louisa Bridge. The main

importance of the site lies in the presence of several rare and threatened plant and animal species and of a rare habitat – thermal, mineral, petrifying spring.

Draft Conservation Objectives:

1. To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status:– *Petrifying springs with tufa formation
2. To maintain the Annex 2 species for which the cSAC has been selected at favourable conservation status: - *Vertigo angustior*, *Vertigo moulinsiana*
3. To maintain the extent, species richness and biodiversity of the entire site.
4. To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

North Dublin Bay SAC (Site Code 000206) covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head (See Appendix for full site description). The North Bull Island is the focal point of this site. This SAC site is an excellent example of a coastal site with all the main habitats represented. It holds good examples of ten habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several wintering bird species have populations of international importance, while some invertebrates on the site are of national importance. The site also contains a numbers of rare and scarce plants including some which are legally protected.

Draft Conservation Objectives:

1. To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status:– Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines; Salicornia and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco Puccinellietalia maritimae*); *Petalophyllun ralfsii*; Mediterranean salt meadows (*Juncetalia maritimi*); Embryonic shifting dunes; Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes); Humid dune slacks
2. To maintain the extent, species richness and biodiversity of the entire site.
3. To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

South Dublin Bay SAC (Site Code 000210) lies south of the River Liffey and extends from the South Wall to the west pier at Dun Laoghaire (See Appendix for full site description). It is a fine example of a coastal system with extensive sand and mudflats. South Dublin Bay is also an internationally important bird site.

Draft Conservation Objectives:

1. To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status: - Mudflats and sandflats not covered by seawater at low tide.
2. To maintain the extent, species richness and biodiversity of the entire site.
4. To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

South Dublin Bay and River Tolka Estuary SPA (Site Code 4024) comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included (See Appendix for full site description).

The site is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex. It is of international importance for Light-bellied Brent Goose and of national importance for nine other waterfowl species. As an autumn tern roost, it is also of international importance. Furthermore, the site supports a nationally important colony of Common Tern. All of the tern species using the site are listed on Annex I of the E.U. Birds Directive, as are Bartailed Godwit and Mediterranean Gull.

Main Conservation Objective:

To maintain the special conservation interests for the SPA at favourable conservation status – Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Golden Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern, Arctic Tern, and Wetland and Waterbirds.

SECTION 4 ASSESSMENT OF POTENTIAL IMPACTS

4.1 ASSESSMENT OF PROPOSED VARIATION NO.1, RETIREMENT VILLAGE, NEWCASTLE

In Section 2.2 (Assessment of Relevance of Proposed Plan to Natura 2000 Sites), a potential hydrological link was highlighted that could act as a source-pathway-receptor between the Proposed Retirement Village lands and Natura 2000 sites – primarily the Dublin Bay Natura 2000 sites. No other hydrological or ecological links to other Natura 2000 sites within 15km of the Proposed Retirement Village lands was identified as posing a potential threat.

The proposed Plan was assessed following the factors as listed: - size and scale; land-take; distance from the Natura 2000 site or key features of the site; resource requirements (water abstraction etc.); emissions (disposal to land, water, or air); excavation requirements; transportation requirements; duration of construction, operation, decommissioning, etc.; habitat area; disturbance to key species; habitat or species fragmentation; species density; changes in key indicators of conservation value (water quality etc.); climate change; key relationships that define the structure of the site; key relationships that determine the function of the site.

The Proposed Variation is subject to the over-arching policies of the South Dublin County Development Plan 2010-1016, in addition to the range of other instruments considered in this assessment (see Section 2.3), all serve to ensure that no significant negative impact arises from the Proposed Variation.

<p>Brief description of the project or plan</p>	<p>A Variation to the Written Statement of the South Dublin County Development Plan is proposed which will provide for the development of a retirement village at Ballynakelly, Newcastle, County Dublin. The retirement village will facilitate the provision of a range of purpose-built accommodation for older people and will include a mix of independent and care supported facilities in a secure and managed environment.</p> <p>These will include the following:</p> <ul style="list-style-type: none"> - individual retirement homes that provide for assisted living designed to HIQA 2008 Standard - a nursing home (for less mobile residents of the retirement village) - a new medical/health centre and - a community centre which will provide dining, recreation, hygiene and health care facilities to be shared by the residents on a communal basis
<p>Brief description of the Natura 2000 sites</p>	<p>There are no Natura 2000 sites either within or directly adjacent to the Proposed Variation lands at Ballynakelly, Newcastle. Natura 2000 sites occurring within 15km of the proposed location of the Retirement Village include the following which are described briefly in Section 3 and in detail in Appendix 1 :- Glenasmole valley SAC (001209), Wicklow Mountains SAC (002122), Wicklow Mountains SPA (004040), Poulaphouca Reservoir SPA (004006), Red Bog (000397), and Rye Water/Carlton SAC (001398),</p>

	North Dublin Bay SAC (000206), South Dublin Bay SAC (000210), North Bull Island SPA (Site Code 4006), and South Dublin Bay and River Tolka Estuary SPA (004024) .
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.	<p>The proposed variation will primarily facilitate limited construction activities on the site in Ballynakelly, Newcastle. These units will be connected to the mains sewer and surface water systems. There are no natural hydrological or ecological links between the site and the Natura 2000 sites listed above therefore no impacts to these protected sites are likely to arise.</p> <p>As the Proposed Variation sits within the framework of the South Dublin County Development Plan 2010-2016, which itself has been subject to Screening for Appropriate Assessment, there are no cumulative elements expected which are likely to give rise to impacts on Natura 2000 sites.</p>
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of: <ul style="list-style-type: none"> • size and scale; • land-take; • distance from the Natura 2000 site or key features of the site; • resource requirements (water abstraction etc.); • emissions (disposal to land, water or air); • excavation requirements; • transportation requirements; • duration of construction, operation, decommissioning, etc.; • other 	<p>The Proposed Variation lands are not within or directly adjacent to any Natura 2000 site, therefore there will no impacts arising regarding size and scale or land-take.</p> <p>The Proposed Variation Lands are over 8km distant from the nearest Natura 2000 site (Rye Water/Carton SAC) to which there is no hydrological or ecological link. Apart from the Dublin Bay Natura 2000 sites, there are also no potential ecological or hydrological links to the other Natura 2000 sites listed in Table 1.</p> <p>There are no requirements to abstract water from any Natura 2000 site.</p> <p>The potential for emissions relates primarily to waste water and surface water disposal. These activities will be subject to the over-arching policies and objectives listed in the SDCC County Development Plan 2010-2016 that relate specifically to water protection (See Appendix 2) and to Regional and National frameworks.</p> <p>Due to the relatively small scale nature and the location of the Proposed Retirement Village at distance from any Natura 2000 site, there are also no impacts to Natura 2000 sites expected from transportation, duration of construction, operation, or decommissioning of any element of the Proposed Variation.</p>
Describe any likely changes to the site arising as a result of: <ul style="list-style-type: none"> • reduction of habitat area 	

<ul style="list-style-type: none"> • disturbance to key • species; • habitat or species fragmentation; • reduction in species density; • changes in key indicators of conservation value (water quality etc.); • climate change. 	<p>Due to the nature of the proposed development, its distance from any Natura 2000 site and the absence of any ecological or hydrological links, there are no changes expected to any Natura 2000 site relating to habitat or species reduction, changes to key indicators of conservation value, or to climate change.</p>
<p>Describe any likely impacts on the Natura 2000 site as a whole in terms of:</p> <ul style="list-style-type: none"> • interference with the key relationships that define the structure of the site • interference with key relationships that define the function of the site 	<p>The only potential impact identified relates to possible deterioration in water quality leaving the site and impacting downstream in the Dublin Bay Natura 2000 sites. However, the considerable distance of the Proposed Variation lands from these sites, coupled with Council's adherence to the strong policies for ground and surface water protection contained in the South Dublin County Development Plan 2010-2016, any such impacts on either the structure or function of the sites in question will be avoided.</p>
<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <ul style="list-style-type: none"> • loss; • fragmentation; • disruption; • disturbance • change to key elements of the site (e.g. water quality etc.). 	<p>There will be no impacts to Natura 2000 sites relating to loss, fragmentation, disruption, disturbance, or changes to key elements of the site.</p>
<p>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.</p>	<p>There will be no direct, indirect, or cumulative impacts from the Proposed Variation on Natura 2000 sites.</p>

4.2 CUMULATIVE EFFECTS

The Proposed Variation has been assessed and is deemed not to present a risk to any Natura 2000 site either within or outside of South Dublin County. Likewise, the Proposed Variation in combination with the other plans and projects outlined in the South Dublin County Development Plan, within which framework the Proposed Variation sits, is deemed not to present a risk to any Natura 2000 site by virtue of their potential cumulative impact.

The National Spatial Strategy 2002-2020 and the National Development Plan 2007-2013 set the national planning framework within which the South Dublin County Development Plan 2010-2016 and the Proposed Variation to the Written Statement has been prepared. Within South Dublin County itself, the County Development Plan 2010-2016 provides the local framework within the regional approach of the Regional Planning Guidelines 2010-2020. These documents have been subject to screening for Appropriate Assessment to ensure no significant impacts are likely. The Proposed Variation No.1, Retirement Village, Newcastle, has been assessed taking the objectives and policies of these plans into account and no potential impacts are deemed to arise.

Taken together, adherence to this required approach will ensure no cumulative impacts will arise from these plans.

SECTION 5 CONCLUSIONS

This screening report has evaluated the Proposed Variation No.1, Retirement Village, Newcastle, to determine whether or not significant negative impacts on Natura 2000 sites are likely to arise by virtue of the Variation's implementation. The report finds that the Plan will not, either individually or in combination with other plans and projects, give rise to significant effects on the integrity of any Natura 2000 site.

The Appropriate Assessment procedure for this proposed Plan is therefore concluded at this Screening Stage and a detailed (Stage 2) Appropriate Assessment is not required.

Appendix 1

Natura 2000 descriptions (as listed in Table 1)

SITE SYNOPSIS

SITE NAME: GLENASMOLE VALLEY

SITE CODE: 001209

Glenasmole Valley in south Co. Dublin lies on the edge of the Wicklow uplands, approximately 5 km from Tallaght. The River Dodder flows through the valley and has been impounded here to form two reservoirs which supply water to south Dublin. The non-calcareous bedrock of the Glenasmole Valley has been overlain by deep drift deposits which now line the valley sides. They are partly covered by scrub and woodland, and on the less precipitous parts, by a herb-rich grassland. There is much seepage through the deposits, which brings to the surface water rich in bases, which induces local patches of calcareous fen and, in places, petrifying springs, a priority habitat listed on Annex I of the EU Habitats Directive.

Examples of calcareous fen and flush areas occur between the two reservoirs, where sedges (*Carex flacca* and *Carex panicea*) are joined by such species as Grass of Parnassus (*Parnassia palustris*), Few-flowered Spike-rush (*Eleocharis quinqueflora*), Zig-zag clover (*Trifolium medium*) and the scarce Fen Bedstraw (*Galium uliginosum*).

Orchid-rich grassland occurs in the drier parts of this site and in places grades into *Molinia* meadow, both of these habitats are listed on Annex I of the EU Habitats Directive. Species recorded in these habitats include Frog Orchid (*Coeloglossum viride*), Northern Marsh-orchid (*Dactylorhiza purpurella*), Fragrant Orchid (*Gymnadenia conopsea*), Marsh Helleborine (*Epipactis palustris*), Early-purple Orchid (*Orchis mascula*) and Greater Butterfly Orchid (*Platanthera chlorantha*).

Two Red Data Book species have also been found here, Green-winged Orchid (*Orchis morio*) and Small-white Orchid (*Pseudorchis albida*). The sward includes Sweet Vernal-grass (*Anthoxanthum odoratum*), Creeping Bent (*Agrostis stolonifera*) and Crested Dog's-tail (*Cynosurus cristatus*). Other species which occur are Common Bird's-foot-trefoil (*Lotus corniculatus*), Kidney Vetch (*Anthyllis vulneraria*), Common Restharrow (*Ononis repens*), Yellow-wort (*Blackstonia perfoliata*) and Autumn Gentian (*Gentianella amarella*).

Woodland occurs in patches around the site. On the east side of the valley, below the northern lake, a Hazel (*Corylus avellana*) wood has developed on the unstable calcareous slopes and includes Ash (*Fraxinus excelsior*), Downy Birch (*Betula pubescens*), Goat Willow (*Salix caprea*) and (Irish) Whitebeam (*Sorbus hibernica*). Spring Wood-rush (*Luzula pilosa*), Wood Speedwell (*Veronica montana*) and Brambles (*Rubus fruticosus* agg.) are included in the ground flora.

Wet semi-natural broad-leaved woodland is also found around the reservoirs and includes Alder (*Alnus glutinosa*) and Willow (*Salix* spp.) with Yellow Iris (*Iris pseudacorus*), Horsetail (*Equisetum* spp.), Brambles and localised patches of Japanese Knotweed (*Reynoutria japonica*), an introduced species.

The lake shore vegetation is not well developed, which is typical of a reservoir. There are occasional patches of Canary-grass (*Phalaris arundinacea*) and Purple-loosestrife (*Lythrum salicaria*), which are more extensive around the western shore of the northern lake, along with Common Marsh-bedstraw (*Galium palustre*) and Water Mint (*Mentha aquatica*). Other vegetation includes Shoreweed (*Littorella uniflora*) and the scarce Water Sedge (*Carex aquatilis*).

As well as the Green-winged Orchid and Small-white Orchid, two other threatened species which are listed in the Irish Red Data Book also occur in the site, Yellow Archangel (*Lamiastrum galeobdolon*) and Yellow Bird's-nest (*Monotropa hypopitys*).

The site provides excellent habitat for bat species, with at least four species recorded: Pipistrelle, Leisler's, Daubenton's and Brown Long-eared Bat. Otter occurs along the river and reservoirs. These habitats also support Kingfisher, an Annex I species under the EU Birds Directive.

Glenasmole Valley contains a high diversity of habitats and plant communities, including three habitats listed on Annex I of the EU Habitats Directive. The presence of four Red Data Book plant species further enhances the value of the site as does the presence of populations of several mammal and bird species of conservation interest.

03.09.2001

SITE SYNOPSIS

SITE NAME: WICKLOW MOUNTAINS

SITE CODE: 002122

This site is a complex of upland areas in Counties Wicklow and Dublin, flanked by Blessington Reservoir to the west and Vartry Reservoir in the east, Cruagh Mt. in the north and Lybagh Mt. in the south. Most of the site is over 300m, with much ground over 600m and the highest peak of Lugnaquilla at 925m.

The Wicklow Uplands comprise a core of granites flanked by Ordovician schists, mudstones and volcanics. The form of the Wicklow Glens is due to glacial erosion. The Wicklow Mountains are drained by several major rivers including the Dargle, Liffey, Dodder, Slaney and Avonmore. The river water in the mountain areas is often peaty, especially during floods.

The topography is typical of a mountain chain, showing the effects of more than one cycle of erosion. The massive granite has weathered characteristically into broad domes. Most of the western part of the site consists of an elevated moorland, covered by peat. The surrounding schists have assumed more diverse outlines, forming prominent peaks and rocky foothills with deep glens. The dominant topographical features are the products of glaciation. High corrie lakes, deep valleys and moraines are common features of this area. The substrate over much of the area is peat, usually less than 2m deep. Poor mineral soil covers the slopes and rock outcrops are frequent

The vegetation over most of the site is a mosaic of heath, blanket bog and upland grassland (mostly on peaty soil, though some on mineral soil), with stands of dense Bracken (*Pteridium aquilinum*) and small woodlands mainly along the rivers. Mountain loughs and corrie lakes are scattered throughout the site. The site supports many habitats that are listed on Annex I of the E.U. Habitats Directive.

The two dominant vegetation communities in the area are heath and blanket bog. Heath vegetation, with both wet and dry heath well represented, occurs in association with blanket bog, upland acid grassland and rocky habitats. The wet heath is characterised by species such as Ling (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*), Cottongrasses (*Eriophorum* spp.), Tormentil (*Potentilla erecta*), Mat-grass (*Nardus stricta*), Bent grasses (*Agrostis* spp.) and bog mosses (*Sphagnum* spp.). In places the wet heath occurs in conjunction with flush communities and streamside vegetation, and here species such as Heath Rush (*Juncus squarrosus*) and *Carex* spp. are found. Dry heath at this site is confined to shallow peaty soils on steep slopes where drainage is better and particularly in sheltered conditions. It is characterised by species such as Ling, Gorse (*Ulex* spp.), Bell Heather (*Erica cinerea*), Bilberry (*Vaccinium myrtillus*), Purple Moor-grass (*Molinia caerulea*) and lichens (*Cladonia*

spp.). In places the heath grades into upland grassland on mineral soil, some examples of which correspond to the E.U. Habitats Directive Annex I priority habitat species-rich *Nardus* grassland.

Blanket bog is usually dominated by Cottongrasses, Ling and bog mosses (*Sphagnum* spp.). On steeper slopes there is some flushing and here Purple Moor-grass, Heath Rush, and certain *Sphagnum* species become more common. The Liffey Head blanket bog is among the best of its kind in eastern Ireland, with deep peat formations and an extensive system of dystrophic pools developed among the hummocks and hollows on the bog surface. The vegetation is largely dominated by Ling and Cross-leaved Heath, with Cottongrasses (*Eriophorum vaginatum* and *E. angustifolium*), Deergrass (*Scirpus cespitosus*) and Bog Asphodel (*Narthecium ossifragum*). In drier areas, Bilberry and Cowberry (*Vaccinium vitis-idaea*) are common, while the scarce Bog Rosemary (*Andromeda polifolia*) is also found. Blanket bog occurs over extensive areas of deeper peat on the plateau and also on gentle slopes at high altitudes. Peat erosion is frequent on the peaks - this may be a natural process, but is likely to be accelerated by activities such as grazing.

Due to the underlying rock strata, the water of the rivers and streams tends towards acidity. The water is generally oligotrophic and free from enrichment. The lakes within the area range from the high altitude lakes of Lough Firrib and Three Lakes, to the lower pater-noster lakes of Glendalough, Lough Tay and Lough Dan. Spectacular corrie lakes (such as Loughs Bray (Upper and Lower), Ouler, Cleevaun, Arts, Kellys and Nahanagan) exhibit fine sequences of moraine stages. The deep lakes are characteristically species poor, but hold some interesting plants including an unusual form of Quillwort (*Isoetes lacustris* var. *morei*), a Stonewort (*Nitella* sp.) and Floating Bur-reed (*Sparganium angustifolium*). The Red Data Book fish species Arctic Char has been recorded from Lough Dan, but this population may now have died out.

Alpine vegetation occurs on some of the mountain tops, notably in the Lugnaquilla area, and also on exposed cliffs and scree slopes elsewhere in the site. Here alpine heath vegetation is represented with species such as Crowberry (*Empetrum nigrum*), Cowberry, Dwarf Willow (*Salix herbacea*), the grey-green moss *Racomitrium lanuginosum* and scarce species such as Mountain Clubmoss (*Diphasiastrum alpinum*), Firmoss (*Huperzia selago*), and Starry Saxifrage (*Saxifraga stellaris*). Some rare arctic-alpine species have been recorded, including Alpine Lady's-mantle (*Alchemilla alpina*) and Alpine Saw-wort (*Saussurea alpina*).

Small areas of old oakwood (Blechno-Quercetum petraeae type) occur on the slopes of Glendalough and Glenmalure, near L. Tay and L. Dan, with native Sessile Oak (*Quercus petraea*) 100-120 years old. On wetter areas, wet broadleaved semi-natural woodlands occur, which are dominated by Downy Birch (*Betula pubescens*). Mixed woodland with non-native tree species also occurs.

The site supports a range of rare plant species, which are listed in the Irish Red Data Book: Parsley Fern (*Cryptogramma crispa*), Marsh Clubmoss (*Lycopodiella inundata*), Greater Broom-rape (*Orobancha rapum-genistae*), Alpine Lady's-mantle, Alpine Saw-wort, Lanceolate Spleenwort (*Asplenium billotii*), Small White Orchid (*Pseudorchis albida*) and Bog Orchid (*Hammarbya paludosa*). The latter three species are legally protected under the Flora (Protection) Order, 1999. The rare Myxomycete fungus, *Echinostelium colliculosum*, has been recorded from the Military Road.

Mammals and birds which occur are typical of the uplands. Deer are abundant, mainly hybrids between Red and Sika Deer. Other mammals include Hare, Badger and Otter, the latter being a species listed on Annex II of the E.U. Habitats Directive. Pine Marten has recently been confirmed as occurring within the site. Among the birds, Meadow Pipit, Skylark, Raven and Red Grouse are resident throughout the site. Wheatear, Whinchat and the scarce Ring Ouzel are summer visitors. Wood Warbler and Redstarts are rare breeding species of the woodlands.

Dipper and Grey Wagtail are typical riparian species. Merlin and Peregrine Falcon, both Annex I species of the EU Birds Directive, breed within the site. Recently, Goosander has become established as a breeding species.

Large areas of the site are owned by NPWS, and managed for nature conservation based on traditional landuses for the uplands. The most common landuse is traditional sheep grazing. Other land uses include turf-cutting, mostly hand-cutting but some machine-cutting occurs. These activities are largely confined to the Military Road, where there is easy access. Large areas which had been previously hand-cut and are now abandoned, are regenerating. In the last 40 years, forestry has become an important landuse in the uplands, and has affected both the wildlife and the hydrology of the area. Amenity use is very high, with Dublin city close to the site.

Wicklow Mountains is important as a complex, extensive upland site. It shows great diversity from a geomorphological and a topographical point of view. The vegetation provides examples of the typical upland habitats with heath, blanket bog and upland grassland covering large, relatively undisturbed areas. In all ten habitats listed on Annex I of the EU Habitats Directive are found within the site. Several rare, protected plant and animal species occur.

12.10.2001

SITE SYNOPSIS

SITE NAME: WICKLOW MOUNTAINS SPA

SITE CODE: 004040

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 being over 600 m; the highest peak is Lugnaquilla (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. The bog habitat is usually dominated by Ling (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*), Cottongrasses (*Eriophorum vaginatum* and *E. angustifolium*), Deergrass (*Scirpus cespitosus*) and Bog Asphodel (*Narthecium ossifragum*). Bog mosses (*Sphagnum* spp.) are well represented. On shallower peats, dry heath is represented by such species as Ling, Gorse (*Ulex* spp.), Bell Heather (*Erica cinerea*), Bilberry (*Vaccinium myrtillus*), Purple Moor-grass (*Molinia caerulea*) and lichens (*Cladonia* spp.). Fine examples of native Oak woodlands are found in the Glendalough area, and include Sessile Oak (*Quercus petraea*) trees of 100-120 years old. Glendalough Lake is a good example of an oligotrophic system.

The site supports good examples of both upland and woodland bird communities. The open peatlands provide excellent foraging habitat for Merlin (5-10 pairs) and Peregrine (c. 10 pairs). The Merlins nest in old crows nests, whilst the Peregrines nest on cliffs and crags. Other birds of the open peatlands and scree slopes include Ring Ouzel, now a very rare bird in Ireland, and Red Grouse. The Wicklow uplands are the only regular location in Ireland where Goosander breeds, with the Glendalough lakes being a regular site. This species was proved to be breeding only as recently as 1994 and it is now well established. Whinchat, a localised species in Ireland, breeds within the site.

The Glendalough Oak woods are a regular location for several rare breeding passerines. Redstart is recorded most years and 1-2 pairs probably breed. Wood Warbler is another annual

visitor, with perhaps up to 5 pairs in some years. Recently, Garden Warbler has been recorded, whilst Blackcap has a very strong breeding population.

The site, which is within the Wicklow Mountains National Park, is fragmented into about twenty separate parcels of land. Much of the site is State-owned and managed for nature conservation based on traditional landuses for the uplands. The most common landuse is traditional sheep grazing. Other land uses include turf-cutting, mostly by hand though some machine-cutting also occurs. Grazing by sheep and deer in the woodlands can be damaging as it prevents or reduces regeneration. Dublin City is close to the site and amenity use is very high; if not properly controlled, recreational activities could cause disturbance to some bird species.

This site is of high ornithological importance as it supports very good examples of upland and woodland bird communities. Several of the species which occur are very rare at a national level. Two species, Ring Ouzel and Red Grouse, are Red-listed and their status is of high conservation concern. Also of note is that Merlin and Peregrine are both listed on Annex I of the E.U. Birds Directive.

25.8.2004

SITE SYNOPSIS

SITE NAME: POULAPHOUCA RESERVOIR SPA

SITE CODE: 004063

Poulaphouca Reservoir SPA, located in the western foothills of the Wicklow Mountains, was created in 1944 by damming of the River Liffey for the purpose of generating electricity from hydropower. The reservoir covers an area of approximately 20 square kilometres and is the largest inland water body in the Mideast and south-east regions. The reservoir receives water from two main sources, the River Liffey at the northern end, and the Kings River at the southern end. The exit is into the River Liffey gorge at the western end. Underlying the reservoir are sands and gravels deposited during the last glaciation. The shores of the lake are mostly sandy.

When water levels are low the exposed lake muds are colonised by an ephemeral flora of annual plant species. Wet grassland areas occur in sheltered bays around the lake but especially in the northern part. Reed Canary-grass (*Phalaris arundinacea*) is the main grass species present, but other plant species characteristic of wet grasslands occur, including Creeping Bent (*Agrostis stolonifera*), Meadowsweet (*Filipendula ulmaria*), Yellow Iris (*Iris pseudacorus*) and Water Mint (*Mentha aquatica*). Sedges (*Carex* spp.) are locally common, while Rusty Willow (*Salix cinerea* subsp. *oleifolia*) scrub is often found associated with the wet grassland. In some places the water

washes against grassy banks which are generally less than a metre high, and in a few places there are steep sand and clay cliffs, up to 15 m high - these are remnants of the old River Liffey channel. In many places the banks are actively eroding, and a strip of conifers has been planted around much of the perimeter of the reservoir in an attempt to stabilize the banks.

Poulaphouca Reservoir is of international importance for its Greylag Goose population, which is one of the largest in the country. The site provides the main roost for the birds, with feeding occurring mostly on improved grassland outside of the site. An average peak of 1,058 individuals occurred during the five seasons 1995/96 to 1999/00. A range of other waterfowl species occur in relatively low numbers, including Whooper Swan (34), Wigeon (262), Teal (136), Mallard (283),

Goldeneye (36), Cormorant (16), Great Crested Grebe (11), Curlew (118) and Mute Swan (17). The site is also used by Grey Heron (12).

The reservoir attracts roosting gulls during winter, most notably a large population of Lesser Black-backed Gull (1,116), which in Ireland is rare in winter away from the south coast. Black-headed Gull (1,245) and Common Gull (229) also occur. Breeding birds at the site include Great Crested Grebe (several pairs), which is localised in its distribution in eastern Ireland, as well as Snipe and Lapwing. The principal interest of the site is the Greylag Goose population, which is of international importance. A range of other wildfowl species also occurs, including Whooper Swan, a species that is listed on Annex I of the E.U. Birds Directive. The site is also notable as a winter roost for gulls, especially Lesser Black-backed Gull.

2.3.2005

SITE SYNOPSIS

SITE NAME : NORTH DUBLIN BAY SAC

SITE CODE : 000206

This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site. The island is a sandy spit which formed after the building of the South Wall and Bull Wall in the 18th and 19th centuries. It now extends for about 5 km in length and is up to 1 km wide in places.

A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes. Marram Grass (*Ammophila arenaria*) is dominant on the outer dune ridges, with Lyme Grass (*Leymus arenarius*) and Sea Couchgrass (*Elymus farctus*) on the foredunes. Behind the first dune ridge, plant diversity increases with the appearance of such species as Wild Pansy (*Viola tricolor*), Kidney Vetch (*Anthyllis vulneraria*), Bird's-foot Trefoil (*Lotus corniculatus*), Rest Harrow (*Ononis repens*), Yellow Rattle (*Rhinanthus minor*) and Pyramidal Orchid (*Anacamptis pyramidalis*). In these grassy areas and slacks, the scarce Bee Orchid (*Ophrys apifera*) occurs.

About 1 km from the tip of the island, a large dune slack with a rich flora occurs, usually referred to as the 'Alder Marsh' because of the presence of Alder trees (*Alnus* spp). The water table is very near the surface and is only slightly brackish. Saltmarsh Rush (*Juncus maritimus*) is the dominant species, with Meadow Sweet (*Filipendula ulmaria*) and Devil's-bit (*Succisa pratensis*) being frequent. The orchid flora is notable and includes Marsh Helleborine (*Epipactis palustris*), Common Twayblade (*Listera ovata*), Autumn Lady's-tresses (*Spiranthes spiralis*) and Marsh orchids (*Dactylorhiza* spp.)

Saltmarsh extends along the length of the landward side of the island. The edge of the marsh is marked by an eroding edge which varies from 20 cm to 60 cm high. The marsh can be zoned into different levels according to the vegetation types present. On the lower marsh, Glasswort (*Salicornia europaea*), Saltmarsh Grass (*Puccinellia maritima*), Annual Sea-blite (*Suaeda maritima*) and Greater Sea-spurrey (*Spergularia media*) are the main species. Higher up in the middle marsh Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*), Sea Arrowgrass (*Triglochin maritima*) and Sea Pink (*Armeria maritima*) appear. Above the mark of the normal high tide, species such as Scurvy Grass (*Cochlearia officinalis*) and Sea Milkwort (*Glaux maritima*) are found, while on the extreme upper marsh, Sea Rushes (*Juncus maritimus* and *J. gerardii*) are dominant. Towards the tip of the island, the saltmarsh grades naturally into fixed dune vegetation.

The island shelters two intertidal lagoons which are divided by a solid causeway. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. The north lagoon has an area known as the "Salicornia flat", which is dominated by *Salicornia dolichostachya*, a pioneer Glasswort species, and covers about 25 ha. Tassel Weed (*Ruppia maritima*) occurs in this area, along with some Eelgrass (*Zostera angustifolia*). Eelgrass (*Z. noltii*) also occurs in Sutton Creek. Cordgrass (*Spartina anglica*) occurs in places but its growth

is controlled by management. Green algal mats (*Enteromorpha* spp., *Ulva lactuca*) cover large areas of the flats during summer. These sediments have a rich macrofauna, with high densities of

Lugworms (*Arenicola marina*) in parts of the north lagoon. Mussels (*Mytilus edulis*) occur in places, along with bivalves such as *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*. The small gastropod *Hydrobia ulvae* occurs in high densities in places, while the crustaceans *Corophium volutator* and *Carcinus maenas* are common. The sediments on the seaward side of North Bull Island are mostly sands. The site extends below the low spring tide mark to include an area of the sublittoral zone.

Three Rare plant species legally protected under the Flora Protection Order 1987 have been recorded on the North Bull Island. These are Lesser Centaury (*Centaureum pulchellum*), Hemp Nettle (*Galeopsis angustifolia*) and Meadow Saxifrage (*Saxifraga granulata*). Two further species listed as threatened in the Red Data Book, Wild Sage (*Salvia verbenaca*) and Spring Vetch (*Vicia lathyroides*), have also been recorded. A rare liverwort, *Petalophyllum ralfsii*, was first recorded from the North Bull Island in 1874 and has recently been confirmed as being still present there. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. The North Bull is the only known extant site for the species in Ireland away from the western seaboard.

North Dublin Bay is of international importance for waterfowl. During the 1994/95 to 1996/97 period the following species occurred in internationally important numbers (figures are average maxima): Brent Geese 2,333; Knot 4,423; Bar-tailed Godwit 1,586. A further 14 species occurred in nationally important concentrations - Shelduck 1505; Wigeon 1,166; Teal 1,512; Pintail 334; Shoveler 239; Oystercatcher 2,190; Ringed Plover 346; Grey Plover 816; Sanderling 357; Dunlin 6,238; Blacktailed Godwit 156; Curlew 1,193; Turnstone 197 and Redshank 1,175. Some of these species frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes (mostly Brent Goose, Oystercatcher, Ringed Plover, Sanderling, Dunlin).

The tip of the North Bull Island is a traditional nesting site for Little Tern. A high total of 88 pairs nested in 1987. However, nesting attempts have not been successful since the early 1990s. Ringed Plover, Shelduck, Mallard, Skylark, Meadow Pipit and Stonechat also nest. A well-known population of Irish Hare is resident on the island. The invertebrates of the North Bull Island have been studied and the island has been shown to contain at least seven species of regional or national importance in Ireland (Orders Diptera, Hymenoptera, Hemiptera).

The main landuses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. The site is used regularly for educational purposes.

North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a statutory Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site. This site is an excellent example of a coastal site with all the main habitats represented. It holds good examples of ten habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a number of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.

23.11.1999

SITE SYNOPSIS

SITE NAME: SOUTH DUBLIN BAY

SITE CODE: 000210

This site lies south of the River Liffey and extends from the South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. The sediments are predominantly sands but grade to sandy muds near the shore at Merrion gates.

The main channel which drains the area is Cockle Lake. There is a bed of Eelgrass (*Zostera noltii*) below Merrion Gates which is the largest stand on the east coast. Green algae (*Enteromorpha* spp. and *Ulva lactuca*) are distributed throughout the area at a low density. Furoid algae occur on the rocky shore in the Maretimo to Dún Laoghaire area. Species include *Fucus spiralis*, *F. vesiculosus*, *F. serratus*, *Ascophyllum nodosum* and *Pelvetia canaliculata*. Lugworm (*Arenicola marina*) and Cockles (*Cerastoderma edule*) and other annelids and bivalves are frequent throughout the site. The small gastropod *Hydrobia ulvae* occurs on the muddy sands off Merrion Gates.

South Dublin Bay is an important site for waterfowl. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. The principal species are Oystercatcher (1215), Ringed Plover (120), Sanderling (344) and Dunlin (2628), Redshank (356) (average winter peaks 1996/97 and 1997/98). Up to 100 Turnstones are usual in the south bay during winter. Brent Geese regularly occur in numbers of international importance (average peak 299). Bar-tailed Godwit (565), a species listed on Annex I of the EU Birds Directive, also occur.

Large numbers of gulls roost in South Dublin Bay, e.g. 4,500 Black-headed Gulls in February 1990; 500 Common Gulls in February 1991. It is also an important tern roost in the autumn, regularly holding 2000-3000 terns including Roseate Terns, a species listed on Annex I of the E.U. Birds Directive. South Dublin Bay is largely protected as a Special Protection Area. At low tide the inner parts of the south bay are used for amenity purposes. Baitdigging is a regular activity on the sandy flats. At high tide some areas have windsurfing and jet-skiing.

This site is a fine example of a coastal system with extensive sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. South Dublin Bay is also an internationally important bird site.

25.2.2000

SITE SYNOPSIS

SITE NAME: SOUTH DUBLIN BAY AND RIVER TOLKA ESTUARY SPA

SITE CODE: 004024

The South Dublin Bay and River Tolka Estuary SPA comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay 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. 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. There is a bed of Dwarf Eelgrass (*Zostera noltii*) below Merrion Gates which is the largest stand on the east coast. Green algae (*Enteromorpha* spp. and *Ulva lactuca*) are distributed throughout the area at a low density. The macro-invertebrate fauna is well-developed, and is characterised by annelids such as Lugworm (*Arenicola marina*), *Nephtys* spp. and Sand Mason (*Janice conchilega*), and bivalves, especially Cockle (*Cerastoderma edule*) and Baltic Tellin (*Macoma balthica*). The small gastropod Spire Shell (*Hydrobia ulvae*) occurs on the muddy sands off Merrion Gates, along with the crustacean *Corophium volutator*.

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 site includes Booterstown Marsh, an enclosed area of saltmarsh and muds that is cut off from the sea by the Dublin/Wexford railway line, being linked only by a channel to the east, the Nutley stream. Sea water incursions into the marsh occur along this stream at high tide. An area of grassland at Poolbeg, north of Irishtown Nature Park, is also included in the site.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of the SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The site is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex – all counts for wintering waterbirds are mean peaks for the five year period 1995/96-99/2000. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. An internationally important population of Light-bellied Brent Goose (525) occurs regularly and newly arrived birds in the autumn feed on the Eelgrass bed at Merrion.

Light-bellied Brent Goose is also known to feed on the grassland at Poolbeg.

The site supports nationally important numbers of a further nine species: Oystercatcher (1,263), Ringed Plover (161), Golden Plover (1,452), Grey Plover (183), Knot (1,151), Sanderling (349), Dunlin (2,753), Bar-tailed Godwit (866) and Redshank (713). Other species occurring in smaller numbers include Great Crested Grebe (21), Curlew (397) and Turnstone (75).

South Dublin Bay is a significant site for wintering gulls, especially Black-headed Gull (3,040), but also Common Gull (330) and Herring Gull (348). Mediterranean Gull is also recorded from here, occurring through much of the year, but especially in late winter/spring and again in late summer into winter. Both Common Tern and Arctic Tern breed in Dublin Docks, on a man-made mooring structure known as the E.S.B. dolphin – this is included within the site. Small numbers of Common Tern and Arctic Tern were recorded nesting on this dolphin in the 1980s. A survey of the dolphin in 1999 recorded Common Tern nesting here in nationally important numbers (194 pairs). This increase was largely due to the ongoing management of the site for breeding terns. More recent data highlights this site as one of the most important Common Tern sites in the country with over 400 pairs recorded here in 2007.

The south bay is an important tern roost in the autumn (mostly late July to September). Birds also use the Dalkey Islands to the south. The origin of many of the birds is likely to be the Dublin breeding sites (Rockabill and the Dublin Docks) though numbers suggest that the site is also used by birds from other sites, perhaps outside the state. More than 10,000 terns have been recorded, consisting of Common, Arctic and Roseate terns. The wintering birds within this site are now well-monitored. More survey, however, is required on the wintering gulls and the autumn terns.

Boosterstown Marsh supports an important population of Borrer's Saltmarsh-grass (*Puccinellia fasciculata*), a rare, Red Data Book species that is listed on the Flora (Protection) Order, 1999.

The South Dublin Bay and River Tolka Estuary SPA is of international importance for Light-bellied Brent Goose and of national importance for nine other waterfowl species. As an autumn tern roost, it is also of international importance. Furthermore, the site supports a nationally important colony of Common Tern. All of the tern species using the site are listed on Annex I of the E.U. Birds Directive, as are Bartailed Godwit and Mediterranean Gull.

1.5.2008

Appendix 2

List of County Development Plan objectives and policies that are relevant to water protection in South Dublin County.

Policy LHA 21 River and Stream Management

It is the policy of the Council to implement a strategy (prepared on a regional basis) for the management of rivers and streams throughout the County.

Policy LHA 22 Watercourses

It is the policy of the Council to protect, maintain, improve and enhance the natural and organic character of the watercourses in the County and to promote access, walkways and other recreational uses of their associated public open space, subject to a defined strategy of nature conservation and flood protection.

2.3.4 Strategy: The strategy of the Council for the development of Water Supply and Drainage in the County is as follows:

- *Continue the sustainable development and improvement of the water supply and foul drainage systems throughout the County to meet the anticipated water and drainage requirements of the area.*
- *Protect surface water catchments and manage catchment areas where appropriate to protect the surface water drainage infrastructure of the County.*
- *Implement the provisions of national policy and legislation in the control of water pollution.*
- *Ensure that existing and proposed developments are not subject to undue risk of flooding.*
- *Conserve treated water by active leakage detection, non-domestic metering and development of infrastructure.*
- *Actively pursue and resolve water leakage.*

Policy WD 1 Water Supply and Drainage

It is the policy of the Council to co-operate with adjoining authorities to continue the sustainable development and improvement of the water supply and drainage systems throughout the County to meet the anticipated water and drainage requirements of the area, in accordance with the recommendations set out in the 'Greater Dublin Strategic Water Supply Study' and the 'Greater Dublin Strategic Drainage Study', and the proposed 'Dublin Region Water Services Strategic Plan' when adopted.

Policy WD 2 Wastewater Treatment Plants and Wastewater Collection Systems

It is the policy of the Council that development shall be preceded by sufficient capacity in the public wastewater treatment plants and appropriate extensions in the existing public wastewater collection systems.

Policy WD 3 Quality of Surface Water and Groundwater

It is the policy of the Council that the ongoing development of the County shall be undertaken in such a way as not to compromise the quality of surface water (and associated habitats and species) and groundwater.

Policy WD 4 Soil and Groundwater Contamination

It is the policy of the Council to require adequate and appropriate investigations to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.

Policy WD 5 Water Quality Management Plans

It is the policy of the Council to promote the implementation of water quality management plans for ground and surface waters in the county as part of the implementation of the EU Water Framework Directive, and in accordance with the policies and objectives and programme of measures of the Eastern River Basin Management Plan and any further amendments.

Policy WD 6 Sustainable Urban Drainage Systems (SuDS)

It is the policy of the Council to ensure that all development proposals incorporate Sustainable Urban Drainage Systems (SuDS).

Policy WD 7 Storm Overflows

It is the policy of the Council to minimise the number and frequency of storm overflows of sewage to watercourses and to establish, in co-operation with the adjoining local authorities, a consistent approach to the design, improvement and management of these intermittent discharges to ensure that the needs of the Region's receiving waters are met in a cost effective manner.

Policy WD 8 Water Pollution Abatement Measures

It is the policy of the Council to implement the provisions of water pollution abatement measures in accordance with National and EU Directives and legislative requirements in conjunction with other agencies as appropriate.

Policy WD 9 Bohernabreena Reservoirs and Catchment Area

It is the policy of the Council to protect the Bohernabreena Reservoirs and catchment area, cSAC and buffer zone, in the interests of public health and to restrict development in the catchment.

Policy EE 15 Natural Features in Enterprise Priority Areas

It is the policy of the Council where existing streams, watercourses, are located on land zoned for Enterprise Priority One, Enterprise Priority Two and Enterprise Priority Three purposes they should be protected and incorporated within the overall design for the area, thereby contributing to and connecting into the overall green network policy for the County. Riparian corridors should be kept free from development and be used as amenity for workers and visitors on the site, taking due care to protect and enhance the corridor's native biodiversity resource.

Policy EE 33 Sustainable Development of Agricultural Diversification

It is the policy of the Council to support the sustainable development of agriculture and agriculture diversification, such as organic foods, rural tourism and small to medium-sized enterprises subject to the retention of the holding for primarily agricultural use and the proper planning and sustainable development of the area including protecting and maintaining biodiversity, wildlife habitats, water quality, rural landscape character, scenic amenities and nature conservation.

Policy EE 35 Rural Related Enterprises

It is the policy of the Council to facilitate the development of acceptable rural related enterprises, including equine enterprises, in accordance with the terms of Zoning Objective 'B' (to protect and improve rural amenity and to provide for the development of agriculture) and to minimise pollution from agricultural sources by means of development management and water pollution legislation and regulations.

4.1.2 Additional Protection Measures - Planning Conditions

The Planning Authority has not granted permission for any development within the two SACs. However, in order to ensure that there are no direct, indirect, or cumulative impacts on the SACs and that their conservation status of the protected habitats are maintained and that their listed conservation objectives are adhered to, the following measures will be strictly applied for all planning applications within the sensitive areas above and adjacent to the County's two SACs in the Dublin Mountains.

- All planning applications received by the Planning Authority for these areas will be subject to rigorous Appropriate Assessment screening and full AA investigation

where required. Where impacts are seen to be likely, or where reasonable doubt exists to potential for impact, no application will be allowed to proceed.

- Appropriate Assessments will be based upon contemporary scientific data regarding hydrology and ecology wherever appropriate.
- For any permitted development, strict conditions will apply regarding the type, installation, monitoring, and servicing of all newly-granted waste water treatment systems in the catchment area of the two SACs.

Policy H33 (see Section 4.1) which refers to one-off rural housing in this area, also reinforces the necessity to have due regard in any application in this sensitive area, to the requirements for assessment as demanded under the Habitats Directive.