Screening Report for Appropriate Assessment of development at Hyde Park, Hyde Road, Dalkey, Co. Dublin

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Introduction

Biodiversity is a contraction of the words 'biological diversity' and describes the enormous variability in species, habitats and genes that exist on Earth. It provides food, building materials, fuel and clothing while maintaining clean air, water, soil fertility and the pollination of crops. A study by the Department of Environment, Heritage and Local Government placed the economic value of biodiversity to Ireland at \in 2.6 billion annually (Bullock et al., 2008) for these 'ecosystem services'.

All life depends on biodiversity and its current global decline is a major challenge facing humanity. In 1992, at the Rio Earth Summit, this challenge was recognised by the United Nations through the Convention on Biological Diversity which has since been ratified by 193 countries, including Ireland. Its goal to significantly slow down the rate of biodiversity loss on Earth has been echoed by the European Union, which set a target date of 2010 for *halting* the decline. This target was not met but in 2010 in Nagoya, Japan, governments from around the world set about redoubling their efforts and issued a strategy for 2020 called 'Living in Harmony with Nature'. In 2011 the Irish Government incorporated the goals set out in this strategy, along with its commitments to the conservation of biodiversity under national and EU law, in the second national biodiversity action plan (Dept. of Arts, Heritage and the Gaeltacht, 2011). A third plan was published in 2017.

The main legislation for conserving biodiversity in Ireland have been the Directive 2009/147//EC of the European Parliament and of the Council of November 2009 on the conservation of wild birds (Birds Directive) and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive). Among other things, these require member states to designate areas of their territory that contain important bird populations in the case of the former; or a representative sample of important or endangered habitats and species in the case of the latter. These areas are known as Special Protection Areas (SPA) and Special Areas of Conservation (SAC) respectively. Collectively they form a network of sites across the European Union known as Natura 2000. The Birds and Habitats Directives have been transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011-2015. A report into the economic benefits of the Natura 2000 network concluded that "there is a new evidence base that conserving and investing in our biodiversity makes sense for climate challenges, for saving money, for jobs, for food, water and physical security, for cultural identity, health, science and learning, and of course for biodiversity itself" (EU, 2013).

Unlike traditional nature reserves or national parks, Natura 2000 sites are not 'fenced-off' from human activity and are frequently in private ownership. It is the responsibility of the competent national authority to ensure that 'good conservation status' exists for their SPAs and SACs and specifically that Article 6(3) of the Habitats Directive is met. Article 6(3) states:

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

Sections 177U and 177V of the Planning and Development Act 2000 sets out the purpose of AA Screening is as follows:

A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

The test at stage 1 AA Screening is that:

The competent authority shall determine that an appropriate assessment of a proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

The test at stage 2 (Appropriate Assessment) is:

Whether or not the proposed development, individually or in-combination with other plans or projects would adversely affect the integrity of a European site.

However, where this is not the case, a preliminary screening must first be carried out to determine whether or not a full AA is required. This screening is carried out by An Bord Pleanála.

The Purpose of this document

This document provides for the screening of a proposed development of new club houses on the site at Hyde Park, Hyde Road, Dalkey, Co. Dublin, and its potential effects in relation to Natura 2000 sites (SACs and SPAs). Under the Planning and Development Act 2000 (as amended), and the Birds and Natural Habitats Regulations 2011, the planning authority cannot grant planning permission where significant effects may arise to a Natura 2000 area. In order to make that decision the development must be screened for AA. This report provides the necessary information to allow Dun Laoghaire Rathdown County Council to carry out this screening.

Methodology

The methodology for this screening statement is clearly set out in a document prepared for the Environment DG of the European Commission entitled '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' (Oxford Brookes University, 2001). Chapter 3, part 1, of this document deals specifically with screening while Annex 2 provides the template for the screening/finding of no significant effects report matrices to be used.

In accordance with this guidance, the following methodology has been used to produce this screening statement:

Step 1: Management of the Natura 2000 site

This determines whether the project is necessary for the conservation management of the site in question.

Step 2: Description of the Project

This step describes the aspects of the project that may have an impact on the Natura 2000 site.

Step 3: Characteristics of the Site

This process identifies the conservation aspects of the site and determines whether negative impacts can be expected as a result of the plan. This is done through a literature survey and consultation with relevant stakeholders – particularly the National Parks and Wildlife Service (NPWS). All potential effects are identified including those that may act alone or in combination with other projects or plans.

Using the precautionary principle, and through consultation and a review of published data, it is normally possible to conclude at this point whether potential impacts are likely. Deficiencies in available data are also highlighted at this stage.

Step 4: Assessment of Significance

Assessing whether an effect is significant or not is dependent on whether the project is likely to have an effect on the conservation objectives of the site.

If this analysis shows that significant effects are likely then a full AA will be required.

The steps are compiled into a screening matrix, a template of which is provided in Appendix II of the EU methodology.

Reference is also made to recently published guidelines for Local Authorities from the Department of the Environment, Heritage and Local Government (DoEHLG, 2009).

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

Screening Template as per Annex 2 of EU methodology:

This plan is not necessary for the management of the site and so Step 1 as outlined above is not relevant.

Brief description of the project

The project is described here as per the planning application:

The demolition of the existing sports facilities and the construction of a new community sports facility to contain a sports hall, cafe, gym, changing rooms, meeting facilities, physio rooms and ancillary plant and storage space. All associated site works.

The site location is shown in figures 1 and 2 while the proposed layout is given in figure 3.

It is planned to construct a new club house on the site along Hyde Road, Dalkey, Co. Dublin as previously described. This will involve the demolition of existing club house buildings, a construction phase to include connections to existing surface water drainage infrastructure as well as electricity and wastewater networks.

The main phases of this project include:

- Site clearance and preparation including demolition of existing buildings.
- A construction phase using standard building materials.
- Construction will include a new surface water drainage infrastructure and connection to electricity and wastewater networks.
- An operation phase whereby the buildings will be occupied.

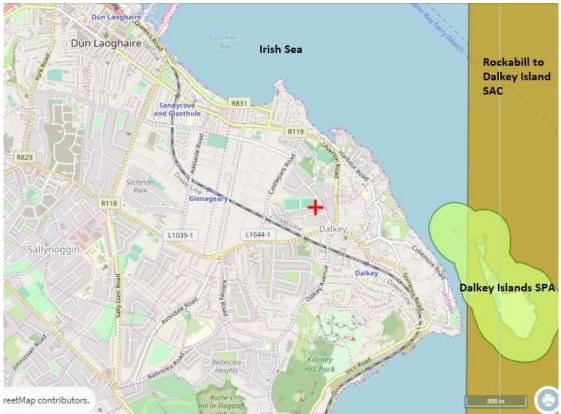


Figure 1 – Site location (red cross) showing SACs (tan) and SPAs (lime green) (from <u>www.epa.ie</u>).

The site is not located within or directly adjacent to any Natura 2000 site (SAC or SPA). This part of south Dublin is a built-up residential zone and is predominantly composed of artificial surfaces although parks and gardens do provide some semi-natural habitat. Mapping from the OSI and EPA show that the lands are within the catchment of no significant water course. Hydrological pathways lead directly to the Irish Sea. Rainwater currently percolates to the soil or enters the local combined foul sewer.

A site visit was carried out on November 5th 2019 and this lies outside the optimal period for general habitat survey. For a study of this nature it is essential that pathways between the site and Natura 2000 sites can be full identified and in this regard no difficulties were encountered. Habitats are described here as per standard classifications (Fossitt, 2000). The survey found that the lands are entirely composed of **buildings and artificial surfaces – BL3** which include the existing club house as well as a small area of amenity grassland with trees (tall Lime *Tilia sp.* and Aspen *Populus tremula*. There is no Japanese Knotweed *Fallopia japonica* or other plant species classified as alien invasive (listed on Schedule 3 of SI No. 477 of 2011).

The development site is directly adjacent to playing fields. There was no evidence that these fields were used by wetland/wading birds (geese, ducks etc.).

Currently there is no attenuation of rain run-off. In accordance with the Greater Dublin Strategic Drainage Study this project will incorporate sustainable

drainage systems (SUDS) that will enhance the quality and quantity of run-off at the 'greenfield' rate.

According to the Engineering Planning Report prepared by Punch Consulting for this application:

"Relatively small volumes of rainwater collected on the respective SuDS devices will enter the public sewer network during typical low intensity storms. This is because the proposed SuDS measures will retain rainwater until it is either used via evapotranspiration in the green areas or reused within the development via the rainwater harvesting system.

The SuDS processes decrease the impact of the development on the receiving environment by providing amenity and biodiversity in many cases."

SUDS measures include a green roof, attenuation storage and discharge to the sewer via a flow control device.



Figure 2 – Site boundary (aerial photo from www.google.com)

Foul wastewater from the proposed development will be sent to the wastewater treatment plant at Ringsend in Dublin. Emissions from the plant are currently not in compliance with the Urban Wastewater Treatment Directive. Irish Water, the authority in charge of the wastewater treatment network, has prioritised the enhancement of the Ringsend plant. In April 2019 Irish Water was granted planning permission to upgrade the Ringsend plant. This will see improved

treatment standards and will increase network capacity by 50%, with a target completion date of 2022.

There are no other discharges from this operation. Fresh water supply for the development will be via a mains supply. This originates in the Poulaphouca Reservoir.

There are no point air emissions from the site while some dust and noise can be expected during the construction phase.

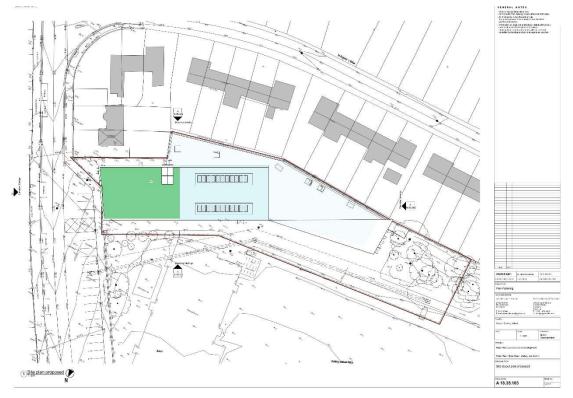


Figure 3 – Proposed layout plan (note: north is down in this view)

Brief description of Natura 2000 sites

In assessing the zone of influence of this project upon Natura 2000 sites the following factors must be considered:

- Potential impacts arising from the project
- The location and nature of Natura 2000 sites
- Pathways between the development and the Natura 2000 network

It has already been stated that the site is not located within or directly adjacent to any Natura 2000 area. There is no prescribed radius for determining which Natura 2000 should be examined and this depends upon the zone of influence of the project. There are two such areas near the Dalkey Coast: the **Dalkey Islands SPA (site code: 4172)** and the **Rockabill to Dalkey Islands SPA (site code: 3000)**. Wastewater will discharge to the **South Dublin Bay and River Tolka Estuary SPA (site code: 4024)**; and the **South Dublin Bay SAC (0210)**, via the Ringsend wastewater treatment plant. The **North Dublin Bay SAC (site code: 0206)** and **North Bull Island SPA (site code: 4006)** are also in this region. The **Poulaphouca Reservoir SPA (site code: 4063)**, from which drinking water supply for this development will originate, is also considered to fall within the zone of influence of this project. These are considered to be the only Natura 2000 areas within the zone of influence of the development as pathways do not exist to other areas.

The **South Dublin Bay and Tolka Estuary SPA** (side code: 4024) is largely coincident with the South Dublin Bay SAC boundary with the exception of the Tolka Estuary. The **North Bull Island SPA** (site code: 0206) meanwhile is largely coincident with the North Dublin Bay SAC with the exception of the terrestrial portion of Bull Island. These designations encompass all of the intertidal areas in Dublin Bay from south of the Howth peninsula to the pier in Dun Laoghaire. Wintering birds in particular are attracted to these areas in great number as they shelter from harsh conditions further north and avail of the available food supply within sands and soft sediments. Table 1 lists the features of interest for both of the SPAs.

North Bull Island SPA	South Dublin Bay and Tolka Estuary SPA	
Light-bellied Brent Goose	Light-bellied Brent Goose	
(Branta bernicla hrota) [A046]	(Branta bernicla hrota) [A046]	
Oystercatcher	Oystercatcher	
(Haematopus ostralegus) [A130]	(Haematopus ostralegus) [A130]	
Teal (Anas crecca) [A052]	Ringed Plover (Charadrius hiaticula) [A137]	
Pintail (<i>Anas acuta</i>) [A054]	Grey Plover	
	(Pluvialis squatarola) [A140]	
Shoveler (Anas clypeata) [A056]	Knot (<i>Calidris canutus</i>) [A143]	
Shelduck (Tadorna tadorna) [A048]	Sanderling (Calidris alba) [A144]	
Golden Plover (<i>Pluvialis apricaria</i>) [A140]	Dunlin (<i>Calidris alpina</i>) [A149]	
Grey Plover (<i>Pluvialis squatarola</i>)	Bar-tailed Godwit	
[A141]	(Limosa lapponica) [A157]	
Knot (Calidris canutus) [A143]	Redshank (<i>Tringa totanus</i>) [A162]	
Sanderling (<i>Calidris alba</i>) [A144]	Black-headed Gull (<i>Croicocephalus ridibundus</i>) [A179]	
Dunlin (<i>Calidris alpina</i>) [A149]	Roseate Tern (<i>Sterna dougallii</i>) [A192]	
Black-tailed Godwit (Limosa limosa)	Common Tern	
[A156]	(Sterna hirundo) [A193]	

Table 1 – Features of interest for SPAs in Dublin Bay (EU code in square parenthesis)

Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	Arctic Tern (<i>Sterna paradisaea</i>) [A194]
Curlew (<i>Numenius arquata</i>) [A160]	Wetlands & Waterbirds [A999]
Redshank (<i>Tringa totanus</i>) [A162]	
Turnstone (Arenaria interpres) [A169]	
Black-headed Gull (<i>Larus ridibundus</i>) [A179]	
Wetlands & Waterbirds [A999]	

- Light-bellied Brent Goose. There has been a 67% increase in the distribution of this goose which winters throughout the Irish coast. The light-bellied subspecies found in Ireland breeds predominantly in the Canadian Arctic.
- **Sanderling.** This small bird breeds in the high Arctic and winters in Ireland along sandy beaches and sandbars. Its wintering distribution has increased by 21% in the previous 30 years.
- **Dunlin.** Although widespread and stable in number during the winter season, the Irish breeding population has collapsed by nearly 70% in 40 years. Breeding is now confined to just seven sites in the north and west as habitat in former nesting areas has been degraded.
- **Knot.** These small wading birds do not breed in Ireland but gather in coastal wetlands in winter. Their numbers have increased dramatically since the mid-1990s although the reasons for this are unclear.
- **Black-headed Gull.** Widespread and abundant in winter these gulls are nevertheless considered to be in decline. The reasons behind this are unclear but may relate to the loss of safe nesting sites, drainage, food depletion and increase predation.
- **Ringed Plover.** This bird is a common sight around the Irish coast where it is resident. They breed on stony beaches but also, more recently, on cut-away bog in the midlands.
- **Oystercatcher.** Predominantly coastal in habit Oystercatchers are resident birds whose numbers continue to expand in Ireland.
- **Bar-tailed Godwit.** These wetland wading birds do not breed in Ireland but are found throughout the littoral zone during winter months. They prefer estuaries where there are areas of soft mud and sediments on which to feed.
- **Grey Plover.** These birds do not breed in Ireland but winter throughout coastal estuaries and wetlands. Its population and distribution is considered to be stable.
- **Roseate Tern.** This tern breeds at only a few stations along Ireland's east coast. Most of these are in decline although at Dublin their colony is increasing.
- **Common Tern.** This summer visitor nests along the coast and on islands in the largest lakes. Its breeding range has halved in Ireland since the 1968-1972 period.

- Arctic Tern. These long-distance travellers predominantly breed in coastal areas of Ireland. They have suffered from predation by invasive mink and are declining in much of their range.
- **Redshank.** Once common breeders throughout the peatlands and wet grasslands of the midlands Redshanks have undergone a 55% decline in distribution in the past 40 years. Agricultural intensification, drainage of wetlands and predation are the chief drivers of this change.
- **Teal**. In winter this duck is widespread throughout the country. Land use change and drainage however have contributed to a massive decline in its breeding range over the past 40 years.
- **Pintail**. Dabbling duck wintering on grazing marshes, river floodplains, sheltered coasts and estuaries. It is a localised species and has suffered a small decline in distribution in Ireland for unknown reasons.
- **Shoveler**. Favoured wintering sites for this duck are inland wetlands and coastal estuaries. While there have been local shifts in population and distribution, overall their status is stable in Ireland.
- **Shelduck.** The largest of our ducks, Shelduck both breed and winter around the coasts with some isolate stations inland. Its population and range are considered stable.
- **Golden Plover.** In winter these birds are recorded across the midlands and coastal regions. They breed only in suitable upland habitat in the north-west. Wintering abundance in Ireland has changed little in recent years although it is estimated that half of its breeding range has been lost in the last 40 years.
- **Black-tailed Godwit.** Breeding in Iceland these waders winter in selected sites around the Irish coast, but predominantly to the east and southern halves. Their range here has increase substantially of late.
- **Curlew.** Still a common sight during winter at coastal and inland areas around the country it breeding population here has effectively collapsed. Their habitat has been affected by the destruction of peat bogs, afforestation, farmland intensification and land abandonment. Their wintering distribution also appears to be in decline.
- **Turnstone.** This winter visitor to Irish coasts favours sandy beaches, estuaries and rocky shores. It is found throughout the island but changes may be occurring due to climate change.

Bird counts from BirdWatch Ireland are taken from Dublin Bay as a whole and are not specific to any particular portion of the Bay. Dublin Bay is recognised as an internationally important site for water birds as it supports over 20,000 individuals.

There were also internationally important populations of particular birds recorded in Dublin Bay (i.e. over 1% of the world population): Light-bellied brent geese *Branta bernicula hrota*; Black-tailed godwit *Limosa limosa*; Knot *Calidris canutus* and Bar-tailed godwit *L. lapponica*.

The **South Dublin Bay SAC** (side code: 0210) is concentrated on the intertidal area of Sandymount Strand. It has four qualifying interests: mudflats and sandflats not covered by seawater at low tide (1140), annual vegetation of drift

lines (1210), Salicornia and other annuals colonising mud and sand (1310) and Embryonic shifting dunes (2110).

- Annual vegetation of drift lines (1210) This habitat of the upper shore is characterised by raised banks of pebbles and stones. They are inhabited by a sparse but unique assemblage of plants, some of which are very rare. The principle pressures are listed as gravel extraction, the building of pipelines and coastal defences.
- Embryonic shifting dunes (2110). As their name suggests these sand structures represent the start of a sand dune's life. Perhaps only a meter high they are a transient habitat, vulnerable to inundation by the sea, or developing further into white dunes with Marram Grass. They are threatened by recreational uses, coastal defences, trampling and erosion.
- **Tidal mudflats (1140)**. This is an intertidal habitat characterised by fine silt and sediment. Most of the area in Ireland is of favourable status however water quality and fishing activity, including aquaculture, are negatively affecting some areas.
- Salicornia mudflats (1310): This is a pioneer saltmarsh community and so is associated with intertidal areas. It is dependent upon a supply of fresh, bare mud and can be promoted by damage to other salt marsh habitats. It is chiefly threatened by the advance of the alien invasive Cordgrass *Spartina anglica*. Erosion can be destructive but in many cases this is a natural process.

The **North Dublin Bay SAC** (site code: 0206) is focussed on the sand spit on the North Bull island. The qualifying interests for it are shown in table 2. The status of the habitat is also given and this is an assessment of its range, area, structure and function, and future prospects on a national level and not within the SAC itself.

Habitat/Species	Status ¹
Mudflats and sandflats not covered by seawater at low tide	Inadequate
Salicornia and other annuals colonizing mud and sand	Favourable
Atlantic salt meadows	Inadequate
Mediterranean salt meadows	Inadequate
Annual vegetation of drift lines	Inadequate
Embryonic shifting dunes	Inadequate
Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	Inadequate
Fixed coastal dunes with herbaceous vegetation (grey dunes)	Bad
Humid dune slacks	Inadequate

Table 2 – Qualifying interests for the North Dublin Bay SAC

¹ NPWS. 2019. *The Status of EU Protected Habitats and Species in Ireland*. Habitat Assessments Volume 1: Summary report. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

Petalophyllum ralfsii Petalwort	Favourable

- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) (2120). These are the second stage in dune formation and depend upon the stabilising effects of Marram Grass. The presence of the grass traps additional sand, thus growing the dunes. They are threatened by erosion, climate change, coastal flooding and built development.
- Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130). These are more stable dune systems, typically located on the landward side of the mobile dunes. They have a more or less permanent, and complete covering of vegetation, the quality of which depends on local hydrology and grazing regimes. They are the most endangered of the dune habitat types and are under pressure from built developments such as golf courses and caravan parks, over-grazing, under-grazing and invasive species.
- **Humid dune slacks (2190).** These are wet, nutrient enriched (relatively) depressions that are found been dune ridges. During winter months or wet weather these can flood and water levels are maintained by a soil layer or saltwater intrusion in the groundwater. There are found around the coast within the larger dune systems.
- **Petalwort (1395).** There are 30 extant populations of this small green liverwort, predominantly along the Atlantic seaboard but also with one in Dublin. It grows within sand dune systems and can attain high populations locally.

Rockabill to Dalkey Island SAC (site code: 0300). This is a recently designated off-shore (i.e. marine) SAC. It has two qualifying interests which are reefs and Harbour Porpoise *Phocoena phocoena*. Conservation objectives for this SAC have been published to maintain or restore the area of habitat and status of the population to 'favourable conservation status'.

- Reefs can be intertidal or subtidal features and are characterised by hard or rocky substrates. The main pressures that have been identified by the NPWS are commercial fishing, aquaculture, water pollution and commercial/recreational uses of the marine environment. Nationally their status is assessed as 'bad' (NPWS, 2013a).
- Harbour porpoise This is the smallest cetacean species regularly occurring in Irish waters. It is commonly found in residential pods close to the shore and it is not considered threatened in Irish waters. Its status nationally is 'good'.

Dalkey Islands SPA (site code: 4172) is protected for its breeding colonies of three tern species and is found approximately 4.3km south east of the West Pier.

• **Roseate Tern.** This tern breeds at only a few stations along Ireland's east coast. Most of these are in decline although at Dublin their colony is increasing.

- **Common Tern.** This summer visitor nests along the coast and on islands in the largest lakes. Its breeding range has halved in Ireland since the 1968-1972 period.
- Arctic Tern. These long-distance travellers predominantly breed in coastal areas of Ireland. They have suffered from predation by invasive mink and are declining in much of their range.

At its nearest point the **Poulaphouca Reservoir SPA** (site code: 4063) is located approximately 27km from the site of the proposed development. Its 'features of interest' include the Greylag Goose *Anser anser* and the Lesser Black-backed Gull *Larus fuscus*.

Whether any of these SACs or SPAs is likely to be affected must be measured against their 'conservation objectives'. Specific conservation objectives have been set for all of these areas with the exception of the Poulaphouca Reservoir and the Dalkey Islands SPA. Generic conservation objectives have been published by the NPWS and are stated as:

To maintain or restore the favourable conservation condition of the Annexed species for which the SPA has been selected.

In a generic sense '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.

While 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.

Specific conservation objectives have been set for mudflats in the South Dublin Bay SAC (NPWS, 2013) and for all qualifying interests the North Dublin Bay SAC (NPWS, 2013). The objectives relate to habitat area, community extent, community structure and community distribution within the qualifying interest. There is no objective in relation to water quality.

For the South Dublin Bay & Tolka Estuary SPA and the North Bull Island SPA the conservations objectives for each bird species relates to maintaining a population trend that is stable or increasing and maintaining the current distribution in time and space (NPWS, 2015a & b).

For the Poulaphouca Reservoir SPA, generic conservation objectives have been published by the NPWS and are as previously stated above (NPWS, 2018).

Conservation objectives for the Rockabill to Dalkey SAC have been published to maintain or restore the area of habitat and status of the population of Harbour Porpoise to 'favourable conservation status'.

Data collected to carry out the assessment

Habitats on the site are not associated with either intertidal habitats or species which are associated with any Natura 2000 sites.

The EU's Water Framework Directive (WFD) stipulates that all water bodies were to have attained 'good ecological status' by 2015 or, with exemptions, by 2027 at the latest. In 2010 a management plan was published to address pollution issues, and this included a 'programme of measures' which was to be completed. The coastal waters of the bay have most recently (2014) been assessed by the Environmental Protection Agency (EPA) as 'unpolluted' (from <u>www.epa.ie</u>). It was assessed as 'good' in terms of its status under the Water Framework Directive for the 2010-15 reporting period. This classification indicates that water quality in the bay is of a sufficient standard to meet the requirements of the WFD. Future developments must not jeopardise this status.

In 2018 a second RBMP was published which highlights 190 'priority areas for action' where resources will be focussed during the 2018-2021 period. The Tolka and Dodder, as well as the upper Liffey are among those areas where improvements are expected.

Details from the NPWS site synopsis report and the most recent data from BirdWatch Ireland's Wetlands Bird Survey (IWeBS) indicate that Dublin Bay is of international importance for wintering birds meaning that it regularly holds a population of over 20,000 birds. Total counts from IWeBS are shown in table 2.

Of the species listed in table 1 six: Curlew, Dunlin, Redshank, Pintail, Shoveler and Black-headed Gull are listed as of high conservation concern, and on BirdWatch Ireland's red list (Colhoun & Cummins, 2013).

- Dunlins do not breed on the east coast of Ireland while their winter range, which includes a number of coastal and wetland areas across the country, has declined by over 50% between 1994/5 and 2008/09. The reason for this decline is unclear.
- Wintering Redshank numbers in Ireland have changed little since the early 1980s while their breeding sites, based around wetlands west of the River Shannon and some eastern coastal areas, has fallen by 55% in 40 years.

This can be attributed to habitat loss from agricultural intensification and drainage.

- Black-headed Gulls remain a frequent winter presence and their red listing relates to their breeding status only. This has seen a 55% decline in 40 years for reasons which are not clear but may relate to loss of nesting sites, predation, food depletion or drainage. They are not recorded as breeding in the Dublin area.
- Wintering Pintails and Shoveler are believed to be declining in Dublin Bay
- Wintering Curlew have experienced a small decline but their status is nevertheless assessed as 'favourable' (Balmer et al., 2013).

A 'supporting document' has been published by the NPWS which gives a detailed assessment of the features of interest for which SPAs in Dublin Bay have been designated (NPWS, 2014). In particular, it presents information on the trends of these features and the pressures which are likely to affect these trends. It has determined that five species: Grey Plover, Shelduck, Pintail, Shoveler, Golden Plover and Black-headed Gull, are of unfavourable status while the remainder are 'favourable'. In the case of the Grey Plover it was found that its population trend is decreasing both within Dublin Bay and at an all-Ireland level. For this reason it is reasonable to assume that the factors for its decline are not unique to Dublin Bay. The Black-headed Gull population was not assessed in this way. Only for Shoveler is it considered that significant declines are being experience due to site conditions.

The development site was surveyed by ecologist Hugh Delaney for wintering birds on February 12th, February 21st, March 10th and March 18th 2021. This found no evidence of Light-bellied Brent Geese or wader species (Oystercatcher, Curlew or Black-tailed Godwit). A number of gull species were recorded foraging in low numbers, including the Black-headed Gull which is a qualifying interest of the South Dublin Bay SPA and the North Bull Island SPA.

The report included the following summary/conclusion statement and is presented in full as an addendum to this AA Screening Report:

"No target species (Brent Geese or wader species) were observed utilizing the Cuala site in the 4 visits in February and March. Herring and Black-headed Gull were the only species observed foraging on the grass sward/playing areas. I would consider it unlikely that target species were utilizing the site hitherto the February visits. Looking at the area of the site it is of too small an area in likelihood to tolerate the pressure of dog walkers and other recreational users that are almost continually present on the site throughout the day, being one of few green areas in the Dalkey area. While this level of visitation might be tolerated in a much larger green area like for example Kilbogget Park, where birds foraging have available enough 'buffer' areas to retire to in the event of disturbance in the case of the Cuala site they really don't have an alternative other than to leave the site. On more than one of the visits to Cuala the absence of recreational users was more a case of the exception to the rule, and thus the absence of species like Oystercatcher etc. Kilbogget Park is the nearest site to Cuala with regular usage of Brent Goose, Oystercatcher and occasional Blacktailed Godwit in winter, but is vastly bigger site."

The status of wintering Black-headed Gull was assessed by the National Parks and Wildlife Service (Lewis et al., 2019) with a mean population of 48,821 between the winters of 2011-2016). The species is described as "our most widespread and numerous wintering gull".

The Assessment of Significance of Effects

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.

In order for an effect to occur there must be a pathway between the source (the development site) and the receptor (the SAC or SPA). Where a pathway does not exist, an impact cannot occur.

The proposed development is not located within, or adjacent to, any SAC or SPA.

Habitat Loss

The site is approximately 1.5km from the boundary of the Dalkey Islands SPA and the Rockabill to Dalkey Islands SAC as the crow flies and the intervening land is occupied by residential/urban development and transport links, as well as coastal waters. Because of the distance separating these areas there is no pathway for loss or disturbance of habitats listed in table 1 or other semi-natural habitats that may act as ecological corridors for important species associated with the qualifying interests of the Natura 2000 sites.

Habitat disturbance/Ex-situ impacts

There is no evidence that the subject site, or the nearby playing pitches are used by wetland/wading birds associated with Natura 2000 sites in Dublin Bay, with the exception of Black-headed Gull. No such birds were observed during the site visit (November 2019) and no published evidence was found for this study, while personal testimony from site personnel indicated that the playing pitches are not frequented by geese or other wader species.

The winter bird surveys carried out for this study found no evidence of use of the site by Light-bellied Brent Geese, Oystercatcher, Black-tailed Godwit or Curlew. There was evidence of low level foraging by Black-headed Gull, a qualifying interest of the South Dublin Bay and River Tolka Estuary SPA, despite high levels of disturbance by walkers and their dogs. Some surveys recorded zero Black-headed Gulls with others recorded between 4-5 at any one time.

The evidence provided therefore suggests that Black-backed Gulls are tolerant of human disturbance and are using this site sporadically and in low numbers. The extent and nature of the construction or operation phases of this development are not likely to result in significant effects to the population or distribution of Black-headed Gulls or any other species for which Natura 2000 sites are designated. No ex-situ impacts to Natura 2000 sites will arise.

Hydrological pathways

There is a pathway from the site to Dublin Bay via the Ringsend wastewater treatment plant.

Pollution from wastewater

While the issues at Ringsend wastewater treatment plant are being dealt with in the medium-term evidence suggests that some nutrient enrichment is benefiting wintering birds for which SPAs have been designated in Dublin Bay (Nairn & O'Hallaran eds, 2012). Additional loading to this plant arising from the operation of this project are not considered to be significant as there is no evidence that pollution through nutrient input is affecting the conservation objectives of the South Dublin Bay and River Tolka Estuary SPA.

Pollution from surface water

New surface water attenuation measures are designed so that there will be a positive impact to the quantity and quality of surface water leaving the site. These are standard measures undertaken for all development projects and are not included here to reduce or avoid an effect to any Natura 2000 site. No significant effects can occur to the SAC or SPA arising from this source.

Pollution during construction

During the site clearance and construction phases some sediment will become entrained in rain run-off. However, there is only a very weak pathway to Natura 2000 sites off-shore from this source. No significant effects to Natura 2000 sites can arise from this source.

Are there other projects or plans that together with the project or plan being assessed could affect the site?

Implementation of the WFD will result in continued improvements to water quality in Dublin Bay. Environmental water quality can be impacted by the effects of surface water run-off from areas of hard standing. These impacts are particularly pronounced in urban areas and can include pollution from particulate matter and hydrocarbon residues, and downstream erosion from accelerated flows during flood events. There can be no negative impact to surface water quality leaving the site due to the attenuation measures which are planned.

In 2005 the Greater Dublin Drainage Study (GDDS) was published as a policy document designed to provide for drainage infrastructure to 2030. The implementation of this policy will see broad compliance with environmental and planning requirements in an integrated manner. This is likely to result in a long-term improvement to the quality and quantity of storm water run-off in the capital. This project is complaint with the requirements of this policy.

The completion of upgrade works at Ringsend by 2022 will see greater compliance with quality standards of effluent and so an expected improvement in water quality in Dublin Bay.

There are no projects which can act in combination with this development which can give rise to significant effect to Natura areas within the zone of influence.

List of agencies consulted

Due to the low ecological sensitivity of this site, third party observations were not sought.

Conclusion and Finding of No Significant Effects

This project has been screened for AA under the appropriate methodology. It has found that significant effects are not likely to arise, either alone or in combination with other plans or projects to any SAC or SPA.

This conclusion is based upon the best available scientific evidence.

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Cuala GAA Dalkey, Winter Bird Surveys 2021

Introduction

In February – March 2021 winter bird surveys were conducted on the grounds of Cuala GAA Club off Hyde Road, Co Dublin. Two surveys were completed for each month by Hugh Delaney, a freelance Ecologist (Birds primarily) having completed work on numerous sites with ecological consultancies over 10+ years. Hugh is local to the Dun Laoghaire-Rathdown area is especially familiar with the bird life and its ecology in the environs going back over 30 years.

Winter Bird Survey Methodology

Winter bird surveys are conducted from soon after sunrise until late in the afternoon shortly before sunset, the site is monitored throughout the day and all bird species utilizing the site recorded, including species flying through overhead. Checks are also made on suitable habitat nearby or adjacent the site for comparative purposes and to monitor any interchange of birds between sites. Target species, species of more special interest utilizing the site will be mapped and estimates of the time these species frequented the site recorded. In the instance of Cuala GAA Club in Dalkey with its grass sward playing field area and location near coast such species would be Brent Goose, Curlew, Oystercatcher and Black-tailed Godwit, species that have taken to feeding on other comparable sites across Dublin.

Survey Results -

February 12th 2021

Sunrise- 07.49hrs/Sunset 17.30hrs. Weather – F6 Southeast, 7/8, Dry, 4c, Excellent visibility. Onsite 08.15hrs – 16.30hrs.

Species recorded – Magpie, Hooded Crow, Starling, Black-headed Gull, Herring Gull, Dunnock, Woodpigeon, Pied Wagtail, Great Black-backed Gull, Blackbird, Jackdaw, Robin, Meadow Pipit, Redwing, Goldfinch.

<u>08.45hrs - 09.15hrs.</u> -Walked playing fields, no sign of any (Brent) Goose scat on site. Numerous Dog walkers on site, often 6-8 at a time, walkers on site from arrival.

<u>09.30hrs-11.15hrs.</u> -Occasional Black-headed Gull and single Herring Gull landing onto pitches to feed, at short intervals.

<u>11.15-13.30hrs.</u> -Herring Gulls and Black-headed Gull foraging, peak of 16 Herring Gull at 10.38hrs, however both species regularly moved offsite due to heavy human recreational use.

<u>13.30-16.30hrs.</u> -Occasional Herring & Black-headed Gull landing for short periods on site, now even heavier traffic of people and dogs onsite.

No other species recorded onsite, nearby Castle Park School which has a potential foraging area was checked shortly after midday and no target species were recorded there.

February 21st 2021

Sunrise- 07.30hrs/Sunset 17.48hrs. Weather – F3 Southwest, 5/8, Dry, 8c, Excellent visibility. Onsite 08.00hrs – 16.45hrs

Species recorded – Hooded Crow, Magpie, Robin, Song Thrush, Black-headed Gull, Herring Gull, Dunnock, Blue Tit, Jackdaw, Blackbird, Pied Wagtail, Woodpigeon, Collared Dove, Goldfinch, Greenfinch, Starling.

<u>08.00hrs-10.30hrs.</u> – Black-headed and Herring Gull landing onsite occasionally, peak of 4 Black-headed at 09.15hrs and 2 Herring Gulls throughout morning. No Goose scat found on check of site.

<u>10.30hrs-13.00hrs.</u> – Peak of 14 Herring Gull foraging onsite at 11.15hrs and 5 Black-headed Gull at 11.40hrs.

<u>13.00hrs-16.45hrs.</u> – Smaller numbers of Herring and Black-headed Gull foraging on grass, less than 5 at any time of either species, no target species recorded. Very heavy used dog walking activity in the afternoon, with 4-6 dog walkers present often at any one time. Castle Park School checked at 14.30hrs and no target species recorded on its green areas.

Similar outcome from first February visit, again Herring and Black-headed Gull the main species foraging onsite.

March 10th 2021

Sunrise- 06.49hrs/Sunset 18.20hrs. Weather – F3 Southwest, 7/8, light rain, 12c, Good visibility. Onsite 07.45hrs – 17.15hrs

Species recorded – Dunnock, Starling, Herring Gull, Great tit, Magpie, Siskin, Mallard, Robin, Redwing, Mistle Thrush, Goldfinch, Pied Wagtail, Great Black-backed Gull, Hooded Crow, Blue Tit, Collared Dove, Greenfinch, Woodpigeon, Grey Heron, Wren, Blackbird, House Sparrow.

<u>07.45hrs-11.00hrs.</u> – Up to 12 Herring Gull foraging onsite throughout morning (usually 5-6), no Black-headed Gull foraging onsite. One Mallard flew over east side of site at 10.05hrs.

<u>11.00hrs-14.00hrs.</u> – Up to 11 Herring Gull foraging on site until 12.30hrs when footballers practicing on site, no further foraging to 14.00hrs.

<u>1400hrs-17.15hrs.</u> – 3 Herring Gull foraging from 14.05hrs increasing to peak of 7 at 14.30hrs, 3-4 thereafter until 15.25hrs. No Black-headed Gulls foraging. Castle Park School grounds again quiet at 14.00hrs.

Slightly more consistent foraging by Herring Gulls, again no target species. Consistent numbers of dog walkers during day, slightly less than last day due to weather.

March 18th 2021

Magpie, Herring Gull, Black-headed Gull, Woodpigeon, Robin, Mistle Thrush, Blackbird, Dunnock, Blue Tit, Pied Wagtail, Collared Dove, Wren, Starling, House Sparrow, Redwing, Hooded Crow, Goldfinch, Greenfinch, Grey Heron.

Sunrise- 06.32hrs/Sunset 18.35hrs. Weather – F4 Northwest, 4/8, Dry, 9c, Excellent visibility. Onsite 07.15hrs – 17.30hrs

<u>07.15hrs-11.00hrs.</u> – Up to 8 Herring Gull foraging onsite throughout morning, 4 Black-headed Gull foraging between 0910hrs-0950hrs. One Grey Heron passed over East side of site at 10.15hrs. Site checked for Goose scat, none present.

<u>11.00hrs-14.00hrs.</u> – Peak of 5 Herring Gull onsite at 13.20hrs, at other times 2 present on site foraging. Occasional Black-headed Gull passing overhead but none landing to forage. Castle Park School checked at 11.15hrs, no target species there. Heavy usage by Dog walkers throughout.

<u>14.00hrs-17.30hrs.</u> – Peak count of 12 Herring Gull present at 14.40hrs, other times 4-5 more consistently normal. No Black-headed Gull seen foraging.

Herring Gull in the main foraging on site, no target species onsite or observed overhead.

Summary of data February-March & Observations

No target species (Brent Geese or wader species) were observed utilizing the Cuala site in the 4 visits in February and March. Herring and Black-headed Gull were the only species observed foraging on the grass sward/playing areas. I would consider it unlikely that target species were utilizing the site hitherto the February visits. Looking at the area of the site it is of too small an area in likelihood to tolerate the pressure of dog walkers and other recreational users that are almost continually present on the site throughout the day, being one of few green areas in the Dalkey area. While this level of visitation might be tolerated in a much larger green area like for example Kilbogget Park, where birds foraging have available enough 'buffer' areas to retire to in the event of disturbance in the case of the Cuala site they really don't have an alternative other than to leave the site. On more than one of the visits to Cuala the absence of recreational users was more a case of the exception to the rule, and thus the absence of species like Oystercatcher etc. Kilbogget Park is the nearest site to Cuala with regular usage of Brent Goose, Oystercatcher and occasional Black-tailed Godwit in winter, but is vastly bigger site.

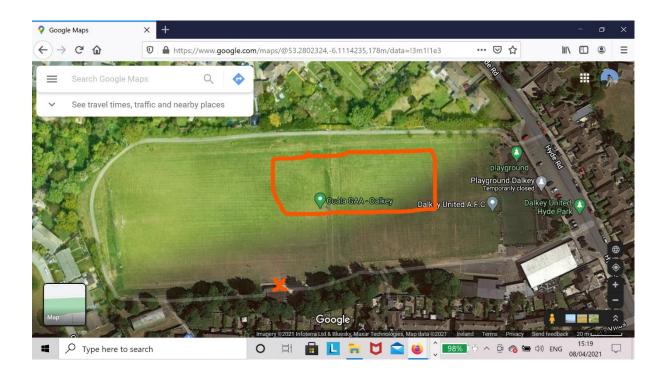


Fig 1. (Above) – Site marked with orange X is the main observation location giving good view of whole site, the area with the orange square is the preferred foraging area for Gull (predominantly Herring Gull.

Hugh Delaney 08/04/21