# Appropriate Assessment

# PORTMARNOCK SOUTH Local Area Plan

# Natura Impact Report

JULY 2013

Comhairle Contae Fhine Gall
Fingal County Council

LAP

Photo Courtesy of Clive Timmons

# NATURA IMPACT REPORT

## APPROPRIATE ASSESSMENT OF THE PORTMAROCK SOUTH LOCAL AREA PLAN 2013-2019

## FINGAL COUNTY COUNCIL

| Rev. | Status | Author | Reviewed By | Approved By | Issue Date |
|---|---|---|---|---|---|
| V6 | Final | JAH/RF | PS | PS | 23/07/13 |

Scott Cawley, 127 Lower Baggot Street, Dublin 2, Ireland

Tel+353(1)676-9815 Fax +353(1) 676-9816

## TABLE OF CONTENTS

1 Introduction ..... 3
1.1 Requirement for Appropriate Assessment ..... 3
1.2 Appropriate Assessment Process: Purpose and Process ..... 3
1.3 Formal Guidance ..... 6
1.4 Data Sources ..... 7
1.5 Consultation ..... 7
2 Stage 1 Screening ..... 8
2.1 Methodology ..... 8
2.2 Desk and Field Based Study ..... 8
2.3 Overview of Portmarnock South Local Area Plan ..... 9
2.4 Overview of Fingal Development Plan 2011-2017 ..... 9
2.5 LAP Strategy Overview ..... 11
2.6 Overview of Receiving Environment ..... 13
2.7 Features of the Surrounding Environment ..... 13
2.8 Screening Steps ..... 13
2.9 Description of European Designated sites in the surrounding area ..... 14
2.10 Description of Other Designated sites in the surrounding area ..... 15
2.11 Reasons for Designation, Site Sensitivities and Threats ..... 15
2.12 Other Plans or Projects nearby which may lead to cumulative impacts upon local ecology ..... 21
2.13 Likely Significant Effects from the LAP on European Sites ..... 23
2.14 Conclusions of Screening Assessment Process ..... 29
3 Stage Two: Provision of information for an Appropriate Assessment ..... 30
3.1 Assessment Methodology ..... 30
3.2 Site-specific issues at Natura 2000 sites ..... 30
3.3 Global issues at European Sites ..... 34
3.4 Likely Effects of the LAP on European Sites ..... 34
3.5 In-combination Impacts with other Plans and Projects ..... 51
3.6 Summary of Policies Protecting Individual European Sites. ..... 53
3.7 Responsibilities for implementing mitigation policies ..... 55
3.8 Monitoring the Implementation of Objectives ..... 55
4 Screening of Submissions and Manager's Recommendations made on the Draft Plan ..... 55
5 Conclusion of Stage 2 Appropriate Assessment ..... 55
6 References ..... 56

Appendix A ..... 58
Appendix B ..... 59
Appendix B (b) ..... 60
Appendix C ..... 61
Appendix D ..... 75
Appendix E ..... 76
Appendix F ..... 80
Appendix G ..... 81

# 1 Introduction

## 1.1 Requirement for Appropriate Assessment

This Natura Impact Report (NIR) has been prepared by Scott Cawley Ltd. on behalf of Fingal County Council. It provides information on and assesses the potential for the Portmarnock South Local Area Plan (LAP) to impact on sites within the Natura 2000 network. This is the final version of the NIR and serves as a documented record of the process of the Appropriate Assessment of the Local Area Plan throughout its preparation.

The preparation of the Local Area Plan has had regard to Article 6 of the *Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (as amended) (hereafter referred to as the Habitats Directive). This is transposed in Ireland primarily by Part XAB of the Planning and Development (Amendment) Act 2010 and the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477) (hereafter referred to as the Habitats Regulations).

Articles 6(3) and 6(4) of the Habitats Directive sets out the requirement for an assessment of proposed plans and projects likely to affect European sites. Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)):

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

The subsequent paragraph allows proposed plans and projects to be approved in certain conditions.

Article 6(4): "*If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of 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 the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest*."

This report is the final version of the Natura Impact Report and serves as a documented record of the Appropriate Assessment process of the Portmarnock South Local Area Plan 2013-2019 throughout its preparation.

## 1.2 Appropriate Assessment Process: Purpose and Process

Fingal County Council has prepared the Portmarnock South Local Area Plan 2013-2019. This LAP sets out objectives and policies which will be used to guide the development of the area.

All land use plans, such as the Portmarnock South Local Area Plan, must be examined to ensure that there will not be any significant adverse effects on European Sites. These particular sites are regarded to be of European importance and are part of the European Commission's (EC) Natura 2000 network of sites in Ireland. They are termed candidate Special Areas of Conservation (cSAC) designated as per

the EC Habitats Directive and Special Protection Areas (SPA) under the EC Birds Directive, hereafter referred to as European Sites. The Irish Government and local planning authorities have a legal obligation to protect these sites.

The process of assessing the Plan is a structured exercise with a series of steps. The overall purpose of the process is to ensure that the Plan, when implemented, does not result in adverse effects on the "integrity" of European sites. The overall process is termed "Appropriate Assessment", using the terms set out in the EC Habitats Directive Article 6(3).

Based on guidance from the Irish Government (2001) on the Appropriate Assessment process there are the first two stages of the Appropriate Assessment process comprise:

- Stage 1 – Screening
- Stage 2 –Appropriate Assessment (which results in the publication of the Natura Impact Report as per Part XAB of the Planning and Development (Amendment) Act 2010)

These two stages are within the overall "Appropriate Assessment Process". The first step is to look at the Plan in principle and to answer the questions: *is it likely that the implementation of this Plan could result in likely significant effects on European sites*? It does not matter where these sites may be located, impacts can occur across administrative boundaries. This step is referred to as Screening for Appropriate Assessment. The Screening Stage is described in more detail in Section 2.

If the screening stage results in a judgement that likely significant effects may occur or cannot be ruled out, a more detailed 'Appropriate Assessment' (AA) is then required. Whilst the structure of this assessment process is not specified in the legislation, there are guidance documents that are used to provide an indication of how this assessment may be carried out.

In order to ensure that the Portmarnock South Local Area Plan complies fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Fingal County Council have undertaken a Screening of the Local Area Plan to determine the need for further stages of the Appropriate Assessment (Stage 2 in accordance with Departmental guidance).

The Screening Stage determined that due to the types of development that could arise as a result of implementing the Local Area Plan, significant effects could not be ruled out and that the Plan would require further assessment. The Appropriate Assessment process then moved to Stage 2- Appropriate Assessment.

To inform the preparation of the Local Area Plan, a Policy Guidance Note was prepared by the Appropriate Assessment Team and issued to the LAP and SEA team, which can be viewed in Appendix A. This note highlighted the ways in which the Plan may result in impacts on the individual cSACs and SPAs and provided recommended Policies and Objectives to be included in the Plan.

Stage 2 of the AA process involved analysing the relationship between the proposed policies and objectives in the Local Area Plan and the sensitivities of the European sites. Where potential existed for an impact to occur then the assessment team recommended changes to elements of the Plan to avoid or mitigate the potential impact. These recommendations were integrated into the Plan so that the implementation of the Final Plan will not result in any significant effects on European sites.

Fingal County Council provided the Appropriate Assessment team with draft chapters during their process of preparing the plan. These chapters were reviewed by the AA team and subsequently revised by the Council. The results of the AA of the Plan are provided in Section 3 of this report.

The Draft Plan was put on public display from 10th April 2013 to 23rd May 2013, during which time 12 submissions were made by members of the public and statutory agencies/prescribed bodies. These submissions were assessed by the Council with the AA team who highlighted any submissions that may have had implications for European Sites – this is discussed in Section 3.5. A Manager's report on the

submissions to the Draft Plan was discussed at the Council meeting on XXXXX 2013. The report contained the Manager's response to and recommendations on the submissions received. The amendments arising from the Manager's recommendations were screened by the AA team to assess whether they would be likely to pose significant impacts on European Sites.

Motions received from Councillors, 10 in total, were also screened by the AA team prior to the Council meeting which discussed the Draft Plan. The Manager's response to these motions was also screened and any amendments arising from the Council meeting were screened following the meeting to determine if they would give rise to any likely significant effects on European Sites.

The Council Members adopted the amendments and made the changes to specific Policies and Objectives within the Draft Plan. The final version of the Plan was adopted by Council Members at the meeting on 8th July 2013.

Figure 1 overleaf shows the process of the Appropriate Assessment, in relation to the preparation of the Portmarnock South Local Area Plan.

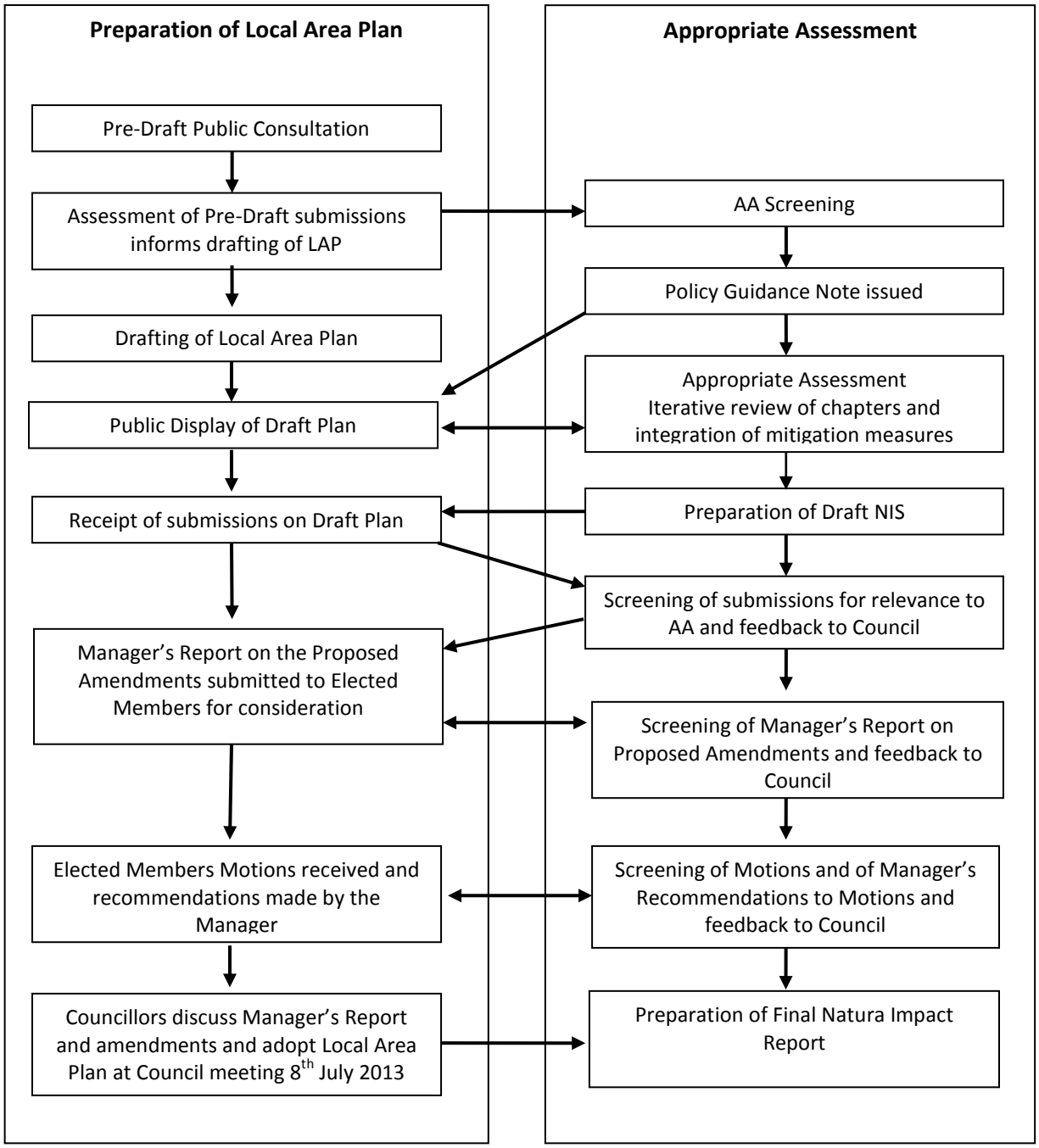



**Figure 1: Relationship between the Appropriate Assessment and Local Area Plan Preparation process.**

### 1.3 Formal Guidance

The AA process took account of guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10.
- 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); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.

- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission (European Commission, January 2007).
- 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).

### 1.4 Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites are listed below:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie and Google Earth (accessed on dates from March 2012 to March 2013).
- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie (accessed on dates from March 2012 to March 2013).
- Natura 2000 standard Data Form
- Publicly-accessible biodiversity datasets
- Biodiversity Data for County Fingal including that contained within Fingal County Council GIS system
- Information on water quality in the area available from www.epa.ie
- Information on the River Basin Districts from www.wfdireland.ie
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2007 & 2008)
- Status of Birds in Ireland: An Analysis of Conservation Concern 2008-2013 (Lynas et al, 2007)
- Fingal Development Plan 2011-2017
- Fingal Biodiversity Action Plan 2010–2015
- Baldoyle-Stapolin Local Area Plan 2013-2019
- Dublin City Council Development Plan 2011-2017
- Clongriffin – Belmayne (North Fringe) Local Area Plan 2012-2018
- Ecological reports and EIS report for proposed developments within LAP lands

### 1.5 Consultation

Fingal County Council held a consultation meeting with the National Parks and Wildlife Service (NPWS) on 20th February 2012 followed by a further meeting on 28th August 2012. The purpose of

these meetings was to discuss the status of the European Sites surrounding the LAP lands, their sensitivities and threats and how the Local Area Plan can be prepared to avoid impacts on these sites. The comments made at this meeting were integrated into the LAP preparation process. Issues discussed during the February meeting included areas used by Light-bellied Brent Geese for grazing, shooting activities along a wildlife sanctuary and pedestrian linkages, including an underpass at the railway line. The consultation meeting with NPWS in August (referred to above) discussed the design layout proposals including the positioning of playing pitches, avoidance of development in areas, creation of park and wildlife areas and pedestrian and potential cycle routes and width.

A formal consultation letter was also sent to the Development Applications Unit of the NPWS, Inland Fisheries Ireland (IFI) and BirdWatch Ireland on the 3rd May 2012. A data request was also sent to NPWS and the EPA on the 3rd May 2012 with data on protected species received from the NPWS on the 8th May 2012 and incorporated into the Appropriate Assessment process where relevant. A no comment note was issued from the NPWS to the DAU on the 8th May 2012 (Ref: G Pre00200/2012). Informal consultation was also undertaken with NPWS regional staff throughout the AA process.

A response from the IFI on the 8th May 2012 (Ref: BB/DD/260) notes that regard should be given to the need for sustainable development of inland and marine fisheries resource with the lands traversed by the Sluice and Mayne River. The Sluice is noted to be a regionally important Salmonid system with the IFI assessing the viability of a Salmonid reintroduction programme to the Mayne. It is also noted that protection of habitats outside designated areas and lack of proposals on natural floodplains would benefit aquatic and riparian features with the IFI opposed to development on natural floodplain lands.

On the 9th May 2012 data was provided on WFD Salmonid Waters, Registered Protected Areas - Nutrient Sensitive Rivers, Registered Protected Areas -Nutrient Sensitive Lakes and Estuaries and Small Stream Risk Score Values from the EPA and incorporated into the assessment where relevant. Informal consultation was also undertaken with NPWS local staff and BirdWatch Ireland.

Informal consultation was also undertaken with Irish Brent Goose Research Group regarding lands to the south of the LAP area (Baldoyle-Stapolin) and the Portmarnock South LAP lands. It was noted that the LAP lands used by Brent geese is dependent on whether, and where, winter cereals have been planted, with the geese being attracted to winter cereals. It was noted that this was not the case during the 2012/2013 winter, in the past large numbers (1000+) have been observed, particularly in the field which slopes up from the coast road within the east of the LAP lands. During the 2012/13 winter, birds have been seen flying inland of that field, but the usage of precisely which hinterland fields has not been investigated. Murragh Marsh is also used by the geese, particularly if they have been flushed off the small public park opposite the Texaco garage to the north east of the LAP lands (pers. comm., Resightings Co-ordinator, Irish Brent Goose Research Group, 2013).

# 2 Stage 1 Screening

## 2.1 Methodology

## 2.2 Desk and Field Based Study

The Screening process included a desktop study as well as site visit undertaken on the 10th May 2012. A site meeting was held with representatives from Fingal County Council and Dublin City Council as well as representatives from Scott Cawley Ltd. The purpose of the meeting was to discuss various aspects of the proposed policies within the two Council's LAP lands, how these would interact, with current site-specific issues and also to consider requests from the general public and how these could be incorporated into both the Baldoyle-Stapolin and Portmarnock South LAPs whilst simultaneously ensuring no adverse impacts to the surrounding European Sites. Potential policies within the plan

and background data including existing Environmental Impact Statements and a range of ecological studies were used to inform the AA.

Early in the AA process it was identified that one of the main threats to Baldoyle SPA is the loss of feeding grounds for wintering birds on open agricultural and amenity grassland and/or disturbance to such birds utilising the existing open agricultural and amenity grassland areas for grazing. No specific wintering bird surveys of the area had been previously undertaken, therefore Fingal County Council commissioned wintering bird surveys during the 2011/2012 winter bird season. The aim was to record the bird species that were utilising specific areas around the Baldoyle Estuary. Three surveys were undertaken from December to February 2011-2012 by BirdWatch Ireland (Pierce and Dillon, 2012). The report is attached to this NIR in Appendix B. In December 2012, an additional 9 visits to the LAP area was undertaken by representatives of the local BWI branch. The overall aim was to produce a baseline dataset on wintering bird's species using the lands surrounding Baldoyle Bay and gain further insight into how important these lands are for estuarine birds. This can also be viewed in Appendix B (b).

## 2.3 Overview of Portmarnock South Local Area Plan

A Local Area Plan was initially prepared for Portmarnock South in 2006. The proposed LAP will replace and further develop a sustainable strategy for the future development of the area in line with current best practices. The plan lands cover an area of c. 86 hectares.

The LAP lands are located in the south east of Fingal approximately 10km northeast of Dublin city centre, and south west of Portmarnock town. The Belfast railway forms the western boundary of the LAP lands with Portmarnock train station within the north western corner of the LAP lands. The southern extent of the LAP lands joins the northern lands of Baldoyle-Stapolin LAP. The lands on the south west of the LAP lands include Clongriffin within Dublin City Council's wider North Fringe Area encompassing Northern Cross/Clare Hall/Belmayne to Clongriffin. This, along with Baldoyle-Stapolin, is one of Dublin's larger new development areas and, when completed, will have approximately 10,000 new homes plus retail and commercial areas. The residential zoned lands within the LAP are targeted to achieve up to 1,200 residential units. This would equate to approximately 3360 persons. A hierarchy of open green space will be provided within the residential development which will facilitate play areas, a linear park, a circular park to the northwest of the lands referred to as Skylark Park, pocket parks and green buffer areas around the protected monuments.

The existing LAP for Portmarnock South was adopted in 2006 and a subsequent Masterplan prepared in 2007, on foot of which planning permission was granted in 2007 for 647 residential units [Phase 1] under Planning Reference Register F07A/0947. The 2006 LAP had a six year lifespan. A new LAP is now being prepared for the lands at Portmarnock South. Given the downturn in the economy, the subject lands have remained undeveloped.

## 2.4 Overview of Fingal Development Plan 2011-2017

The LAP is implemented within the planning hierarchy beneath the Fingal Development Plan 2011-2017. The County Development Plan was also subject to an AA prior to its adoption.

The LAP lands comprise of the following zoning objectives within the Fingal Development Plan:

- c. 40.36 hectares of land zoned **Objective RA** – '*Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure*'.
- c. 32 hectares zoned **Objective OS** – Preserve and provide for open space and recreational amenities.

- c. 12 hectares zoned **Objective HA –** Protect and enhance high amenity areas.
- C. 1 hectare zoned **Objective RC** - Provide for small scale infill development serving local needs while maintaining the rural nature of the cluster
- c. 0.4 hectare zoned **Objective RS –** Provide for residential development and protect and improve residential amenity.

Figure 2 below provides an indication of the site boundary and zoning areas within the LAP boundary. The RA (residential communities - objective noted above) zoned lands are the focus for the proposed residential element of the LAP, the RS zoned lands providing for and protecting existing residential development with the RS lands covering existing residential areas. The HA (high amenity areas - objective noted above) zoned lands include Murragh Spit to the north east of the LAP lands and land surrounding Moyne Lodge. The OS zoned lands include the east and south of the residentially zoned lands which will form the main open space to serve the residents and wildlife of the area and beyond. Local objectives from the County Development Plan also exist on these LAP lands, as listed below.

- Objective 402: Promote an enhanced rail station and improved rail service, together with the provision of a local feeder bus service.
- Objective 408: Density shall be in accordance with (draft) public safety zones recommended by the Government.
- Objective 410: Develop an estuary walkway and cycleways from Mayne Bridge, Baldoyle Road to Strand Road, Portmarnock together with an adequate system of public lighting for the entire route from Baldoyle to Portmarnock.
- Objective 422: Create a full pathway from Howth to Malahide through the construction of a pathway from the River Mayne Bridge to the Portmarnock Roundabout.
- Objective 427: Place signage and information boards along this coastal pathway at pivotal locations.
- Objective 429: Only development relating to recreational activities to be permitted in the OS zoning between Portmarnock and Baldoyle.
- Objective 435: Facilitate extra housing on Station Road, Drumnigh Road and Old Portmarnock to link into the main drainage scheme.
- Objective 460: In co-operation with relevant national agencies, to draw up a plan for improving the water quality of Baldoyle Estuary in conjunction with the Eastern River Basin Management System.

The Fingal Development Plan also includes a number of strategic objectives which are applicable to the plan lands. These include the implantation of Fingal Coastal Way, additional Rail Tracks, Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor and Airport Safety and Noise Zones, as described within the LAP.

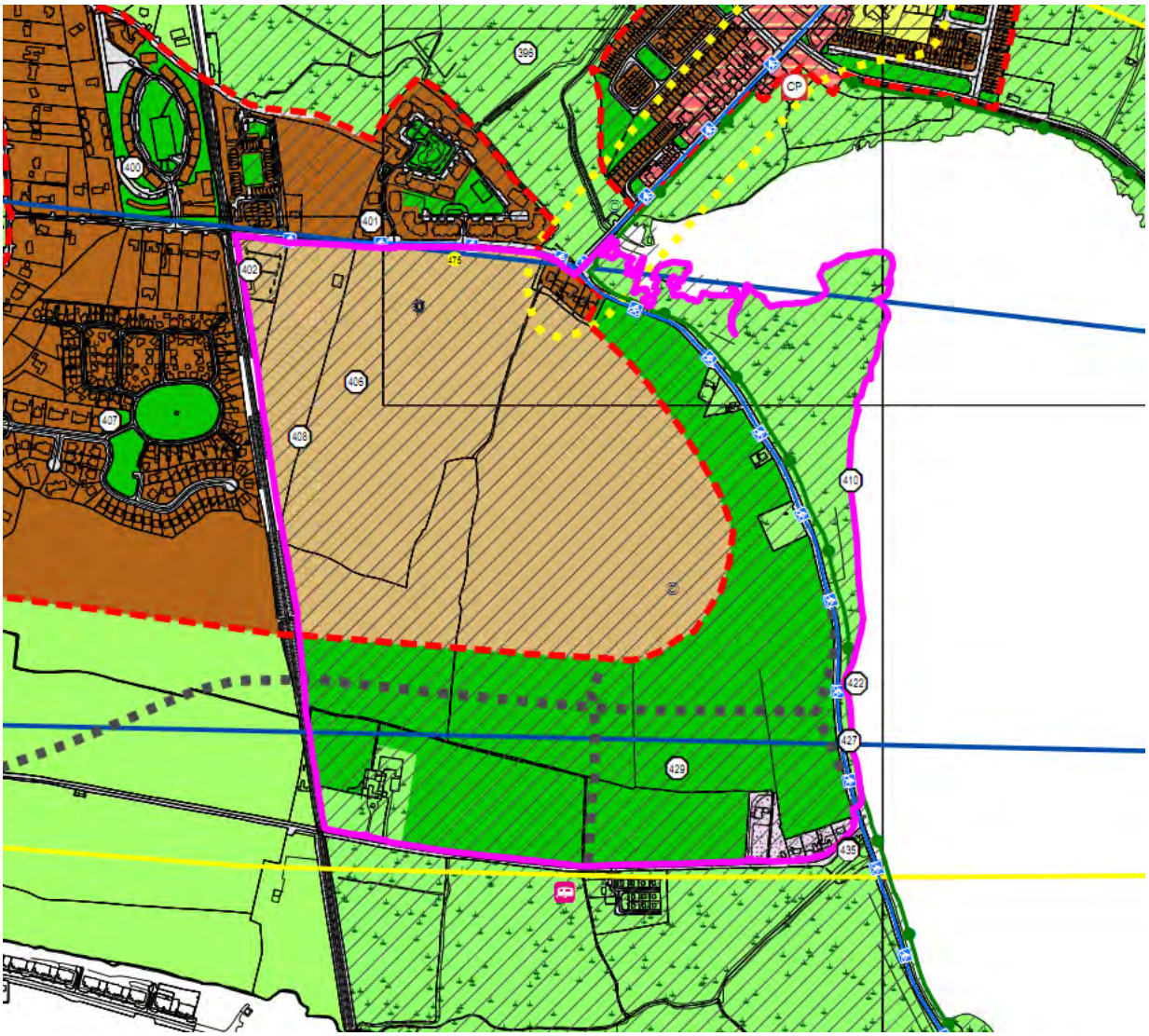



**Figure 2: Portmarnock South LAP land enclosed in pink line boundary. Brown areas zoned RA (residential), dark green areas zoned OS (open space and recreational amenities) and light green areas zoned as HA (amenity areas). Map Sourced from Fingal County Council, 2012.**

## 2.5 LAP Strategy Overview

The overall vision for Portmarnock South LAP is underpinned by five inter-linked strategic aims, each with their own objectives as follows:

**Environment and Heritage**

- Ensure that the integrity of the Natura 2000 site of Baldoyle Bay and its associated conservation objectives are appropriately protected and recognised within the plan area.
- Protect and improve where possible the water quality of the receiving waters of Baldoyle Bay and ground water quality through appropriate sustainable water management within the plan lands.

- Promote and develop opportunities for biodiversity and its supporting natural features (trees/hedgerows/streams), open space, green routes/corridors and key views as defining characteristics of the developing area including their priority in phasing proposals.
- Promote the conservation, enhancement, and enjoyment, including public access where appropriate, of the archaeological, natural and built heritage as important elements in the long-term sustainability of the area.

**Movement and Transport**

- Promote and encourage the use of sustainable means of travel including walking, cycling and public transport through the development of an integrated movement and transport network
- Promote connectivity and the integration of new and established communities through a hierarchy of spaces linked through a network of green permeable walking and cycling routes at a local and strategic level.

**Urban Design and Housing**

- Ensure that all new development is of a high quality and standard, promotes a local sense of place, protects existing residential, public and environmental amenities and enhances the plan area.
- Ensure that new development is physically, visually and functionally integrated with the landscape character of the plan area.
- Promote the provision of a wide choice of dwelling types and tenure with a strong emphasis on family orientated, high quality, adaptable, lifelong homes which are energy efficient and incorporate green design techniques.
- Ensure that housing on the LAP lands contributes to meeting the requirements of Fingal's Core Strategy in Portmarnock.

**Community, Recreational, Social and Commercial Infrastructure**

- Promote and encourage a socially inclusive community that caters for all age groups, that accords with the principles of universal design and that offers equal opportunity and good services to all.
- Promote the provision of a mix of retail, service, healthcare, recreational and community facilities within the local centre and at a level commensurate with local need.
- Provide for an integrated network of open space areas to meet the recreational needs of residents while respecting the sensitivities of the Plan lands through the Green Infrastructure and Landscape Strategy.
- Promote and facilitate employment and environmentally sustainable tourism opportunities appropriate to this area.

**Infrastructure and Services**

- Ensure the timely and adequate provision of infrastructure and services through phasing to serve the new development within the plan lands.

The strategic aims and overall vision of the LAP are to be provided for through the Green Infrastructure and Landscape Strategy, the Transport and Movement Strategy, the Urban Design Framework and through the implementation of Sustainable Urban Drainage Systems (SuDS).

Appropriate phasing of development will be implemented to ensure that development will only proceed in tandem with the necessary physical, social and environmental infrastructure.

## 2.6 Overview of Receiving Environment

The lands covered by the Portmarnock South LAP lands are located north of Dublin City Centre on the coast of Baldoyle Bay which flows into the Irish Sea. They are located on the southern boundary of Fingal where it joins Dublin City Council administrative lands along the Belfast railway. The LAP lands are an open and elevated coastal landscape forming the western backdrop to Baldoyle Bay and Portmarnock Peninsula. The lands are predominately agricultural in nature consisting of arable fields and grassland, with Murragh Marsh situated within the north east corner of the LAP lands. There are a number of established hedgerows and trees within the lands, the majority of which mark the historic townland boundaries between Portmarnock and Drumnigh.

The agricultural lands to the north and west are zoned for RS – Provide for residential development and protect and improve residential amenity with the lands to the northeast, with the south western neighbouring lands zoned "GB" - Protect and provide for a Greenbelt (Fingal County Council, 2011). Murragh Marsh lands are zoned as HA – Protect and enhance high amenity areas (Fingal County Council, 2011). The agricultural lands to the south and east are zone as OS -Preserve and provide for open space and recreational amenities.

The lands to the south will form part of the Baldoyle-Stapolin LAP area which is currently under review. Baldoyle Estuary is located to the east with Portmarnock Point and Velvet Strand located between the estuary and Irish Sea.

Private residential housing is located around the perimeter of the LAP lands including along the Coast Road, Station Road and Moyne Road. Moyne Lodge is located within the south west corner of the LAP lands.

## 2.7 Features of the Surrounding Environment

The LAP lands are located within the Eastern River Basin District with the south western section of the site draining into Mayne River, the north west section of the site draining into the River Sluice with the centre and eastern section of the lands draining into Baldoyle Estuary (http://watermaps.wfdireland.ie/NsShare_Web/Viewer.aspx?Site=NsShare&ReloadKey=True, 2013). According to the Santry Mayne Sluice Water Management Unit Report (2009) the principal pressures on the Santry Mayne Sluice are misconnected foul sewers from houses and businesses, combined sewer overflows (wastewater discharges) and urban area pollution.

Malahide Shellfish Area is located c. 2km to the northeast and extends from Lambay Island to Portmarnock. Balbriggan/Skerries Shellfish Area is situated in adjacent tidal waters. This was designated under the European Communities (Quality of Shellfish Waters) Regulation 2006 (as amended) S. I. No. 268 of 2006 to protect or improve shellfish waters in order to support shellfish life and growth. It is designed to protect the aquatic habitat of bivalve and gastropod molluscs, which include oysters, mussels, cockles, scallops and clams. Any pollution or output from the River Mayne or the LAP lands to the estuary has potential to impact on the quality of sea water and on the health of the Shellfish Area off the Irish coast. The Shellfish Waters Directive sets out a mix of mandatory and recommended physical, chemical and microbiological water quality requirements that EU members must meet in order to protect these designated areas.

## 2.8 Screening Steps

Best practice in AA Screening promotes a site-led approach to the process. The site-led approach puts the environmental conditions that maintain site integrity first. So the first steps in the screening stage are identifying the European sites within the "zone of influence" of the Plan and then collecting as much information as possible on the "Qualifying Interests" and how site integrity may be defined

for each European site. The site-led approach focuses on how the site integrity can be maintained by avoiding impacts on key environmental conditions. This approach allows issues such as cumulative impacts to be identified.

The site-led approach is summarised as follows:

1. Which European sites lie within the zone of influence of the plan? (sometimes referred to as pre-screening)
2. What are the Qualifying Interests for each European site?
3. What are the underpinning ecological and environmental conditions to maintain these Qualifying Interests at Favourable Conservation Status?
4. What are the threats – actual or potential- that could affect the underpinning factors?
5. Are there aspects of the LAP that could give rise to these or other threats, alone and or in combination?

If, based upon the currently available information, there are aspects of the Plan that could affect the European sites then they will require further analysis in the form of a Stage 2 Appropriate Assessment.

### 2.9 Description of European Designated sites in the surrounding area

In accordance with the Department of Environment, Heritage and Local Government guidance (DoEHLG, 2010), an initial distance of 15km from the LAP boundary was selected for consideration of European sites. This distance was deemed to be sufficient to cover all likely significant effects which may arise from the implementation of the Plan on European Sites. Spatial boundary data on the European network was extracted from the NPWS website on 12th October 2012 and was updated in December 2012 because of new marine designation off the Irish coast.

All European sites which fall within 15km of the LAP boundary are listed in Appendix C and illustrated in Figure 4, Appendix D. In order to identify those sites that could be potentially affected, it was necessary to describe the European Site in the context of why it has been designated (its "Qualifying Interests") and the environmental and ecological conditions that maintain the condition of these features. The Qualifying Interests and threats to the sites were extracted from the NPWS website database (www.npws.ie, 2012). The underpinning conditions that are required to maintain the 'health' of these features are listed in this table. Threats to sites were also scoped during informal consultation with regional NPWS staff in February, August and December, 2012. Reference should be made to Appendix C to guide the reader. A list of all European sites within 15km is presented below in Table 2.

**Table 2 European Designated Sites within 15km of the Portmarnock South LAP**

| Candidate Special Areas of Conservation | Special Protection Areas |
|---|---|
| Baldoyle Bay | Lambay Island |
| North Dublin Bay | Rogerstown Estuary |
| Lambay Island | Malahide Estuary |
| Rogerstown Estuary | Baldoyle Bay |
| Malahide Estuary | Dalkey Islands |
| Irelands Eye | Irelands Eye |
| Howth Head | Howth Head |
| South Dublin Bay | South Dublin Bay and River Tolka Estuary |
| Rockabill to Dalkey Island | North Bull Island |

## 2.10 Description of Other Designated sites in the surrounding area

In addition to examining European Sites, the AA process also examined national-level and other designated sites which fall within 15km of the LAP boundary. Although Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHA) and other designated sites such as Nature Reserves, Wildfowl Sanctuaries and Ramsar sites (although the latter normally overlap with SPA's) do not form part of the Natura 2000 Network, they often provide an important supporting role to the network, particularly when it comes to fauna species which often do not obey site boundaries. For example, a pNHA/NHA that provides regular feeding grounds for a population of Golden Plover for which a separate site is designated as an SPA plays a role in the maintenance of the species at favourable conservation status for that SPA. In other words, in that example, in order to protect the European network it may also be important to protect the pNHA /NHA which provides a supporting role to it. There are however, NHAs and pNHAs that are designated for features that are not important at an international level and may not interact with the Natura 2000 network. Table 3 lists the non-European Sites illustrated in conjunction with national and international sites in Figure 5, Appendix D. Details on each of the sites can be found in Appendix E.

**Table 3 Proposed Natural Heritage Areas, Nature Reserves and Wildfowl Sanctuaries within 15km of the Portmarnock South LAP**

| Nature Reserves and Wildfowl Sanctuaries | Proposed Natural Heritage Areas | Ramsar Sites | Shellfish Areas |
|---|---|---|---|
| Baldoyle Estuary Nature Reserve and Wildfowl Sanctuary | Rogerstown Estuary | Baldoyle Bay | Malahide |
| North Bull Island Nature Reserves | Royal Canal | Rogerstown Estuary | |
| Rogerstown Estuary Wildfowl Sanctuary | Liffey Valley | Broadmeadow Estuary | |
| | Grand Canal | North Bull Island | |
| | Feltrim Hill | Sandymount Strand / River Tolka Estuary | |
| | Santry Demesne | | |
| | Ireland's Eye | | |
| | North Dublin Bay | | |
| | Dolphins, Dublin Docks | | |
| | South Dublin Bay | | |
| | Booterstown Marsh | | |
| | Howth Head | | |
| | Sluice River Marsh | | |
| | Malahide Estuary | | |
| | Baldoyle Bay | | |
| | Lambay Island | | |
| | Portraine Shore | | |
| | Dalkey Coastal Zone and Killiney Hill | | |

## 2.11 Reasons for Designation, Site Sensitivities and Threats

In order to identify those European Sites that could potentially be affected, it was necessary to describe each European Site in the context of why it has been designated (its "Qualifying Interests") and the environmental and ecological conditions that maintain the condition of these features. As

noted the Qualifying Interests and threats to the sites were extracted from the NPWS website database (www.npws.ie, 2012) and Status of EU Protected Habitats and Species in Ireland (NPWS, 2007). Threats to sites were also scoped during informal consultation and meetings with NPWS staff during 2012.

The results of this desktop exercise are presented in Appendix C. This table lists each European Site within 15km of the Portmarnock South LAP, qualifying interests for European Sites, key environmental conditions supporting each qualifying interest and key threats to each qualifying interest.

The key output of this stage was the identification of the types of threats to the integrity of the European sites. These can then be related to the consequences of implementing the Portmarnock South LAP 2013-2019 to see if there is a risk of any likely significant effects. Table 4 lists generic threats which were identified from NPWS Report on the Status of EU Protected Habitats and Species in Ireland (2007). These generic threats do not take account of specific sensitivities at each Natura 2000 site. Site-specific threats were sourced from NPWS Natura 2000 data forms, site synopsis forms and liaison with regional staff allowing site-specific sensitivities to be identified. The key output of this stage was the identification of the types of threats to the integrity of the European Sites. These can then be related to the consequences of implementing the LAP to see if there is a risk of any likely significant effects.

**Table 4 Main Pressures and Threats to the Qualifying Interests of European Sites within 15km (Listed in Appendix C)**

| Qualifying Interests of European Sites [EU Reference Code] | Main pressures and threats to habitat conservation status [1,2,3,4] | |
|---|---|---|
| Estuaries [1130] | Aquaculture<br>Recreational fishing<br>Housing development<br>Sewage outflow<br>Industrialisation<br>Autoroutes | Port/Marina<br>Water Pollution<br>Reclamation of land<br>Drainage<br>Dredging<br>Invasion of species. |
| Mudflats and sandflats not covered by seawater at low tide [1140] | Aquaculture<br>Professional fishing<br>Bait digging<br>Removal of fauna<br>Aggregate extraction (removal of beach material)<br>Disposal of industrial waste | Industrialisation<br>Port/Marina<br>Communications networks<br>Water Pollution<br>Reclamation of land<br>Coastal protection works<br>Invasion by a species |
| Annual vegetation of drift lines [1210] | Grazing<br>Sand and gravel extraction –removal of beach materials<br>Walking, horse riding and non-motorised vehicles<br>Outdoor sports and leisure activities - motorised vehicles | Other leisure and tourism impacts (beach cleaning)<br>Trampling, overuse<br>Sea defence or coastal protection works |
| Perennial vegetation of stony | Sand and gravel extraction -removal | Outdoor sports and leisure activities – |

1 Sourced from Status of EU Protected Habitats and Species in Ireland: Backing Documents, Article 17 forms, maps. Vol. 1 – 3 (NPWS, 2007).
2 Sourced from Birdguides (2003-2006), Birds of the Western Palaearctic. Version 2.0.1.
3 Sourced from BirdLife International (2013). IUCN Red List for birds. Downloaded from http://www.birdlife.org, January 2012
4 Sourced from AEWA, (2006), Technical Series No. 11, International Single Species Action Plan for Light-bellied Brent Goose (East Canadian High Artic Population) Branta bernicla hrota.

| Table 4 Main Pressures and Threats to the Qualifying Interests of European Sites within 15km (Listed in Appendix C) | | |
|---|---|---|
| **Qualifying Interests of European Sites [EU Reference Code]** | **Main pressures and threats to habitat conservation status** [1,2,3,4] | |
| banks [1220] | of beach materials<br>Disposal of inert materials<br>Improved access to site (car park)<br>Walking, horse riding and non-motorised vehicles | motorised vehicles<br>Trampling, overuse<br>Sea defence or coastal protection works<br>Erosion |
| Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] | Fertilisation<br>Grazing<br>Overgrazing by sheep<br>Overgrazing by hare, rabbits and small mammals<br>Restructuring agricultural land holding<br>Burning<br>Hand cutting of peat | Dispersed habitation Disposal of household waste<br>Routes, autoroutes<br>Golf course<br>Camping and caravans<br>Trampling, overuse<br>Sea defence/coastal protection works<br>Erosion |
| *Salicornia* and other annuals colonizing mud and sand [1310] | Grazing<br>Overgrazing by sheep<br>Overgrazing by cattle<br>Discontinuous urbanization (development)<br>Walking, horseriding and non-motorised vehicles (amenity) | Landfill, land reclamation and drying out, general reclamation of land from the sea, estuary or marsh<br>Invasion by species (*Spartina anglica*)<br>Erosion |
| Spartina swards *Spartinion maritimae* [1320] | Reclamation of land from the sea, estuary or marsh<br>Sea defence or coastal protection works<br>Other human induced changes in hydraulic conditions (dredging) | Erosion<br>Biocoenotic evolution<br>Other natural processes (transition of *Spartina* sward to other saltmarsh) |
| Atlantic salt meadows *Glauco-Puccinellietalia maritimae* [1330] | Grazing<br>Overgrazing by sheep<br>Overgrazing by cattle<br>Urbanised areas, human habitation (development)<br>Discontinuous urbanization (development)<br>Other industrial/commercial areas (development)<br>Disposal of industrial waste (dumping)<br>Disposal of inert materials (dumping)<br>Other urbanisation, industrial and similar activities (development)<br>Paths, tracks, cycling tracks | Walking, horseriding and non-motorised vehicles (amenity)<br>Landfill, land reclamation and drying out, general<br>Reclamation of land from the sea, estuary or marsh<br>Sea defence or coastal protection works<br>Erosion<br>Invasion by species (*Spartina anglica*) |
| Grey seal *Halichoerus grypu* [1364] | Fish and Shellfish Aquaculture<br>Fixed location fishing<br>Trawling<br>Drift-net fishing<br>Hunting<br>Sand and gravel extraction<br>Mines | Noise nuisance<br>Other pollution or human impacts/activities<br>Dumping, depositing of dredged deposits<br>Natural catastrophes<br>Interspecific faunal relations – |

| Table 4 Main Pressures and Threats to the Qualifying Interests of European Sites within 15km (Listed in Appendix C) | | |
|---|---|---|
| **Qualifying Interests of European Sites [EU Reference Code]** | **Main pressures and threats to habitat conservation status** [1,2,3,4] | |
| | Sport and leisure structures<br>Outdoor sports and leisure activities - nautical sports<br>Pollution | parasitism & introduction of disease |
| Harbour porpoise *Phocaena phocaena* [1170] | Professional fishing<br>Drift-net fishing<br>Outdoor sports and leisure activities | Water pollution<br>Noise nuisance<br>Natural processes (biotic and abiotic) |
| Petalwort *Petalophyllum ralfsii* [1395] | Fertilisation<br>Abandonment of pastoral systems<br>Overgrazing general<br>Undergrazing<br>Restructuring agricultural land holding<br>Stock feeding<br>Paths, tracks, cycling tracks | Sport and leisure structures<br>Outdoor sports and leisure activities<br>Drainage<br>Water pollution<br>Erosion<br>Drying out |
| Mediterranean salt meadows *Juncetalia maritimi* [1410] | Grazing<br>Over-grazing by sheep<br>Over-grazing by cattle<br>Discontinuous urbanization (development)<br>Disposal of industrial waste (dumping)<br>Disposal of inert materials (dumping) | Other urbanisation, industrial and similar activities (development)<br>Paths, tracks, cycling tracks<br>Landfill, land reclamation and drying out, general<br>Reclamation of land from the sea, estuary or marsh<br>Erosion |
| Embryonic shifting dunes [2110] | Sand and gravel extraction<br>Removal of beach materials<br>Walking, horseriding and non-motorised vehicles<br>Motorised vehicles<br>Trampling, overuse | Sea defence or coastal protection works<br>Erosion<br>Other natural processes (depletion of sediment source) |
| Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] | Grazing<br>Sand and gravel extraction<br>Removal of beach materials<br>Paths, tracks, cycling routes<br>Walking, horseriding and non-motorised vehicles<br>Motorised vehicles | Trampling, overuse<br>Sea defence or coastal protection works<br>Erosion<br>Other natural processes (depletion of sediment source) |
| *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | Mowing/cutting<br>Agricultural improvement<br>Fertilisation<br>Grazing<br>Abandonment of pastoral systems<br>Overgrazing by sheep<br>Overgrazing by cattle<br>Overgrazing by hares, rabbits, small mammals<br>Undergrazing<br>Restructuring agricultural holding<br>Stock feeding<br>Burning | Other urbanisation, industrial or similar activities<br>Paths, tracks, cycling routes<br>Routes, autoroutes<br>Golf course<br>Sports pitch<br>Camping and caravans<br>Walking, horseriding and non-motorised vehicles<br>Motorised vehicles<br>Pollution<br>Trampling, overuse<br>Other pollution or human activities |

| Table 4 Main Pressures and Threats to the Qualifying Interests of European Sites within 15km (Listed in Appendix C) | | |
|---|---|---|
| **Qualifying Interests of European Sites [EU Reference Code]** | **Main pressures and threats to habitat conservation status** [1,2,3,4] | |
| | Sand and gravel extraction<br>Urbanised areas, human habitation<br>Discontinuous urbanisation<br>Dispersed habitation<br>Disposal of household waste | Sea defence or coastal protection works<br>Erosion<br>Invasion by a species<br>Competition |
| Reefs [1170] | Professional fishing<br>Taking of Fauna<br>Taking of Flora | Water Pollution<br>Climate change<br>Invasion of a non-native species |
| Humid dune slacks [2190] | Agricultural improvement<br>Fertilisation<br>Grazing<br>Overgrazing by sheep<br>Overgrazing by cattle<br>Overgrazing by hare, rabbits, small mammals<br>Undergrazing<br>Restructuring agricultural land holding<br>Forestry | Stock feeding<br>Golf course Walking, horseriding and non-motorised vehicles<br>Motorised vehicles<br>Trampling, overuse<br>Drainage<br>Other human induced changes in hydraulic conditions<br>Drying out<br>Invasion by a species |
| European dry heaths [4030] | Overgrazing<br>Abandonment of pastoral systems<br>General Forestry management<br>Forestry planting | Burning<br>Fertilisation<br>Agricultural improvement<br>Sand and gravel extraction |
| Fulmar (Fulmarus glacialis) [A009] | Ingestion of anthropogenic sea debris (can lead to death). | |
| Arctic Tern (Sterna paradisaea) [A194] | Sea level rise, and extreme weather events (waves washing over colonies can destroy entire colonies). Human disturbance (day-trippers, sailors), and predation by gulls and rats. rat and gull predation of breeding colonies | |
| Bar-tailed Godwit (Limosa lapponica) [A157] | Degradation of foraging sites due to land reclamation, pollution, human disturbance and invasion by *Spartina* species. | |
| Black-headed Gull (Larus ridibundus) [A179] | No specific threats. Oil pollution could deteriorate feeding areas. | |
| Black-tailed Godwit (Limosa limosa) [A156] | Human disturbance, spread of invasive species (Spartina species), and loss of grassland feeding sites (may avoid saline influenced coastal grasslands if don't contain earthworms). Juvenile birds which select good wintering sites also select good breeding sites, therefore maintaining high quality wintering sites is crucial to raising productivity on breeding grounds and slowing the rate of decline. | |
| Common Tern (Sterna hirundo) [A193] | Sea level rise, and extreme weather events (waves washing over colonies can destroy entire colonies). Human disturbance (day-trippers, sailors), and predation by gulls and rats. rat and gull predation of breeding colonies | |
| Cormorant (Phalacrocorax carbo) [A017] | Off-shore windfarms and on-shore powerline collisions, persecution from angling/ aquaculture industry, drowning in gill nets, predation by Gulls at colony. | |
| Curlew (Numenius arquata) [A160] | Human disturbance, pollution, and hunting. | |

| Table 4 Main Pressures and Threats to the Qualifying Interests of European Sites within 15km (Listed in Appendix C) | |
|---|---|
| **Qualifying Interests of European Sites [EU Reference Code]** | **Main pressures and threats to habitat conservation status** [1,2,3,4] |
| Dunlin (Calidris alpina) [A149] | Land reclamation (drainage), and the invasion of alien plant species (such as the grass *Spartina anglica* which has spread on British mudflats, resulting in the reduction in size of feeding areas available). The species is also threatened by disturbance on intertidal mudflats from construction work and foot-traffic on footpaths. |
| Golden Plover (Pluvialis apricaria) [A140] | Susceptible to very cold winter temperatures and severe weather conditions. Disturbance and loss of roosting and feeding grounds, spread of Spartina species. |
| Goldeneye (Bucephala clangula) [A067] | Recreational activities, water pollution (including WwTW) infilling, water sports and other amenity activities at Malahide Estuary, resulting in disturbance of feeding/roosting sites. |
| Great Crested Grebe (Podiceps cristatus) [A005] | Drowning in gill-nets, overfishing. |
| Grey Plover (Pluvialis squatarola) [A141] | Over-fishing, disturbance and habitat loss at roost sites. |
| Greylag Goose (Anser anser) [A043] | Poisoning from lead shot ingestion, agricultural changes, disturbance from both terrestrial and aquatic recreation at roosting sites |
| Guillemot (Uria aalge) [A199] | Drowning in gill nets, ingestion of anthropogenic sea debris (can lead to death), displacement from off-shore windfarms. |
| Herring Gull (Larus argentatus) [A184] | Competition for food with other *Larus* species. Licensed culling for protection of other seabirds (e.g. terns), botulism. |
| Kittiwake (Rissa tridactyla) [A188] | Ingestion of anthropogenic sea debris (can lead to death). |
| Knot (Calidris canutus) [A143] | Over-fishing, and water pollution from historical landfills, over-exploitation of shellfish, human disturbance at roosts and feeding sites, |
| Lesser Black-backed Gull (Larus fuscus) [A183] | Competition for food with other *Larus* species. Licensed culling for protection of other seabirds (e.g. terns), botulism. |
| Light-bellied Brent Goose (Branta bernicla hrota) [A046] | Habitat loss/degradation (human induced) – agriculture, infrastructural development, human settlement, tourism, recreation, dams, invasive species; accidental mortality – collision; persecution; pollution – global warming, sea level rise, water pollution; natural disasters – drought, storms, flooding; changes in native species dynamics – competitors, pathogens/parasites; poor regeneration, restricted range; human disturbance – recreation, transport, agricultural, industrial. |
| Oystercatcher (Haematopus ostralegus) [A130] | Over-fishing of benthic shellfish and the resulting disappearance of intertidal mussel and cockle beds, also threatened by habitat degradation on its wintering grounds due to land reclamation, pollution, and human disturbance. |
| Pintail (Anas acuta) [A054] | Recreational activities, water pollution infilling, water sports and other amenity activities at Malahide Estuary. |
| Puffin (Fratercula arctica) [A204] | Predation by *Rattus norvegicus* and *R. rattus* at Lambay. Drowning in gill nets, ingestion of anthropogenic sea debris (can lead to death). |
| Razorbill (Alca torda) [A200] | Drowning in gill nets, ingestion of anthropogenic sea debris (can lead to death), displacement from off-shore windfarms. |
| Red-breasted Merganser (Mergus serrator) [A069] | Overfishing, drowning in fishing nets. |

| Table 4 Main Pressures and Threats to the Qualifying Interests of European Sites within 15km (Listed in Appendix C) | |
|---|---|
| **Qualifying Interests of European Sites [EU Reference Code]** | **Main pressures and threats to habitat conservation status** [1,2,3,4] |
| Redshank (Tringa totanus) [A162] | Human disturbance, spread of invasive species (Spartina species), loss of breeding habitat. |
| Ringed Plover (Charadrius hiaticula) [A137] | Over-fishing, and water pollution from historical landfills, botulism, disturbance at coastal roost sites |
| Roseate Tern (Sterna dougallii) [A192] | Sea level rise, and extreme weather events (waves washing over colonies can destroy entire colonies). Human disturbance (day-trippers, sailors), and predation by gulls and rats. rat and gull predation of breeding colonies |
| Sanderling (Calidris alba) [A144] | Human disturbance (and free-running dogs) in sandy shoreline feeding habitats, and rocky roosting habitats. |
| Shag (Phalacrocorax aristotelis) [A018] | Windfarms, overfishing, oil spills, persecution from angling/ aquaculture industry, drowning in gill nets, predation by gulls at colony. |
| Shelduck (Tadorna tadorna) [A048] | Habitat loss at feeding and roosting sites. Spartina invasion of feeding areas. |
| Shoveler (Anas clypeata) [A056] | Wintering habitat loss, potential impact from collisions with overhead lines, poisoning from lead-shot ingestion. |
| Teal (Anas crecca) [A052] | Drainage of feeding sites, disturbance at roost sites, poisoning from lead-shot ingestion, hunting. |
| Turnstone (Arenaria interpres) [A169] | Human disturbance (incl. dogs) at feeding and roosting sites. Note however relative tolerance of humans during feeding. |
| Wetlands & Waterbirds [A999] | Bait digging, wildfowling, spread of Spartina, disturbance including dog walkers, recreational activities, water pollution, infilling, oil spillages from shipping (sourced Natura 2000 forms for each site). |

### 2.12 Other Plans or Projects nearby which may lead to cumulative impacts upon local ecology

The EC Habitats Directive, Habitats Regulations 2011 and Planning and the Development Regulations (Amendment) 2011 require that the impacts on Natura 2000 sites be assessed from the plan or project in question and also in the presence of other plans and projects that could affect the same Natura 2000 sites.

The Appropriate Assessment process identified the plans and projects that could act in combination with the Local Area Plan to pose likely significant effects on European sites within the study area and its environs. This section identifies if these plans and/or projects have undergone an Appropriate Assessment themselves as it is assumed that if a plan has been adopted following an AA then it cannot pose likely significant adverse effects on European sites.

The Local Area Plan must comply with higher-level strategic actions and will, in turn, guide lower level decisions such as approving or refusing of planning applications and other projects. Relevant plans and projects have been identified and are summarised below:

As previously noted in Section 2.6 the lands to the south of the LAP lands are zoned for amenity areas and residential development in the County Development Plan (Fingal County Council, 2011). Portmarnock Head is designated HA to "Protect and enhance high amenity areas" (Fingal County Council, 2011). The lands to the west and south west of the railway or western LAP boundary are zoned as green belt and residential development (Fingal County Council, 2011). The Clongriffin – Belmayne (North Fringe) Local Area Plan along with Baldoyle-Stapolin LAP lands is one of Dublin's larger proposed development areas which, when completed, will have approximately 10,000 new

homes, as well as new retail and commercial areas. The majority of remaining areas to the south towards Clontarf, Sutton, Howth and Donaghmede are largely zoned "To protect, provide and improve residential amenities" (Z1) under the Dublin City Development Plan 2011-2017, inter-spaced with pockets of recreational, amenity and open space (Z9)with areas zoned for mixed services facilities including institutional, educational, recreational, community, green infrastructure and health uses (Z15). See http://www.dublincity.ie/Planning/DublinCityDevelopmentPlan/Pages/CityDevelopmentPlan.aspx. The majority of lands to the north of the LAP area are zoned for open space, green belt, amenity area and residential (Fingal County Council, 2011). Consideration is given to the cumulative impact of the various zoning objectives surrounding the LAP site.

Baldoyle-Stapolin Local Area Plan located adjacent to the southern boundary of the site, currently contains policies for residential development, to provide open space and to protect and improve high amenity areas. The Baldoyle-Stapolin LAP also includes policies such as the green infrastructure strategy to manage any adverse impacts on Baldoyle SAC/SPA through appropriate mitigation measures. These measures were developed as part of a co-ordinated approach to the lands at both Portmarnock South and Baldoyle-Stapolin. Development of these lands has potential to result in cumulative impacts on Baldoyle Bay cSAC/SPA.

The Clongriffin–Belmayne (North Fringe) Local Area Plan 2013-2019 is located at the south west corner of the site. Policies within this plan have potential to impact upon the local ecology in particular policy MTO7 - *To develop a pedestrian route along the River Mayne and access the potential to connect with amenity lands in Baldoyle Estuary and further amenities along the coastal routes*. It is likely that such policies will increase access for pedestrians and cyclists along the coast and through the open grassland buffering the residential developments from the coast with potential to increase disturbance or other impacts to qualifying interests of Baldoyle SPA or cSAC. As part of this plan an Appropriate Assessment was undertaken with no significant impacts noted, as further discussed in Section 3.5.

The LAP lands are part of the North Fringe Sewer catchment which discharges to Ringsend Waste Water Treatment Plant (WWTP). At the time of preparation of the LAP and AA, Ringsend WWTP is operating at/near to design capacity (pers. comm., Fingal County Council, 2013). Dublin City Council is finalising proposals to increase capacity from 1.7 million PE (population equivalent) to 2.1 which is expected to be completed by 2015. Under the Waste Water Discharge (Authorisation) Regulations 2007 (SI No. 684 of 2007) there is a requirement for the Water Service Authority to satisfy itself that there is adequate drainage capacity available in the network prior to granting a planning permission for any development. This will apply to all developments proposed under the Portmarnock South LAP.

The Greater Dublin Drainage Initiative led by Fingal County Council will provide strategic drainage infrastructure including a new regional WWTP will be commissioned by 2020 (http://www.greaterdublindrainage.com/). On the 10th June 2013 it was announced that Clonshaugh was the preferred location for the proposed WWTP (http://www.greaterdublindrainage.com/, 2013). It is anticipated in the Alternative Sites Assessment and Route Selection Report that the proposed pipeline will traverse the LAP lands and would be tunnelled under Baldoyle Bay to avoid direct and indirect impacts on Baldoyle Bay cSAC and SPA (Jacobs, 2013). Details of this plan however were not available at the time of writing as further technical examination, more detailed studies and an EIS is yet to be prepared for the proposed new WWTP and associated outfall (http://www.greaterdublindrainage.com/, 2013). As part of this plan however a separate Appropriate Assessment will be required to ensure no adverse impacts on any European Sites will occur.

A new waste water pumping station within the LAP lands will be required in serve the residential-zoned lands within the LAP area. This project, in particular the outlet, has potential to result in

significant impacts on the European Sites and their qualifying interests. Project design details will be assessed at the project level which will require a separate Appropriate Assessment, therefore this project is not discussed further within this report.

Other projects examined as part of the AA process include the proposed extension of the cycle/pedestrian path project – Sutton to Sandyford (S2S) from Sutton to Swords via Malahide. This is currently out to tender and if developed, would involve development along the coastal route to the east of the LAP lands (Pers. Comm. Fingal County Council, 2013). There is a potential risk of temporary disturbance from construction as well as longer-term disturbance of birds from visual stimuli. This proposal will also undergo an Appropriate Assessment and therefore is not considered further in the assessment of the Plan.

The LAP lands are included within the Eastern River Basin Management Plan with the Mayne River Water Management Unit developed specifically to assess the River Mayne and River Sluice with the overall objective of achieving and maintaining good water quality status (Santry Mayne Sluice WMU, 2009).

### 2.13 Likely Significant Effects from the LAP on European Sites

This section documents the final stage of the screening process. It used the information collected on the sensitivity of the qualifying interests of each European Site and describes any likely significant effects of implementation of the LAP. This assumes the absence of mitigation measures that were later incorporated within the individual policies in the LAP.

The Screening Stage identified likely significant effects of the LAP both in isolation and potentially in combination with other plans or projects – see Table 5. These potential impacts have been addressed in more detail in Stage 2 Appropriate Assessment. The sites highlighted in grey are those which were subsequently scrutinised in Stage 2. Plans and/or projects not considered to result in potential in-combination impacts were not considered further.

| Table 5 European Sites (Natura 2000) Details | | | | |
|---|---|---|---|---|
| **Site** | **Potential Impacts arising from the Proposed LAP** | **Is there a likely risk of a Significant Effect?** | **Other plans & projects to be considered in Combination?** | **Is there a risk of Significant Impact in combination?** |
| **CANDIDATE SPECIAL AREAS OF CONSERVATION** | | | | |
| Baldoyle Bay cSAC (000199) | LAP lands include Murragh Marsh which is within Baldoyle Bay cSAC. LAP could result in an alteration of baseline conditions which may impact upon the qualifying interests of the cSAC. A potential alteration in the surface water, ground water, pollution, flooding regime, flood defence, recreational uses, increase in population and a potential alteration of erosion rates all have potential alone or in combination to result in changes to baseline conditions on which qualifying interests depend. | YES | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area<br>Sutton to Sandycove Promenade and Cycleway (S2S)<br>The Greater Dublin Drainage Initiative | YES |
| North Dublin Bay cSAC (000206) | LAP lands located north of cSAC. Unlikely to result in direct or indirect impacts on cSAC due to distance and coastline separating sites. Potential cumulative impacts from Ringsend WWTW discharge if operating over capacity. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Sutton to Sandycove Promenade and Cycleway (S2S) | YES |
| Lambay Island cSAC (000204) | Due to the isolation of Lambay Island c.4km off the Irish coast and private ownership of the island with restricted access, potential impacts are considered unlikely. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Malahide Shellfish Area<br>The Greater Dublin Drainage Initiative | NO |
| Rogerstown Estuary cSAC (000208) | LAP lands located south of cSAC. Unlikely to result in direct or indirect impacts on cSAC due to distance separating sites. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area | NO |

**Table 5 European Sites (Natura 2000) Details**

| Site | Potential Impacts arising from the Proposed LAP | Is there a likely risk of a Significant Effect? | Other plans & projects to be considered in Combination? | Is there a risk of Significant Impact in combination? |
|---|---|---|---|---|
| Malahide Estuary cSAC (000205) | LAP lands located south of cSAC. Potential indirect and cumulative impacts from developments include recreational uses, increase in population and a potential alteration of erosion rates. All have potential to result in changes to baseline conditions on which qualifying interests depend. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area<br>Sutton to Sandycove Promenade and Cycleway (S2S) | YES |
| Irelands Eye cSAC (002193) | LAP lands located south of cSAC. Unlikely to result in direct or indirect impacts on cSAC due to distance separating sites and isolation of Ireland's Eye off the coast. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Malahide Shellfish Area<br>The Greater Dublin Drainage Initiative | NO |
| Howth Head cSAC (000202) | LAP lands located south east of cSAC. Unlikely to result in direct or indirect impacts on cSAC due to distance separating sites. Recreational uses, increase in population and a potential alteration of erosion rates of sensitive habitats all have potential to result in combination changes to baseline conditions on which qualifying interests depend. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area | YES |
| Rockabill to Dalkey Island cSAC (003000) | cSAC situated off-shore. Unlikely to result in direct or indirect or cumulative impacts on cSAC. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Malahide Shellfish Area | NO |
| South Dublin | LAP lands located north of cSAC. Unlikely to result in | NO | Fingal Development Plan, | YES |

| Table 5 European Sites (Natura 2000) Details | | | | |
|---|---|---|---|---|
| **Site** | **Potential Impacts arising from the Proposed LAP** | **Is there a likely risk of a Significant Effect?** | **Other plans & projects to be considered in Combination?** | **Is there a risk of Significant Impact in combination?** |
| Bay cSAC (000210) | direct or indirect impacts on cSAC due to distance and coastline separating sites. Potential cumulative impacts from Ringsend WWTW discharge if operating over capacity. | | Dublin City Development Plan<br>Eastern River Basin Management Plan<br>FEMFRAMS<br>Sutton to Sandycove Promenade and Cycleway (S2S) | |
| **Special Protection Areas (SPA)** | | | | |
| Lambay Island SPA (004069) | Too distant for any disturbance impacts to be likely as a result of the Plan. | NO | Fingal Development Plan,<br>Malahide Shellfish Area<br>The Greater Dublin Drainage Initiative | NO |
| Rogerstown Estuary SPA (004015) c. | Developments resulting in an influx of residents and recreational activities may result in an increase in pollution, recreational activities that may result in disturbance to wintering species. Pollution may also result in a reduction in water quality and feeding resources for bird species. However none of these potential threats are considered to result in likely adverse impacts due to the distance between the two sites and the provision of recreational/opens spaces within the LAP lands. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Malahide Shellfish Area<br>Sutton to Sandycove Promenade and Cycleway (S2S) | NO |
| Malahide Estuary SPA (004025) (also known as Broadmeadow/ Swords SPA) | Potential indirect and cumulative impacts from developments include an influx of residents may result in an increase in pollution and/or recreational activities that may result in disturbance to wintering species. Pollution may also result in a reduction in water quality and feeding resources for bird species. | YES | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area<br>Sutton to Sandycove Promenade and Cycleway (S2S) | YES |
| Baldoyle Bay SPA (004016) | LAP lands include Murragh Marsh which is within Baldoyle Bay SPA. Outside of the SPA, the physical footprint of development will result in a loss of feeding | YES | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan | YES |

**Table 5 European Sites (Natura 2000) Details**

| Site | Potential Impacts arising from the Proposed LAP | Is there a likely risk of a Significant Effect? | Other plans & projects to be considered in Combination? | Is there a risk of Significant Impact in combination? |
|---|---|---|---|---|
| | bird habitats for wintering bird species connected to the SPA. Developments will result in an influx of residents which may result in an increase in pollution, recreational activities and/or disturbance to bird species. Pollution may also result in a reduction in water quality and feeding resources for bird species. | | Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area<br>Sutton to Sandycove Promenade and Cycleway (S2S)<br>The Greater Dublin Drainage Initiative | |
| Dalkey Islands SPA (004172) | Too distant for any disturbance impacts to be significant as a result of the Plan. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Dun Laoghaire Rathdown Development Plan | NO |
| Ireland's Eye SPA (004117) | Too distant for any disturbance impacts to be significant as a result of the Plan. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Malahide Shellfish Area<br>The Greater Dublin Drainage Initiative | NO |
| Howth Head SPA (004113) | Due to the breeding location of qualifying interest on cliffs, combined with distance from the LAP lands, potential for impacts from disturbance are not considered to be significant as a result of the Plan. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Mayne River Water Management Unit<br>FEMFRAMS<br>Clongriffin Belmayne LAP<br>Baldoyle-Stapolin LAP<br>Malahide Shellfish Area | NO |
| North Bull Island SPA (004006) | LAP lands located north of cSAC. Unlikely to result in direct or indirect impacts on cSAC due to distance and coastline separating sites. Potential cumulative impacts include an influx of residents may result in an increase in pollution and/or recreational activities that may result | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>FEMFRAMS<br>Sutton to Sandycove Promenade and Cycleway (S2S) | YES |

| Table 5 European Sites (Natura 2000) Details | | | | |
|---|---|---|---|---|
| **Site** | **Potential Impacts arising from the Proposed LAP** | **Is there a likely risk of a Significant Effect?** | **Other plans & projects to be considered in Combination?** | **Is there a risk of Significant Impact in combination?** |
| | in disturbance to wintering species. Pollution may also result in a reduction in water quality and feeding resources for bird species. | | | |
| South Dublin Bay and River Tolka Estuary SPA (004024) | LAP lands located north of cSAC. Unlikely to result in direct or indirect impacts on cSAC due to distance and coastline separating sites. Potential cumulative impacts from Ringsend WWTW discharge if operating over capacity. | NO | Fingal Development Plan,<br>Dublin City Development Plan<br>Eastern River Basin Management Plan<br>Sutton to Sandycove Promenade and Cycleway (S2S) | YES |

### 2.14 Conclusions of Screening Assessment Process

The Screening process identified nine cSACs and nine SPA's within 15km of the Portmarnock South Local Area Plan lands. The north eastern section of the LAP lands overlap with Baldoyle Special Protection Area. Based on the information provided above and by applying the precautionary principle it was determined that it was not possible to rule out likely significant impacts on nine of the surrounding European Sites; and therefore the AA process proceeded to Stage Two: Appropriate Assessment as detailed in Section 4 below for these sites. The nine sites which were considered at potential risk of likely significant effects are Baldoyle Bay cSAC, Baldoyle SPA, Malahide Estuary cSAC, Malahide Estuary SPA Howth Head cSAC, North Dublin Bay cSAC, South Dublin Bay cSAC, North Bull Island SPA and South Dublin Bay SPA. Sites that were not regarded to be potentially at risk of significant impacts were not subject to further consideration in the assessment.

# 3 Stage Two: Provision of information for an Appropriate Assessment

## 3.1 Assessment Methodology

The overall aim of the Habitats and Birds Directives is to maintain or restore the favourable conservation status of habitats and/or species of community interest. Site specific conservation objectives aim to define favourable conservation condition for particular habitats or species within that site. The conservation objectives for the qualifying interests of the surrounding European Sites are listed in Appendix C).

According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC', paragraph 4.6(3):

*"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."*

Within this stage often referred to as "Stage 2 of the Appropriate Assessment", the potential impacts of the proposed development on the integrity of the surrounding European Sites are examined with respect to the conservation objectives of each European Site and to its general structure and function. The assessment of impacts on the Natura 2000 network of sites was undertaken by the following steps:

1. Identify site-specific issues so that the impact evaluation is correctly informed. This was primarily achieved through research of desktop information, site visit and consultation with regional staff of the NPWS.
2. Issuing a Policy Guidance Note for Fingal County Council to pro-actively inform the preparation of Policies and Objectives of the LAP. This note contained a summary of the pre-screening and recommendations of policies to promote and avoid during the preparation of the LAP (Appendix A). The overall aim was to assist those preparing the Plan in avoiding adverse impacts on European Sites (Appendix A).
3. Consultation with relevant authorities and groups enabled Fingal County Council to form the policies with an awareness of issues, including environmental and ecological, within and surrounding the LAP lands.
4. Iterative Review of draft Chapters of the LAP to allow the amendment of policies, objectives and supporting text. This was to ensure that potential impacts were avoided or mitigated for through the addition of policies and objectives.

## 3.2 Site-specific issues at Natura 2000 sites

Each European Site identified to be potentially at risk of significant impacts during the Screening Stage in Section 2 above are discussed below with specific threats to each site discussed, including specific elements of the LAP deemed to pose likely significant effects to the relevant European sites. Habitats or species unlikely to be impacted upon are not discussed below. In total 9 sites were deemed to be at risk of likely significant effects, or such impacts could not be ruled out:

- Baldoyle Bay cSAC (000199)
- Malahide Estuary cSAC (000205)
- North Dublin Bay cSAC (000206)
- Howth Head cSAC (000202)
- South Dublin Bay cSAC (000210)
- Baldoyle Bay SPA (004016)

- Malahide Estuary SPA (004025)
- North Bull Island SPA (004006)
- South Dublin Bay SPA (004024)

### 3.2.1 Baldoyle Bay cSAC (000199)

Baldoyle Bay candidate Special Area of Conservation (cSAC) includes the whole of the Baldoyle Estuary, a portion of Portmarnock Strand or Velvet Strand and Sutton Strand. The cSAC is located along the length of the eastern boundary of the LAP lands and overlaps with the north eastern corner of the LAP lands.

- Pollution

Baldoyle Bay is an estuarine system. According to the Natura 2000 Data Form, the site receives pollution from a number of sources, mainly the inflowing rivers (Mayne and Sluice) but also an unsatisfactory sewage network. The River Mayne, located to the south of the LAP lands has a Q-value of 3 which is classed as Poor under the EC Water Framework Directive. Investigative monitoring on the Mayne was undertaken in March/April of 2012 (DCC, 2012). The results shows that water quality within the river for Ammonia, Phosphorus and Biochemical Oxygen Demand (BOD) did not meet the requirement of the "good" status required under the Water Framework Directive. The current "Poor" status and any further depreciation of water quality are considered a potential threat to habitats downstream and their supporting species. The River Sluice which is located to the north of the LAP lands is classed as being of Good Status under the EC Water Framework Directive (http://www.wfdireland.ie/maps.html).

- Disturbance and Recreational Activities

Potential threats include visitor pressure and recreational activities which may result in erosion of mudflat and/or salt marsh habitat. The zoning of the western area of the LAP lands for development will result in an influx of residents which has a potential to impact on these habitat of the cSAC through recreation if not appropriately managed.

- Loss of Habitat

The north east corner of the LAP lands overlaps with Baldoyle Bay cSAC. This area known as Murragh Marsh is to be retained and managed for biodiversity with no impingement of development. Mudflats and sandflats not covered by seawater at low tide, *Salicornia* and other annuals colonizing mud and sand are both located within the estuary. *Spartina sp.* is noted to be well established in the inner estuary however it may be causing unfavourable interactions with the intertidal and salt marsh habitats (Natura 2000 Data Form). Atlantic salt meadows and Mediterranean salt meadows habitats are located on the coastline, along the River Mayne and at Murragh Marsh.

The habitats along the River Mayne are located within lands covered by the Baldoyle-Stapolin LAP lands and are currently unmanaged. In previous discussion with NPWS management of this area was proposed including fencing off this area to restrict public access and implementation of a grazing regime to avoid natural succession to scrub. Similarly, overgrazing is a potential threat to the habitats.

### 3.2.1 Malahide Estuary cSAC (000205)

- Disturbance and Recreational Activities

The site synopsis and Natura 2000 data form notes that owing to the proximity of two large towns, the area is very popular for water sports and other amenity activities, with the inner estuary heavily used for water sports. The increase in residential development within the LAP

lands may result in an increase in recreational pressures on sand dune and/or salt marsh habitats, qualifying interests of the cSAC.

### 3.2.2 North Dublin Bay cSAC (000206)

- Recreational Activities

Bull Island possesses an excellent diversity of coastal habitats. The Natura 2000 data form notes that North Bull Island dune system is one of the most important systems on the east coast and is one of the few in Ireland that is actively accreting. Dunes are subject to high recreational pressures and moderate levels of grazing by rabbits which cause some localised damage. It continues by noting that damaged areas are monitored by Dublin City Council and appropriate management implemented. However potential adverse impacts on these habitats through an increase in visitor numbers, due to an increase in surrounding residential numbers (including Baldoyle Stapolin LAP area located to the south), cannot be ruled out.

### 3.2.3 Howth Head cSAC (000202

- Recreational Activities

The site synopsis for this site notes that recreation is the main activity within the cSAC, consisting mostly of walking and horse-riding which has led to some erosion within the site. Fires also pose a danger to the site, as well as loss of extent due to housing development. Undergrazing is also a threat to heath habitat with Fingal County Council launching a grazing programme in 2012 in an attempt to combat the threat. The increase in residential development from the LAP lands may result in an increase in recreational pressures on European dry heaths, a qualifying interest of cSAC.

### 3.2.4 South Dublin Bay cSAC (000210)

- Pollution

South Dublin Bay cSAC is an intertidal site with extensive areas of sand and mudflats. The Natura 2000 Data Form notes that the intertidal areas receive water that is somewhat polluted though there are no apparent impacts on the associated flora and fauna. An additional risk is the discharge from Ringsend WWTP which is currently operating at capacity. Any increase in volumes of discharge has potential to reduce water quality which may impact upon the diverse communities they support including invertebrates, algae and eel grass and therefore the integrity of the site.

### 3.2.5 Baldoyle Bay SPA (004016)

Baldoyle Bay Special Protection Area (SPA) encompasses Baldoyle Bay, predominately overlapping with Baldoyle Bay cSAC. A portion of the LAP lands at River Murragh Marsh overlap with Baldoyle Bay SPA.

- Disturbance and Recreational Activities

An Appropriate Assessment was undertaken for the proposed Coastal Pathway from Portmarnock Bridge to “The Coast” housing development in Baldoyle by Fingal Co. Co. in 2009. The gravel walkway was designed to be 1.5m wide and fenced off from the adjacent Baldoyle SPA. It was noted in the AA that any future walkway and cycleway along the Coast Road would be located on the landward side to avoid disturbance along the estuary (Fingal Co. Co., 2009). The AA concluded that the landward side coastal pathway could proceed with concerns over disturbance to birds and loss of habitat outside of designated areas (outside of LAP lands) were mitigated for through provision of a screening structure at the mouth of the River Mayne.

Access to the shore is currently restricted by the Coast Road, however the plans for the creation of Racecourse Park may result in an increased level of disturbance to feeding birds without appropriate management. In addition, disturbance from dog walkers along the coast road currently threatens goose and wading bird feeding and roosting sites , both within estuarine and grassland feeding grounds.

- Loss of Feeding Habitat

Bird species of Baldoyle Bay SPA, in particular Light-bellied Brent Geese are known to use lands surrounding the SPA for feeding. A section of the agricultural lands adjoining the SPA, in the vicinity of C4 were noted to be of major importance with records of between 401-1450 Light-bellied Brent Geese recorded from this area (Benson, 2009). Loss of feeding habitat may result in negative impacts upon qualifying interests of the SPA.

- Loss of Roosting Areas

Brent geese using Dublin Bay to the south are thought to roost overnight primarily on shallow water (Nairn, 2011), presumably due to safety from human/dog disturbance and fox predation. It is believed the geese from Baldoyle SPA also leave their terrestrial grassland feeding sites for night-time roosting in open water with data showing that Baldoyle Bay SPA is often used by Brent Geese (NPWS, 2012), with Bull Island also known to be a major roosting location (Benson, 2009). No loss of roosting habitat is predicted.


**Figure 3: Study Area C with location of recorded wintering birds highlighted in green in relation to the LAP lands. (Pierce and Dillon, 2012)**

### 3.2.6 North Bull Island SPA (004006)

- Loss of Feeding Habitat

The site is among the top ten sites for wintering waterfowl in the country. The Natura 2000 Data form notes that there are no serious imminent threats to the wintering birds. However, loss of feeding habitat, in particular grassland or agricultural lands used by birds of the SPA is considered a potential threat.

- Pollution

The Natura 2000 Data Form notes that the intertidal areas receive polluted water though there are no apparent impacts on the associated flora and fauna. An additional risk is the discharge from Ringsend WWTP which is currently operating over capacity. Any increase in volumes of effluent has potential to reduce water quality which may impact upon the diverse communities they support including invertebrates, algae and eel grass. Such food resources are vital for wintering birds therefore any adverse impact would threaten the integrity of the site.

#### 3.2.7 Malahide Estuary SPA (004025)

- Loss of Feeding Habitat

Malahide Estuary is of high importance for wintering waterfowl and supports a particularly good diversity of species. According to the Natura 2000 Data Form, the main problems or threats affecting this site are recreational activities, water pollution and infilling. However, loss of feeding habitat, in particular grassland or agricultural lands used by birds of the SPA is considered a potential threat.

### 3.3 Global issues at European Sites

#### 3.3.1 Implications of Sea Level Rise

Climate change is an on-going threat to habitats and species globally. Due to the coastal location of the LAP lands and loss of low-lying undeveloped lands to development, an alteration of coastal flooding is considered a potential threat to Baldoyle cSAC/SPA. Studies undertaken as part of the European Climate Adaptation Platform assessed change in exposure to coastal flooding by noting projected inundation depth changes due to sea level rise. This was calculated on the basis of regional coastal storm surge heights projected by the DIVA model for a 100 year return event and heightened by a 1m sea level rise. County Dublin was assessed as having a low negative impact with a change of 0.1-0.3m (http://climate-adapt.eea.europa.eu/map-viewer?mapViewerAppId=ast-vulnrisk-espon01, 2012). The magnitude of habitat loss as a result of this rise in level does not appear to have been modelled. Based on the low-lying location of Qualifying Interests such as salt marsh habitats along the coast, potential adverse impacts cannot be ruled out.

Sea level rise may also result in changes in flooding patterns of rivers. Online mapping illustrates inundation depth changes due to climate induced changes in river flooding. "No impact" to "marginal impact" of up to 0.1m was predicted for the Dublin area (http://climate-adapt.eea.europa.eu/map-viewer?mapViewerAppId=ast-vulnrisk-espon01, 2012). Based on the mapping data potential impacts on the Qualifying Interests cannot be determined. The LAP notes moderate predictions for the effects of climate change including a 10% increase in rainfall intensity, a 20% increase in base river flow and a sea-level rise of 500mm by the year 2100, with these scenarios have included in the SuDS Strategy for the lands.

### 3.4 Likely Effects of the LAP on European Sites

The following text represents the potential impacts that have been predicted after the drafting of the policies in the LAP, many of which pre-empt the need to protect the integrity of the European sites.

### 3.4.1 Baldoyle Bay cSAC (000199)

- Loss of Habitat

Under the LAP, the Atlantic salt meadows and Mediterranean salt meadows within Murragh Marsh are to be protected and managed as an area for wildlife and amenity. The coastal walk and cycle path seeks to pass through Baldoyle Bay cSAC at the River Mayne, south of the LAP lands (within Stapolin-Baldoyle LAP lands) parallel to the Coast Road. This objective of both the Portmarnock South and Baldoyle Stapolin Local Area Plans has potential to result in a direct loss of a portion of this habitat. Discussions between Fingal County Council and National Transport Authority have led to an agreement of a maximum shared path/cycle way width of 3m (pers. comm., Fingal Council, 2012). This will replace the proposed walkway for which Fingal Co. Co. previously undertook an AA in 2009. This walkway was 1.5m wide with mitigation measures proposed for disturbance to birds. The route was also selected with the aim of reducing any potential impact to qualifying interests of the Natura 2000 sites, including avoidance of Annex I habitat.

### 3.4.2 Baldoyle Bay SPA

- Disturbance and Recreational Activities

The historical and current data on the feeding and roosting patterns of Light-bellied Brent Geese within LAP lands is discussed in detail under "*Loss of Feeding Habitat*" below. In summary, although Geese were not recorded using the LAP land for feeding during the 2011/12 winter period (Pierce and Dillon, 2012), precautionary mitigation has been proposed for this species due to existence of historical feeding records of large flocks in the vicinity (Benson, 2009).

Portmarnock South LAP plans to extend Racecourse Park, within Baldoyle Stapolin LAP to the south, northwards to include eastern and southern sections of Portmarnock South LAP. This area along the eastern and southern periphery of the residential-zoned lands within Portmarnock South LAP lands is designated as an ecological buffer zone within the Fingal Development Plan, 2011-2017. This area also includes a proportion of Baldoyle-Stapolin LAP. The purpose of the buffer zone is to protect the integrity of the nationally and internationally designated sites and to provide suitable habitat for birds that is connected to Baldoyle Bay SPA. The LAP aims to develop these open areas as multi-functional landscapes where agricultural land-use is maintained and, where appropriate, combined with nature conservation targets and low intensity recreational use. Approximately c.32 ha of the c.86 ha of the LAP is zoned as "OS" to *Preserve and provide for open space and recreational amenities,* with an additional 12 ha – the Murragh Spit and other smaller areas zoned for protection and enhancement (zoning HA). Racecourse Park to the south, when complete, will comprise of c.72 hectares of public parkland with playing pitches with facilities. The Park within Baldoyle-Stapolin LAP will also incorporate a nature reserve area including the plan lands that lie within Baldoyle Bay cSAC. The LAP includes proposals for habitat protection and enhancement measures within the ecological buffer zone. These are aimed at providing increased feeding and roosting resources for bird species, including those connected to Baldoyle Bay SPA. The lands are to be maintained and managed as amenity grassland, semi-natural meadow, natural grassland and scrub, pasture and arable land use, including the provision of wintering crops as feeding resources for wintering bird species. The management of defined areas for wintering birds is a key element of mitigation proposed to reduce the impact of recreational activities and loss of feeding habitat from residentially-zoned lands within the LAP.

As previously noted, disturbance from dog walkers threatens goose and wading bird feeding and roosting sites , both within estuarine and grassland feeding grounds. Studies on the Dublin population of Brent Geese noted that they habituate to moderate and predictable disturbance

however regular disturbance by human activity was observed at certain feeding sites (Benson, 2009 and NPWS, 2011). In disturbed areas including Baldoyle SPA the Geese also moved to adjacent sites to continue grazing (Benson, 2009).

A study of Brent Geese at Irishtown, Co. Dublin (Phalan and Nairn, 2007) also found that predictable disturbance from dogs and walkers caused little disturbance. Human disturbance carries a potential threat to the conservation status of waterbird populations in the vicinity of the LAP lands, and could result in long-term decreases in wintering numbers within the SPA and/or decreased breeding success of Brent Geese and other birds on their northern breeding grounds through a decrease in physical form. Benson's study (2009) notes that Brent Geese have been viewed as a nuisance by urban residents with deterrents put in place in some instances including a flying kite which has become ineffective following habitation by the geese.

Benson also noted that wardened parks, possibly by virtue of active monitoring of recreation and provision of information to the general public, appear to result in an increase in terms of acceptance of the geese with little disturbance recorded. In unwardened parks disturbance levels were regular and persistent at peak times including weekends, mornings and evenings when dogs were walked unleashed (Benson, 2009). Fingal County Council intends to provide regular supervision by a warden and depending on usage of park, this supervision will be increased if necessary (Pers. Comm., Fingal County Council, 2013).

Intervention through either designated status for known feeding/roosting sites and/or appropriate land management policies will be required. To reduce the impacts of disturbance from pedestrians, cyclists and dog walkers, a "quiet zone" will be established to the south east of the residential area to cater for wintering Brent Geese and wader species. Access to this quiet zone grassland for recreation will not be permitted during the winter migratory bird season (i.e. fenced from September to March inclusive). The enclosure will be dog proof with e.g. 1.2m high fence. Hedge planting) shall include only low-growing shrub species (i.e. no mature tree plantings) to retain an open space preferred by waterbirds in feeding areas as predators are more easily observed.

The management plan for these open lands will include provision of information boards and appropriate signage. This is aimed at reducing disturbance form dogs, bikes or children running through flocks– primary sources of disturbance. Benson (2009) and NPWS Conservation staff (Pers. Comm., 2012) noted that Brent Geese easily habituate to constant or regular human disturbance such as nearby traffic or walkers up to a distance of 5 –10 metres, with Benson noting that Brent Geese at Shelbourne Park dog track were not disturbed by ground staff walking through the flock. Benson (2009) noted that Seagrange and Red Arches (south of LAP lands) where two of the sites most at risk from high disturbance activities where walkers deliberately disturbed feeding Geese, however Benson further noted that Dublin City and South Dublin Park Rangers have observed that once people have information about the Geese, they are less likely to disturb them and develop a sense of stewardship towards their conservation.

During the production of the open space management plan, careful consideration will be given to appropriate crop rotation, mowing/grazing, fertilisation, and boundary hedging of this area for both Brent (favour winter cereals and pasture (Nairn, 2012), low hedges and sward <10cm (McKay et al., 1996)) and Black-tailed Godwit as described below for other SPAs. The Irish Brent Geese Research Group and National Parks and Wildlife Service shall be contacted to confirm if the regime is appropriate to Light-bellied Brent Geese as much of the literature refers to UK populations of different races of Geese.

Other mitigation measures incorporated into the plan include fields of arable crops, management of grasslands fields as meadows, retention of edge of ecological buffer zone in an open state to provide unhindered bird movement from the mudflats of Baldoyle estuary to the

grasslands and croplands, retention and management of the Murragh Spit for waterbirds, and minimising disturbance of birds through appropriate timing and management of construction and related activities.

The LAP includes requirements for a coordinated implementation to include the transfer of open space lands and the preparation of a Conservation Management Plan for the Murragh Spit lands in agreement with Fingal County Council. The phasing of works section within the LAP provides reference to Habitat Protection Measures required within the ecological buffer zone prior to the commencement of development. These measures shall be implemented prior to the commencement of development; ensuring feeding and roosting habitat is protected and disturbance to migratory birdlife for the duration of the construction and post construction phase is mitigated. Subsequent transfer of zoned open space lands to Fingal County Council will be completed prior to the commencement of development. The Council are fully committed to the implementation of agreed habitat protection measures.

- Loss of Feeding Habitat

The zoning of residential development may result in the loss of feeding habitat for qualifying interests of the SPA, in particular Light-bellied Brent Geese. As previously noted, a bird study commissioned by Fingal County Council and undertaken by Birdwatch Ireland (see Appendix C) included 13 visits over the 2011/12[5] winter period, covering the LAP lands and surrounding areas. The overall aim was to produce a baseline dataset on the bird species of the lands surrounding the estuary and establish how important these lands are for the birds for Baldoyle estuary (Pierce and Dillion, 2012). The study included all wintering bird species using LAP lands and highlighted the presence of any species of conservation concern.

The survey divided the study area into 10 fields (C1-C10). Within LAP lands, only field C4 contained important bird numbers with the majority of this field within the footprint of residentially zoned lands, with the exception of a linear strip along the east which will be retained as part of open space (zoned as OS). Field C4 (see Figure 3 below) contained significant bird populations of several bird species which are qualifying interests for other SPAs in Co. Dublin, but none designated for Baldoyle Bay SPA. No habitat loss impacts to Baldoyle SPA bird populations are predicted from the loss of these fields to development, however a discussion of potential impacts to Brent Geese which were previously recorded using these lands but not recorded feeding in these lands during the 2011/12 survey period is presented below.

Contrary to the findings of the 2011/2012 winter surveys, an account of usage of lands in Dublin by Light-bellied Brent Geese *Branta bernicla hrota* noted that the lands corresponding to Field 'C' within the LAP lands supported large flocks of geese ( in the range 401-1450 quoted in this study) (Benson, 2009). Anecdotal records also refer to 1,000+ bird occurring there as discussed in Section 1.5 [6]. Benson's account of bird numbers were undertaken between 2008 and 2009. The fields corresponding to the LAP lands were concluded to be of 'Major importance' for the species (Benson, 2009). This apparent discrepancy between 2011/2012 and 2009 Brent survey data for the fields in question appears to be explained by more recent comments by BirdWatch Ireland who describe the southern 'C' fields as "currently unsuitable for many migratory species to feed or roost on" with no evidence of usage recorded (Pierce and Dillon, 2012). It is likely that the apparent departure of Brent Geese from these feeding fields between 2009 and 2012 is a consequence of a change in crop rotation and local changes in land management. Nevertheless, the quiet zone proposed in fields to the south of the LAP lands as described above will offer a new long-term feeding resource for Brent Geese. Geese have proved to be adaptable and

5 December 2011, January 2012, February 2012, and December 2012.
6 A peak of at least 1000 Brent geese in 2008/9 appears likely given counts by local residents, (Pers. Comm., Graham McElwaine of the Irish Whooper Swan Study Group, March 2013).

resilient in seeking new food sources and feeding sites, allowing the Dublin population to expand (Benson 2009).

Analysis of local and national trends and national conservation status are required to accurately assess any potential impact to Brent from loss of grassland fields once used for feeding. Brent populations nationally have doubled since the mid 1990's, and are continuing to increase (long-term change +103%; short-term change +50% (Boland & Crowe, 2012)). In Baldoyle, the Brent population has increased steadily since 2002[7], with highest numbers in the past decade recorded in recent years[8]. The species is an Amber-listed bird of medium conservation concern in Ireland (Lynas et al., 2007). Overall therefore, Brent populations are increasing nationally and locally, and are of medium but not high conservation concern in Ireland.

Other waterbirds were recorded within these fields (e.g. Lapwing *Vanellus vanellus*, Snipe *Gallinago gallinago)*. With the exception of Lapwing (peak 1,000, and several hundred regularly recorded), all other species occurred in small numbers. None of these other species are qualifying interests of Baldoyle Bay SPAs, and they are therefore not assessed here.

Finally, it is informative to the assessment to note that fields to the south of the LAP lands, as are to be actively managed by Fingal County Council for wintering birds under the Baldoyle-Stapolin LAP. These fields host important numbers of Brent Geese with one field found to host a peak of 700 over 3 visits in winter 2011/2012 (Peak = 175% of Baldoyle SPA Population[9]; mean of 370 =93% of Baldoyle SPA Population).

To conclude, once mitigation has been implemented in full, no decrease in favourable conservation status of Brent Geese are predicted and no significant impacts to Baldoyle SPA site integrity will arise as a result of loss of feeding habitat. This assessment has taken account of best available scientific information including a) current and historical Brent data for the fields in question, b) increasing national and local Brent Geese populations c) the species is not red-listed nationally, and d) taking account of mitigation measures including seasonal fencing and management measures of fields to the east and south of the LAP lands for wintering bird species including provision of a quiet zone.

### 3.4.3 North Bull Island SPA (004006) and Broadmeadow Estuary SPA (004025)

- Loss of Feeding Habitat

As noted above under Baldoyle Bay SPA, wintering bird surveys from winter 2011 and 2012 (Appendix C) found that only field C4 (see Figure 4 above) may have contained important bird numbers with regard to the Qualifying Interests of the site. A precautionary approach has assumed birds recorded near here occurred within field C4[10]. The majority of this field is contained within the footprint of proposed residentially zoned lands under the LAP, with the exception of a linear strip along the east which will be retained as part of open space. Field C4 contained significant bird populations of one wading bird species which is a qualifying interest for both North Bull Island SPA and Broadmeadow Estuary SPA (Black-tailed Godwit *Limosa limosa)*. Small numbers of Redshank *Tringa totanus* and Curlew *Numenius arquata* were also recorded but are not considered significant as illustrated by the data analysis and discussion below. As a precautionary measure, both Godwit and Redshank recorded in the context of the LAP have been considered to belong to either the North Bull Island or Broadmeadow Estuary populations. Other waterbirds were recorded within these fields (e.g. Lapwing *Vanellus*

7 Excluding outlying peak from 2001
8 IWeBS data from 2001 to 2010. Sourced from BWI.
9 The SPA is designated for holding 1% of the international flyway population of Brent (700 birds – see Boland & Crowe, 2012). An SPA may hold more or less than this number but must hold at least this number averaged for a five year period to qualify.
10 It is assumed that birds were counted in field C4 during additional 2012 surveys by Birdwatch Ireland. Counts were provided for an area including C4, but were not presented by individual field.

*vanellus*, Snipe *Gallinago gallinago)*. With the exception of Lapwing (peak 1,000, and several hundred regularly recorded), all other species occurred in small numbers. None of these other species are qualifying interests of nearby SPAs, and they are therefore not assessed below.

Black-tailed Godwit may have been recorded in field C4 on 5 occasions over 13 survey in winter 2011/2012 [10]. Maximum or 'peak' numbers of 180 birds were recorded in field C4, or 30% of the minimum population for which North Bull SPA is designated[11] (Mean of 25 birds = 4% of SPA Population).

Redshank may have been recorded in field C4 in small numbers on 9 of 13 survey dates [10]. Maximum or 'peak' numbers of 25 birds were recorded in field C4, or c.0.6 % of the Redshank population for which North Bull SPA is designated[12] (Mean of 8 birds = <0.5% of SPA Population).

Curlew may have been recorded in field C4 on 8 of 13 survey dates. Maximum or 'peak' numbers of 8 birds were recorded, or c.1.5 % of the Curlew population for which North Bull SPA is designated[13] (Mean of 1 bird = <0.2% of SPA Population).

A robust assessment of the potential impact to SPA populations arising from the loss of these fields requires an analysis of Curlew, Black-tailed Godwit and Redshank trends on local and national scales.

Black-tailed Godwit populations nationally have increased substantially since the mid 1990's (long-term change +63%; short-term change +53% (Boland & Crowe, 2012)). In Dublin Bay, the population has declined by 60% since 2001[14]. Godwit numbers from the Baldoyle Bay SPA[15] during a similar period have shown a slight increase (+6%). The species is an Amber-listed bird species regarded to be of medium conservation concern in Ireland (Lynas et al., 2007). Overall, Godwit populations are increasing nationally but declining locally. The species was occasionally present in field C4 in moderate numbers.

Redshank populations nationally have increased substantially since the mid 1990's, but historic increases have recently levelled off (long-term change +47%; short-term change 1% (Boland & Crowe, 2012)). In Dublin Bay[16], the Redshank population has doubled since 2001 (+210%) [14]. Locally, numbers at Baldoyle SPA have slightly increased there since 2001 (+9% change)[14]. At Malahide/Broadmeadow Estuary SPA the species has shown an increase of 21% since 2001 [14]. The small, resident, breeding Redshank population is a Red-listed species regarded to be of high conservation concern in Ireland (Lynas et al., 2007), but the large migratory wintering/passage population is in fact nationally increasing as already described. Overall, wintering Redshank populations are stable nationally and increasing locally. The species was present in field C4 in very low numbers.

Wintering Curlew populations have steadily declined since the 1980's, (long-term change -41%; short-term change 23% (Boland & Crowe, 2012)). In Dublin Bay, the Curlew population has been relatively stable since 2001 (+10%)[14]. The breeding Curlew population is Red-listed and of high conservation in Ireland due to rapid declines, but the wintering population is of medium

[11] The SPA is designated for holding 1% of the international flyway population of Black-tailed Godwits (610 birds – see Boland & Crowe, 2012). An SPA may hold more or less than this number but must hold at least this number averaged for a five year period to qualify.

[12] The SPA is designated for holding 1% of the international flyway population of Redshank (3900 birds – see Boland & Crowe, 2012).

[13] The SPA is designated for holding 1% of the international flyway population of Curlew (550 birds – see Boland & Crowe, 2012).

[14] IWeBS data from 2001-2009 Sourced from Boland and Crowe 2012.

[15] IWeBS data from 2001 to 2010. Sourced from BWI 2013.

[16] North Bull SPA and Sandymount Strand SPAs combined

conservation concern (Lynas et al., 2007). Overall, wintering Curlew populations are declining nationally and stable locally. The species was present in field C4 in extremely low numbers.

The open space management plan of the 'quiet lands' should take account of grass length preference of Black-tailed Godwit when considering mowing/grazing regimes of the quiet zone (Redshank and Curlew populations not significant). Feeding fields are deemed suitable if they have a mean sward height <10cm (Milsom et al., 1998). The location of the quiet zone already satisfies two other key criteria in relation to Black-tailed Godwit habitat preference in that fields are not overly disturbed by busy roadway (Reijnen *et al.,* 1996), given the single national roadway on one side of the field only. Secondly, the large open nature of the quiet zone fields are uninterrupted by field boundary hedging which is apparently a preference of Godwit (Milsom *et al.*, 1997), presumably as this affords more uninterrupted views of potential predators.

To conclude, no decreases in favourable conservation status of Redshank, Curlew or Black-tailed Godwit are predicted, and no impacts to SPA site integrity will arise as a result of habitat loss under the LAP. This has been informed by the best available scientific information including a) bird numbers using fields as a proportion of SPA populations, b) national and local population trends, c) national conservation status, and d) taking account of the seasonal fencing and management measures of fields in the south of the LAP lands for waterbirds (the 'quiet zone').

### 3.4.4 LAP Protective Objectives

As previously noted, a Policy Guidance Note was prepared at the commencement of the preparation of the LAP to help those preparing the Plan in avoiding adverse impacts on Natura 2000 sites (Appendix A). The Guidance Note provided advice to the Council that would allow impacts on Natura 2000 sites to be avoided or mitigated by amending Policies, adding caveats or protective Policies.

The AA process involved the analysis of the initial drafts of objectives and where necessary, the inclusion of mitigation policies to ensure that the implementation of the Plan would not result in adverse impacts on Natura 2000 sites.

The LAP, as a strategic planning document within the overall planning hierarchy, lacks the finer details for each project/plan or development that will be proposed for lands within the LAP. In order to combat potential issues that may arise at the project/plan stage, "protective" objectives were devised whose specific function was to protect the integrity of the sites and the environmental conditions underpinning them. These "protective" objectives of the LAP are listed below in Table 6.

**Table 6: Protective Objectives of the LAP**

| Chapter/ Section/Title | Objective Code | Policy/Objective/Theme |
|---|---|---|
| 5.1: Green Infrastructure and Landscape Strategy | Objective GI3 | Comply with the objectives relating to biodiversity, open space and green infrastructure set out in the current Fingal Development Plan |
| 5.2: Biodiversity Conservation and Extension of the Biodiversity Network | Objective C1 | Maintain qualifying interest habitats and species within the Baldoyle Bay SPA and SAC and other European Sites where relevant at favourable conservation condition to ensure the ecological integrity of Baldoyle Bay and further ensure that the LAP lands continue to provide supporting function for the Qualifying Interest species. |

| | | |
|---|---|---|
| 5.2: Biodiversity Conservation and Extension of the Biodiversity Network | Objective C2 | Protect and conserve the natural habitats and designated status of the Sluice River Marsh and ensure that salmonid waters constraints apply to all development within the plan lands. |
| 5.5.2: Implementation of Habitat Protection Measures | Objective GI6 | Require Appropriate Assessment (AA) Screening for any development, plan or project including changes to the landscape, within the Ecological Buffer Zone. This will include any changes to existing or future layout, materials or management. |
| 5.5.2: Implementation of Habitat Protection Measures | Objective GI7 | Protect and enhance the function of the ecological buffer zone through appropriate mitigation and management measures as set out in the Green Infrastructure and Landscape Strategy. |
| 5.5.2: Implementation of Habitat Protection Measures | Objective GI8 | Promote the conservation and enhancement of biodiversity having regard to the objectives of the Fingal Development Plan, the Fingal Biodiversity Action Plan and the Fingal Heritage Plan while allowing for appropriate development, access and recreational activity. |
| 5.5.2: Implementation of Habitat Protection Measures | Objective GI11 | Require measures for the protection and management of local biodiversity features to be submitted in any development proposals. This shall include details of how and where any surplus fill from the plan lands is to be disposed. |
| 5.5.2: Implementation of Habitat Protection Measures | Objective GI12 | Implementation of agreed habitat protection measures as set out in Section 5.2.1 of the LAP and the subsequent transfer of zoned open space lands to Fingal County Council to be completed prior to the commencement of development. |
| 5.5.2: Implementation of Habitat Protection Measures | Objective GI13 | Ensure that sufficient information is provided as part of development, plan or project proposals to enable Appropriate Assessment screening to be undertaken and to enable a fully informed assessment of impacts on biodiversity to be made. |

### 3.4.5 Conservation Objectives

The EC Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the European site as indicated by its Conservation Objectives. At the time of the preparation of the LAP, the National Parks and Wildlife Service had prepared generic objectives for four cSACs and three SPAs for which potential significant adverse impacts existed on the integrity of the sites from the LAP alone and/or in combination with other plans or projects.

The generic objective for each cSAC is as follows:

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

These Annex I habitats and Annex II species for which each European Site is designated are listed in Appendix C. Favourable Conservation status/condition 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*".

"Favourable" is defined as:

"*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*".

For SPAs, most have the following generic objective:

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

The main potential impacts of the LAP on the generic conservation objectives of seven European Sites (Malahide Estuary cSAC (000205), North Dublin Bay cSAC (000206), Howth Head cSAC (000202), South Dublin Bay cSAC (000210), Malahide Estuary SPA (004025), North Bull Island SPA (004006) and South Dublin Bay SPA (004024)) include an increase in local residential population potentially resulting in increased disturbance to wintering bird species (including increased dog walkers), loss and/or alteration of Annex I habitat and/or feeding habitat due to an alteration in management practices, trampling and a decrease in water quality mainly due to an increase on pressure on waste water treatment facilities. A combination of the policy guidance note, creation of policies with an awareness of ecological sensitivities and "protective" measures in Table 6 will ensure the protection of the conservation status/condition of the qualifying interests.

Site-specific Objectives have been prepared for Baldoyle Bay cSAC and SPA. These Conservation Objectives are more explicit and relate to each of the qualifying interests. The Conservation Objectives for Baldoyle Bay cSAC and Baldoyle Bay SPA relevant to this Assessment have been reproduced in Table 7 and 8 below respectively to show the potential impact of the Plan on these objectives, prior to and post mitigation.

| Table 7: Baldoyle cSAC Conservation Objectives and Targets and how they may be affected by LAP | | | | |
|---|---|---|---|---|
| **Attribute** | **Measure** | **Target** | **Potential impact of LAP on target without mitigation** | **Potential impact of LAP on target with mitigation** |
| **Mudflats and Sandflats not Covered by Seawater at Low Tide [1140]** | | | | |
| Community distribution | Hectares | Conserve the following community types in a natural condition: Fine sand dominated by *Angulus tenuis* community complex; and Estuarine sandy mud with *Pygospio elegans* and *Tubificoides benedii* community complex | Habitat within LAP lands zoned for amenity. Pollution may threaten ecological integrity of communities. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address the potential for pollution and effects on mudflats. |
| **Salicornia and other annuals colonising mud and sand [1310]** | | | | |
| Habitat area | Hectares | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: Baldoyle- 0.383ha. | Habitat located outside of LAP footprint. Alteration by proposed SUDS, surface water run-off may result in erosion of habitat. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on habitat area. |
| Habitat distribution | Occurrence | No decline, or change in habitat distribution, subject to natural processes. | Habitat located outside of LAP footprint. Alteration by proposed SUDS, surface water run-off may result in erosion of habitat. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on habitat distribution. |
| Physical structure: sediment supply | Presence/ absence of physical barriers | Maintain natural circulation of sediments and organic matter, without any physical obstructions | Habitat located outside of LAP footprint. Alteration by proposed SUDS, surface water run-off may result in erosion of habitat. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on sediment supply. |

| | | | | |
|---|---|---|---|---|
| Physical structure: creeks and pans | Occurrence | Maintain creek and pan structure, subject to natural processes, including erosion and succession | Habitat located outside of LAP footprint. Alteration by proposed SUDS, surface water run-off may result in erosion of habitat. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on creeks and pans. |
| Physical structure: flooding regime | Hectares flooded; frequency | Maintain natural tidal regime | Habitat located outside of LAP footprint. No barriers to the natural tidal regime envisaged. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on flooding regime. |
| Vegetation structure: zonation | Occurrence | Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession | Habitat located outside of LAP footprint. Alteration by proposed SUDS, surface water run-off may result in erosion of habitat. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation zone. |
| Vegetation structure: vegetation height | Centimetres | Maintain structural variation within sward | Habitat located outside of LAP footprint. Alteration of proposed SUDS, surface water run-off may impact upon vegetation substrate. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation structure. |
| Vegetation structure: vegetation cover | Percentage cover at a representative sample of monitoring stops | Maintain more than 90% of area outside creeks vegetated | Habitat located outside of LAP footprint. Alteration of proposed SUDS, surface water run-off may impact upon vegetation substrate. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation cover. |
| Vegetation composition : typical species and sub-communities | Percentage cover | Maintain the presence of species-poor communities with typical species listed in the Saltmarsh Monitoring Project (McCorry and Ryle, 2009) | Habitat located outside of LAP footprint. Pollution and/or alteration of flow may negatively impact vegetation composition. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation composition. |

| | | | | |
|---|---|---|---|---|
| Vegetation structure: negative indicator species- *Spartina anglica* | Hectares | No significant expansion of Common cordgrass (*Spartina anglica*), with an annual spread of less than 1% | Habitat located outside of LAP footprint. Pollution and/or alteration of flow may negatively impact vegetation composition. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on expansion of *Spartina anglica*. |
| **Atlantic Salt Meadows (Glauco-Puccinellietalia) [1330]** | | | | |
| Habitat area | Hectares | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: Baldoyle - 11.98ha | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP[17]. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and management of Murragh Marsh, within LAP lands.. |
| Habitat distribution | Occurrence | No decline, or change in habitat distribution, subject to natural processes | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on habitat distribution. |
| Physical structure: sediment supply | Presence/ absence of physical barriers | Maintain natural circulation of sediments and organic matter, without any physical obstructions | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on sediment supply. |
| Physical structure: creeks and pans | Occurrence | Maintain/restore creek and pan structure to develop, subject to natural processes, including erosion and succession | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on creeks and pans. |

[17] Based on habitat mapping as per NPWS conservation objectives (http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO000199.pdf)

| | | | | |
|---|---|---|---|---|
| Physical structure: flooding regime | Hectares flooded; frequency | Maintain natural tidal regime | Habitat within and outside of footprint of LAP lands. No alteration of natural tidal regime envisaged. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on flooding regime. |
| Vegetation structure: zonation | Occurrence | Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat structure. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation zone. |
| Vegetation structure: vegetation height | Centimetres | Maintain structural variation within sward | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation substrate. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation structure. |
| Vegetation structure: vegetation cover | Percentage cover at a representative sample of monitoring stops | Maintain more than 90% of the area outside of the creeks vegetated | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation cover. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation cover. |
| Vegetation composition : typical species and sub-communities | Percentage cover at a representative sample of monitoring stops | Maintain range of sub- communities with typical species listed in the Saltmarsh Monitoring Project (McCorry and Ryle, 2009) | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation composition. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation composition. |
| Vegetation structure: negative indicator species- *Spartina anglica* | Hectares | No significant expansion of Common cordgrass (Spartina anglica), with an annual spread of less than 1% | Habitat within and outside of footprint of LAP lands. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation composition. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on expansion of *Spartina anglica*. |

| Mediterranean Salt Meadows (Juncetalia maritimi) [1330] | | | | |
|---|---|---|---|---|
| Habitat area | Hectares | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: Baldoyle - 2.64ha. | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP[18]. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on habitat area. |
| Habitat distribution | Occurrence | No decline, or change in habitat distribution, subject to natural processes. | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on habitat distribution. |
| Physical structure: sediment supply | Presence/ absence of physical barriers | Maintain natural circulation of sediments and organic matter, without any physical obstructions | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on sediment supply. |
| Physical structure: creeks and pans | Occurrence | Maintain creek and pan structure, subject to natural processes, including erosion and succession | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat area. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on creeks and pans. |
| Physical structure: flooding regime | Hectares flooded; frequency | Maintain natural tidal regime | Habitat within and outside of footprint of LAP lands. No alteration of natural tidal regime envisaged. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on flooding regime. |

[18] Based on habitat mapping as per NPWS conservation objectives (http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO000199.pdf)

| | | | | |
|---|---|---|---|---|
| Vegetation structure: zonation | Occurrence | Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may reduce habitat structure. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and potential effects on vegetation zone. |
| Vegetation structure: vegetation height | Centimetres | Maintain structural variation within the sward | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation substrate. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and River Mayne and potential effects on vegetation structure. |
| Vegetation structure: vegetation cover | Percentage cover at a representative sample of monitoring stops | Maintain more than 90% of the area outside of the creeks vegetated | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation cover. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and River Mayne and potential effects on vegetation cover. |
| Vegetation composition: typical species and sub-communities | Percentage cover at a representative sample of monitoring stops | Maintain range of sub- communities with typical species listed in the Saltmarsh Monitoring Project (McCorry and Ryle, 2009) | Habitat within and outside of footprint of LAP lands. No direct loss of area due to LAP. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation composition. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and River Mayne and potential effects on vegetation composition. |
| Vegetation structure: negative indicator species- *Spartina anglica* | Hectares | No significant expansion of Common cordgrass (*Spartina anglica*), with an annual spread of less than 1% | Habitat within and outside of footprint of LAP lands. Alteration of flooding regime, habitat management, disturbance, grazing, trampling and/or surface water run-off may impact upon vegetation composition. | Potential significant impacts avoided through full implementation of objectives, including "protective" measures (see Table 6). Objectives address alteration of natural processes and River Mayne and potential effects on expansion of *Spartina anglica*. |

**Table 8: Baldoyle SPA Conservation Objectives and Targets and how they may be affected by LAP**

| Attribute | Measure | Target | Potential impact of LAP on target without mitigation | Potential impact of LAP on target with mitigation |
|---|---|---|---|---|
| **Brent Goose *Branta bernicla hrota* [A046]** | | | | |
| Population trend | Percentage change | Long term population trend | Reduction of wintering feeding area, increase levels of disturbance, reduction in feeding time, increase in energy expenditure to locate suitable resources possibly resulting in a reduction in form. | Potential significant impacts avoided through implementation of objectives, including "protective" measures (see Table 6). Cognisance given to management of retained agricultural and grassland areas within lands to provide for feeding habitat. |
| Distribution | Range, timing and intensity of use of areas | No significant decrease in the range, timing and intensity of use of areas by Light-bellied Brent geese, other than that occurring from natural patterns of variation | Loss of significant area of feeding habitat including increase of area designated for residential development or other development types. | Potential significant impacts avoided through implementation of objectives, including "protective" measures (see Table 6). Cognisance given to management of retained agricultural and grassland areas within lands to provide for feeding habitat. |
| **Shelduck *Tadorna tadorna* [A048]** | | | | |
| Population trend | Percentage change | Long term population trend stable or increasing | No potential impacts envisaged | No potential impacts envisaged |
| Distribution | Range, timing and intensity of areas | No significant decrease in the range, timing or intensity of use of areas by Shelduck, other than that occurring from natural patterns of variation | No potential impacts envisaged | No potential impacts envisaged |
| **Ringed Plover *Charadrius hiaticula* [A137]** | | | | |
| Population trend | Percentage change | Long term population trend stable or increasing | No potential impacts envisaged | No potential impacts envisaged |
| Distribution | Range, timing and intensity of areas | No significant decrease in the range, timing or intensity of use of areas by Ringed plover, other than that occurring from natural patterns of variation | Reduction in feeding grassland | Potential significant impacts avoided through implementation of objectives, including "protective" measures (see Table 6). Cognisance given to management of retained agricultural and grassland areas within lands to provide for feeding habitat. |
| **Golden Plover *Pluvialis apricaria* [A140]** | | | | |

| | | | | |
|---|---|---|---|---|
| Population trend | Percentage change | Long term population trend stable or increasing | No potential impacts envisaged | No potential impacts envisaged |
| Distribution | Range, timing and intensity of areas | No significant decrease in the range, timing or intensity of use of areas by Golden plover, other than that occurring from natural patterns of variation | Reduction in feeding grassland | Potential significant impacts avoided through implementation of objectives, including "protective" measures (see Table 6). Cognisance given to management of retained agricultural and grassland areas within lands to provide for feeding habitat. |
| **Grey Plover *Pluvialis squatarola* [A141]** | | | | |
| Population trend | Percentage change | Long term population trend stable or increasing | No potential impacts envisaged | No potential impacts envisaged |
| Distribution | Range, timing and intensity of areas | No significant decrease in the range, timing or intensity of use of areas by Grey plover, other than that occurring from natural patterns of variation | Reduction in feeding grassland | Potential significant impacts avoided through implementation of objectives, including "protective" measures (see Table 6). Cognisance given to management of retained agricultural and grassland areas within lands to provide for feeding habitat. |
| **Bar-tailed Godwit *Limosa lapponica* [A157]** | | | | |
| Population trend | Percentage change | Long term population trend stable or increasing | No potential impacts envisaged | No potential impacts envisaged |
| Distribution | Range, timing and intensity of areas | No significant decrease in the range, timing or intensity of use of areas by Bar-tailed godwit, other than that occurring from natural patterns of variation | No potential impacts envisaged | No potential impacts envisaged |
| **Wetlands [A999]** | | | | |
| Habitat area | Hectares | The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 263ha, other than that occurring from natural patterns of variation | No reduction in extent of SPA or other wetland habitat | Potential significant impacts avoided through implementation of objectives, including "protective" measures (see Table 6). Cognisance given to long-term protection of Murragh Marsh, within LAP lands. |

### 3.5 In-combination Impacts with other Plans and Projects

The EC Habitats Directive and the Habitats Regulations (2011) require that the impacts on European Sites be assessed from the plan or project in question and also in the presence of other plans and projects that could affect the same or other European Sites.

The Appropriate Assessment process identified the plans that could act in combination with the Local Area Plan to pose likely significant effects on European Sites within the study area and its environs. This section identifies if these plans have undergone an Appropriate Assessment themselves as it is assumed that if a plan has been adopted following an AA then it cannot pose likely significant adverse effects on European Sites.

The cumulative/in-combination impact assessment focused on the County Development Plan, major infrastructural projects/plans and surrounding Local Area Plans that have the highest potential to affect the same Natura 2000 sites which could be affected by Portmarnock South LAP.

The Planning Scheme must comply with higher level strategic actions and will, in turn, guide lower level decisions such as approving or refusing planning applications. Relevant plans and programmes have been identified and are summarised below:

- National Spatial Strategy 2002-2020

The National Spatial Strategy (NSS) 2002-2020 established a detailed sustainable planning framework for strategic spatial planning to ensure development is targeted at the most appropriate locations. The NSS places emphasis on the creation of high-quality living environments through urban design and the integration of social and community amenities.

Whilst it did not undergo any formal Appropriate Assessment under the EC Habitats Directive, its relevance to the protection of Natura sites is embodied within several references to the protection of protected species and habitats. Assuming that all plans and projects under the NSS comply with its provisions then there would be no impacts on European Sites.

- Smarter Travel – A Sustainable Transport Future (2009)

"Smarter Travel" is the Government's action plan to free towns and cities from traffic congestion, substantially cut $CO_2$ emissions, encourage car-based commuters to leave their cars at home, and encourage a shift toward walking, cycling and greater public transport usage.

It does not appear to have undergone any type of Appropriate Assessment and it does not seem to directly link to projects that could impact on European Sites. It is not anticipated that there is a risk of interacting with any of the aspects of the LAP that would affect the conclusions made in this NIR.

- Greater Dublin Area Transport Strategy – 2030 vision

This Draft Transport Strategy of the National Transport Authority establishes appropriate policies and transport measures that will support the Greater Dublin Area in meeting its potential, as a competitive, sustainable city-region with a good quality of life for all. By improving the public transport network, limited strategic road building and demand management measures to meet the targets of Smarter Travel.

An Appropriate Assessment/Habitats Directive Assessment was carried out and noted potential for impacts on South Dublin Bay cSAC with indirect impacts on North Dublin Bay cSAC, South Dublin Bay cSAC and North Bull Island SPA. Where necessary, provisions were made for protecting these sites at project-level. It is not anticipated that there is a risk of these proposals interacting with any of the aspects of the LAP that would affect the conclusions made earlier.

- Regional Planning Guidelines for the Greater Dublin Area 2010- 2022

Regional planning authorities are required, under the Planning and Development (Regional Planning Guidelines) Regulations 2003 (SI No. 175 of 2003), to draw up Regional Planning Guidelines (RPGs), long term strategic planning frameworks, for their relevant region. An Appropriate Assessment was undertaken with mitigation measures in the form of amendments to the strategic policy and recommendations provided to ensure compliance with the Habitats Directive Article 6 requirements by integrating measures for the protection of European Sites into all policy areas covered by the proposed plan.

- Fingal County Development Plan 2011-2017

The current Fingal County Development Plan identifies the development strategy for Portmarnock to "*Consolidate, define and enhance the existing urban form and retain amenities in line with the Urban Centre Strategy for Portmarnock (2009). The long-term development area for Portmarnock is based on the existing development area. It is intended to encourage more intensive commercial development, to provide good linkages to lands at south Portmarnock adjacent to the rail line, and to rejuvenate the existing village core".* The Plan's objectives include:

1. *Develop Portmarnock as a centre providing services for both the residential population and for tourists.*
2. *Implement the Portmarnock Urban Centre Strategy including the design guidelines for Portmarnock's urban centre.*
3. *Preserve the identity of the town by securing its physical separation from Malahide by Greenbelts.*
4. *Improve the physical character and environment of the area so that it can act as a service, social, recreational and tourist centre.*
5. *Carry out an environmental improvement scheme in the village.*
6. *Protect and manage the flood plain of the Sluice River to the south of Portmarnock and ensure that its integrity as a natural habitat is maintained.*

In Section 2.5 the AA of the plan noted that there was *"potential for some elements of the Development Plan to result in negative impacts on Natura 2000 sites should they be implemented following adoption of the Development Plan;* however it was considered that "*the Council's commitments to the Habitats Directive and Appropriate Assessment that are presented in the Development Plan, including the mitigation measures in the form of amendments to the Development Plan proposed in this Report, will be sufficient to prevent inappropriate development that could result in significant negative impacts on the conservation objectives of Natura 2000 sites from occurring within the boundaries of the Natura 2000 sites, or adjacent to such sites".*

An overarching objective was also included at the end of the "Fulfilling the Requirements Of The Habitats Directive" Section 1.1 as follows: *Ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening*. Additional mitigatory objectives were included within the plan to ensure Fingal County Council 'take full account of the requirements of the Habitats and Birds Directives, as they apply both within and without Natura 2000 sites in the performance of its functions' (Objective BD06). Other mitigatory objectives to ensure compliance with the Habitats Directive include (but are not limited to):

- *Objective BD07 - that Fingal will take full account of the objectives and management practices proposed in any management plans for Natura 2000 sites in and adjacent to Fingal published by DEHLG.*
- *Objective BD09 - requiring that NIS be compiled by a qualified ecologist in line with Department Guidance.*
- *Objective BD12 - requiring strict protection for Natura 2000 sites.*
- *Objective BD13 - requiring AA for any plan or project with potential to impact either alone or in combination*
- *Objective BD14 - requiring a NIS for developments likely to have significant direct or indirect impacts on any Natura 2000 sites.*

- Dublin City Development Plan 2011-2017

Dublin City Council has provided specific policies in relation to the protection and preservation of designated sites under the EC Habitats Directive and the EU Birds Directive. The Appropriate Assessment process for the Dublin City Plan resulted in a conclusion that mitigatory measures identified in Stage 2 of the AA process are adequate to ensure that the integrity of sites in the Natura 2000 network will not be receiving significant effects as a result of potential impacts of the policies and objectives contained within the Plan.

- Clongriffin–Belmayne (North Fringe) Local Area Plan 2013-2019

Some of the policies of the Clongriffin–Belmayne (North Fringe) Local Area Plan 2013-2019 are discussed previously. The NIR prepared for the LAP concludes by stating that the "*the Assessment process for this report has resulted in a conclusion that mitigatory measures identified in Stage 2 are adequate to ensure that the integrity of the Natura 2000 sites will not be receiving significant effects as a result of potential impacts of the policies and objectives contained within the Clongriffin-Belmayne Local Area Plan*".

- Baldoyle - Stapolin Local Area Plan 2013-2019

Baldoyle-Stapolin LAP was developed in tandem with Portmarnock South LAP, enabling potential cumulative issues to be addressed during the development of both plans. This process resulted in the creation of policies and objectives (engrained into both LAPs) aimed at the protection of Baldoyle Bay ecosystem and the protected species and habitats it supports. A separate AA was undertaken for Baldoyle - Stapolin LAP from which no significant adverse impact on the integrity of any European Site was identified, alone and or in-combination with other plans and/or projects.

### 3.6 Summary of Policies Protecting Individual European Sites.

Table 9 below show a summary of the Objectives contained within the Portmarnock South Local Area Plan which act cumulatively to protect the individual European Sites. This list does not cover all of the Objectives of a protective or mitigatory nature but identifies those that address specific sensitivities of the European sites.

**Table 9 Objectives to Protect Individual European Sites**

| Site | Sensitivity/threat | Mitigation Objective |
|---|---|---|
| Baldoyle Bay cSAC (000199) | • Encroaching development at the Mayne River;<br>• Water pollution from inflowing rivers and poor sewage network; | **C1, C2, GI3, GI5, GI6, GI7, GI8, GI10, GI11, GI12, GI13, GI14, GI21, GI22, GI28, GI30, GI31, GI36, GI37, GI38, GI39, GI40, GI41, GI42, GI43, PL1, TM8, TM10,** |

| Table 9 Objectives to Protect Individual European Sites | | |
|---|---|---|
| **Site** | **Sensitivity/threat** | **Mitigation Objective** |
| | • Bait digging and controlled wildfowling;<br>• Invasion by *Spartina* species;<br>• Disturbance to bird species;<br>• Overgrazing by livestock | **TM15, UD1, T16, T17, T10, WW2, WW4, SW2, SW7, SW12, FRM1, WQ1, WQ2, WQ3, GW1, WM5, WM7, WM8, SU7, SP1, SP2.** |
| Malahide Estuary cSAC (000205) | • Recreational activities<br>• Water pollution<br>• Infilling<br>• Nutrient enrichment from the Broadmeadow River and sewage plants<br>• Disturbance<br>• Development | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM15, WQ1, SU7.** |
| North Dublin Bay cSAC (000206) | • Recreational activities<br>• Grazing (rabbits)<br>• Water abstraction<br>• Water pollution<br>• Oil spillages from shipping<br>• Commercial bait digging | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM15, WW2, WW4, WQ1, SU7.** |
| Howth Head cSAC (000202) | • Controlling fire risk<br>• Controlling visitor numbers<br>• Air pollution<br>• Overfishing affecting prey abundance | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM15, WQ1, SU7.** |
| South Dublin Bay cSAC (000210) | • Land take for Infrastructure/ Industry<br>• Water quality/pollution<br>• Recreational Activities<br>• Commercial Bait Digging<br>• Disturbance | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM15, WW2, WW4, WQ1, SU7.** |
| Baldoyle Bay SPA (004016) | • Disturbance from dog walkers<br>• Infilling<br>• Nutrient enrichment from inflowing rivers and sewage plants<br>• Spartina may be causing unfavourable interactions with the intertidal and salt marsh habitats | **C1, C2, GI3, GI5, GI6, GI7, GI8, GI10, GI11, GI12, GI13, GI14, GI21, GI22, GI28, GI30, GI31, GI36, GI37, GI38, GI39, GI40, GI41, GI42, GI43, PL1, TM8, TM10, TM15, UD1, T16, T17, T10, WW2, WW4, SW2, SW7, SW12, FRM1, WQ1, WQ2, WQ3, GW1, WM5, WM7, WM8, SU7, SP1, SP2.** |
| Malahide Estuary SPA (004025) | • Reclamation for industrial and/or infrastructural purposes.<br>• Infilling<br>• Landfill site is also a major source of pollution<br>• Untreated waste<br>• Agricultural nutrient enrichment<br>• Water quality<br>• Impacts on food resources<br>• Disturbance from recreational activities<br>• Disturbance from dog walkers | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM15, WQ1, SU7.** |
| North Bull Island SPA (004006) | • Pollution (Shipping)<br>• Commercial Bait Digging<br>• Recreational Activities<br>• Water Sports | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM16, WW2, WW4, WQ1, SU7.** |
| South Dublin Bay and River Tolka Estuary | • Land take and Habitat Degradation<br>• Pollution<br>• Commercial Bait Digging | **C1, GI3, GI8, GI11, GI13, GI21, GI31, TM15, WW2, WW4, WQ1, SU7.** |

| Table 9 Objectives to Protect Individual European Sites | | |
|---|---|---|
| **Site** | **Sensitivity/threat** | **Mitigation Objective** |
| SPA (004024) | • Recreational Activities | |

### 3.7 Responsibilities for implementing mitigation policies

The responsibility for implementing the Portmarnock South Local Area Plan lies solely with the Planning Authority through the planning consent process. Applicants who intend to develop within the area are obliged to ensure that their application is consistent with the Policies and Objectives within the Plan and County Development Plan.

Applicants must also provide information to allow the Planning Authority to screen the application and assess if the next stage (Stage 2) of the AA process is required.

### 3.8 Monitoring the Implementation of Objectives

Whilst there is no legal requirement to monitor the outputs of the AA process, there is an obligation to monitor the implementation of the Local Area Plan through the E.C. SEA Directive as implemented in Ireland. Contingency measures may have to be applied if there is evidence that Objectives cannot be implemented without giving rise to adverse effects.

## 4 Screening of Submissions and Manager's Recommendations made on the Draft Plan

The Draft Portmarnock South Local Area Plan 2013-2019, together with accompanying Strategic Environmental Assessment and Draft Natura Impact Report, was put on public display from 10th April to 23rd May 2013. Written submissions or observations with respect to the Draft LAP and/or Strategic Environmental Assessment and/or Appropriate Assessment were invited from members of the public and other interested parties.

Following completion of the public consultation period for the Draft Plan, a Manager's Report was prepared on the submissions summarising the issues raised, detailing the Manager's response to them and outlining recommendations to the Draft LAP. A total of 12 submissions were received.

Submissions underwent a screening process by the AA team to see which submissions (if any) had implications for European Sites. The assessment of the amendments recommended by the Manager, on foot of the submissions (contained within the Manager's Report to the Members), are set out in Appendix F. In addition the Manager's responses to the Motions put forward by the Members to the Draft LAP are set out in Appendix G.

The Manager's Report, together with a SEA/AA screening of each proposed amendment, was considered by the Elected Members of Fingal County Council at the Council meeting on the 8th July 2013. Based on the screening exercise for SEA and AA, the Planning Authority determined, in accordance with the requirement of Section 12 (7)(aa) of the Planning and Development Act 2000 (as amended), that there were no likely significant effects on the environment as a result of implementing the proposed amendments to the Draft Plan.

## 5 Conclusion of Stage 2 Appropriate Assessment

This Natura Impact Report records the decisions that were taken during the preparation of the Portmarnock South Local Area Plan 2013-2019. It determined that, assuming the successful implementation of the Policies and Objectives, there will be no likely significant effects on European Sites, within the LAP lands and its environs by the Local Area Plan in isolation or in combination with other Plans and Projects.

## 6 References

**Benson, L., (2009).** *Use of Inland Feeding Sites by Light Bellied Brent Geese in Dublin 2008-2009*. UCD, Dublin.

**Biodiversity Data Centre** (2012). *Mapping Centre Viewer*. Available online at http://maps.biodiversityireland.ie/#/Home. (Accessed September 2011).

**Boland, H. and Crowe, O.** (2012). *Irish wetland bird survey: waterbird status and distribution 2001/02 – 2008/09.* BirdWatch Ireland, Kilcoole, Co. Wicklow

**Clauseqa, P., Madsen, J., Percival, S., O'Connor D., Anderson, G**. (1998). *Population Development and Changes in Winter Site Use by the Svalbard Light Bellied Brent Goose Branta bernicla hrota 1980-1994*. Biological Conservation (84)157-165.

**DoEHLG** (2010) *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, Rev Feb 2010)

**DoELG (2002).** *National Spatial Strategy for Ireland 2002 – 2020: People, Places and Potential***.**

**DoT** (2009). Smarter Travel – A Sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020. Dublin.

**DoT** (2011). Greater Dublin Area Transport Strategy 2011-2030 vision. Dublin.

**Dublin City Council (2011).** Dublin City Council Development Plan 2011-2017.

**Dublin City Council (2012).** Clongriffin – Belmayne (North Fringe) Local Area Plan 2012-2018.

**Dublin Regional Authority and Mid-East Regional Authority** (2010). *Regional Planning Guidelines for the Greater Dublin Area 2010- 2022.*

**Eastern River Basin District** (2009) *Eastern River Basin District Management Plan 2009-2015*, Available online at http://www.wfdireland.ie/docs/. (Accessed September 2011)

**European Commission** (2000). *Communication from the Commission on the precautionary principle*

**European Commission** (2001) *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General,);

**European Commission** (2000) *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (EC Environment Directorate-General, 2000); hereinafter referred to as "MN2000"

**Environmental Protection Agency** (2012). EPA ENVision Service (internet-based environmental information portal). Available online at: http://maps.epa.ie/internetmapviewer/mapviewer.aspx (Accessed October 2011).

**Fingal County Council** (2006). *Portmarnock Local Area Plan 2005-2011.*

**Fingal County Council** (2010). *Fingal Biodiversity Action Plan 2010-2015.*

**Fingal County Council** (2010). *Fingal Development Plan 2011-2017.*

**Geological Survey of Ireland** (2012). *GSI Datasets Public Viewer*. Available online at http://www.gsi.ie/Mapping.htm. (Accessed 2012).

**Milsom, T.P., Ennis, D.C., Haskell, D.J., Langton, S.D., McKay, H.V., 1998.** *Design of grassland feeding areas for waders during winter: the relative importance of sward, landscape factors and human disturbance*. Biological Conservation 84, 119–129

**McKay. H. V., Langton. S. D., Milsom. T. P., Feare. C. J.** (1996). *Prediction of field use by Brent Geese; An Aid to Management*. Crop Protection. (15-3).

**Nairn, R.** (2012)**.** Ch. 10 of *Ringsend Wastewater Treatment Works Extension Environmental Impact Statement Volume 1.* Chapter 10 produced by Richard Nairn of Natura Consultants on behalf of Dublin City Council.

**National Parks & Wildlife Service** (2010) Circular NPW 1/10 & PSSP 2/10 *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.* (Department of Environment, Heritage and Local Government).

**National Parks & Wildlife Service** (2007). T*he Status of EU Protected Habitats and Species in Ireland*. Volume 1, 2 ,3. Unpublished Reports

**National Parks & Wildlife Service**. NATURA 2000 Data Form. Available online at http://www.npws.ie/. (Accessed December 2012).

**National Parks & Wildlife Service**. Natura 2000 Conservation Objectives. Available online at http://www.npws.ie/. (Accessed December 2012).

**National Parks & Wildlife Service** (2012). Conservation Objectives-Supporting Document (Version 1). Available online at http://www.npws.ie/publications/archive/004016_Baldoyle%20Bay%20SPA%20Supporting%20Doc_V1.pdf (Accessed March 2013).

**Phalan, B. and Nairn, R.G.W. (2007).** *Disturbance to waterbirds in South Dublin Bay*. Irish Birds, 8,

223-230.

**Pierce, S. & Dillon, D.** (2012) *Wintering bird survey of the lands surrounding Baldoyle Estuary. December to February 2011 – 2012*. Report for Fingal County Council. Fingal branch of Birdwatch Ireland. June 2012.

**Reijnen, R., Foppen, R., Meeuwsen, H. (1996).** *The effects of traffic on the density of breeding birds in Dutch agricultural grasslands*. Biological Conservation, 75: 255-260.

**Riddington. R., Hassall. M. & Lane. S. J**. (1997). The Selection of Grass Swards by Brent Geese *Branta b bernicla* : Interactions Between Food Quality and Quantity. Biological Conservation (81) 153-160.

**Robinson, J.A. & Colhoun, K.,** (2006). International Single Species Action Plan for the Conservation of the Light-bellied Brent Goose (East Canadian High Artic population) *Branta bernicla hrota*. AEWA Technical Series No. 11. Bonn. Germany.

**Vickery. J.A., Sutherland. W. J., O'Brien. M., Watkinson. R., Yallop. A.** (1997). *Managing Coastal Grazing Marshes for Breeding Waders and Overwintering Geese: Is there a Conflict?* Biological Conservation (79) 23-34.

**Appendix A**

**Policy Guidance Note For the Protection of Natura 2000 sites** **Rev 1.0**

12th April 2012

## How to use this Policy Guidance Note

This Note has been prepared at the commencement of the preparation of the new Baldoyle-Stapolin and Portmarnock Local Area Plans 2012-2018, to help those preparing the new Plan in avoiding adverse impacts on Natura 2000 sites. It is an advisory note only and not exhaustive in its scope. It can be revised as the Plan is progressed further and more data is analysed.

Section 1 describes the Natura 2000 sites that have the potential to be adversely affected by the LAP's. It lists the types of impacts that could affect each site. These are the impacts that should be avoided.

Section 2 lists the advice for planners on how to avoid impacts on these sites. It is divided into the sections that make up the draft LAP's for ease of reference. Note that this Guidance note only relates to protection of Natura 2000 sites and not ecological features outside of them.

Section 3 provides policy guidance on how to maintain or safeguard specific conditions underpinning site integrity for each Qualifying Feature type found in Baldoyle-Stapolin and Portmarnock and its environs.

## Section 1: Potential Impacts and current threats

As part of the Screening stage in the Appropriate Assessment process, the previous LAP's, consultation with Fingal County Council and existing background documentation on the LAP areas were interpreted as being the background for the Draft LAP's. Potential sources of impacts were identified and linkages between these impacts and the integrity of the Natura 2000 sites within Baldoyle-Stapolin and Portmarnock and its environs were subsequently highlighted. An informal meeting was held with NPWS staff and Fingal County Council on 20th February 2012 where the key issues surrounding each of the Natura 2000 sites were discussed, particularly in the context of current pressures on the Natura 2000 sites. The results of the Screening and this consultation exercise are presented below.

**Table 1 Natura 2000 sites and potential impacts from LAP's**

| Site Name & Code | Qualifying Interests [1] | Possible Impacts arising from the Plan[2] | Specific Issues raised by NPWS (informal consultation) |
|---|---|---|---|
| Baldoyle cSAC (004016) | Annex I habitats for which the sites is designated:<br>• Mudflats and sandflats not covered by seawater at low tide<br>• *Salicornia* and other annuals colonizing mud and sand<br>• *Spartina* swards *Spartinion maritimae*<br>• Atlantic salt meadows *Glauco-Puccinellietalia maritimae*<br>• Mediterranean salt meadows *Juncetalia maritimi* | • Coastal developments can threaten local water quality especially during construction. The site receives pollution from a number of sources, chiefly the inflowing rivers but also an unsatisfactory sewage network (Natura 2000 data form).<br>• Any changes in local water catchments leading to changes in water quality could affect condition of the habitats.<br>• Loss and/or alteration of habitat due to development pressures along the Mayne River. | • Loss Alteration of Coastal habitat including open grassland/salt marsh habitats along the River Mayne. These are known feeding grounds for Brent Geese. Increased population and activity within the area may further reduce attractiveness of area through increased disturbance levels.<br>• Recommend appropriate management of saltmarsh within the cSAC potentially through horse grazing at appropriate stocking levels.<br>• Appropriate Management Plan for local park including management of use of site by local population.<br>• Works required on Mayne River including one way flood value to enable brackish water to enter upstream to ensure long-term maintenance of salt marsh habitat which is currently degrading. |
| Baldoyle SPA (004016) | • Light-bellied Brent Goose *Branta bernicla hrota*<br>• Shelduck *Tadorna tadorna*<br>• Ringed Plover *Charadrius hiaticula*<br>• Grey Plover *Pluvialis squatarola*<br>• Bar-tailed Godwit *Limosa lapponica* | • Coastal developments can threaten local water quality especially during construction. The site receives pollution from a number of sources, chiefly the inflowing rivers but also an unsatisfactory sewage network (Natura 2000 data form).<br>• Increased disturbance to wintering wildfowl from increased population, recreational; activities and domestic animals. This disturbance is a mix of parameters including noise and visual disturbance (e.g. walkers, cyclists etc.).<br>• Reduction in water quality may negatively impact habitat quality on which wintering wildfowl feed. | • Loss Alteration of Coastal habitat including open grassland/salt marsh habitats along the River Mayne. These are known feeding grounds for Brent Geese. Increased population and activity within the area may further reduce attractiveness of area through increased disturbance levels.<br>• Increased population may result in unlicensed shooting of wildfowl in Murragh area.<br>• Increased access to the area with little amenity.<br>• Increased disturbance to wildfowl in the Sluice River Area |

[1] Sourced from Natura 2000 Site Conservation Objectives (www.npws.ie)
[2] Sourced from Natura 2000 Data Form for Natura 2000 site (www.npws.ie); Status of EU Protected Habitats and Species in Ireland (NPWS, 2007).

| Table 1 Natura 2000 sites and potential impacts from LAP's | | | |
|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests [1]** | **Possible Impacts arising from the Plan[2]** | **Specific Issues raised by NPWS (informal consultation)** |
| | | • Loss and/or alteration of coastal habitat (including open grassland areas) may negatively reduce attractiveness of such habitats to wintering wildfowl resulting in them flying further inland for suitable feeding grounds.<br>• Dumping of unregulated waste in coastal habitats | |

## Section 2: Recommendations for each Section in the Development Plan

This section provides some preliminary recommendations to be included as text, policies or objectives in the emerging LAP's.

### 2.1 Policy Context

2.1.1 Include reference to the role of the Council as competent authority for carrying out appropriate assessments under the EC Habitats and Birds Directives. This role applies to the preparation of these Local Area Plans but also to all other plans and projects that may have likely significant effects on the integrity of Natura 2000 sites.

2.1.2 State the LAP's will be consistent with the recommendation contained as mitigation measures in the Habitats Directive Assessment of the Regional Planning Guidelines, Fingal Development Plan 2011-2017, Strategic Environmental Assessment, Fingal Biodiversity Action Plan and the Eastern River Basin District Management Plan.

2.1.3 Highlight the legal requirement that all plans and projects that are proposed as a result of the LAP's should be screened according to Article 6 of the Habitats and an appropriate assessment carried out where necessary. Highlight that policies and objectives in this LAP's may help in determining if a full (Stage 2) Appropriate Assessment is required. There is no need to re-state this requirement throughout the rest of the LAP's as this is now enshrined in law.

### 2.2 Built Environment

2.2.1 Built Environment patterns should be proposed that take account of the indirect effects of local population increases on Natura 2000 sites. This is particularly important with regard to physical disturbance of riparian (riverbanks) habitat and sensitive coastal habitats such as salt marshes. Breeding birds and wildfowl (e.g. overwintering geese) are vulnerable to pedestrian and motorised craft disturbance. Policies that have any locational component should take account of known overwintering sites and should recommend that in any of these areas that wintering bird surveys should be carried out and any relevant proposed developments should be correctly designed to avoid these areas. If areas cannot be avoided, as the spatial extent of the constraints may be too large, then mitigation measures should be proposed such as the provision of feeding habitat elsewhere, location and screening of footpaths and roadways, and design of amenities etc.

2.2.2 Ensure that settlement patterns include the concurrent provision of appropriate services such as recreation, water supply and treatment facilities. The location of such facilities, the resources they use and their ecological impacts can have adverse effects on the integrity of Natura 2000 sites if inadequately designed or located. The location of any lands zoned for development within 100m of the Baldoyle Bay cSAC and SPA, or lands within its floodplain should be scrutinised for their potential for interaction with the Baldoyle Bay ecosystem. Any planning application within these high-risk areas is likely to require a full appropriate assessment (Stage 2 AA). This assessment would have to prove that the development can be constructed and operated:

- Without resulting in runoff of contaminated surface water to the Baldoyle Bay or any of its tributaries;

- Without loss of any salt marsh habitat
- Without causing loss of wintering bird feeding and resting habitat
- Without negatively impacting on habitats within Baldoyle Bay

In some cases this may require avoidance of areas for zoning.

2.2.3 Ensure that any new planning applications that may result in an increase in sewage takes place must only take place if the accepting Wastewater Treatment Plants has the capacity to accommodate extra loadings. Development that would add extra loading to a WWTP that is at or over-capacity and drains into a catchment containing a Natura 2000 site that is dependent on good water quality cannot be promoted. Policies which may wish to do so must be strongly caveated that the WWTP must be upgraded to allow treated effluent meet the water quality standard required by the catchment and the Natura 2000 site, before any additional development takes place. Several local authorities now refuse planning applications on the basis that there is no capacity for sewage treatment. Policies that rely upon good intentions to commit to upgrading plants within the lifetime of the Plan cannot used as mitigation measures, as experience has shown that economic changes can override these intentions. These types of caveats in Plans are no longer acceptable unless there is funding and contractual arrangements in place.

2.2.4 Precautions must also be made for water abstraction if it occurs within the catchment of any of the Natura 2000 sites that rely on water quality and volume. It cannot be assumed that water abstraction is sustainable without the relevant appropriate assessment being carried out.

2.2.5 Similarly precautions must also be made for flood and surface water run-off to ensure they are adequately treated to remove pollution in the form of silt, hydrocarbons and any other pollutants that may decrease water quality in the receiving body, in this case it is likely to be Baldoyle Bay.

## 2.3 Landscape and Heritage

2.3.1 Policies should be included to promote, provide information on and educate the local population on the need to protect Natura 2000 sites. These should also support the need for a network of green infrastructure, including surrounding pNHAs that may help to support the qualifying interest species.

2.3.2 Cognisance should be given to the fact that many protected species are located outside Natura 2000 sites.

2.3.3 Policies should also note that the location of the LAP lands are within a sensitive landscape of the Estuary and tributaries used by many species outside of the Natura 2000 sites. Design should be complementary with elements of the landscape used by protected species respected and maintained where possible e.g. open grasslands for wintering geese.

2.3.4 Policies promoting sensitive landscaping in all developments should be promoted. In order to reduce the risk of spread of non-native flora into Natura 2000 sites and also other areas of nature conservation value, all landscaping proposals should have an emphasis on use of native species. The LAP's should include a list of invasive species that should not be proposed as part of landscaping schemes (refer to the *European Communities (Birds and Natural Habitats) Regulations 2011*).

## 2.4 Population/Demographics

2.4.1 All development should take place with cognisance to population/demographics. As a general rule, specific individual policy proposals are dependent on current and future demographics for all types of development in urban centres will have to have regard to the sensitivities of the Natura 2000 sites. Population and access to sensitive areas must be appropriately managed. In addition regard should be paid to how developments will be sustained by water supply, wastewater treatment facilities and accommodate surface water run-off.

2.4.2 Generally the assessment of impacts housing will take place in response to individual policy proposals. As a general rule, location-specific proposals for housing will have to have regard to the sensitivities of the Natura 2000 sites as indicated in the Screening report. Specific regard should be paid to how the development will be sustained by water supply and wastewater treatment facilities.

2.4.3 Promote careful consideration of the interface between housing areas and surroundings undeveloped areas with respect to the potential for littering, light spill, trampling of sensitive habitats and disturbance of sensitive species.

2.4.4 Recognise that the Fingal coastline is subject to natural geomorphological change and that long shore drift and areas of selective erosion and deposition are natural processes and should not be interfered with unless there are overriding reasons (which may be subject to appropriate assessment). Coastal development should take account of climate change and the interaction between the Natura 2000 qualifying interest habitats and species that may respond to rising seas levels and climatic changes.

## 2.5 Social and Cultural Wellbeing

2.5.1 Policies promoting leisure and recreation should promote use of local open space and avoid forcing populations to the coastal sensitive areas.

2.5.2 For coastal population centres, policies should promote development of off-leash parks and bye-laws controlling dog walking in certain areas of the beaches and strands. Whilst usually unpopular and hard to enforce, it can raise the awareness of the sensitivity of the coastal habitats to disturbance.

2.5.3 Ensure that any policy for creation of recreational areas/centres or amenities considers the qualifying interests of the Natura 2000 sites. In addition all proposals must be subject to an Appropriate Assessment process to ensure no adverse impacts on the Natura 2000 sites.

2.5.4 For policies that promote watersports and use of jet skis, consideration must be made to allocating preferential areas of water for recreation and buoying these in certain seasons to prevent disturbance to birds.

## 2.6 Infrastructure

2.6.1 Infrastructure proposals that have a spatial reference plan should take into the account the sensitivities of the Natura 2000 sites.

2.6.2 A policy of preferring to avoid locating any potentially damaging infrastructure within/through or on the periphery of a Natura 2000 sites is recommended. This may not always be possible (e.g. the R106 dissects the Baldoyle cSAC) and where this is the case then appropriate mitigation may be required.

2.6.3 Specific policy advice is given to the following infrastructure types:

a) Water Supply

- Promote the preferential avoidance of abstraction from Natura 2000 sites unless it can be proven that there are no risks to the integrity of the site (by carrying out an appropriate assessment) highlight the potential of long-range effects of abstraction from both surface and groundwater including sites outside of the LAP's areas.

b) Wastewater treatment
- Include a policy that states that wastewater treatment plants discharging into the coastal Natura 2000 sites are, where required suitably maintained and upgraded in advance of any additional loadings beyond their capacity in order to protect water quality.

c) Flooding
- Avoid a policy of diverting or closed-culverting watercourses or drainage ditches as flood relief measures in and around Natura 2000 sites and promote use of open ditches.
- Promote positive flood relief measures that can enhance habitats in the Boyne floodplain such as swales, constructed wetland basins etc.

d) Waste management
- Promote local waste disposal facilities close to housing areas including recycling banks to minimise the tendency to fly-tip.

e) Energy
- Ensure that any proposal for fracking or similar subsurface exploration is accompanied by an appropriate assessment that addresses the potential impacts on ground and potentially surface water quality.
- Ensure that any proposal for geothermal or similar subsurface exploration is accompanied by an appropriate assessment that addresses the potential impacts on groundwater quality.
- Ensure that any proposal for tidal or wave-energy projects is accompanied by an appropriate assessment that addresses the potential impacts on wintering birds, coastal habitats and their supporting ecosystems.
- Ensure that any proposal for windfarm harvesting is accompanied by an appropriate assessment that addresses the potential impacts on passage of wintering and breeding avian fauna.
- Promote a policy of preferential avoidance of siting wind energy projects in Natura 2000 sites, or sites that are on the flight lines of wintering birds unless it can be proven that there are no risks to the integrity of the sites (by carrying out an appropriate assessment supported by appropriate studies).
- Promote a policy of preferential avoidance of overhead lines in Natura 2000 sites or surrounding qualifying interests feeding grounds, or sites that are on the flight lines of wintering birds unless it can be proven that there are no risks to the integrity of the sites (by carrying out an appropriate assessment supported by appropriate studies).

## 2.7 Transport and Movement

- All transport and movement proposals (including roads, rail, cycle tracks, pathways, bus routes) that have a spatial reference plan should take into the account the sensitivities of the Natura 2000 sites.

- A policy of preferring to avoid locating any potentially damaging infrastructure within/through or on the periphery of a Natura 2000 sites is recommended. This may not always be possible (e.g. the R106 dissects the Baldoyle cSAC) and where this is the case then appropriate mitigation may be required.

2.7.1 Public Transport (Bus & Rail), Walking & Cycling.

- Will need to ensure consistency with NTA 2030 Vision AA.
- Ensure that new cycle routes, pedestrian access and/or footpaths along the coastline and/or watercourses address the potential to cause habitat loss and visual disturbance of qualifying interest habitats and species and therefore are likely to require a Stage 2 AA.
- Promote policies that allow pedestrian access to certain areas of Natura 2000 sites for sustainable appreciation of their value.

2.7.2 Roads Infrastructure

- Promote the preferential avoidance of increased access/proximity to Natura 2000 sites in new road schemes to avoid direct and indirect impacts on the qualifying interests of the Natura 2000 sites.
- Highlight the need to address construction impacts when within at least 2km of a Natura 2000 site and even further with respect to hydrological links.
- Promote the need to increase connectivity of green infrastructure/ecological corridors that connect Natura 2000 sites.
- Highlight the importance of considering the localised increase in Nitrogen oxides and subsequent acidification/eutrophication effects on wetland sites downwind or in close proximity. Adopt the National Roads Authority guideline of looking at potential effects on Natura 2000 sites when located within 1km of the new road.

## Section 3 Policies that will help to maintain Specific Conditions underpinning Site Integrity for each Qualifying Feature type.

The table below lists the qualifying interests found in the Natura 2000 sites adjacent to P Baldoyle-Stapolin and Portmarnock and its environs. The second column suggests the policies that will help protect these features.

**Table 2 Natura 2000 Qualifying Features**

| Qualifying Features | Policies to maintain site condition |
|---|---|
| Mudflats and sandflats not covered by seawater at low tide | • Promote protection of watercourses from contamination, nutrient run-off and care when promoting activities that could increase nutrients into the ground and surface water.<br>• Protect rivers and riparian corridors from habitat loss and pollution. Ensure that proposed development within 50m of any watercourse takes into account the potential for impacts on these habitats.<br>• Ensure protection and reduce access to these habitats, in particular salt marsh habitat, through appropriate management of local population.<br>• Integrated Coastal zone management approach required to protect coastal habitats from a wide range of anthropogenic pressures.<br>• Protect against localised pollution incidents. |
| *Salicornia* and other annuals colonizing mud and sand | |
| *Spartina* swards *Spartinion maritimae* | |
| Atlantic salt meadows *Glauco-Puccinellietalia maritimae* | |
| Mediterranean salt meadows *Juncetalia maritimi* | • Protect coastal roosting sites close to feeding sites.<br>• Integrated Coastal zone management to protect against changes to flooding regime of coastal grasslands.<br>• Protect against localised pollution incidents.<br>• Protect against on-going and/or repeated disturbance due to pedestrians and dogs. |
| Light-bellied Brent Goose *Branta bernicla hrota* | |
| Shelduck *Tadorna tadorna* | |
| Ringed Plover *Charadrius hiaticula* | |

| **Table 2 Natura 2000 Qualifying Features** | |
|---|---|
| **Qualifying Features** | **Policies to maintain site condition** |
| Grey Plover *Pluvialis squatarola* | |
| Bar-tailed Godwit *Limosa lapponica* | |

**Appendix B**

# Wintering Bird Survey of the lands surrounding the Baldoyle Estuary

December to February 2011 - 2012

*Prepared for*

Fingal County Council

June 2012

# Wintering bird survey of the lands surrounding the Baldoyle Estuary

December to February 2011 - 2012

***FINGAL BRANCH***

Prepared by:

Sean Pierce and David Dillon

Table of Contents


1. Introduction..... 4

2.1 European directives..... 5

2.2 Birds of Conservation Concern..... 7

3. Location and Study Area..... 9

4. Landscape Overview ..... 10

5. Methodology..... 12

6. Results ..... 13

6.1 Sluice Marsh – Section A..... 15

6.2 PortmarnockGreen – Section B..... 16

6.3 Maynestown – Section C..... 17

6.4 Stapolin to Baldoyle – Section D ..... 18

6.5 Portmarnock Golf Course – Section E..... 20

7. Discussion..... 22

7.1 Key bird species..... 23

7.2 Key areas for wintering birds..... 25

8. Conclusion and Recommendations..... 27

9. References..... 28

Appendices..... 29

## 1. Introduction

The Baldoyle Estuary is designated as a Special Protection Area (SPA) for birds under the EU Birds Directive and is internationally important for Light-bellied Brent Geese and nationally important for a further 5 species (Crowe 2005). It is also listed as a Ramsar Site (Crowe 2005) and a Special Area of Conservation (SAC) for its habitats under the EU Habitats Directive.
The estuary has been the focus of systematic waterbird monitoring since the early 1980s (Hutchinson 1989, Sheppard 1993) and monthly counts from September to March have been conducted since 1994 under the Irish Wetland Bird Survey (I-WeBS).

There have been some previous studies undertaken to assess the importance for birds on specific lands surrounding the Baldoyle Estuary. Lovatt et al (1985, 1986) studied the Birds of Portmarnock Dune system and Baldoyle Estuary and more recently Dillon (2008) studied the birds of Sluice Marsh. Benson (2009) referenced some areas within the present study that were important for Brent Geese.

However, to date no systematic survey has been carried out on the lands surrounding the entire estuary and there is little published information on the use of these lands by protected bird species.
In response to Fingal County Council's need for baseline data to inform the preparation of the Portmarnock and Baldoyle Local Area Plans, the County Development Plan and future development decisions, this study was commissioned in December 2011 with the following aims:

- To collect baseline data on all wintering birds species which utilise the lands surrounding the Baldoyle Estuary,
- To highlight the presence of any species of conservation concern, especially:
    - Annex I species listed under the EU Birds Directive,
    - Species featured under the qualifying interest of the Baldoyle Estuary SPA – Natura 2000 site,
    - and Species listed under Birds of Conservation Concern Ireland, particularly those which are of regional importance and the focus of specific conservation actions in Fingal

## 2.1 European Union Directives

The National Parks & Wildlife Service (NPWS) has prepared Site Synopses in relation to the Special Area of Conservation (SAC) and Special Protection Area (SPA) designations covering the Baldoyle Bay. These synopses contain outline descriptions of the designated areas, and in the case of the SAC synopsis, emphasise the habitats which are included in Annexes of the EU Habitats Directive.
The extent of the Baldoyle Bay SPA and SAC designations is shown in Figure 1 and the directives are explained in more detail below.

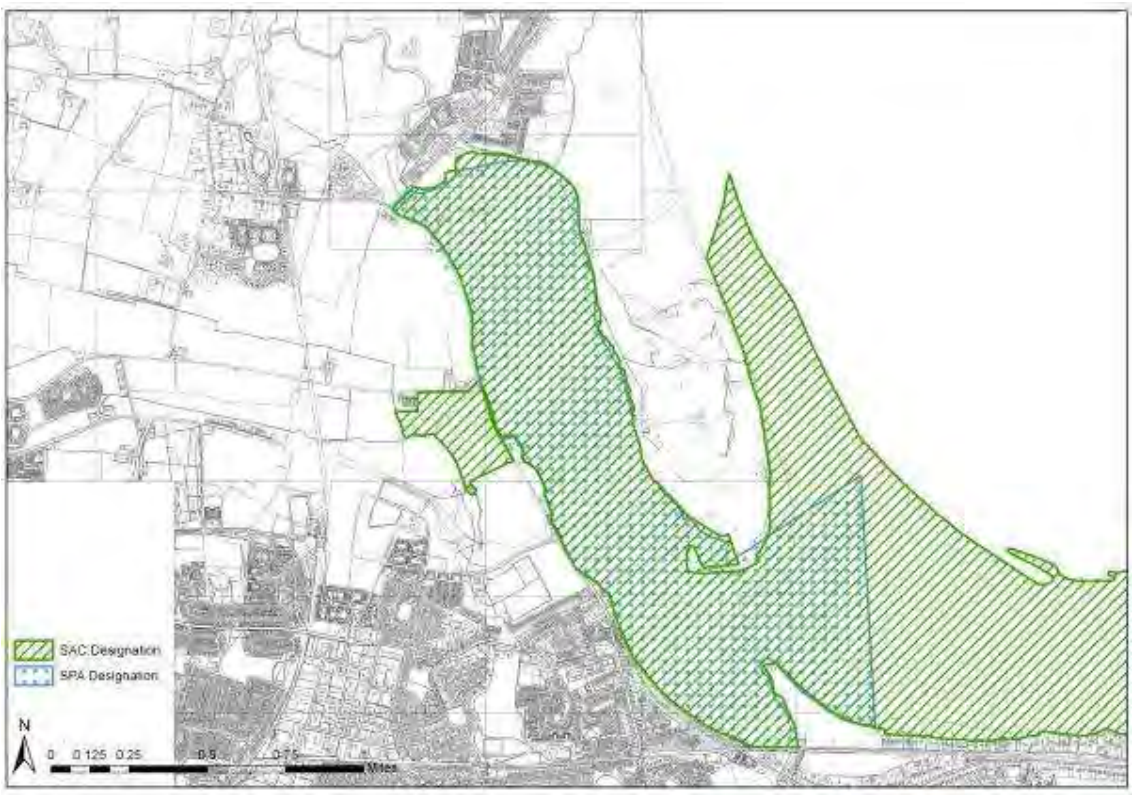



Figure 1: Special and Protection Area and Special Area of Conservation designations at the Baldoyle Estuary

### *Birds Directive - Special Protection Areas (SPAs)*

In 1979 the European Union adopted a directive on the conservation of wild birds (Directive 79/409/EEC), which is commonly referred to as the "Birds Directive". The primary purpose of this directive is to give protection to Europe's birds and their habitats, especially to vulnerable species which are listed in Annex I of the directive. Species listed in Annex I are subject to special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. In relation to bird habitats, there is emphasis on wetlands, which are vital for many migratory water birds, some of which are listed in Annex I. Thirty three species of bird listed under Annex I of the EU Birds Directive 79/409 are deemed relevant to Ireland.

The primary means for bird habitat protection has been the establishment of a comprehensive network of Special Protection Areas (SPAs), under Article 4 of the directive. The SPAs are usually chosen on the basis that the sites are internationally important for birds, particularly Annex I species. The Irish authorities are obliged to prevent significant pollution or deterioration of the habitat, and significant disturbance to the birds for which the SPAs have been designated.

### *Habitats Directive Special Areas of Conservation (SACs)*

Special Areas of Conservation (SACs) are prime habitat conservation areas in the country, considered to be important on a European as well as Irish level. The legal basis on which SACs are selected and designated is the EU Habitats Directive (92/43/EEC), transposed into Irish law in the European Union (Natural Habitats) Regulations, 1997. The Habitats Directive lists (Annex I) certain habitats that must be protected within SACs. Baldoyle Bay contains four habitats listed on Annex I of the EU Habitats Directive and has two legally protected plant species.

Together SPAs and SACs form "**Natura 2000**", a network of protected areas throughout the European Community. Planning authorities are obliged by law to ensure that these sites are protected and conserved. Any activities, which are likely to damage or destroy SACs and SPAs, whether within the site or beyond it, must be controlled, and are only allowed in certain very limited circumstanc*es.*

The Natura 2000 Data Form for Baldoyle states that

*"Baldoyle Bay is an important bird site for wintering waterfowl and the inner part of the estuary is a Special Protection Area under the EU Birds Directive as well as being a Statutory Nature Reserve. Internationally important numbers of Pale-bellied Brent Geese (418) and nationally important numbers of two Annex I Birds Directive species- Golden Plover (1,900) and Bar-tailed Godwit (283) - have been recorded. Four other species also reached nationally important numbers: Shelduck (147), Pintail (26), Grey Plover (148) and Ringed Plover (218) - all figures are average peaks for four winters 1994/95 to 1997/1998. Breeding wetland birds at the site include Shelduck, Mallard and Ringed Plover. Small numbers of Little Tern, a species listed on Annex I of the EU Birds Directive, have bred on a few occasions at Portmarnock Point but not since 1991.Part of the tidal section of the Mayne River and adjoining brackish marshes are included in the site."* (NPWS 2002) See Table 1.

## Table 1: Birds listed in the Baldoyle Estuary Natura 2000 Data Form

| Common Name | Scientific Name | Number | Common Name | Scientific Name | Number |
|---|---|---|---|---|---|
| Birds listed Annex 1 of Council Directive 79/409/EEC | | | | | |
| **Golden Plover*** | *Pluvialis apricaria* | **1900** | **Little Tern** | **S***terna albifrons* | **0-5pairs** |
| **Bar-Tailed Godwit*** | *Limosa lapponica* | **283** | | | |
| Migratory Birds regularly occurring not listed Annex 1 of Council Directive 79/409/EEC | | | | | |
| **Brent Goose**** | ***Branta bernicla*** | **418** | Knot | *Canutus canutus* | *96* |
| **Shelduck*** | ***Tadorna tadorna*** | **147** | Sanderling | *Calidris alba* | *28* |
| Teal | *Anas crecca* | 122 | Snipe | *Gallingo gallingo* | *11* |
| **Pintail*** | ***Anas acuta*** | **26** | Black-tailed Godwit | *Limosa limosa* | *72* |
| Red-brested Merganser | *Mergus serrator* | 13 | Redshank | *Tringa tetanus* | *197* |
| Oystercatcher | *Haematopus ostralegus* | 479 | Greenshank | *Tringa nebulari*a | 11 |
| **Ringed Plover*** | *Charadrius hiaticula* | 218 | Turnstone | *Arenaria intrerpres* | *50* |
| **Grey Plover*** | *Pluvialis squatarola* | 148 | Dunlin | *Calidrid alpine* | *512* |
| Lapwing | *Vanellus vanellus* | 631 | | | |

Notes: Species occurring in numbers of **** International importance; * National importance**.
Bird numbers presented in the Table 1 are based on the mean peak counts (I-WeBS) over the five-season periods 1995/96 - 1999/2000. Crowe (2005) shows that, based on data from period 1996/97 - 2000/01, all species of international and national importance retained their status and Black-tailed Godwit occurred in numbers of international importance at the site.
Threshold values for species of international importance are set by Wetlands International and are based on 1% of the international population estimate. Values for species of national importance are based on 1% of the national population estimate (Crowe *et al.* 2008)

### 2.2 Bird Species of Conservation Concern

In addition to species listed in the EU Birds Directive, species of conservation concern in the Irish and European context are also classified under Birds of Conservation Concern Ireland (BoCCI) and Species of European Conservation Concern (SPEC). Both of these assessment processes are used to identify priority species in order that conservation action can be taken to improve species status.

**Birds of Conservation Concern Ireland (BoCCI) 2008 – 2013** (Lynas, P. *et al* 2008)
BirdWatch Ireland and the Royal Society for the Protection of Birds (RSPB) have listed priority bird species suffering decline in the Irish/European and global context. The Birds of Conservation Concern in Ireland (BoCCI) list classifies birds as Red (high conservation concern) or Amber (medium conservation concern) based on their conservation status and hence conservation priority. All other regularly occurring species are classified as Green List and are not considered threatened. Listed species must meet one or more of the following criteria:

**Red List:** Their breeding population or range has declined dramatically in recent years, or their breeding population has undergone a significant decline since 1800, or they are of global conservation concern.

**Amber List:** Their population or range has declined moderately in recent years, or they are rare or sporadically breeding species, or their breeding or wintering population is internationally important and/or localised, or they have an unfavourable conservation status in Europe.

**Green List:** Do not meet Red or Amber-listing criteria.

**European Conservation Status (SPEC)**
Species of European Conservation Concern are assessed by BirdLife International and recognised by the SPEC process:
**SPEC 1:** Species are those which are of global conservation concern. SPEC 1 species are automatically BoCCI Red-listed and both SPEC 2 and 3 species are Amber-listed except for those that do not breed in Ireland.
**SPEC 2: Those** species a which have an unfavourable conservation status in Europe (if the population is threatened, declining, depleted from historical levels or is found only in a few locations) and is concentrated in Europe (i.e. more than 50% of the global population occurs in Europe).
**SPEC 3:** Species are which have an unfavourable conservation status in Europe (as above), but which are not concentrated in Europe.
Species which do not fulfil these criteria are regarded as **non-SPEC** species and of least conservation concern

## 3. Location and Study area

Baldoyle Estuary is located 11 kms north east of Dublin City centre. The town of Baldoyle is located on the south west corner of the estuary while Portmarnock lies adjacent to its northern edge.

The study area comprises the lands that surround the estuary. (See Fig 2).

The main Portmarnock Sand spit which runs south from Portmarnock forms the eastern boundary of the study area. The lands around Sluice Marsh and those adjacent to the Portmarnock Bridge form the northern boundary while the lands located between the Dublin to Belfast railway line and the R106 coastal road form the western boundary. The latter areas comprise of parts of the town lands of Maynestown, Grange and Stapolin and lie north of Baldoyle itself. The public amenity areas of Red Arches and Seagrange Park within Baldoyle were also included in the survey zone.

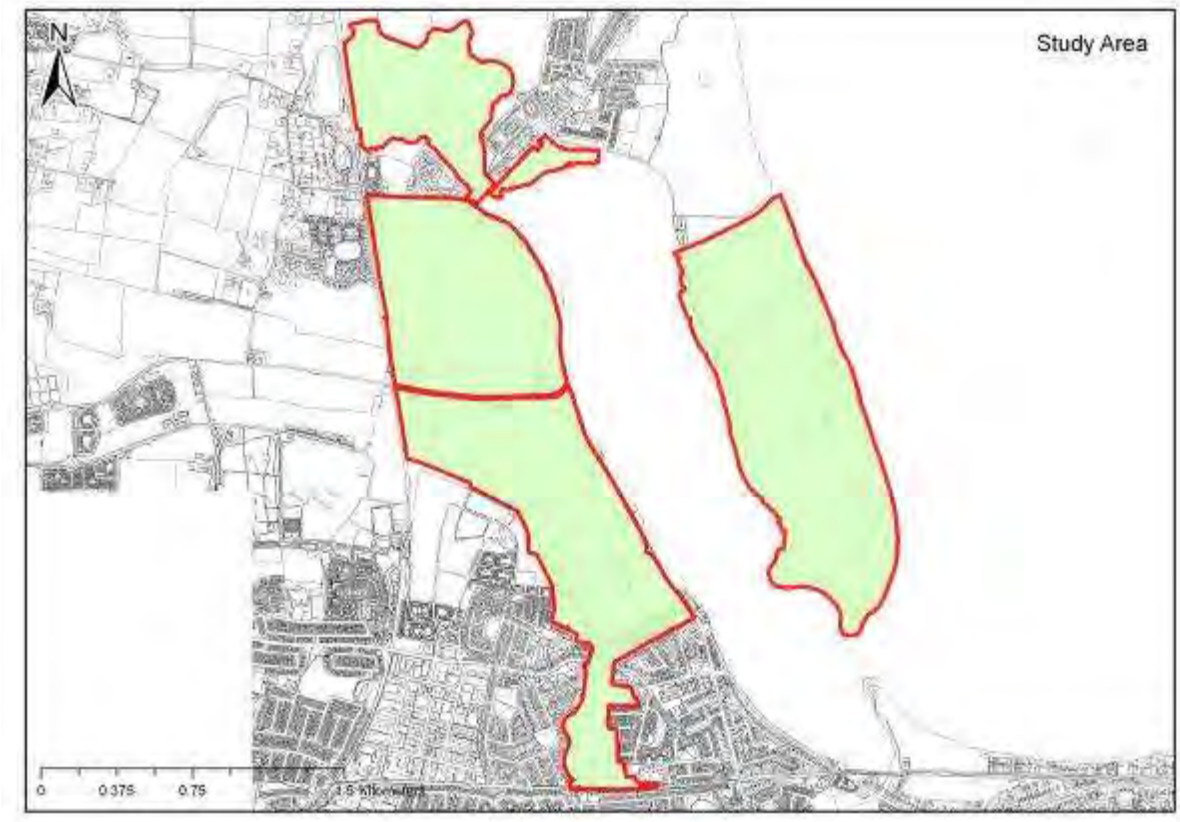



Figure 2 . Map of the Study Area around Baldoyle Estuary, Co Dublin

## 4. Landscape Overview

The landscape and land use within the study area is quite diverse ranging from highly managed public amenity parks and golf courses, to farmland and the long abandoned lands of the old Baldoyle Racecourse .

The lands that form the eastern boundary are owned by the Portmarnock Golf Club. They consist of a typical sand dune system adapted to provide a coastal links golf course. Within the golf course are areas of pine, gorse and sea buckthorn. Several ponds are found on the golf course and there is a semi natural area of dune vegetation, slacks, freshwater marsh and salt marsh along the southern and south western edges.

Sluice Marsh forms the northern edge of the study zone. The lands at the Sluice River Marsh are a complex mix of low-lying wet grasslands and saltmarsh on its eastern flank that become progressively wetter and dominated by marsh, rush, reedbed and alder carr on its western side where it adjoins the Dublin-Belfast railway line. The drier eastern side is grazed by horses.

Farmland dominates the north western half of the study zone. The lands are located within a roughly rectangular area running from the Portmarnock Railway Station southwards to the Mayne Road and bounded to the east by the R106. The land is entirely given over to fields of arable crops of wheat and barley divided by thin lines of hedgerow. An archaeological site called the Portmarnock Barrows is located just east of the Portmarnock Railway Station. A large set aside field forms the southern boundary of this section where it adjoins Mayne Road (R123). A small drainage stream runs along the northern hedge line of this set aside field and there is a wet pond located at its eastern end.

The southern half of the western study zone is dominated by the remains of the former Baldoyle Racecourse. Little is left of the racecourse but the lands that remain are elevated and well drained compared to the more low lying western sections. Large areas of open grassland remain although there are also extensive patches of gorse and bramble present. The south western areas in the town land of Stapolin have undergone some development with an access roadway and pedestrian pathways laid out in the format of a future public park to service the Clongriffin area. This development is to date unfinished and there are still rough grassland fields, trees and patches of scrub in this area.

The River Mayne flows through the northern half of the western study zone. Some trees and bushes are found along its banks but these peter out as the river reaches its tidal zone approaching its entry point to the estuary at Mayne Bridge. The field to the north of the river is rough grassland and is grazed by horses from the adjacent halting site on Mayne Road. There are several stubble fields located in the north west sector towards the Dublin-Belfast railway line.

A drainage channel runs north from the southern boundary at Stapolin to meet the Mayne River and is fringed by a stand of Phragmites reed. The low lying fields east and west of this drainage channel have freshwater ponds and boggy areas but these get progressively more saline as one moves north towards the Mayne River.

The public amenity lands at Red Arches and Seagrange Parks consist predominately of managed grassland although the eastern sides of the latter become wet and waterlogged during the winter months.

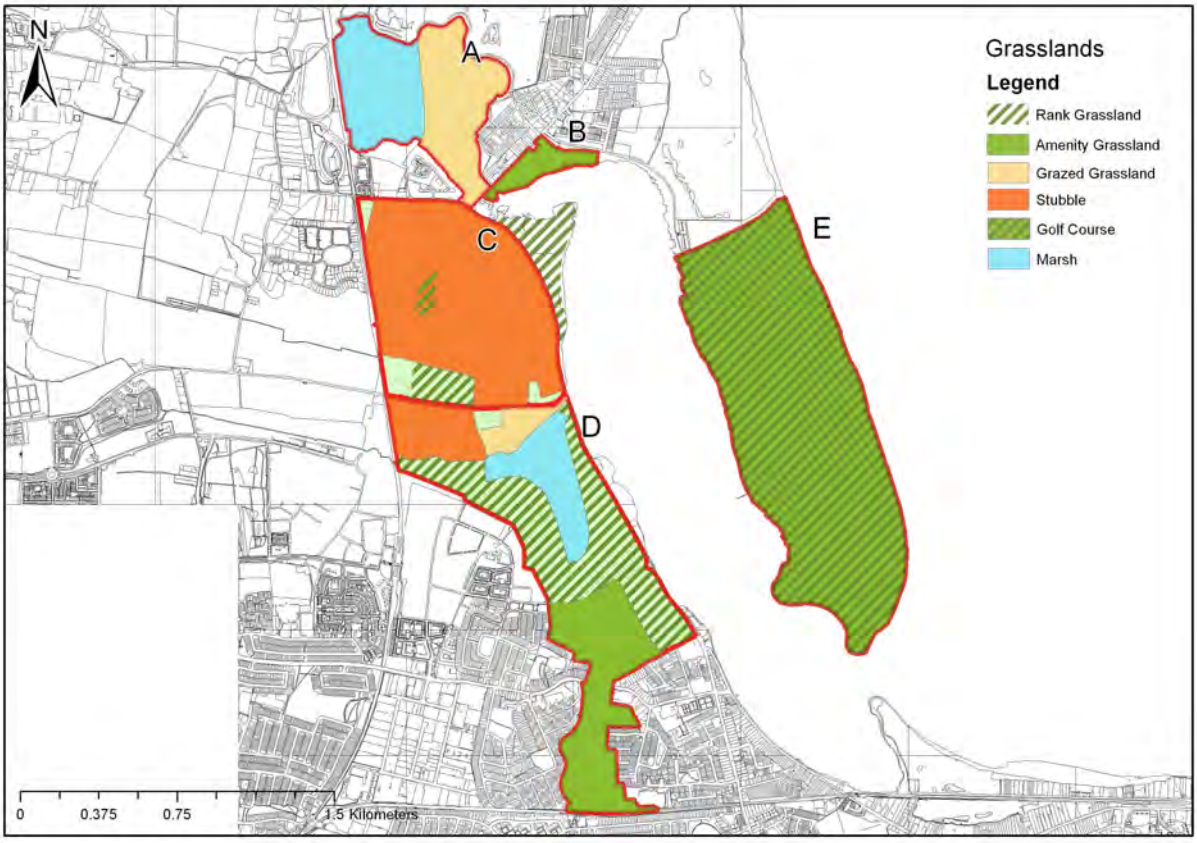



Figure 3: Habitat Map of lands surrounding the Baldoyle Estuary , Land Use, Dec. – Mar. 2012

## 5. Methodology

The area to be surveyed was defined by Fingal County Council and refined after the initial visits to include any other areas of potential interest. The lands were visited, mapped and for the purposes of this study divided into five accessible sections (labelled A-E, see Figure 4 ).

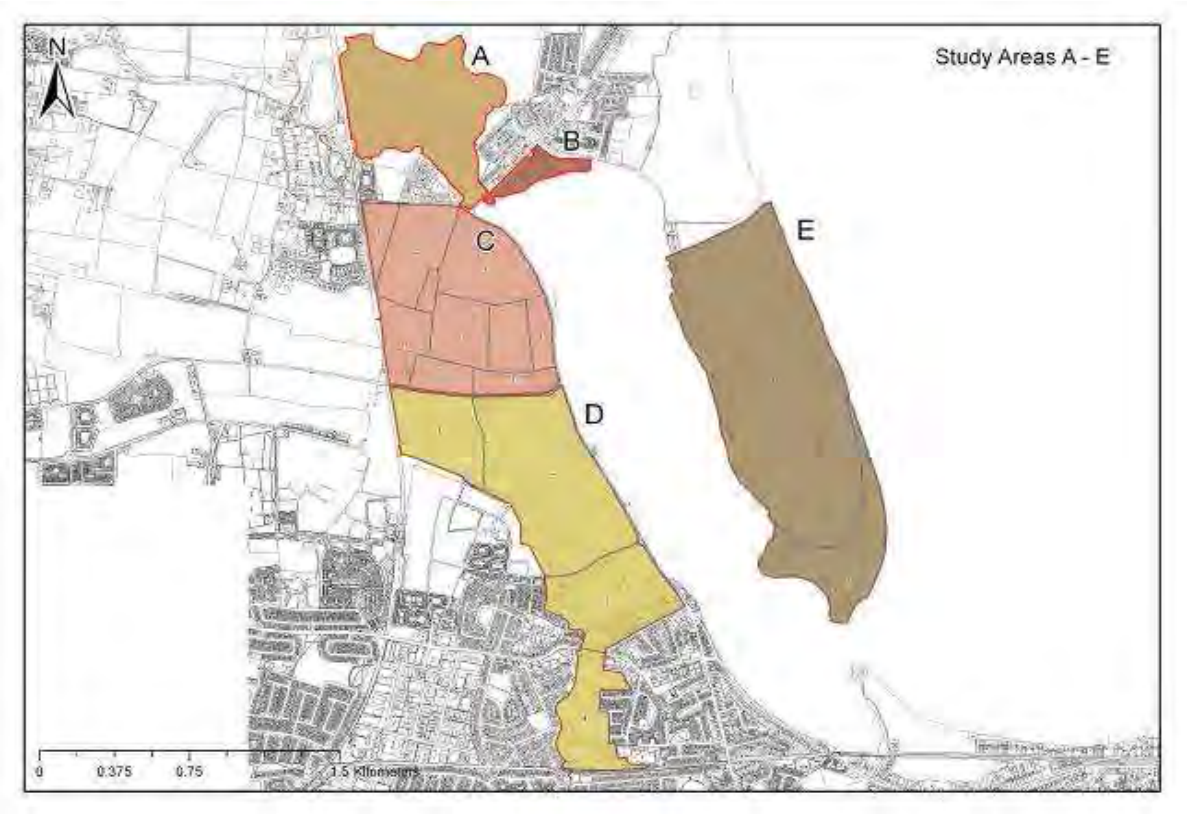



Figure 4: Colour coded map study sections for lands surrounding the Baldoyle Estuary

The fields in Sections C and D were given individual references to provide a higher detail of baseline information. In the case of the sections A, B and E this was not appropriate given the different nature of the land use or due to the small size of the area.

With the exception of area A, all survey areas were visited three times between December 2011 and February 2012. One additional visit was made to area C4 to observe the movements of geese and plover within the estuary complex and to identify sites which were used regularly. Area A was not surveyed during this winter. Instead the results of the wintering bird study carried out in 2007-2008 by David Dillon were incorporated in this report.

Every field/area was walked along its boundaries, open areas were observed and all birds present recorded. Long stops were undertaken where large numbers of birds were feeding to ensure accurate recording and counting. Within a section, where individual birds or large flocks (e.g. geese) moved between fields they were recorded once to avoid double counting. All fields/open areas which were suitable for geese where checked for fresh droppings.
Observations were documented on land use and any particular habitats where bird species were present in high numbers. All observations took place when weather conditions were suitable for surveying. Where flocks of geese or waders were present, fields were not entered so as to minimise disturbance.

## 6. Results.

A total of 65 species were recorded in the survey areas from December 2011 to February 2012 (See Table 2). Please note that this also includes the IWEBS data of the Sluice River Marsh for 2007-2008.

**Table 2:** List of wintering species recorded at lands surrounding Baldoyle Estuary, Dec. – Feb. 2011-2012

| No. | Species | *Scientific name* | No. | Species | *Scientific name* |
|---|---|---|---|---|---|
| 1. | Mute Swan | *Cygnus olor* | 34. | Skylark | *Alauda arvensis* |
| 2. | Little Grebe | *Tachybaptus ruficollis* | 35. | Meadow Pipit | *Anthus pratensis* |
| 3. | Little Egret | *Egretta garzetta* | 36. | Grey Wagtail | *Motacilla cinerea* |
| 4. | Grey Heron | *Ardea cinerea* | 37. | Pied Wagtail | *Motacilla alba* |
| 5. | Light-bellied Brent Goose | *Branta bernicla hrota* | 38. | Wren | *Troglodytes troglodytes* |
| 6. | Teal | *Anas crecca* | 39. | Dunnock | *Prunella modularis* |
| 7. | Mallard | *Anas platyrhynchos* | 40. | Robin | *Erithacus rubecula* |
| 8. | Wigeon | *Anas penelope* | 41. | Stonechat | *Saxicola torquata* |
| 9. | Sparrowhawk | *Accipiter nisus* | 42. | Blackbird | *Turdus merula* |
| 10. | Buzzard | *Buteo buteo* | 43. | Song Thrush | *Turdus philomelos* |
| 11. | Kestrel | *Falco tinnunculus* | 44. | Mistle Thrush | *Turdus viscivorus* |
| 12. | Merlin | *Falco columbarius* | 45. | Goldcrest | *Regulus regulus* |
| 13. | Pheasant | *Phasianus colchicus* | 46. | Long-tailed Tit | *Aegithalos caudatus* |
| 14. | Water Rail | *Rallus aquaticus* | 47. | Coal Tit | *Parus ater* |
| 15. | Moorhen | *Gallinula chloropus* | 48. | Blue Tit | *Parus caeruleus* |
| 16. | Oystercatcher | *Haematopus ostralegus* | 49. | Great Tit | *Parus major* |
| 17. | Golden Plover | *Pluvialis apricaria* | 50. | Magpie | *Pica pica* |
| 18. | Lapwing | *Vanellus vanellus* | 51. | Jackdaw | *Corvus monedula* |
| 19. | Woodcock | *Scolopax rusticola* | 52. | Rook | *Corvus frugilegus* |
| 20. | Snipe | *Gallinago gallinago* | 53. | Hooded Crow | *Corvus corone cornix* |
| 21. | Jack Snipe | *Lymnocryptes minimus* | 54. | Raven | *Corvus corax* |
| 22. | Black-tailed Godwit | *Limosa limosa* | 55. | Starling | *Sturnus vulgaris* |
| 23. | Curlew | *Numenius arquata* | 56. | House Sparrow | *Passer domesticus* |
| 24. | Redshank | *Tringa tetanus* | 57. | Tree Sparrow | *Passer montanus* |
| 25. | Greenshank | *Tringa nebularia* | 58. | Chaffinch | *Fringilla coelebs* |
| 26. | Black-headed Gull | *Larus ridibundus* | 59. | Greenfinch | *Carduelis chloris* |
| 27. | Herring Gull | *Larus argentatus* | 60. | Goldfinch | *Carduelis carduelis* |

| | | |
|---|---|---|
| 28. | Common Gull | *Larus canus* |
| 29. | Stock Dove | *Columba oenas* |
| 30. | Wood Pigeon | *Columba palumbus* |
| 31. | Collared Dove | *Streptopelia decaocto* |
| 32. | Kingfisher | *Alcedo atthis* |
| 61. | Linnet | *Carduelis cannabina* |
| 62. | Redpoll | *Carduelis flammea* |
| 63. | Bullfinch | *Pyrrhula pyrrhula* |
| 64. | Yellowhammer | *Emberiza citronella* |
| 65. | Reed Bunting | *Emberiza schoeniclus* |

Picture courtesy of Shay Connelly

Photo 1: light bellied Brent Goose is one of the key species of the Baldoyle Estuary

## 6. Survey results by section

### 6.1 *Sluice Marsh -Section A*

The Sluice river marsh is located between the railway line and Portmarnock village. It is good example of a wetland habitat that has become increasingly rare in Fingal. The western half of the site is a freshwater marsh and a proposed Natural Heritage Area, while the eastern part is mainly grazed grassland. These grazed grasslands are particularly important for many birds in the Baldoyle Estuary. At high tide Brent goose, Black-tailed godwit, Teal and Curlew regularly use the open fields, while bar-tailed godwit, lapwing and redshank are using the site on a more occasional basis. Herons, Little egrets and Kingfisher frequent the sluice river on a regular basis.

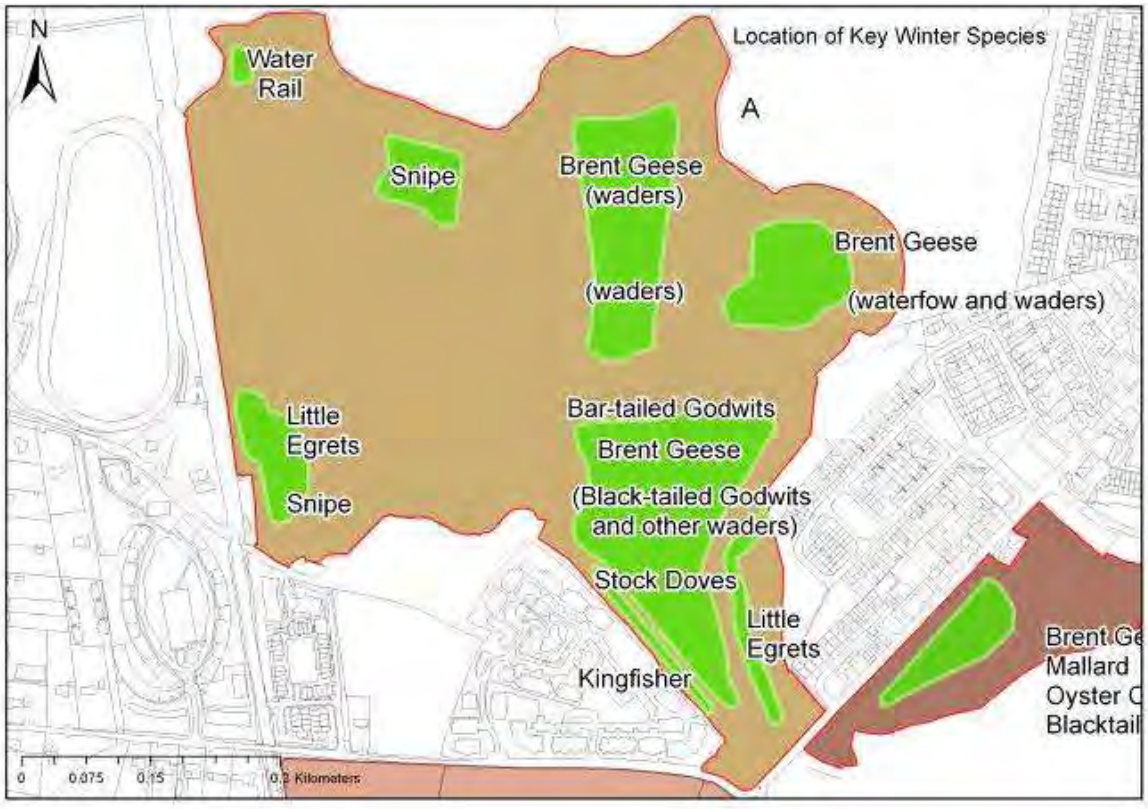



Figure 5: Map of important species located in the Sluice River Marsh

### 6.2 *Portmarnock Green -Section B*

Portmarnock Green is a public amenity area located east of the R106 coastal road at the south east corner of Portmarnock village. The grass amenity area borders the saltmarsh of the Baldoyle Estuary. The amenity area although quite public, regularly supports internationally important numbers of Brent Geese (300+) and nationally important numbers of Black-tailed Godwit (200+). Others waders like Redshank (80), Curlew(50), Bar-tailed Godwit (35) and Oystercatcher (100) occur. Duck species like Teal and Wigeon and Mallard occur in smaller numbers. At the southern corner where the Sluice River enters Baldoyle Estuary both Kingfisher (1) and Little Egrets (4+) are regularly seen.

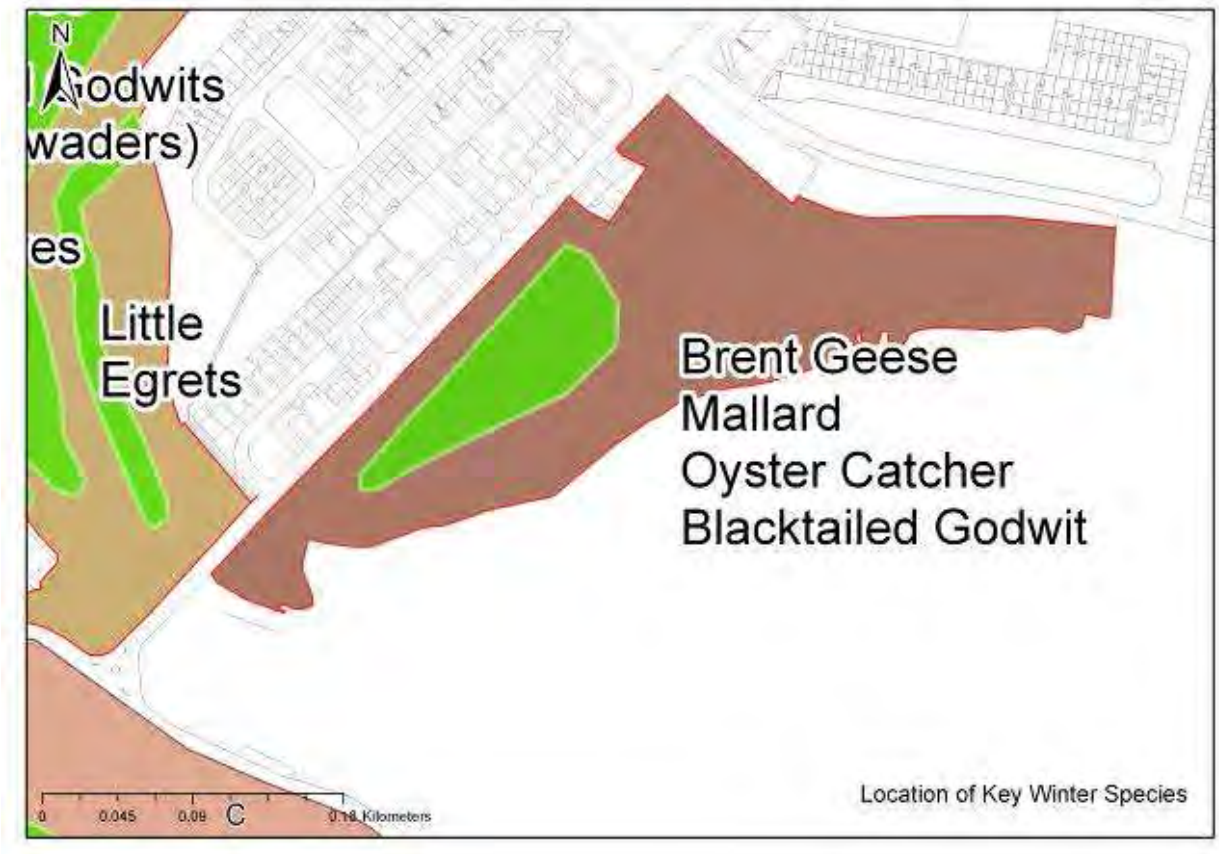



Figure 6: Map of important species located in Zone B

## 6.3 *Maynestown -Section C*

The six large fields in this section were all in stubble in December but all had been ploughed and seeded with wheat or barley by late January. Two areas were left unploughed. The northern section of the Mound Field C2 and the southern side of C6. Hedgerows on the western sides of C1,C2, C3,C5 and C6 were of good quality and important for thrushes, finches, sparrow and bunting species.
Over 50 species of birds were recorded in this section. 22 of the most significant are listed in Appendix 3.
Important species are Little Egret (2), Lapwing (1000), Black-tailed Godwit (186). Four species of raptor, Buzzard, Kestrel, Merlin and Sparrowhawk were recorded feeding and hunting over the stubble fields.
The very large C4 field is particularly important for Lapwing and Black-tailed Godwit to provide feeding at times of high water on the Baldoyle Estuary. Furthermore, the section held very significant numbers of Skylark (479) Stock Dove (50) and Tree Sparrow (144) which are numbers of national importance. The area has importance for Linnet (60), Goldfinch (47), Reed Bunting (22) and Yellowhammer (12) and Woodpigeon (458).

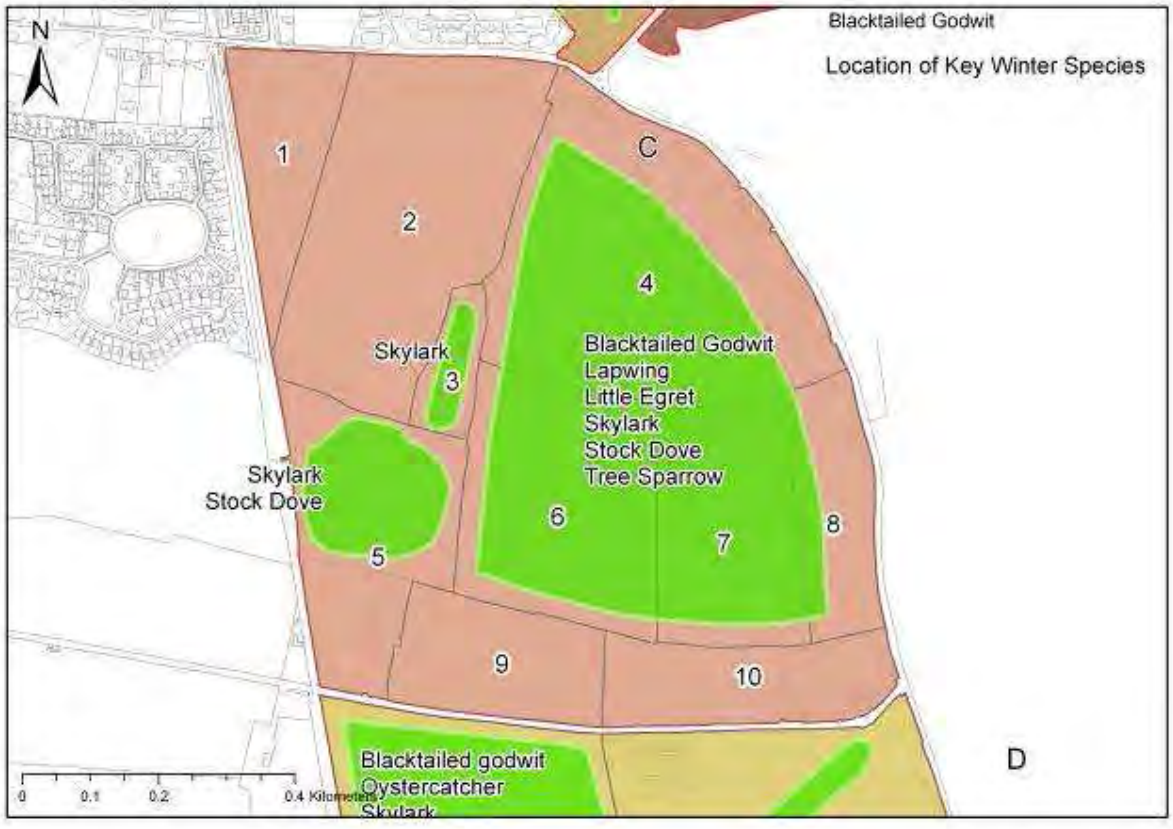



Figure 7: Map of important species located in Maynestown -Section C

## 6.4 *Stapolin to Baldoyle -Section D*

The land use in Section D was quite varied. The four westernmost fields adjoining the railway line were in stubble in December but all had been ploughed by late January. The eastern and southern sectors comprise mainly of rough ungrazed grassland with large areas of saltmarsh, gorse and scrub. Several patches of freshwater reed and sedges border the drainage channel that runs north to link with the Mayne River. The northern field adjacent to the Halting Site on Mayne Road was grazed by horses. A large section of the former racecourse grassland area in the south east sector is used frequently for motorbike scrambling. Several walking pathways are laid out in the south west sector close to the new town of Clongriffin.

A total of 37 species of birds were recorded in this section.(See Appendix 1). The stubble fields on the western edge held the most important numbers and diversity, Oystercatcher 200, Black-tailed Godwit (200), Stock Dove (50), Skylark (45), Tree Sparrow 20, Yellowhammer (20), Reed Bunting (60) and Goldfinch (50).

The numbers are of importance particularly those of Stock Dove, Skylark, Reed Bunting and Yellowhammer. It is significant that the numbers of all species recorded dropped once the stubbles were ploughed over in Jan/Feb.

In the eastern sector the saltmarsh areas had Little Egret (1) Snipe (14) and Jack Snipe (1) and a roost of 50+ Reed Buntings in the Phragmites reedbed which is of significance and interest . Three species of raptor were recorded, Buzzard, Kestrel and Short-eared Owl. The site is a traditional location for this latter species in the Fingal context.

A section along the southern edge of the study zone was found to be important for winter finches. Here the lands had been recently disturbed and then allowed to lie fallow. The resultant vegetation was good feeding area for Goldfinch, Chaffinch, Linnet, Redpoll and Meadow Pipits.

There was no evidence found of any grazing by Brent Geese in this section. The vegetation was not suitable.

Picture courtesy of Shay Connelly

Photo 2: Short-eared Owl is a regular winter visitor to the former Racecourse lands

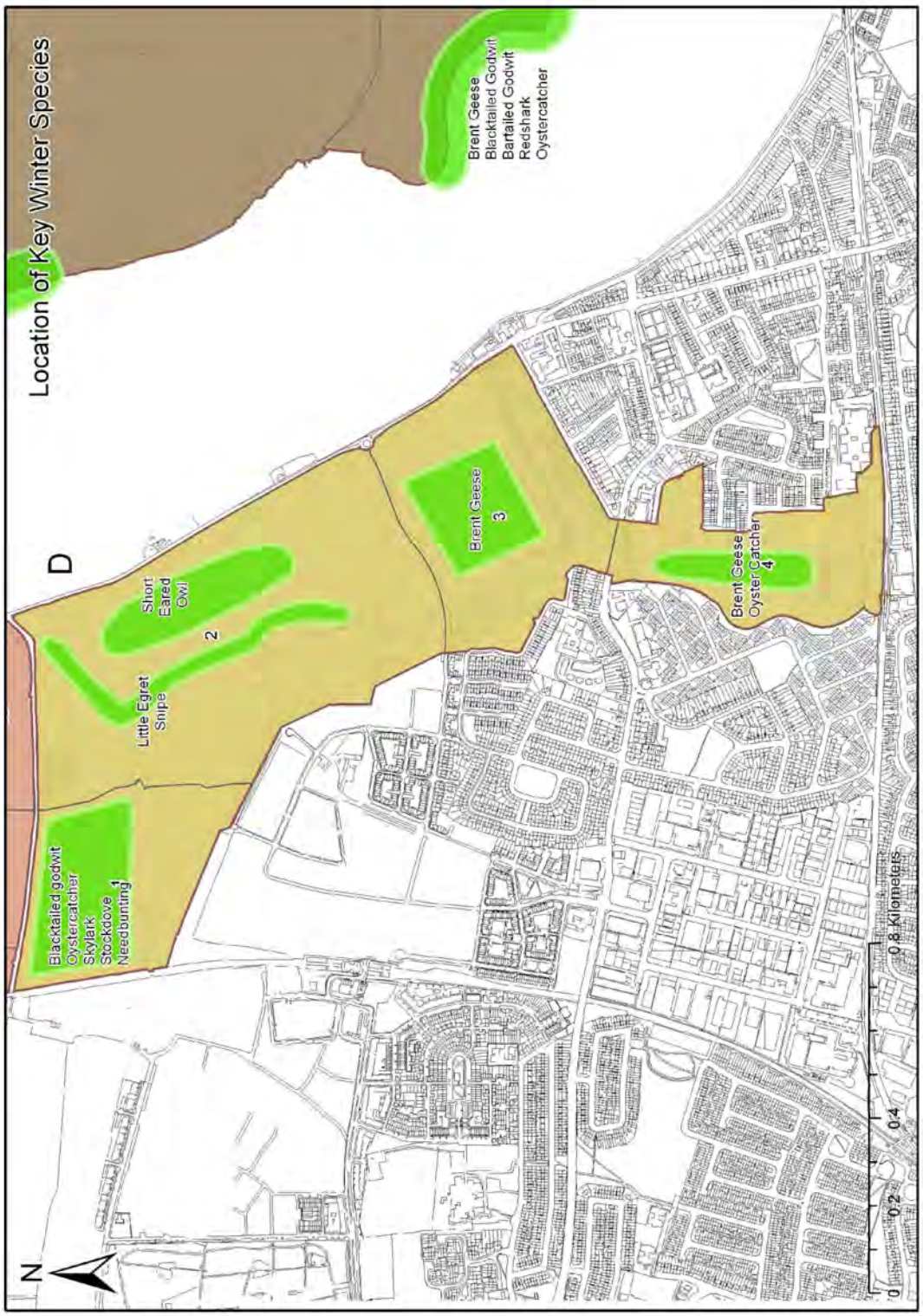



Figure 8: Map of important species located in the Racecourse lands – zone D

## 6.5 *Portmarnock Golf Course -Section E*

The lands of the Portmarnock Golf Club are a former sand dune system now managed as a links course. Along with the normal green and fairway pattern areas of pines, gorse, sea buckthorn and semi- natural dune vegetation are interspersed throughout the course . There are several small freshwater ponds located on the course and an area of saltmarsh is located at the southwest corner. There is an area of natural sand dunes, sea buckthorn and some freshwater marsh on the southern edge of the peninsula.

A total of 34 species were recorded in this section. The numbers of Brent Geese recorded (100 max) was surprisingly low. Benton(2009) lists the Portmarnock Peninsula as being a site of major importance and holding in the order of 400-1450 birds during her study. Direct evidence of heavy grazing by Brent Geese was found in only one area on the Portmarnock Golf Course during this survey and that was located on a broad open field north of the clubhouse which interestingly is not used by golfers. Birds were seen in smaller numbers grazing some of the central fairway areas and on the saltmarsh. Other areas along the eastern and south eastern sides of the Golf Course that appeared to be good grazing habitat for Brent Geese were not utilised during this survey dates.

The most significant species recorded on the Golf Course were Skylark (10), Snipe (3), Water Rail (1), Moorhen (3) Linnet (25) and Kestrel (1). These species were all recorded in the semi natural sand dune and freshwater complex at the southern end of the peninsula. The Golf Course itself held good numbers of common birds particularly in the stands of gorse and sea buckthorn interspersed through the links. Several Moorhen ( max 2) were recorded on the freshwater ponds at the north end of the course.

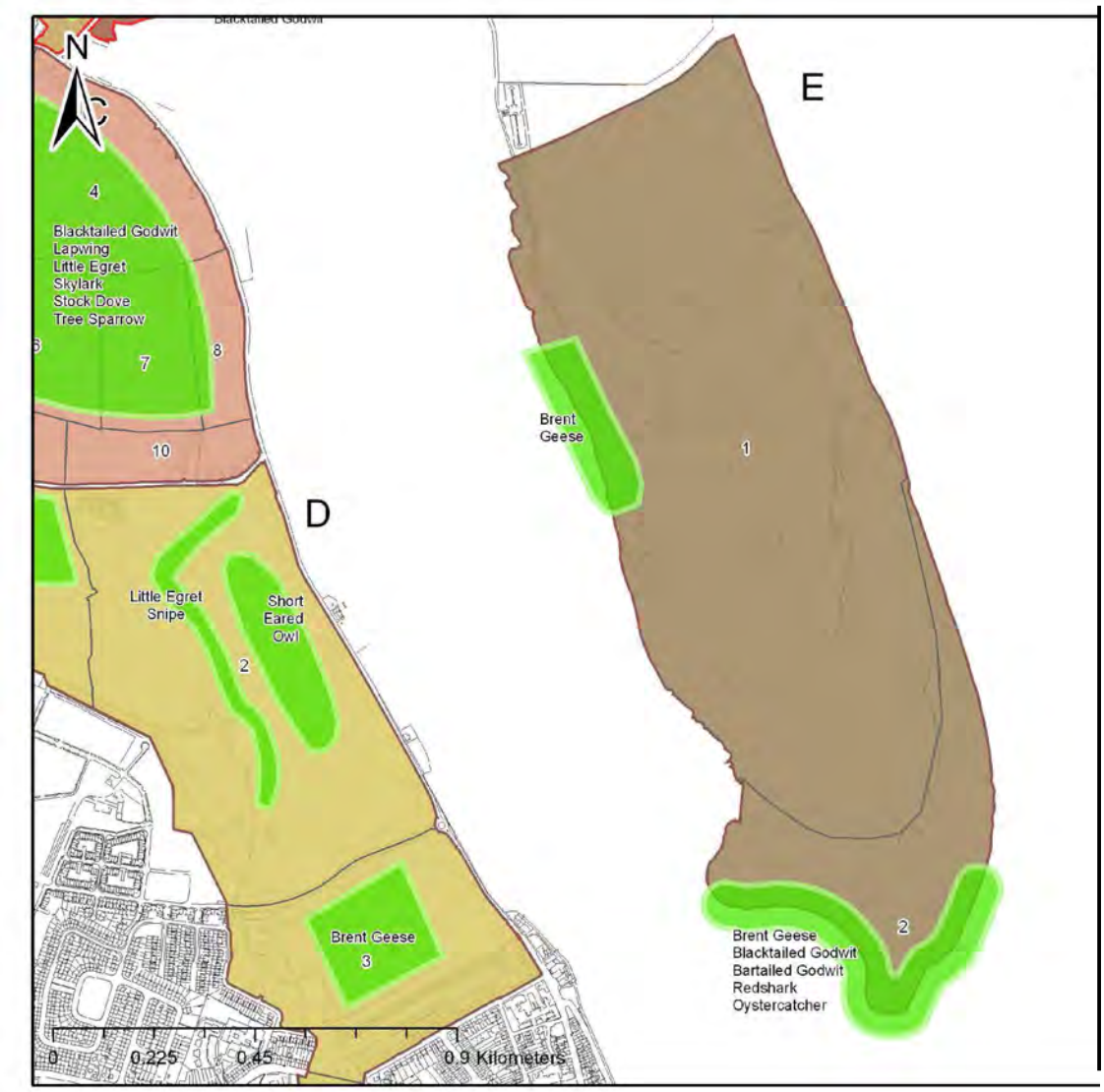



Figure 9: Map of important species located in the Portmarnock Golf Course – zone E

## 7. Discussion

The Baldoyle Estuary is an internationally important wetland site for wintering waterbirds and is designated as a Special Protection Area (SPA) for birds under the EU Birds Directive. The birds and their distribution pattern within the SPA boundaries is well documented as a result of the I-WeBS surveys, but information on the use of the surrounding lands by the waders and wildfowl was mainly based on anecdotal evidence. This study aims to produce a baseline data set on the bird species of the lands surrounding the estuary and establish how important these lands are for the birds of the Baldoyle estuary.

The survey shows that there is a very good diversity of bird species in the land surrounding the estuary, with 65 bird species recorded. Most of these are common birds, but five bird species listed under Annex I of the EU Birds Directive and ten species which are listed under the qualifying interests the Baldoyle SPA - Natura 2000 site were also recorded roosting and feeding in the surrounding lands. The survey also identified twenty one species of conservation concern under BoCCI, though many are listed based on their breeding populations. (See Table 3).

**Table 3: Overview of conservation status of key species recorded at lands surrounding Baldoyle Estuary, December – February 2011-2012**

| No | Species | Baldoyle Estuary Natura 2000 site - listed species | EU Birds Directive | Birds of Conservation Concern | | | |
|---|---|---|---|---|---|---|---|
| | | | | Europe | Ireland | | Fingal |
| | | | | SPEC | BoCCI | BoCCI qualifying criteria* | Target species |
| 1. | Little Egret | | Annex I | | | | |
| 2. | Brent Goose | International Importance | | 3 | Amber | Non-breeding populations | ✓ |
| 3. | Teal | ✓ | | | Amber | Breeding populations | |
| 4. | Wigeon | | | | Amber | Non-breeding populations | |
| 5. | Kestrel | | | 3 | Amber | New SPEC 3 species | |
| 6. | Merlin | | Annex I | | Amber | Breeding populations | |
| 7. | Water Rail | | | | Amber | Breeding populations | ✓ |
| 8. | Oystercatcher | National Importance | | | Amber | Non-breeding populations | |
| 9. | Golden Plover | International Importance | Annex I | | Red | Breeding populations | ✓ |
| 10. | Lapwing | ✓ | | 2 | Red | Breeding populations | ✓ |
| 11. | Snipe | ✓ | | 3 | Amber | SPEC 3 species | ✓ |
| 12. | Black-tailed Godwit | ✓ | | 2 | Amber | Non-breeding populations | ✓ |
| 13. | Bar-tailed Godwit | National importance | Annex I | | Amber | Non-breeding populations | ✓ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 14. | Redshank | National Importance | | | Red/Amber | R: Breeding populations<br>A: Non-breeding populations | ✓ |
| 15. | Greenshank | ✓ | | | Amber | Non-breeding populations | |
| 16. | Stock Dove | | | | Amber | Breeding populations | ✓ |
| 17. | Kingfisher | | Annex I | 3 | Amber | Breeding populations | ✓ |
| 18. | Skylark | | | 3 | Amber | New SPEC 3 species | ✓ |
| 19. | Starling | | | 3 | Amber | New SPEC 3 species | |
| 20. | Tree Sparrow | | | 3 | Amber | New SPEC 3 species | ✓ |
| 21. | Linnet | | | 2 | Amber | New SPEC 2 species | ✓ |
| 22. | Yellowhammer | | | | Red/Amber | Breeding populations | ✓ |

## 7.1 Key bird species

One of the main conservation objectives for the Baldoyle Estuary is to maintain and where possible, increase the wader and wildfowl populations, particularly Brent Geese and the Annex I species Golden Plover, and Bar-tailed Godwit (NPWS 2002). Of these three species, the Light-bellied Brent Goose was the most significant species recorded in the lands surrounding the estuary. The geese occur in numbers of international importance at the estuary based on I-WeBS published counts of the estuary for the period 2001-2009 (Boland & Crowe 2012) with the average population of 1056 individuals.

During this study the geese were found to utilise all suitable grasslands over the surrounding lands and at all states of the tide. Geese flocks were highly mobile between the estuary and these lands during the course of a day. In all months Brent were recorded in numbers of international importance in survey sections at Portmarnock Marsh & Sluice River( Zone A),Portmarnock Green (Zone B), Red Arches, Seagrange Park (Zone D) which are most of the amenity lands surrounding the Baldoyle Estuary. Brent Geese were observed in good numbers (up to 500 birds) in the Maynestown lands (Zone C) in the recent past where they grazed the young wheat. Representatives of the National Parks and Wildlife Service met the local farmer on several occasions to explore possibilities for crop damage control (pers. Comment Maurice Eakin and Niall Harmey, NPWS).

Curiously, Brent Geese were not recorded in any significant numbers during this survey on the Portmarnock Golf Club peninsula which was known to hold internationally important numbers of this species ( Benton 2009).

Bar-tailed Godwits were recorded at the Sluice River Marsh (Zone A) and on the Portmarnock Green (Zone B), albeit in low numbers. The majority of the Bar-tailed Godwits feed and roost within the estuary itself, but will use the surrounding grasslands in case of high tides and/or disturbance.

Golden Plover was not observed feeding or roosting in the surrounding lands during this survey. A flock of 4000 Golden Plover were recorded flying over the area during the site visit of 09/02/2012. The tide on the estuary was full in and it appeared that the birds were attempting to find an alternative roosting site but although they made repeated passes over the site they did not land during the time of the survey.

This was somewhat surprising as Golden Plover are known to use open stubble fields in the vicinity of estuaries (Roe J 2009). Golden Plover are frequently recorded roosting on estuary areas by day and often feed at night on surrounding farmland (Pierce per obs).

Several wader species were found commuting from the estuary to feed on the surrounding farmland especially the stubble field areas such as Lapwing (1000) Oystercatcher(200+) and Black-tailed Godwits (200+). The latter species in particular was found in nationally important numbers on the stubble fields at Maynestown and the Racecourse lands (C & D) and on the wet marsh at Portmarnock Marsh (Zone A).

Lapwing numbers peaked during this survey with 1000 birds seen on the stubbles at Maynestown (Zone C). Oystercatcher (200) and Redshank feed regularly on the wet grasslands of the amenity parks at Portmarnock Green (Zone B), Red Arches and Seagrange Park ( Zone D) when tides fill the estuary.

Other important and protected species which are not linked to the SPA designation were present. Kingfisher and Little Egret both EU Annex I species, were recorded at the Sluice River (Zone A) and along the Mayne River (Zone D).

The remaining species on the SPA list for the Baldoyle Estuary such as Shelduck, Pintail, Red-breasted Merganser, Ringed Plover, Grey Plover, Knot, Sanderling, Turnstone and Dunlin spend most of the winter within the estuary boundaries.

The results of this survey also showed that the surrounding lands support important numbers of typical farmland birds in wintertime some of which are of conservation concern at present. The numbers of Stock Dove (85 +) Tree Sparrow (145), Yellowhammer (20), Reed Bunting (60) and Skylark (500) were found on the farmland stubbles of Maynestown ( Zone C and D) are significant. Yellowhammer and Skylark were also present as breeding birds on the site in the period 2000-2006 (Goodwillie, 2007) and it is expected that this still is the case as the cereal farming has continued in the area. To protect the population of these red listed breeding birds, consideration should be given to their habitat requirements e.g. hedges with cereal plots in the design of the open space for both LAPs.

Photo 3 & 4: Black-tailed Godwit and Oystercatcher. Pictures courtesy of Shay Connelly

## 7.2 Key Areas for wintering birds in and around the Baldoyle Estuary

When looking at the overall picture of feeding and roosting by migratory birds at the Baldoyle Estuary, it becomes clear that there are two key sites within the estuary and seven in the surrounding lands. The key roosting sites within the estuary are located at the beach at the tip of the Portmarnock peninsula and the mudflats at the outfall of the Mayne river (based on IWEBS surveys). Figure 10 illustrates the key areas utilised by important species linked to the SPA designation.

The other key sites are the green of the Portmarnock Golf club, the green at the Texaco station, the pitches at Red Arches, the open space at Seagrange and the Sluice River marsh. They are all short grassland sites which are particularly important for the Brent Geese. The other two sites are open arable land at the Racecourse and at Maynestown (zone C) and these sites hold large numbers of waders such as Black-tailed Godwit, Oystercatcher and Lapwing. It will be important to protect all these key sites and the two habitat types to ensure that there are always roosting and feeding options available to the migratory birds during high tide and in case of ongoing disturbance by dogs and people.

Disturbance to birds is an important issue that will need to be taken into account in the local LAPs. With the exception of the Sluice River Marsh (Zone A) and the Maynestown lands (Zone C) the survey found very high levels of disturbance occurring at all the other sites. With a large part of area C planned for development and open space use, this means that another quiet undisturbed area will disappear with only the Sluice River Marsh remaining as a quiet area. As the number of people increases in Portmarnock and Balboyle, recreational pressure is also going to mount on the pitches at Red Arches and Seagrange and also on the arable land at the Racecourse lands. The recreational pressure is also likely to mount on the most important roosting site at the tip of the Portmarnock peninsula as more and more people are using the beach. The accumulative impact of recreational use of the proposed open space on the feeding and roosting sites in and around the estuary is a major concern and needs to be addressed in the LAPs.

The survey also highlighted the absence of significant numbers of birds over the very large land area of the former Baldoyle Racecourse (Zone D2). The lands here are currently unsuitable for many migratory species to feed or roost on. Small pockets of saltmarsh, freshwater marsh and stands of Phragmites reedbed are still important for Snipe(40+), Jack Snipe (1) and Reed Bunting (60+). It is also a traditional Fingal site for wintering Short-eared Owl while Little Egret feed on the Mayne River. Because of its proximity to the estuary, it is recommended that design and management of this open space be reappraised and habitat creation for the migratory species be considered for inclusion.

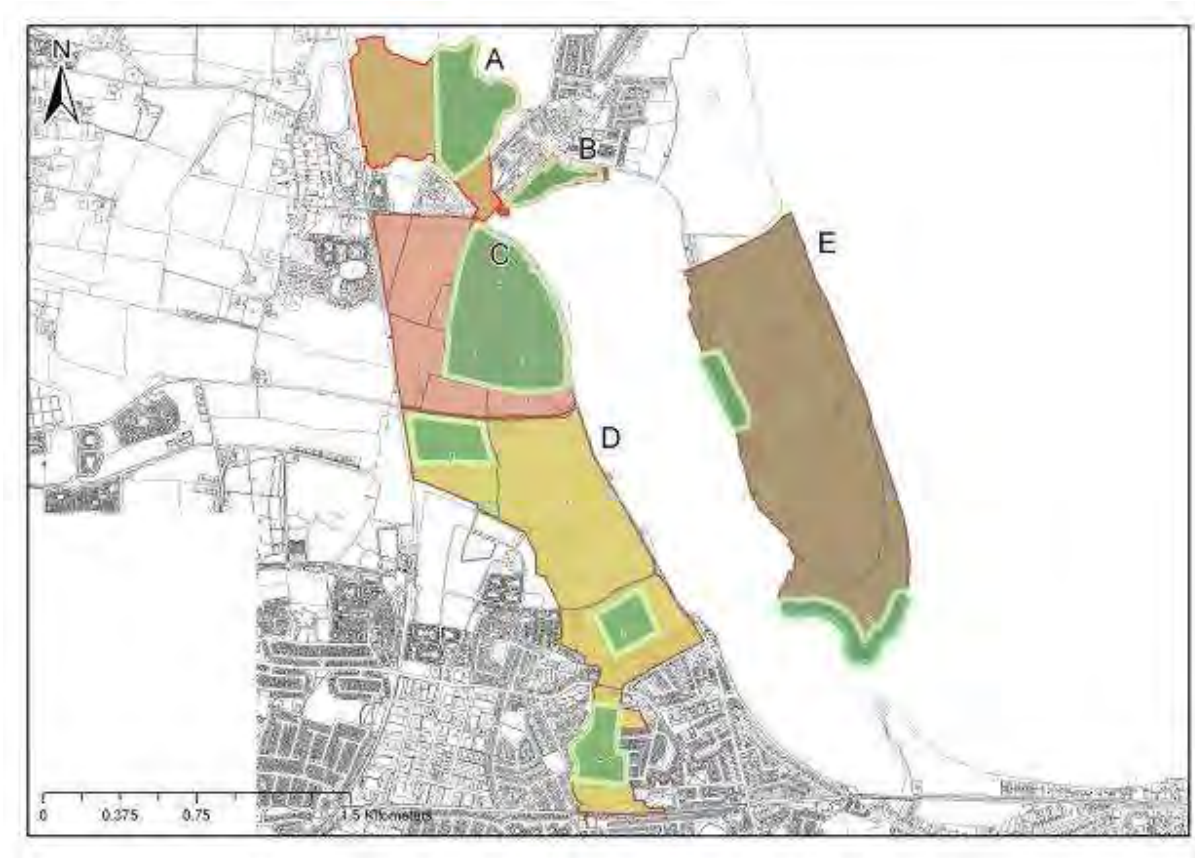



Figure 10: Map with key areas for migratory birds around the Baldoyle Estuary

In the ecological assessment of the Portmarnock LAP lands, Goodwillie (2007) states that no shorebirds regularly use the lands around Maynestown (zone C) and that the link between the estuary and the LAP lands are tenuous. Similarly, the environmental impact statement for the Portmarnock LAP lands by Sherman Oaks Ltd states that none of the wildfowl and waders that frequent the estuary are seen regularly on it, except for Snipe. This bird study found Little Egret, Lapwing, Black-tailed Godwit and Curlew using the open eastern part of the Maynestown lands on the three survey dates. Anecdotal observations in the area would support this data. The data for the ecological assessment for the Portmarnock LAP was collected during a period of 2002 – 2006 and these four species were not found in any significant numbers then. It is unclear from the report whether specific winter bird counts took place during that period. However, if bird counts were undertaken during the winter then this would suggest that the feeding and roosting habits of some of the birds linked to the estuary have changed in the intervening period. Ongoing disturbance at the some of the other key sites for the migratory birds in and around the estuary may have caused them to move to quieter lands in the vicinity of the Baldoyle Estuary.

## 8. Conclusion

This winter bird survey has demonstrated that the surrounding farmlands, amenity grasslands and golf club lands are important habitats for birds linked to the Baldoyle Estuary and should be viewed as being ecologically linked and not divorced from the estuarine areas. In times of hard weather, storms, high tides and low human disturbance times e.g dawn/ night times birds frequently move from the estuarine areas onto the surrounding lands for additional feeding or roosting needs. This valuable mix of land use together with the estuarine wetland habitats produces this diversity, if the mix stays as it is this level of diversity should continue.

The survey has found that the surrounding arable farmland in particular is an important feeding habitat for wader species from the estuary as well as winter finches, skylarks and buntings. The arable croplands location so close to the estuary allows this rich biodiversity to develop. If the surrounding arable lands are re zoned then the diversity and numbers of the bird species that give the SPA status to the Baldoyle Estuary may be affected.

## Recommendations

1. Given the ever increasing human population and requirements for additional housing and recreational zones within the area it is important that future plans include the creation of "quiet zones" where migratory birds can still find quiet feeding and roosting areas.
2. The design of the open space at Baldoyle and Portmarnock should include a mixture of short grassland, arable land use and sacrificial wintering crops (Linnet Mix) to ensure that sufficient feeding and roosting sites can be found within the parkland for migratory birds and native wintering species.
3. Optimise existing sites for migratory birds such as the Racecourse lands and the Murrough spit, thereby developing new roosting and feeding site.

**References.**


Crowe, O. (2005) *Ireland's Wetlands and their Waterbirds: Status and Distribution.* Birdwatch Ireland, Newcastle, Co. Wicklow.

Crowe, O., *Austin, G.E., Colhoun, K., Cranswick, P., Kershaw, M. & Musgrove, A.J. 2008. Estimates and trends of waterbird numbers wintering in Ireland, 1994/95-2003/04. Bird Study 55: 66–77.*

Benson, L. (2009) *Use of Inland feeding sites by Light-bellied Brent Geese in Dublin 2008-2009.* MsC Project UCD, Dublin.

Boland, H. Crowe, O. (2012) *Ireland's Wetlands and their Waterbirds: Status and Distribution.* Birdwatch Ireland, Newcastle, Co. Wicklow.

Goodwillie, R, Dillon, D., & Keeley B (2008) *Sluice River Marsh: Flora and Fauna Assessment.* Report for Fingal County Council Biodiversity Programme

Goodwillie, R, (2007) *Portmarnock LAP Ecological Assessment*. Report for Ballymore Residential Ltd.

Hutchinson, C. D. (1979). *Ireland's Wetlands and Their Birds.* Irish Wildbird Conservancy, Dublin

Lynas, P., Newton, S. F., & Robinson, J. A. (2007). *The Status of Birds in Ireland: an analysis of conservation concern 2008-2013.* Irish Birds 8. 149:165

Lovatt, J. Madden, B.,& O Donnell, M (1985) *The Birds of Portmarnock Sand Dune System and Baldoyle Estuary.*, Irish East Coast Bird Report. IWC Dublin

Lovatt, J. Madden, B.,& O Donnell, M (1986) *The Birds of Portmarnock Sand Dune System and Baldoyle Estuary Part 2.*, Irish East Coast Bird Report. IWC Dublin

NPWS. (2002). *Draft Conservation Plan for Natura 2000 site; Baldoyle Bay cSAC and SPA Co. Dublin* National Parks & Wildlife Service of the Department of Environment, Heritage and Local Government. 7 Ely Place, Dublin 2, Ireland.

Roe, J & J. Lovatt (2009) *Wintering bird survey of the lands surrounding the Broadmeadows/Swords Estuary January – March 2009,* report to Fingal County Council

Sheppard, R. (1993). *Ireland's Wetland Wealth*. Irish Wildbird Conservancy, Dublin.

Sherman Oaks Ltd (2007), *Environmental Impact Statement Portmarnock Local Area Plan Lands – Residential Development* .

# Appendices

## Overview of bird species recorded Zone A – Sluice River Marsh

| | | I-WeBS Counts for Portmarnock Marsh & Sluice River 2006/07 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Species name** | **1999/ 00*** | **Jan-06** | **Feb-06** | **Mar-06** | **Apr-06** | **Nov-06** | **Dec-06** | **Jan-07** | **Feb-07** | **Mar-07** |
| Little Grebe | 2 | | 2 | 1 | | 1 | 2 | | | 1 |
| Grey Heron | 2 | 1 | 4 | 9 | 3 | 4 | 4 | 18 | 16 | 5 |
| Mute Swan | 7 | | | 1 | 2 | 4 | 2 | | 1 | 1 |
| Mallard | 5 | 12 | 27 | 22 | 15 | 43 | 55 | 11 | 37 | 24 |
| Moorhen | 3 | 2 | 1 | | 1 | | | | 3 | 2 |
| Oystercatcher | 3 | | | 12 | 6 | 4 | 114 | | 2 | |
| Lapwing | 40 | | | | | 10 | | | | |
| Snipe | 2 | 12 | 30 | 5 | 8 | 3 | 22 | 4 | 13 | 16 |
| Curlew | 16 | | 11 | 19 | 5 | 8 | 79 | 45 | 24 | 25 |
| Redshank | 6 | 15 | 24 | 14 | 1 | | 12 | | | |
| Greenshank | 2 | | | | | | | | | |
| Black-headed | 1 | | | | | | | | | |
| Brent Goose | | 325 | 34 | 291 | 108 | 27 | 97 | 227 | 270 | 241 |
| Little Egret | | 3 | 1 | 1 | 3 | 4 | 4 | 2 | 3 | 1 |
| Teal | | 13 | 2 | 25 | 7 | 58 | 152 | 34 | 67 | 14 |
| Black-tailed Godwit | | 21 | 7 | 36 | 4 | 7 | 20 | 65 | 145 | 17 |
| Bar-tailed Godwit | | | | | | | | | 23 | |
| Kingfisher | | 1 | 2 | 1 | 2 | 1 | | 1 | 1 | |
| Water Rail | | | 1 | | 1 | | | 1 | | |
| Wigeon | | | | | | | | 21 | 3 | 2 |

## Overview of bird species recorded Zone B - Portmarnock Green

| | Species | 9Dec 2011 | 7 Jan 2012 | 3 Feb 2012 |
|---|---|---|---|---|
| 1. | Light- bellied Brent | 150 | 200 | 250 |
| 2. | Little Egret | 1 | 4 | 4 |
| 3. | Grey Heron | 4 | 5 | 4 |
| 4. | Mallard | 100 | 50 | 70 |
| 5. | Wigeon | 20 | 50 | 40 |
| 6. | Teal | 5 | 15 | 20 |
| 7. | Oystercatcher | 100 | 70 | 120 |
| 8. | Redshank | 10 | 20 | 50 |
| 9. | Black-tailed Godwit | 200 | 150 | 70 |
| 10. | Kingfisher | 1 | 2 | 1 |

## Overview of species recorded in Zone C

| | Species - C1 | 17/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Tree Sparrow | 1 | | |
| 2 | Woodpigeon | 32 | 130 | 150 |
| 3 | Stock Dove | | 45 | 2 |
| 4 | Lapwing | | | 34 |
| 5 | Chaffinch | 3 | | |
| 6 | Reed Bunting | 11 | 6 | 1 |

| | Species - C2 | 17/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Tree Sparrow | 5 | 4 | 11 |
| 2 | Woodpigeon | 178 | 85 | 36 |
| 3 | Stock Dove | 2 | | 2 |
| 4 | Chaffinch | 36 | 12 | 18 |
| 5 | Greenfinch | 15 | 37 | 4 |
| 6 | Reed Bunting | 7 | 3 | 2 |
| 7 | Linnet | 112 | 29 | 12 |
| 8 | Redpoll | 35 | | 8 |

| | Species - C3 | 17/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Skylark | 33 | 25 | 26 |
| 2 | Tree Sparrow | 1 | 27 | 1 |
| 3 | Woodpigeon | 8 | 20 | 20 |
| 4 | Chaffinch | 2 | 4 | |
| 5 | Greenfinch | | 2 | |
| 6 | Bullfinch | 2 | | |
| 7 | Long-tailed tit | 14 | | |
| 8 | Buzzard | | 2 | |
| 9 | Meadow Pipit | | 4 | |
| 10 | Reed Bunting | 6 | 1 | 10 |
| 11 | Woodcock | | 2 | |

| | Species - C4 | 12/12/2011 | 15/01/2012 | 9/02/2012 | 11/02/2012 |
|---|---|---|---|---|---|
| 1 | Skylark | 87 | | 10 | |
| 2 | House Sparrow | 10 | | | 8 |
| 3 | Tree Sparrow | 17 | 12 | | |
| 4 | Woodpigeon | 350 | | 60 | 70 |
| 5 | Stock Dove | 20 | | 50 | 10 |
| 6 | Black-tailed | 120 | 23 | | 180 |
| 7 | Lapwing | 85 | 460 | 1000 | 6 |
| 8 | Curlew | | 11 | 2 | |
| 9 | Yellowhammer | 4 | | 2 | 12 |
| 10 | Greenfinch | 1 | 2 | | 2 |
| 11 | Kestrel | 2 | | | |
| 12 | Buzzard | 1 | | 1 | 2 |
| 13 | Sparrowhawk | | | 1 | |
| 14 | Merlin | | | 1 | |
| 15 | Raven | | | 2 | |
| 16 | Meadow Pipit | 23 | | | |
| 17 | Reed Bunting | 11 | | | |
| 18 | Goldfinch | 17 | | | 2 |
| 19 | Linnet | 60 | 26 | | |
| 20 | Redpoll | | 5 | | |

| | Species - C5 | 17/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Skylark | 217 | 130 | 18 |
| 2 | Tree Sparrow | 30 | 11 | |
| 3 | Woodpigeon | 70 | 174 | 320 |
| 4 | Stock Dove | 26 | 22 | 70 |
| 5 | Chaffinch | 4 | 40 | |
| 6 | Greenfinch | 7 | | |
| 7 | Bullfinch | 7 | | |
| 8 | Buzzard | | | 2 |
| 9 | Meadow Pipit | 24 | 60 | |
| 10 | Reed Bunting | 23 | | |
| 11 | Linnet | | 80 | |

| | Species - C6 | 12/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | House Sparrow | | 2 | |
| 2 | Tree Sparrow | | | 2 |
| 3 | Woodpigeon | 31 | 125 | 25 |
| 4 | Stock Dove | 5 | 34 | |
| 5 | Lapwing | 8 | 25 | |
| 6 | Reed Bunting | | 5 | |
| 7 | Goldfinch | | 2 | |
| 8 | Little Egret | 1 | | |

| | Species C7 | 12/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Skylark | 310 | | |
| 2 | House Sparrow | 25 | | |
| 3 | Tree Sparrow | 102 | | |
| 4 | Woodpigeon | 45 | | |
| 5 | Stock Dove | 15 | | |
| 6 | Black-tailed | | 114 | 6 |
| 7 | Lapwing | 30 | | 24 |
| 8 | Greenfinch | 14 | | |
| 9 | Sparrowhawk | 1 | | |
| 10 | Meadow Pipit | 1 | | |
| 11 | Reed Bunting | 4 | | 11 |
| 12 | Little Egret | 1 | | |

| | Species - C8 | 12/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Skylark | 72 | | |
| 2 | House Sparrow | 7 | 12 | 2 |
| 3 | Tree Sparrow | 18 | 2 | |
| 4 | Woodpigeon | 12 | 24 | 56 |
| 5 | Curlew | 6 | | |
| 6 | Bullfinch | 2 | | |
| 7 | Meadow Pipit | 4 | | |
| 8 | Reed Bunting | 5 | 7 | 2 |

| | Species – C9 | 12/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Skylark | | | 4 |
| 2 | Kestrel | | 1 | |
| 3 | Buzzard | 1 | | |
| 4 | Meadow Pipit | | 4 | 1 |
| 5 | Reed Bunting | 2 | | |
| 6 | Goldfinch | 30 | | |
| 7 | Snipe | 1 | | |

| | Species – C10 | 12/12/2011 | 15/01/2012 | 11/02/2012 |
|---|---|---|---|---|
| 1 | Skylark | 10 | | |
| 2 | House Sparrow | 2 | | |
| 3 | Tree Sparrow | 7 | | |
| 4 | Woodpigeon | 20 | 7 | 18 |
| 5 | Stock Dove | 2 | 2 | |
| 6 | Greenfinch | 4 | | |

## Overview of bird species recorded Zone D - Racecourse Fields Section 1 and 2

| | Species | 9/12/ 2011 | 7/1/ 2012 | 3/2/ 2012 | | Species | 9/12/ 2011 | 7/1/ 2012 | 3/2/ 2012 |
|---|---|---|---|---|---|---|---|---|---|
| 1. | Light- bellied Brent | | | 10 | 24 | Blue Tit | 2 | 2 | 6 |
| 2. | Little Egret | 1 | | 1 | 25 | Magpie | 20 | 10 | 15 |
| 3. | Teal | 5 | | | 26 | Jackdaw | 15 | 5 | 15 |
| 4. | Buzzard | 2 | 1 | | 27 | Rook | 20 | 2 | 10 |
| 5. | Kestrel | 1 | 1 | 1 | 28 | Hooded Crow | 6 | 2 | 6 |
| 6. | Pheasant | 3 | 4 | 2 | 29 | Starling | 150 | 30 | 50 |
| 7. | Moorhen | 1 | 1 | 2 | 30 | Tree Sparrow | | 20 | |
| 8. | Oystercatcher | 200 | 50 | 25 | 31. | Chaffinch | 6 | 40 | |
| 9. | Redshank | 1 | | | 32 | Linnet | | 35 | |
| 10. | Black-tailed Godwit | 200 | | | 33 | Redpoll | 2 | | 2 |
| 11. | Snipe | 14 | 4 | 2 | 34 | Goldfinch | 2 | 50 | 6 |
| 12. | Jack Snipe | 1 | | | 35 | Bullfinch | 2 | 2 | 2 |
| 13. | Black-headed Gull | 10 | 5 | 10 | 36 | Reed Bunting | 14 | 50 | 2 |
| 14. | Herring Gull | 10 | 10 | 5 | 37 | Yellowhammer | | 20 | |
| 15. | Stock Dove | | 25 | 50 | | | | | |
| 16. | Woodpigeon | 10 | 10 | 30 | | | | | |
| 17. | Collared Dove | 2 | 2 | 4 | | | | | |
| 18. | Short-eared Owl | ✓* | | | | | | | |
| 17. | Skylark | 45 | 5 | | | | | | |
| 18. | Meadow Pipit | 2 | 4 | 2 | | | | | |
| 19 | Wren | 15 | 10 | 10 | | | | | |
| 20. | Dunnock | 4 | 4 | 2 | | | | | |
| 21. | Robin | 6 | 6 | 8 | | | | | |
| 22. | Song Thrush | 3 | 2 | 6 | | | | | |
| 23. | Blackbird | 8 | 10 | 8 | | | | | |

*Pellet found and species presence verified by another fieldworker

## Overview of Species recorded in Zone D3 - Red Arches

| | Species | 9/12/ 2011 | 7/1/ 2012 | 27/1/ 2012 |
|---|---|---|---|---|
| 1. | Light-bellied Brent Geese | 700 | 10 | 400 |
| 2. | Oystercatcher | 100 | 50 | 34 |
| 3. | Common Gull | | | 20 |

## Overview of Species recorded in Zone D4 - Seagrange Park

| | Species | 9 Dec 2011 | 7 Jan 2012 | 27 Jan 2012 |
|---|---|---|---|---|
| 1 | Light-bellied Brent Geese | 50 | 120 | 300 |
| 2 | Oystercatcher | 100 | 25 | 40 |
| 3 | Curlew | 5 | 5 | 25 |
| 4 | Black-tailed Godwit | 140 | 85 | 155 |
| 5 | Redshank | 10 | 15 | 35 |

## Overview of Species recorded in Zone E – Portmarnock Golf Club

| | Species | 15/12/ 2011 | 12/1/2012 | 9/2/2012 |
|---|---|---|---|---|
| 1. | Grey Heron | 1 | 3 | 1 |
| 2. | Light-bellied Brent Geese | 20 | | 100 |
| 3. | Teal | 2 | | |
| 4. | Kestrel | | | 1 |
| 5. | Pheasant | 2 | 3 | 2 |
| 6. | Water Rail | 1 | | |
| 7. | Moorhen | 1 | | 3 |
| 8. | Redshank | 10 | | |
| 9. | Curlew | 7 | 1 | 2 |
| 10. | Snipe | 2 | 3 | 2 |
| 11. | Black-headed Gull | 2 | 4 | |
| 12. | Wood Pigeon | 15 | 20 | 25 |
| 13. | Collared Dove | | | 2 |
| 14. | Skylark | 2 | | 10 |
| 15. | Meadow Pipit | 2 | 4 | 4 |
| 16. | Pied Wagtail | | | 2 |
| 17. | Wren | 6 | 5 | 8 |
| 18. | Dunnock | 5 | 4 | 5 |
| 19. | Robin | 4 | 4 | 3 |
| 20 | Stonechat | 2 | 2 | 2 |
| 21. | Blackbird | 6 | 4 | 7 |
| 22 | Song Thrush | | 2 | 2 |
| 23 | Mistle Thrush | 2 | 2 | 4 |
| 24 | Goldcrest | 2 | 4 | 2 |
| 25 | Blue Tit | 2 | 4 | 4 |
| 26 | Magpie | 20 | 15 | 25 |
| 27 | Rook | 6 | 10 | 8 |
| 28 | Hooded Crow | 6 | 8 | 6 |
| 29 | Starling | 20 | 20 | 35 |

## Overview of Species recorded in Zone E – Portmarnock Golf Club continued

| | Species | 15/12/ 2011 | 12/1/2012 | 9/2/2012 |
|---|---|---|---|---|
| 30 | Chaffinch | 15 | 25 | 15 |
| 31 | Linnet | 15 | 20 | 25 |
| 32 | Goldfinch | 8 | 10 | 10 |
| 33 | Greenfinch | 6 | 6 | 6 |
| 34 | Reed Bunting | 4 | 6 | 4 |

**Appendix B (b)**

Bird Survey Work undertaken In Decmember 2012.

| DATE | TIME | BIRDS OBSERVED | COMMENTS |
|---|---|---|---|
| 06.12.2012 | 1300-1500 | Grey Heron 1, Mallard 250, Lapwing 350,Redshank 16, Black-tailed Godwit 10, Curlew 2, Snipe 2, Buzzard 1, Short-eared Owl 1, Woodpigeon 500, Starling 200, Song Thrush 150, Skylark 220, Linnet 100, Meadow Pipit 60, Chaffinch 100, Tree Sparrow 25, Yellowhammer 25 | Flood pools on eastern edge near coast road focus for duck and wader species as was fodder crop on southern side of main field. Hoarding on Mound Fields. Half tide |
| 07.12.2012 | 1530-1600 | Mallard 200, Redshank 10, Woodpigeon 200+ | Brief watch of east end of large field/flood pools. Half Tide |
| 10.12.2012 | 1400-1545 | Mallard 120, Lapwing 55, Redshank 10, Black-tailed Godwit 5, Curlew 2, Buzzard 1, Woodpigeon 400, Song Thrush 100, Skylark 190, Tree Sparrow 150, Brambling 20, Chaffinch 500, Greenfinch 150, Linnet 150, Greenfinch 100, Starling 200, Yellowhammer 25, Meadow Pipit 30 | Low tide. Ducks again in pools and feeding on remains of fodder crop. Lapwing, Redshank, Godwits around pools. Stubbles and fodder crop stuffed with winter finches, larks, buntings, 2000+ birds over range of species |
| 13.12.2012 | 1245-1435 | Mallard 250,Redshank 5, Curlew 2, Grey Heron 1, Snipe 4,Buzzard 1,Woodpigeon 500, Starling 250,Yellowhammer 50,Mistle Thrush 20, Song Thrush 50, Meadow Pipit 20, Skylark 300, Linnet, Brambling 2, Mixed finch flock 1500+ birds mostly Chaffinch(1000), Greenfinch(200) and Tree Sparrow(150) | Full tide on estuary. Same pattern with duck and warder species. The fodder and stubbles holding the large numbers of finches, buntings, pigeon, larks and thrush species. Buzzard again hunting the area. |
| 17.12.2012 | 1400-1530 | Mallard 20, Redshank 14, Lapwing 90, Curlew 2, Snipe 2, Grey Heron 1, Woodpigeon 420, Buzzard 1, Skylark 350, Linnet 50, Mistle Thrush 15, Song Thrush 30, Starling 250, Finch flock 500+ same mix of species. Brambling 2 | Full tide on estuary. Some disturbance with walker in fields along northern/eastern side. |

| | | | |
|---|---|---|---|
| | | | Mound fields not accessible. |
| 20.12.2012 | 1215-1415 | Curlew 4,Mallard 154,Redshank 25, Woodpigeon 250, Buzzard 1, Skylark 250, Merlin 1, Finch flock 1500, Song Thrush 55, Mistle Thrush 25, Starling 100, Linnet 50, Meadow Pipit 20, Brambling 10, Yellowhammer 40, Snipe 2, Tree Sparrow 100 | 2 shooting men on site working the area during the count. Shooting men again present at dusk on the 21st. |
| 24.12.2012 | 1145-1345 | Mallard 200, Redshank 12, Curlew 3, Woodpigeon 100, Skylark 250, Merlin 1, Snipe 1, Linnet 50, Finch flock 500, Tree Sparrow 60,Yellowhammer 30 | |
| 27.12.2012 | 1045-1245 | Redshank 2, Skylark 285, Finch flock 500, Gull flock 50, Song Thrush 50, Mistle Thrush 20, Starling 100, Woodpigeon 200, Curlew 2, Mallard 50, Linnet 30 | |
| 29.12.2012 | 0830-1030 | Curlew 8, Redshank 10, Song Thrush 40, Finch flock 500, Buzzard 1, Woodpigeon 150, Skylark 150, Linnet 250, Mallard 100 | Species like Lapwing 250, Black-tailed Godwit 50, Brent Geese 250+ noted flying over area but moving to better habitat types..wet grasslands primarilyat Portmarnock and inland towards Clongriffin/Red Arches/ Seagrange Park |

**Appendix C**

| Appendix C Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status**[19] | **Conservation Management Objectives**[20] | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity**[21] |
| **candidate Special Areas of Conservation (cSAC)** | | | | | |
| Baldoyle Bay cSAC (000199) 0km | Annex I habitats for which the site is designated:<br><br>• Mudflats and sandflats not covered by seawater at low tide [1140]<br>• *Salicornia* and other annuals colonizing mud and sand [1310]<br>• Atlantic salt meadows *Glauco-Puccinellietalia maritimae* [1330]<br>• Mediterranean salt meadows *Juncetalia maritimi* [1410] | • Mudflats and sandflats not covered by seawater at low tide – Unfavourable/Inadequate<br>• *Salicornia* and other annuals colonizing mud and sand – Unfavourable/Inadequate<br>• Atlantic salt meadows – Unfavourable/Inadequate<br>• Mediterranean salt meadows – Unfavourable/Inadequate | To maintain the favourable conservation condition of the Annex I habitats for which Baldoyle Bay SAC is selected, as defined by the attributes and targets listed in the sites conservation objectives document. | • Water quality including nutrient levels, water clarity, sediment levels<br>• Appropriate agricultural practices including grazing pressures.<br>• Surface and ground water quality<br>• Appropriate levels of access and disturbance<br>• Water levels<br>• Air quality<br>• Tidal currents<br>• Erosion and deposition rates<br>• Maintenance of habitat extent and condition | • Encroaching development at the Mayne River;<br>• Water pollution from inflowing rivers and poor sewage network;<br>• Bait digging and controlled wildfowling;<br>• Invasion by *Spartina* species;<br>• Disturbance to bird species;<br>• Overgrazing by livestock |
| North Dublin Bay cSAC (000206) c.1.2km south | Annex I habitats for which the sites is designated:<br><br>• Mudflats and sandflats not covered by seawater at low tide [1140]<br>• Annual vegetation of drift | • Mudflats and sandflats not covered by seawater at low tide – Unfavourable/Inadequate<br>• Annual vegetation of drift lines – Unfavourable/Inadequate | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected: | • Water quality including nutrient levels, water clarity, sediment levels<br>• Appropriate agricultural practices including grazing pressures.<br>• Surface and ground water | • Recreational activities<br>• Grazing (rabbits)<br>• Water abstraction<br>• Water pollution<br>• Oil spillages from shipping<br>• Commercial bait digging |

19 Sourced from Status of EU Protected Habitats and Species in Ireland: Backing Documents, Article 17 forms, maps. Vol. 1 – 3 (NPWS, 2007).
20 Sourced from Site Conservation Objectives (NPWS, 2011 & NPWS, 2012)
21 Sourced from Status of EU Protected Habitats and Species in Ireland (NPWS, 2007) and/or Natura 2000 Standard Data Forms (NPWS, 2011).

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | lines [1210]<br>• *Salicornia* and other annuals colonizing mud and sand [1310]<br>• Atlantic salt meadows *Glauco-Puccinellietalia maritimae* [1330]<br>• Mediterranean salt meadows *Juncetalia maritimi* [1410]<br>• Embryonic shifting dunes [2110]<br>• Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]<br>• *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]<br>• Humid dune slacks [2190]<br><br><u>Annex II species for which the sites is designated:</u><br><br>• Petalwort *Petalophyllum ralfsii* [1395] | • *Salicornia* and other annuals colonizing mud and sand – Unfavourable/Inadequate<br>• *Spartina* swards – Unfavourable/Inadequate<br>• Atlantic salt meadows – Unfavourable/Inadequate<br>• Mediterranean salt meadows – Unfavourable/Inadequate<br>• Embryonic shifting dunes – Unfavourable/Bad<br>• Shifting dunes along the shoreline – Unfavourable/Bad<br>• Fixed coastal dunes – Unfavourable/Inadequate<br>• Humid dune slacks – Unfavourable/Bad<br><br><u>Annex II species for which the sites is designated:</u><br><br>• Petalwort - Favourable | • Mudflats and sandflats not covered by seawater at low tide<br>• Annual vegetation of drift lines<br>• *Salicornia* and other annuals colonizing mud and sand<br>• Atlantic salt meadows<br>• Petalwort<br>• Mediterranean salt meadows<br>• Embryonic shifting dunes<br>• Shifting dunes along the shoreline<br>• Fixed coastal dunes with herbaceous vegetation<br>• Humid dune slacks | quality<br>• Appropriate levels of disturbance<br>• Water levels<br>• Air quality<br>• Tidal currents<br>• Erosion and deposition rates<br>• Height and frequency of the tides availability of foreshore sand and the average strength of the on-shore winds<br>• Damp, calcareous sand in dune slacks and machair | |
| Lambay Island cSAC (000204) c.11km North | <u>Annex I habitats for which the sites is designated:</u><br><br>• Vegetated sea cliffs of the Atlantic and Baltic coasts | • Vegetated sea cliffs – Unfavourable/Inadequate<br>• Grey seal - Favourable | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected: | • Geology<br>• Coastal habitats<br>• Prey abundance<br>• Water quality<br>• There is no current | • Damage to nest sites by rodents<br>• Competition for fishing resources with fishermen<br>• Illegal culls |

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | [1230]<br><br><u>Annex II species for which the sites is designated:</u><br><br>• Grey seal *Halichoerus grypu* [1364] | | • Vegetated sea cliffs of the Atlantic and Baltic coasts<br>• Grey seal | understanding of grey seal habitat use, requirements or preferences outside of the terrestrial/coastal interface. Terrestrial habitat occupied by grey seals during breeding and other shore-based phases of the annual cycle include coastland and marine littoral habitats such as grass banks islands of various size to estuarine sandbanks, intertidal rock ledges and boulder beaches. | • Disease e.g. Phocine Distemper Virus<br>• Disturbance to breeding colonies<br>• Pollution and discarded waste |
| Rogerstown Estuary cSAC (000208) c.9.5km North | <u>Annex I habitats for which the sites is designated:</u><br><br>• Estuaries [1130]<br>• Mudflats and sandflats not covered by seawater at low tide [1140]<br>• *Salicornia* and other annuals colonizing mud and sand [1310]<br>• Spartina swards *Spartinion maritimae* [1320]<br>• Atlantic salt meadows *Glauco-Puccinellietalia maritimae* [1330]<br>• Mediterranean salt meadows *Juncetalia maritimi* | • Estuaries – Unfavourable/Inadequate<br>• Mudflats and sandflats not covered by seawater at low tide – Unfavourable/Inadequate<br>• *Salicornia* and other annuals colonizing mud and sand – Unfavourable/Inadequate<br>• Spartina swards – Unfavourable/Inadequate<br>• Atlantic salt meadows – Unfavourable/Inadequate<br>• Mediterranean salt meadows – Unfavourable/Inadequate<br>• Shifting dunes along the | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:<br><br>• Estuaries<br>• Mudflats and sandflats not covered by seawater at low tide<br>• *Salicornia* and other annuals colonizing mud and sand<br>• Atlantic salt meadows<br>• Mediterranean salt meadow<br>• Shifting dunes along the sho reline | • Water quality including nutrient levels, water clarity, sediment levels<br>• Surface and ground water quality<br>• Appropriate levels of disturbance<br>• Water levels<br>• Appropriate disturbance levels<br>• Tidal currents<br>• Wind energy<br>• Erosion / deposition levels<br>• Recreational activities<br>• Trampling overuse | • Reclamation/infill of land<br>• Water quality<br>• Erosion |

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | [1410]<br>• Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]<br>• *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | shoreline – Unfavourable/Bad<br>• Fixed coastal dunes – Unfavourable/Inadequate | • *Fixed coastal dunes with herbaceous vegetation | | |
| Malahide Estuary cSAC (000205) c.8km South | <u>Annex I habitats for which the sites is designated:</u><br><br>• Mudflats and sandflats not covered by seawater at low tide [1140]<br>• *Salicornia* and other annuals colonizing mud and sand [1310]<br>• *Spartina* swards *Spartinion maritimae* [1320]<br>• Atlantic salt meadows *Glauco-Puccinellietalia maritimae* [1330]<br>• Mediterranean salt meadows *Juncetalia maritimi* [1410]<br>• Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]<br>• *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | • Mudflats and sandflats not covered by seawater at low tide – Unfavourable/Inadequate<br>• *Salicornia* and other annuals colonizing mud and sand – Unfavourable/Inadequate<br>• *Spartina* swards – Unfavourable/Inadequate<br>• Atlantic salt meadows – Unfavourable/Inadequate<br>• Mediterranean salt meadows – Unfavourable/Inadequate<br>• Shifting dunes along the shoreline – Unfavourable/Bad<br>• Fixed coastal dunes – Unfavourable/Inadequate | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:<br><br>• Mudflats and sandflats not covered by seawater at low tide<br>• *Salicornia* and other annuals colonizing mud and sand<br>• *Spartina* swards *Spartinion maritimae* [1320]<br>• Atlantic salt meadows<br>• Mediterranean salt meadow<br>• Shifting dunes along the shoreline<br>• Fixed coastal dunes with herbaceous vegetation | • Water quality including nutrient levels, water clarity, sediment levels<br>• Railway viaduct<br>• Appropriate agricultural practices including grazing pressures.<br>• Surface and ground water quality<br>• Appropriate levels of disturbance<br>• Water levels<br>• Air quality<br>• Tidal currents<br>• Erosion and deposition rates<br>• Recreational activities<br>• Trampling overuse | • Recreational activities<br>• Water pollution<br>• Infilling<br>• Nutrient enrichment from the Broadmeadows River and sewage plants<br>• Disturbance<br>• Development |
| Irelands Eye | <u>Annex I habitats for which the</u> | • Perennial vegetation of | To maintain or restore the | • Water quality including | • Increase in visitor |

| Appendix C Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| cSAC (002193) c.4km east | sites is designated:<br>• Perennial vegetation of stony banks [1220]<br>• Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] | stony banks [1220] – Unfavourable/Inadequate<br>• Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] – Unfavourable/Inadequate | favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:<br>• [1220] Perennial vegetation of stony banks<br>• [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts | nutrient levels, water clarity, sediment levels<br>• Maintaining appropriate agricultural practices including grazing pressures.<br>• Surface and ground water quality<br>• Maintaining appropriate levels of disturbance<br>• Water levels<br>• Air quality<br>• Tidal currents<br>• Erosion and deposition rates | numbers damaging sandy habitats and disturbing bird species |
| Howth Head cSAC (000202) c.3.5km south-east | Annex I habitats for which the sites is designated:<br>• Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]<br>• European dry heaths [4030] | • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] – Unfavourable/Inadequate<br>• European dry heaths [4030] - Unfavourable/Bad | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:<br>• Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]<br>• European dry heaths [4030] | • Controlling heath Fires<br>• Controlling recreational activities, visitor pressure | • Controlling fire risk<br>• Controlling vistitor numbers<br>• Air pollution<br>• Overfishing affecting prey abundance |
| Rockabill to Dalkey Island cSAC | Annex I habitats for which the sites is designated:<br>• Reefs [1170]<br>Annex II species for which the sites is designated: | • Reefs [1170] - Unfavourable/Inadequate<br>• Harbour porpoise *Phocaena phocaena* [1170] - Favourable | Currently unavailable.<br>Based on current generic conservation objectives for other sites, conservation oblectives likely to be; | • Tidal currents<br>• Direct disturbance to habitats<br>• Prey abundance<br>• Water quality<br>• Disturbance/noise | • Professional fishing<br>• Taking of Fauna<br>• Taking of Flora<br>• Water Pollution<br>• Climate change<br>• Invasion of a non-native species |

| Appendix C Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | • Harbour porpoise *Phocaena phocaena* [1170] | | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:<br>• Reefs [1170]<br>• Harbour porpoise *Phocaena phocaena* [1170] | | • Direct damage to reef habitats<br>• Outdoor sports and leisure activities<br>• Noise<br>• Military manouvers<br>• Competition for fishing resources with fishermen<br>• Pollution |
| South Dublin Bay cSAC (000210) c.6.6km south | Annex I habitats for which the sites is designated:<br>• Mudflats and sandflats not covered by seawater at low tide [1140] | • Mudflats and sandflats not covered by seawater at low tide – Unfavourable/Inadequate | To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:<br>• Mudflats and sandflats not covered by seawater at low tide [1140] | • Controllong bait digging<br>• Land reclamation for industrial / infrastructure usage<br>• Water quality including nutrient levels, water clarity, sediment levels<br>• Maintaining appropriate levels of disturbance<br>• Tidal currents<br>• Erosion and deposition rates | • Land take for Infrastructure/ Industry<br>• Water quality/pollution<br>• Recreational Activities<br>• Commercial Bait Digging<br>• Disturbance |
| **Special Protection Areas (SPA)** | | | | | |
| **Site Name & Code** | **Qualifying Interests & Code** | **Current Conservation Status[22]** | **Conservation Management Objectives[23]** | **Conditions underpinning site integrity** | **Threats to site integrity** |
| Lambay Island SPA (004069) | • Fulmar (*Fulmarus glacialis*) [A009] | • [A009] – Green<br>• [A017] – Amber | To maintain or restore the favourable conservation | • Geology<br>• Coastal habitats | • Predation from rat species<br>• Overfishing |

22 Sourced from The status of birds in Ireland: an analysis of conservation concern 2008-2013, Paul Lynas, Stephen F., Newton,& James A. Robinson, Irish Birds 2007
23 Sourced from Conservation Objectives (NPWS, 2011)

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| c.11km north east | • Cormorant (*Phalacrocorax carbo*) [A017]<br>• Shag (*Phalacrocorax aristotelis*) [A018]<br>• Greylag Goose (*Anser anser*) [A043]<br>• Lesser Black-backed Gull (*Larus fuscus*) [A183]<br>• Herring Gull (*Larus argentatus*) [A184]<br>• Kittiwake (*Rissa tridactyla*) [A188]<br>• Guillemot (*Uria aalge*) [A199]<br>• Razorbill (*Alca torda*) [A200]<br>• Puffin (*Fratercula arctica*) [A204] | • [A018] – Amber<br>• [A043] – Amber<br>• [A183] – Amber<br>• [A184] – Red<br>• [A188] – Amber<br>• [A199] – Amber<br>• [A200] – Amber<br>• [A204] – Amber | condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Fulmarus glacialis [breeding ]*<br>• *Phalacrocorax carbo [breeding ]*<br>• *Phalacrocorax aristotelis [breeding ]*<br>• *Anser anser [wintering]*<br>• *Larus fuscus [breeding ]*<br>• *Larus argentatus [breeding + wintering]*<br>• *Rissa tridactyla [breeding ]*<br>• *Uria aalge [breeding ]*<br>• *Alca torda [breeding ]*<br>• *Fratercula arctica [breeding ]* | • Food supply<br>• Appropriate levels of disturbance | • Pollution<br>• Impacts on food resources |
| Rogerstown Estuary SPA (004015) c.4.5km South | • Greylag Goose (*Anser anser*) [A043]<br>• Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>• Shelduck (*Tadorna tadorna*) [A048]<br>• Shoveler (*Anas clypeata*) [A056]<br>• Oystercatcher (*Haematopus ostralegus*) [A130]<br>• Ringed Plover (*Charadrius* | • [A043] –Amber<br>• [A046] –Amber<br>• [A048] – Amber<br>• [A056] – Red<br>• [A130] – Amber<br>• [A137] – Amber<br>• [A141] – Amber<br>• [A143] – Red<br>• [A149] – Amber<br>• [A156] – Amber | To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Anser anser* [wintering]<br>• *Branta bernicla hrota* [wintering]<br>• *Tadorna tadorna* [wintering]<br>• *Anas clypeata* [wintering] | • Water quality including nutrient levels, water clarity, sediment levels<br>• Water levels<br>• Tidal currents<br>• Wind energy<br>• Erosion / deposition levels<br>• Freshwater influx<br>• Coastal habitats<br>• Food supply<br>• Appropriate levels of | • Pollution caused by increased fertiliser application, sewage and industrial waste.<br>• Reclamation<br>• Pollution from landfill site is also a major source<br>• raw sewage<br>• agricultural pollution<br>• Agricultural nutrient enrichment |

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | *hiaticula*) [A137]<br>• Grey Plover (*Pluvialis squatarola*) [A141]<br>• Knot (*Calidris canutus*) [A143]<br>• Dunlin (*Calidris alpina*) [A149]<br>• Black-tailed Godwit (*Limosa limosa*) [A156]<br>• Redshank (*Tringa totanus*) [A162]<br>• Wetlands & waterbirds [A999] | • [A162] – Red | • *Haematopus ostralegus* [wintering]<br>• *Charadrius hiaticula* [wintering]<br>• *Pluvialis squatarola* [wintering]<br>• *Calidris canutus* [wintering]<br>• *Calidris alpina* [wintering]<br>• *Limosa limosa* [wintering]<br>• *Tringa totanus* [wintering] | disturbance | • Natural erosion<br>• Anthropogenic erosion |
| Malahide Estuary SPA (004025)<br>c. 3.7km north<br><br>(also known as Broadmeadow / Swords SPA) | • Great Crested Grebe (*Podiceps cristatus*) [A005]<br>• Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>• Shelduck (*Tadorna tadorna*) [A048]<br>• Pintail (*Anas acuta*) [A054]<br>• Goldeneye (*Bucephala clangula*) [A067]<br>• Red-breasted Merganser (*Mergus serrator*) [A069]<br>• Oystercatcher (*Haematopus ostralegus*) [A130]<br>• Golden Plover (*Pluvialis apricaria*) [A140]<br>• Grey Plover (*Pluvialis squatarola*) [A141]<br>• Knot (*Calidris canutus*) | • [A005] – Amber<br>• [A046] – Amber<br>• [A048] – Amber<br>• [A054] – Red<br>• [A067] – Amber<br>• [A069] – Green<br>• [A130] – Amber<br>• [A140] – Red<br>• [A141] – Amber<br>• {A143] – Red<br>• [A149] – Amber<br>• [A156] – Amber<br>• [A157] – Red<br>• [A162] – Red | To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Podiceps cristatus* [wintering]<br>• *Branta bernicla hrota* [wintering]<br>• *Tadorna tadorna* [wintering]<br>• *Anas acuta* [wintering]<br>• *Bucephala clangula* [wintering]<br>• *Mergus serrator* [wintering]<br>• *Haematopus ostralegus* [wintering]<br>• Pluvialis apricaria [wintering] | • Water quality including nutrient levels, water clarity, sediment levels<br>• Freshwater influx<br>• Railway viaduct<br>• Water levels<br>• Tidal currents<br>• Wind energy<br>• Erosion / deposition levels<br>• Coastal habitats<br>• Food supply<br>• Appropriate levels of disturbance | • Reclamation for industrial and/or infrastructural purposes.<br>• Infilling<br>• Landfill site is also a major source of pollution<br>• Untreated waste<br>• Agricultural nutrient enrichment<br>• Water quality<br>• Impacts on food resources<br>• Disturbance from recreational activities<br>• Disturbance from dog walkers |

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | [A143]<br>• Dunlin (*Calidris alpina*) [A149]<br>• Black-tailed Godwit (*Limosa limosa*) [A156]<br>• Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>• Redshank (*Tringa totanus*) [A162]<br>• Wetlands & Waterbirds [A999] | | • *Pluvialis squatarola* [wintering]<br>• *Calidris canutus* [wintering]<br>• Calidris alpina [wintering]<br>• *Limosa limosa* [wintering]<br>• *Limosa lapponica* [wintering]<br>• *Tringa totanus* [wintering]<br>• Wetlands & Waterbirds | | |
| Baldoyle Bay SPA (004016) 0km | • Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>• Shelduck (*Tadorna tadorna*) [A048]<br>• Ringed Plover (*Charadrius hiaticula*) [A137]<br>• Golden Plover (*Pluvialis apricaria*) [A140]<br>• Grey Plover (*Pluvialis squatarola*) [A141]<br>• Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>• Wetlands & Waterbirds [A999] | • [A046] – Amber<br>• [A048] – Amber<br>• [A137] – Amber<br>• [A140] – Red<br>• [A141] – Amber<br>• [A157] – Red | To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Branta bernicla hrota [wintering]*<br>• *Tadorna tadorna [wintering]*<br>• *Charadrius hiaticula [wintering]*<br>• *Pluvialis apricaria [wintering]*<br>• *Pluvialis squatarola [wintering]*<br>• *Limosa lapponica [wintering]*<br>• Wetlands & Waterbirds | • Water quality including nutrient levels, water clarity, sediment levels<br>• Water levels<br>• Tidal currents<br>• Wind energy<br>• Erosion / deposition levels<br>• Freshwater influx<br>• Intertidal habitats<br>• Coastal habitats<br>• Food supply<br>• Appropriate levels of disturbance | • Disturbance from dog walkers<br>• Infilling<br>• Nutrient enrichment from inflowing rivers and sewage plants<br>• **S**partina may be causing unfavourable interactions with the intertidal and salt marsh habitats |
| Irelands Eye SPA (004117) | • Cormorant (Phalacrocorax carbo) [A017] | • [A017] - Amber | To maintain or restore the favourable conservation | • Breeding Habitat | • Predation from rat species |

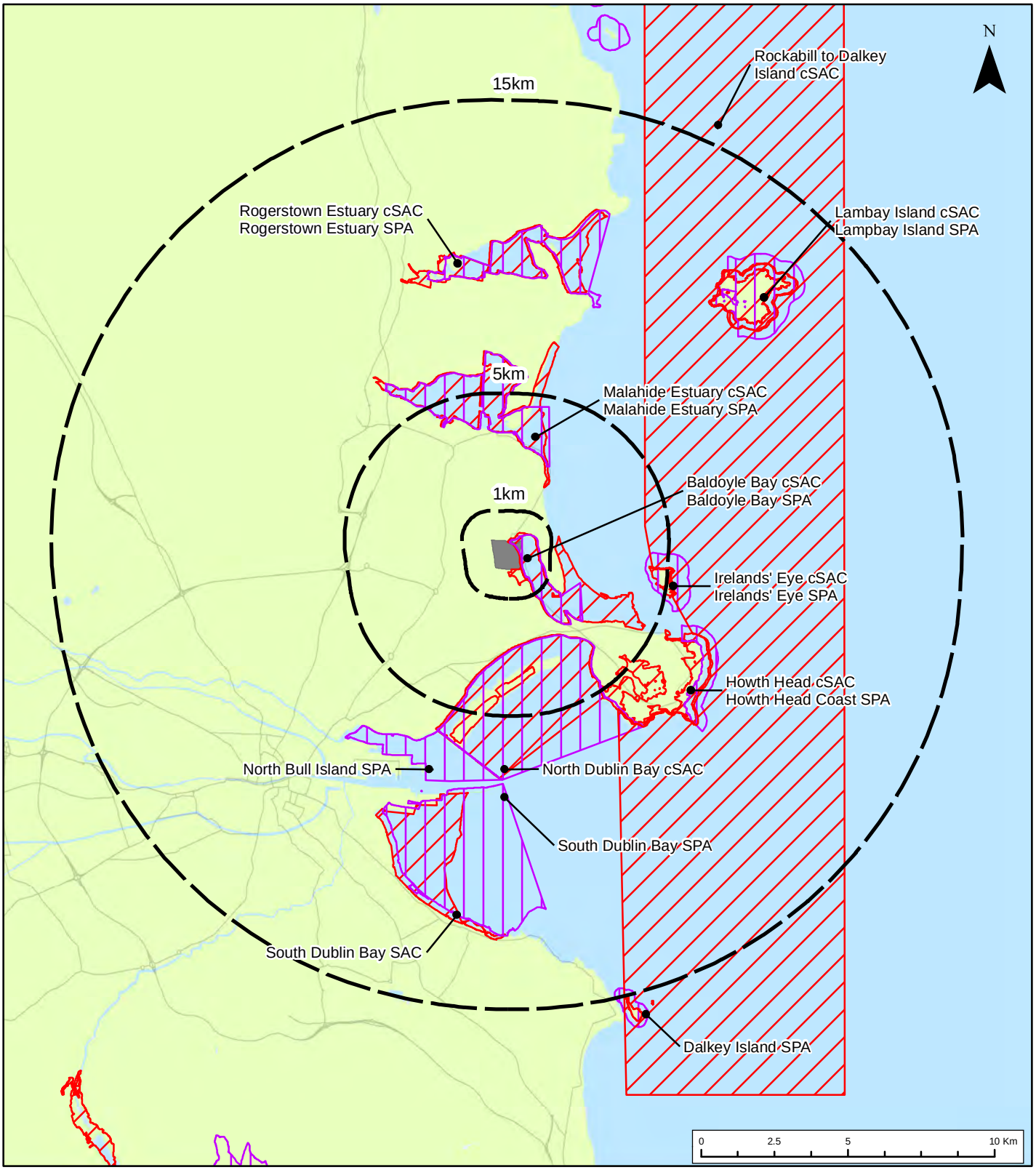
| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| c. 4km east | • Herring Gull (Larus argentatus) [A184]<br>• Kittiwake (Rissa tridactyla) [A188]<br>• Guillemot (Uria aalge) [A199]<br>• Razorbill (Alca torda) [A200] | • [A184] - Red<br>• [A188] – Amber<br>• [A199] – Amber<br>• [A200] – Amber | condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Phalacrocorax carbo* [breeding]<br>• *Larus argentatus* [breeding]<br>• *Rissa tridactyla* [breeding]<br>• *Uria aalge* [breeding]<br>• Alca torda) [A200] [breeding] | • Coastal habitats<br>• Foraging Habitat<br>• Foraging Resources<br>• Water quality<br>• Coastal habitats<br>• Food supply<br>• Appropriate levels of disturbance | • Overfishing<br>• Pollution<br>• Impacts on food resources<br>• Disturbance<br>• Increased Recreation |
| Howth Head Coast SPA (004113)<br>c. 5km south east | • Kittiwake (*Rissa tridactyla*) | • [A188] – Amber | To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Rissa tridactyla [breeding]* | • Breeding Habitat (sea cliffs)<br>• Foraging Habitat (Irish sea)<br>• Food supply<br>• Appropriate levels of disturbance | • Over-fishing<br>• Pollution<br>• Disturbance<br>• Increased Recreation |
| Dalkey Islands SPA (004172)<br>c. 13km south | • Roseate Tern (*Sterna dougallii*) [A192]<br>• Common Tern (*Sterna hirundo*) [A193]<br>• Arctic Tern (*Sterna paradisaea)* [A194] | • [A192] – Amber<br>• [A193] – Common Tern<br>• [A194] – Amber | To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Sterna dougallii* [passage]<br>• *Sterna hirundo* [passage]<br>• *Sterna paradisaea* [passage] | • Foraging Habitat<br>• Breeding Habitat<br>• Appropriate levels of disturbance | • Severe Weather (Lack of Habitat Cover)<br>• Climate Change<br>• Rats<br>• Increased Recreation |

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| North Bull Island SPA (004006)<br>c. 1.2km south | • Oystercatcher (*Haematopus ostralegus*) [A130]<br>• Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>• Shelduck (*Tadorna tadorna*) [A048]<br>• Teal (*Anas crecca*) [A052]<br>• Pintail (*Anas acuta*) [A054]<br>• Shoveler (*Anas clypeata*) [A056]<br>• Golden Plover (*Pluvialis apricaria*) [A140]<br>• Grey Plover (*Pluvialis squatarola*) [A141]<br>• Knot (*Calidris canutus*) [A143]<br>• Sanderling (*Calidris alba*) [A144]<br>• Dunlin (*Calidris alpina*) [A149]<br>• Black-tailed Godwit (*Limosa limosa*) [A156]<br>• Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>• Curlew (*Numenius arquata*) [A160]<br>• Redshank (*Tringa totanus*) [A162]<br>• Turnstone (*Arenaria interpres*) [A169]<br>• Black-headed Gull (*Larus* | • [A130} – Amber<br>• [A140] – Red<br>• [A141] – Amber<br>• [A143] – Red<br>• [A144] – Green<br>• [A149] – Amber<br>• [A046] – Amber<br>• [A048] – Amber<br>• [A149] – Amber<br>• [A052] – Amber<br>• [A054] – Red<br>• [A156] – Amber<br>• [A157] – Red<br>• [A160] – Amber<br>• [A162] – Red<br>• [A169] – Green<br>• [A179] - Red | • To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Branta bernicla hrota* [wintering]<br>• *Tadorna tadorna* [wintering]<br>• *Anas crecca* [wintering]<br>• *Anas acuta* [wintering]<br>• *Anas clypeata* [wintering]<br>• *Haematopus ostralegus* [wintering]<br>• *Pluvialis apricaria* [wintering]<br>• *Pluvialis squatarola* [wintering]<br>• *Calidris canutus* [wintering]<br>• *Calidris alba* [wintering]<br>• *Calidris alpina* [wintering]<br>• *Limosa limosa* [wintering]<br>• *Limosa lapponica* [wintering]<br>• *Numenius arquata* [wintering]<br>• *Tringa totanus* [wintering]<br>• *Arenaria interpres* [wintering]<br>• *Chroicocephalus ridibundus* [wintering]<br>• Wetlands | • Foraging Habitat<br>• Breeding Habitat<br>• Food supply<br>• Appropriate Levels of disturbance<br>• Water quality including nutrient levels, water clarity, sediment levels<br>• Water levels<br>• Tidal currents<br>• Erosion / deposition levels<br>• Freshwater influx<br>• Intertidal habitats<br>• Air Quality | • Pollution (Shipping)<br>• Commercial Bait Digging<br>• Recreational Activities Water Sports |

| Appendix C | Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | *ridibundus*) [A179]<br>• Wetlands & Waterbirds [A999] | | | | |
| South Dublin Bay and River Tolka Estuary SPA (004024) c.5km south | • Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>• Oystercatcher (*Haematopus ostralegus*) [A130]<br>• Ringed Plover (*Charadrius hiaticula*) [A137]<br>• Grey Plover (*Pluvialis squatarola*) [A140]<br>• Knot (*Calidris canutus*) [A143]<br>• Sanderling (*Calidris alba*) [A144]<br>• Dunlin (*Calidris alpina*) [A149]<br>• Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>• Redshank (*Tringa totanus*) [A162]<br>• Black-headed Gull (*Larus ridibundus*) [A179]<br>• Roseate Tern (*Sterna dougallii*) [A192]<br>• Common Tern (*Sterna hirundo*) [A193]<br>• Arctic Tern (*Sterna paradisaea*) [A194] | • [A046] – Amber<br>• [A130] – Amber<br>• [A137] – Amber<br>• [A140] – Amber<br>• [A143] – Red<br>• [A144] – Green<br>• [A149] – Amber<br>• [A157] – Red<br>• [A162] – Red<br>• [A179] - Red<br>• [A192] – Amber<br>• [A193] – Amber<br>• [A194] – Amber | To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:<br><br>• *Branta bernicla hrota* [wintering]<br>• *Haematopus ostralegus* [wintering]<br>• *Charadrius hiaticula* [wintering]<br>• *Pluvialis squatarola* [wintering]<br>• *Calidris canutus* [wintering]<br>• *Calidris alba* [wintering]<br>• *Calidris alpina* [wintering]<br>• *Limosa lapponica* [wintering]<br>• *Tringa totanus* [wintering]<br>• *Chroicocephalus ridibundus* [wintering]<br>• *Sterna dougallii* [passage]<br>• *Sterna hirundo* [breeding + passage ]<br>• *Sterna paradisaea* [passage]<br>• Wetlands [] | • Foraging Habitat<br>• Breeding Habitat<br>• Food supply<br>• Appropriate Levels of disturbance<br>• Water quality including nutrient levels, water clarity, sediment levels<br>• Water levels<br>• Tidal currents<br>• Erosion / deposition levels<br>• Freshwater influx<br>• Intertidal habitats<br>• Air Quality | • Land take and Habitat Degradation<br>• Pollution<br>• Commercial Bait Digging<br>• Recreational Activities |

| Appendix C Details of European Sites within 15km of Baldoyle-Stapolin LAP | | | | | |
|---|---|---|---|---|---|
| **Site Name & Code** | **Qualifying Interests** | **Current Conservation Status[19]** | **Conservation Management Objectives[20]** | **Conditions underpinning site integrity** | **Main pressures and threats to site integrity[21]** |
| | • Wetlands & Waterbirds [A999] | | | | |

**Appendix D**

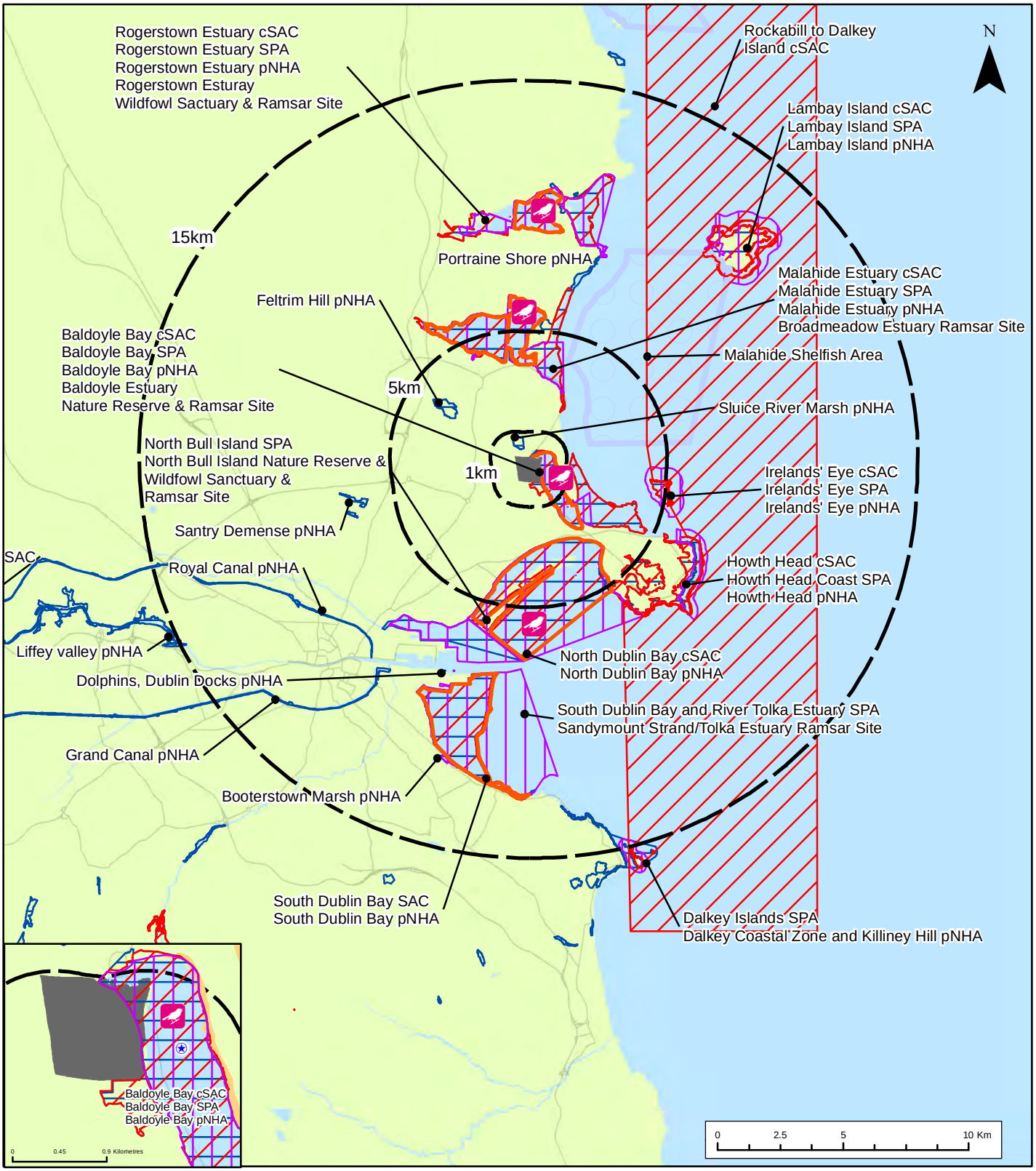



**Legend**

- Portmarnock South LAP
- Special Protection Area (SPA)
- candidate Special Area of Conservation (cSAC)

| | | | |
|---|---|---|---|
| **Title** | Fig 4: European Sites within 1km, 5km, & 15km of the LAP | | |
| **Project** | Portmarnock South Local Area Plan | | |
| **Project No.** | 120023 | | |
| **Client** | Fingal County Council | | |
| **Date** | March 2013 | **Revision** | 01 |

scott cawley
Scott Cawley
Environmental Consultants
127 Lower Baggot Street
Dublin 2
Ireland
Tel: +353-(0)1-6769815
Fax: +353-(0)1-6769816
www.scottcawley.com




**Legend**

- Portmarnock South LAP
- candidate Special Area of Conservation (cSAC)
- Special Protection Area (SPA)
- Proposed Natural Heritage Area (pNHA)
- Ramsar Sites
- Shellfish Waters Directive Areas
- Statutory Nature Reserves
- Ramsar Convention Wetland

| | | | |
|---|---|---|---|
| **Title** | Fig 5: National, European and Internationsl sites within 15km of the LAP | | |
| **Project** | Portmarnock South Local Area Plan | | |
| **Project No.** | 120023 | | |
| **Client** | Fingal County Council | | |
| **Date** | March 2013 | **Revision** | 01 |

scott cawley
Scott Cawley
Environmental Consultants
127 Lower Baggot Street
Dublin 2
Ireland
Tel: +353-(0)1-6769815
Fax: +353-(0)1-6769816
www.scottcawley.com

**Appendix E**

| Appendix E National Designated Sites | | |
|---|---|---|
| **Site Name & Code** | **Distance from Site** | **Qualifying Interests** |
| **Nature Reserves and Wildfowl Sanctuaries** | | |
| Baldoyle Estuary Nature Reserve | 0km | Baldoyle is of international importance as a wintering area for Brent Geese. Wading birds that winter at Baldoyle include black-tailed Godwits, Redshanks and Curlews. Fish within the estuary are prey for diving birds like the Great-crested Grebe and the Red-breasted Merganser. |
| Rogerstown Estuary Wildfowl Sanctuary | c.9.5km | The site is important for various species of waterbirds, supporting internationally important numbers of Brent Geese and large numbers of roosting gulls and terns. Various species of annalids, bivalves and small gastropods occur. |
| North Bull Island Nature Reserves and Wildfowl Sanctuary | c.1.2km | The island is covered with dune grassland. An extensive salt marsh lies to the northwest and at extreme low tides there are extensive mud flats between the island and the mainland. The reserves are of international scientific importance for Brent Geese and also on botanical, ornithological, zoological and geomorphological grounds. |
| **proposed Natural Heritage Areas (pNHA's)** | | |
| Rogerstown Estuary (000208) | c.9.5km | This site is an good example of an estuarine system, with all typical habitats represented, including several listed on Annex I of the EU Habitats Directive.<br>• Estuaries; Mudflats and sandflats; Atlantic and Mediterranean salt meadows; dune habitats; *Salicornia* swards and *Spartina*.<br>Rogerstown is an internationally important waterfowl site and has been a breeding site for Little Terns. The presence within the site of three rare plant species adds to its importance. |
| Royal Canal (002103) | c.7.7km | The Royal Canal pNHA is an important ecological asset for the diversity of species within the linear habitats present and the presence of rare and protected species.<br>• Otter (Lutra lutra); Wildlife Act; Habitats Directive<br>• Opposite-leaved Pondweed (Groenlandia densa) Red Data Book; FPO<br>• Stonewort (Tolypella intricate); Red Data Book<br>• Species diverse hedgerows and calcareous and calcifuge grassland species |
| Liffey Valley (000128) | c.14.4km | The site is important because of the diversity of the habitats within the site, ranging from aquatic to terrestrial. A number of rare and threatened plant species have been recorded from the site.<br>• Mixed Deciduous Woodland<br>• Wet Marsh<br>• Green figwort (Scrophularia umbrosa); Red Data Book<br>• Hairy St. John's Wort (Hypericum hirsutum); FPO; Red Data Book<br>• Yellow Archangel (Lamiastrum galeobdolon); FPO; Red Data Book<br>• Part of the Liffey Valley Special Amenity Areas Order 1990 |
| Grand Canal (002104) | c.8.2km | The ecological value of the canal lies more in the diversity of species it supports along its linear habitats than in the presence of rare species. It crosses through agricultural land and therefore provides a refuge for species threatened by modern farming methods.<br>A number of different habitats are found within the canal boundaries - hedgerow, tall herbs, calcareous grassland, reed fringe, open water, scrub and woodland.<br>Otter (Lutra lutra); Wildlife Act; Habitats Directive<br>Smooth Newt (Lissotriton vulgaris); Wildlife Act |

| Appendix E National Designated Sites | | |
|---|---|---|
| **Site Name & Code** | **Distance from Site** | **Qualifying Interests** |
| | | Opposite-leaved Pondweed (Groenlandia densa) Red Data Book; FPO |
| Feltrim Hill (001208) | c.3.7km | The primary feature of interest is the presence of Knoll-reefs in Feltrim Hill. Knoll-reefs are known from central Ireland and Northern England but are comparatively rare in Britain. Feltrim Hill is regarded as a good example of the phenomenon and a number of fish species have been described from the lower shales. |
| Santry Demesne (000178) | c.6km | The primary importance of this site is that it contains a legally protected plant species. The woodland, however, is of general ecological interest as it occurs in an area where little has survived of the original vegetation.<br>Hairy St. John's Wort (Hypericum hirsutum); FPO; Red Data Book<br>Demesne Woodland |
| Ireland's Eye (000203) | c.4km | This uninhabited marine island has a well developed maritime flora, with two habitats(sea cliffs and shingle) listed on Annex II of the EU Habitats Directive, and nationally important seabird colonies. |
| North Dublin Bay (000206) | c.1.2km | North Dublin Bay pNHA is also designated as 'North Dublin Bay cSAC' and 'North Bull Island SPA'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| Dolphins, Dublin Docks (000201) | c.6.9km | Dolphins, Dublin Docks pNHA is also designated as 'Sandymount Strand/Tolka Estuary SPA'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| South Dublin Bay (000210) | c.6.6km | South Dublin Bay pNHA is also designated as 'South Dublin Bay cSAC' and 'Sandymount Strand/Tolka Estuary SPA'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| Booterstown Marsh (001205) | c.10.1km | Booterstown Marsh is the only saltmarsh in south Dublin and, despite some concerns about the increasing salinity of the site, it remains a valuable habitat for many birds as well as containing a diverse flora including the protected plant Borrer's Saltmarsh-grass (*Puccinellia fasciculata*).<br>• Borrer's Saltmarsh-grass (*Puccinellia fasciculata*); FPO<br>• Variety and abundance of bird species including Kingfisher, Little Egret and Yellow Wagtail |
| Howth Head (000202) | c.3km | Howth Head displays a fine range of natural habitats, including two Annex I habitats, within surprisingly close proximity to Dublin city. The site is also of scientific importance for its seabird colonies, invertebrates and lichens. It also supports populations of at least two legally protected plant species and several other scarce plants. |
| Sluice River Marsh (001763) | c.1.3km | This site is of importance as a relatively intact freshwater marsh, a habitat that is now rare in County Dublin. Some waterfowl from Baldoyle Estuary may use the marsh on occasions.<br>Freshwater Marsh |
| Malahide Estuary (000205) | c.2.8km | Malahide Estuary pNHA is also designated as 'Malahide Estuary cSAC' and 'Malahide Estuary SPA'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| Baldoyle Bay (000199) | 0Km | Baldoyle Bay pNHA is also designated as 'Baldoyle cSAC' and 'Baldoyle SPA'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| Lambay Island (000204) | c.11.2km | Lambay Island pNHA is also designated as 'Lambay Island cSAC' and 'Lambay Island SPA'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| Portraine Shore (001215) | c.8km | The site is mostly a stretch of rocky shore, with some intertidal sands at the south end. A narrow strip of coastal vegetation above the rocky shore |

| Appendix E National Designated Sites | | |
|---|---|---|
| **Site Name & Code** | **Distance from Site** | **Qualifying Interests** |
| | | is included. Turnstones, Oystercatchers and Curlew feed along the shore. This site is a good example of a rocky bedrock shore with a typical flora and fauna. The grassy vegetation above the shore adds habitat diversity. The site is also an important geological site. |
| Dalkey Coastal Zone and Killiney Hill (1206) | c.11.7km | This site represents a fine example of a coastal system with habitats ranging from the sub-littoral to coastal heath. The flora is well developed and includes some scarce species.<br>The islands are important bird sites. Up to five pairs of Fulmar breed on the cliffs below the railway line. Kestrel breeds in the area, as well as Stonechat. The site also has geological importance.<br><br>Dalkey Coastal Zone and Killiney Hill pNHA is also designated as 'Dalkey Island cSAC'. Please refer to these designated areas for further descriptions of qualifying interests of the area. |
| **Ramsar Sites** | | |
| Baldoyle Bay (413) | 0km | A tidal embayment separated from the sea by a major sand dune system. Vast mudflats are exposed at low tide and there are extensive beds of *Spartina*. The site is internationally important for the wintering goose *Branta bernicla hrota*, and nationally important numbers of various species of waterbirds use the site. Human activities include bait digging, shooting, and low levels of recreational boating and fishing. |
| Rogerstown Estuary (412) | c.9.5km | Numerous species of large numbers of wintering waterbirds use the tidal flats and the site is internationally important for 'Branta bernicla hrota'.<br>Human activity in the area includes bait digging and shellfish collection. |
| Broadmeadow Estuary (833) | c.2.7km | The estuary is an important wintering site for numerous species of waterbirds. The Brent goose population is of international importance. The high numbers of diving birds reflects the lagoon-type nature of the inner estuary.<br>Human activity in the area includes watersports where there is a marina present along with some housing in the surrounding locality. |
| North Bull Island (406) | c.1.8km | The area is important for nesting Sterna albifrons (80 pairs, or about 30% of the Irish population) and for numerous species of wintering waterbirds.<br>Human activities include bait digging. |
| Sandymount Strand / Tolka Estuary (832) | c.8km | The site is important for various species of waterbirds, supporting internationally important numbers of Brent Geese and large numbers of roosting gulls and terns.<br>Human activities include bait digging. |
| **Shellfish Areas (Shellfish Waters Directive)** | | |
| Malahide (Map 32.) | c.4km | Malahide is situated in County Dublin in the Eastern River Basin District (Map 1). The designated shellfish area is 36.3 km2 in area and extends from Lambay Island to Portmarnock. Balbriggan/Skerries shellfish area is situated in adjacent tidal waters.<br>The contributing catchment is 376.66 km2 in area (Map 3) and drains number of rivers including the Broadmeadow and the Ward. |

**Appendix F**

**MANAGERS AMENDMENTS**

**1)**Amend Section 3.5 and specifically section entitled 'Infrastructure' as follows:

**'**Foul Water Drainage. The existing pumping station at Portmarnock Bridge is currently at capacity and a new pumping station and overflow outfall is required, replacing the existing, which will then cater for existing and proposed development.**'**

To read, '
**'**Foul Water Drainage. The existing pumping station at Portmarnock Bridge **has limited** capacity and a new pumping station and overflow outfall is required, replacing the existing, which will then cater for existing and proposed development.**'**

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)**Amend the text in Section 2.2.6 of the LAP relating to the Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor as follows:

**Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor**
'The Fingal Development Plan 2011-2017 is fully committed to the development of a Regional Wastewater Treatment Facility to serve the Greater Dublin Area. The Alternative Sites Assessment (ASA) report of May 2012 identifies three emerging preferred sites at i) Annsbrook, ii) Clonshaugh and iii) Newtowncorduff for the location of the proposed Regional Wastewater Treatment facility in north county Dublin. As part of the ASA report, a potential pipeline corridor has been identified in the vicinity of Portmarnock and Baldoyle to serve the Clonshaugh site and the proposed corridor traverses the open space lands within the plan area. The preferred site will be identified by mid 2013 as part of the ASA process. See www.greaterdublindrainage.ie for more information. This LAP will have regard to the ASA report recommendations regarding the provision of strategic drainage infrastructure.'

To read:

**Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor**
The Fingal Development Plan 2011-2017 is fully committed to the development of a Regional Wastewater Treatment Facility to serve the Greater Dublin Area. The report 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' has identified Clonshaugh as the preferred site for a Regional Wastewater Treatment Plant includes proposals for a 26 km pipeline and a 6 km marine outfall. The outfall pipe relating to the Clonshaugh site will be undergrounded within the open space lands within the LAP area. See www.greaterdublindrainage.ie for more information. This preferred "site option" however, will be subject to a full Environmental Impact Statement and Appropriate Assessment.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)**Amend the text in Section 9.2.2.of the LAP relating to the Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor as follows:

**Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor**
'The Greater Dublin Drainage Project aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA) that will facilitate employment, social progress, and economic growth while also protecting the environment. The project is being led by Fingal County Council, on behalf of Dublin City Council, Dún Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils. A new wastewater treatment works, a marine outfall and a new drainage network in the northern part of the GDA is required.

The Alternative Sites Assessment (ASA) report of May 2012 identifies three emerging preferred sites at i)Annsbrook, ii) Clonshaugh and iii) Newtowncorduff for the location of the proposed Regional Wastewater Treatment facility. In addition, two potential outfall areas have been identified off the coast of Loughshinny and off the coast of Portmarnock. The southern outfall area will be the discharge point for the plant, should Clonshaugh emerge as the preferred site. The more northerly outfall area will be the discharge point should either Annsbrook or Newtowncorduff be selected. As part of the ASA report, a potential pipeline corridor has been identified in the vicinity of Portmarnock and Baldoyle.

Pipe 1. Marine Outfall from Clonshaugh – this is only required if Clonshaugh is chosen as the preferred site.

Pipe 2. Rising main from a new Pump station at Grange, northwest of Stapolin to the new Regional Wastewater Treatment Plant. This rising main is required no matter which one of the three sites is chosen as the final preferred site i.e. Annsbrook, Clonshaugh or Newtowncorduff.

To date, the corridor is indicative only and will be subject to further refinement. The preferred site, route and outfall location will be identified through further investigative work, an evaluation of all submissions made and by carrying out an assessment of costs and necessary environmental assessments. It is likely to be mid 2013 before this is completed. The outfall pipe relating to the Clonshaugh site, if selected, will be undergrounded within the open space lands within the LAP. This, however, will all be subject to Appropriate Assessment and Environmental Impact Assessment. This LAP supports the provision of such drainage infrastructure. Wayleave drawings indicating a refined corridor will be prepared upon identification of the preferred site. Landowners will be engaged with by the Greater Dublin Drainage Scheme Project Team prior to any development on the plan lands regarding this future drainage infrastructure. See www.greaterdublindrainage.ie'

To read:

**9.2.2 Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor**
The Greater Dublin Drainage Project aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA) that will facilitate employment, social progress, and economic growth while also protecting the environment. The project is being led by Fingal County Council, on behalf of Dublin City Council, Dún Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils. A new wastewater treatment works, a marine outfall and a new drainage network in the northern part of the GDA is required.

The report 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' has identified Clonshaugh as the preferred site for a Regional Wastewater Treatment Plant includes proposals for a 26 km pipeline and a 6 km marine outfall out to sea. The outfall pipe relating to the Clonshaugh site will be undergrounded within the open space lands within the LAP area. This preferred "site option" however, will be subject to a full Environmental Impact Assessment and Appropriate Assessment. See www.greaterdublindrainage.ie.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion but NIS will require updating to reflect the choice of preferred outfall location.

**3)**In consultation with relevant stakeholders and to facilitate the development of the final preferred layout for station car-parking and to allow the development of the least sensitive locations proximate to the station, [allowing for the delivery of kick-start family homes in line with the NTA Study], amend Phase 1 in Fig 11.0 'Growth Areas and Phases' to extend into a limited area of Phase 2.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)** Amend Figure 7.0 'Character Areas within LAP lands' to incorporate a portion of the lands in the 'Station Character Area immediately west of the railway line to the Central Character area to ensure a more orderly approach to development within this area.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

5) Include St. Marnock's National School to the list of primary schools at Section 8.2 Educational/Childcare Facilities.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**6)** Amend the objective code for the list of surface water management objectives from WM to SW in Section 9.3.1.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SUMMARY OF PROPOSED TEXT AMENDMENTS TO THE DRAFT LAP TEXT:**

**SECTION 2 – POLICY AND STATUTORY CONTEXT**

**1**)Reference to the NTA Cycle Manual will be included after Section 2.1.3 of the LAP as follows:

2.1.3.(i) **National Cycle Manual 2011**

The National Transport Authority's *National Cycle Manual* embraces the principles of sustainable safety offering a safer traffic environment for cyclists. It offers guidance on integrating the bike in the design of urban areas. The Manual supports the objectives of the Department of Transport's Smarter Travel document and National Cycle Policy Framework.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)**Include the following sentence before the second last sentence in Section 2.1.6 Retail Strategy for the Greater Dublin Area as follows; 'Portmarnock South is considered a Level 5 category within the Fingal Retail Hierarchy - 'Local Shops/Small Villages'.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)**Amend the following sentence at the end of Section 2.1.6 Retail Strategy for the Greater Dublin Area as follows;

A ~~Local~~ Centre is proposed within the plan lands to serve the new community'.

To read as follows:

'A small centre is proposed within the plan lands to serve the new community in accordance with the requirements of the Level 5 category 'Local Shops/Small Villages' of the Fingal Retail Hierarchy.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)**Amend title of Table 2.0 of the Draft LAP to 'Qualifying Interests for Baldoyle Bay SAC'.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SECTION 3- LOCAL AREA PLAN CONTEXT**

**1)** Amend the following sentence in Section 3.5 Issues Affecting the Local Area Plan Area – Urban Design as follows: '~~Local Centre.~~ Opportunity to provide services to meet the needs of local residents with connectivity to the train station.'

To read as follows:
'Small Centre. Opportunity to provide local shops and services to meet the needs of local residents with connectivity to the train station.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SECTION 4 - STRATEGIC VISION AND AIMS OF THIS LAP**

**1)** Include the following after the second sentence in Section 4.2 Development Strategy Overview as follows,'

'To reflect the environmental and visual sensitivities of the plan lands as well as the airport public safety density restrictions, flexibility regarding achievable maximum density across the plan lands is provided for in this LAP. Further to the requirements of UD1, appropriate assessment, etc, an average minimum density of 35 units per hectare with an average maximum density of 42 units per hectare shall be considered to comply with the sustainable objectives of the LAP.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)** Amend the first sentence in Section 4.2 Development Strategy Overview as follows,'

'The residential [RA] zoned lands within the Local Area Plan are targeted to achieve up to approximately 1200 residential units based on a density of c.42 units per hectare which accords with airport safety zone criteria.'

To read,

''The residential [RA] zoned lands within the Local Area Plan have the potential to achieve up to approximately 1200 residential units based on a density of c.42 units per hectare which accords with airport safety zone criteria.'

**SECTION 5 – GREEN INFRASTRUCTURE**

**1)** Include the following at the end of first sentence within Table 5.0 as follows:
'Ensure co-ordination between the Conservation Management Plan and any relevant Environmental Management Plan associated with the coastal route.

Scott Cawley Ltd. Comment: Recommend stating that all plans must undergo Appropriate Assessment Screening. Once this is included, there are no implications on the Appropriate Assessment conclusion.

**2)** Amend Table 5.0 as follows,

'Provision of SuDS Regional Wetland,'

To read,

'Provision of SuDS Regional Wetland, **unless otherwise agreed [Objective SW12 refers**]'

Scott Cawley Ltd. Comment: Concerned over the statement "unless otherwise agreed" Any design solutions may have implications downstream, therefore if "unless otherwise agreed" must be included, I recommend stating within the same sentence – however, any other measures will require Appropriate Assessment Screening – or similar to ensure all downstream habitats and open habitat used by qualifying interests birds are protected.

**3)**Figure 5.1 and any relevant sections of the LAP will be amended to notate the Murragh lands in accordance with the spelling in the OSI Map.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)** Include new heading in Section 5.5.1 'Linear Park and Landscape Corridor' of the LAP and include the following text underneath as follows:

**Treatment of the Existing Watercourse within the Linear Park**
Any necessary and required interventions along the watercourse that are required to ensure a safe environment whilst also retaining the surface water management and amenity functions of the watercourse should be carried out and indicated at planning application stage. Recommended works may include raising the bed level of the watercourse by the use of a French drain and boulders so that the water flow above would be quite shallow. Other solutions may also be considered. These works must be carried out in a manner which will retain and protect the existing trees, hedgerows and shrub layer along this watercourse. Appropriate new planting will also be considered along the watercourse. Final design detail for the treatment of the existing watercourse must form part of the Urban Design Appraisal as required under UD1 of the LAP. Prior consultation with the Parks, Biodiversity, Drainage Infrastructure and Planning Sections of the Council are necessary prior to formulating a design solution to ensure a safe environment around the existing watercourse.

Scott Cawley Ltd. Comment: Concern over the detail of the recommendations – these proposals require screening and detailed analysis (design and construction methodology etc) at the project stage. Recommend inserting a clause stating "All proposed design and construction techniques must undergo Appropriate Assessment Screening" to highlight the potential for effects downstream" or similar to ensure there are no implications on Appropriate Assessment conclusion.

**SECTION 6 – MOVEMENT AND TRANSPORT**

**1)**Include new objectives after Section 6.1.1 'Future Rail Infrastructure as follows:

**Objective TM 1** Future planning applications and development of the plan lands shall be so designed to have regard to Iarnród Éireann future rail improvement proposals.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**Objective TM 2** Iarnród Éireann future rail improvement proposals including associated works such as access roads, maintenance yards and car-parks shall be designed and developed having regard to objectives of the LAP and the environmental and visual sensitivities of the plan area.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)**Amend the 4th sentence in Section 6.1.3 entitled Bus, as follows, 'The Council will facilitate relevant stakeholders including developers to engage with public transport operators to seek improvements to the bus transport network.'

To read, 'The Council will facilitate relevant stakeholders including developers to engage with public transport operators to seek improvements to the bus transport network, **particularly with regard to a bus link to Portmarnock Train Station and a bus route through the plan lands**.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)** Include the following after the third paragraph in Section 6.2 of the LAP entitled 'Traffic Impact Assessment.'
'The recommendations in the TIA report covered both Baldoyle-Stapolin and Portmarnock South and for the purposes of phasing, some adjustments were made to the assumed delivery of development set out in the AECOM report to better reflect the likely timing of development. The outcome of the NTA North East Dublin Transportation Study (see below) may also influence the delivery of transportation infrastructure.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)** Amend the following sentence at the end of paragraph three of Section 6.2 as follows: Recommendations for phasing ~~arising out of the final report~~ are included in Section 11 ~~Sequencing and~~ Phasing of this LAP.

To Read;

'Recommendations for phasing are included in Section 11 Phasing and Implementation of this LAP.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**5)** Include a new heading before the last paragraph in Section 6.2 of the LAP as follows: North East Transportation Study

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**6)** Include the following text before the last sentence at the end of the last paragraph in Section 6.2 of the LAP as follows:

'This study will outline the required provision and build out of transportation [roads and public transport] infrastructure to serve not only Portmarnock, but the wider north east County area.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**7)**Include a new objective at end of paragraph Section 6.4 vi) 'Green Route on Eastern Boundary of the Plan Area - The Fingal Coastal Way' as follows;

Objective TM8 'Ensure co-ordination between the Conservation Management Plan required as part of the Habitat Protection Measures outlined in the LAP and any relevant

objectives or requirements as may be developed as part of any Environmental Management Plan associated with the coastal route.

Scott Cawley Ltd. Comment: Recommend that a clause be included that all plans coming out of the LAP require AA screening. If this is included, there would be no implications on Appropriate Assessment conclusion.

**8)** Include the following new objectives at the end of Section 6.4 vi) of the LAP as follows:

*Objective TM 9* Provide a clear, safe and legible network of cycling and pedestrian routes within the LAP lands that will link key destinations, including local shops, services, schools, Portmarnock train station and other important local destinations and amenities and which will also provide linkages, to the GDA Cycle Network.

Scott Cawley Ltd. Comment: Cycle paths can be sources of visual disturbance of sensitive birds using the nearby European site and could result in a likely significant effect. Proposed addition of text as follows at end of the paragraph: "The statutory requirement for screening for Appropriate Assessment will apply to any proposed network in order to protect European Sites."

*Objective TM 10* Provide, as part of the Fingal Coastal Way, an agreed and appropriately designed combined pedestrian and cycle route, of no wider than 3 metres along the eastern edge of the plan land with linkages to the GDA Cycle Network, minimizing access points and signage to avoid disturbance and ensuring the integrity of the protected habitats and species within Baldoyle Bay and the ecological buffer zone within the plan lands.

Scott Cawley Ltd. Comment: Cycle paths can be sources of visual disturbance of sensitive birds using the nearby European site and could result in a likely significant effect. Proposed addition of text as follows at end of the paragraph: "The design, route and construction methodology of this proposal will undergo screening for Appropriate Assessment Screening prior to any consent or agreement."

**9)** Include a new sentence within Section 6.4 'Primary and Secondary Route' at the end of the first paragraph as follows: 'In general, the vehicular carriageway for the secondary route will be 6 metres in width and designed to provide a safe and pleasant environment for cyclists and pedestrians. Exact design details to be determined at Urban Design Appraisal stage.'

Scott Cawley Ltd. Comment: Proposed addition of text as follows at end of the paragraph: Design of the route will require Appropriate Assessment Screening."

**10)** Include the following at the end of the 5th paragraph in Section 6.5 as follows:
'Other design options which provide for well landscaped green car parking areas which enhance green infrastructure and open space provision will also be considered.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SECTION 7- URBAN DESIGN**

**1)** Include the following after the 7th sentence in Section 7.3 Small Centre as follows:

'Other design options which provide for well landscaped green car parking areas which enhance green infrastructure and open space provision will also be considered.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)**Amend the heading in Sections 7.3 from 'Local Centre' to Shops and Services'.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)** Include the following sentence in the second paragraph after the first sentence of Section 7.3 Shops and Services', as follows: 'Future retail/service provision within this small centre must be consistent with the requirements of the Level 5 category –' 'Local Shops/Small Villages' as set out in the Fingal Retail Hierarchy.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)** The term 'local centre' will be omitted throughout the LAP text and replaced with the term 'small centre' where relevant.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**5)** Include the following in Section 7 'Urban Design' and specifically Objective UD1 of the LAP as follows:

- Submit design details and cross-sections for the treatment of the existing watercourse and hedgerow/townland boundary to ensure a safe environment around the existing watercourse in the context of a new Linear Park. Prior consultation with the Parks, Biodiversity, Drainage Infrastructure and Planning Sections of Fingal County Council are necessary prior to formulating a design solution to ensure a safe environment.

Scott Cawley Ltd. Comment: As above, the details of the proposals require screening and detailed analysis. Recommend inserting a clause stating "All proposed design and construction techniques must undergo Appropriate Assessment Screening" to highlight the potential for effects downstream" or similar to ensure there are no implications on Appropriate Assessment conclusion.

**SECTION 8 – COMMUNITY, SOCIAL, EMPLOYMENT AND TOURISM INFRASTRUCTURE**

**1)**Amend the heading in Section 8.4 from 'Local Centre' to Shops and Services'.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)**Amend Objective T12 in Section 8.8 as follows: ''Support and co-operate with the relevant bodies in the marketing and promotion of tourism in the area.

To read, Objective T12 'Support and co-operate with the relevant bodies in the development, marketing/ **promotion and funding of sustainable tourism products in the area.**

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)**Amend Objective T20 to read Objective T10.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SECTION 9 – INFRASTRUCTURE AND SERVICES**
**1)** Include the following objective at the end of the list of surface water objections after Section 9.3.1. as follows,

Objective SW12 'SuDs features shall be provided as part of the first phase of development and would only be considered on a phased basis where an alternative temporary solution is proposed or where phasing does not adversely impact or prejudice the delivery of the final SuDs Strategy and complies with appropriate assessment and conservation management objectives/Habitat Protection Measures of the LAP.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SECTION 11 – PHASING AND IMPLEMENTATION**
**1)** Amend list of Habitat Protection Measures required within the Ecological Buffer Zone in Section 11.4 as follows:

'Provision of SuDS Regional Wetland,'

To read,

Provision of SuDS Regional Wetland, **unless otherwise agreed [Objective SW12 refers]**

Scott Cawley Ltd. Comment: Concerned over the statement "unless otherwise agreed" Any design solutions may have implications downstream, therefore if "unless otherwise agreed" must be included, I recommend stating within the same sentence – however, any other measures will require Appropriate Assessment Screening – or similar to ensure all downstream habitats and open habitat used by qualifying interests birds are protected.

**2)** Amend Section 11.5 and specifically the Water and Drainage Section as follows,

'Regional SuDs wetland pond completed as part of the required Habitat Protection Measures prior to the commencement of development.'

To read,

'Regional SuDs wetland pond completed as part of the required Habitat Protection Measures prior to the commencement of development, **unless otherwise agreed.**

Scott Cawley Ltd. Comment: Concerned over the statement “unless otherwise agreed” Any design solutions may have implications downstream, therefore if “unless otherwise agreed” must be included, I recommend stating within the same sentence – however, any other measures will require Appropriate Assessment Screening – or similar to ensure all downstream habitats and open habitat used by qualifying interests birds are protected.

**SUMMARY OF PROPOSED AMENDMENTS TO APPENDIX 1 WITHIN LAP:**

**1)**Omit the SuDs Strategy Arrangement Map in Appendix 1 and replace with SuDs Strategy Arrangement Map from Appendix 2.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SUMMARY OF PROPOSED AMENDMENTS TO MAPS WITHIN LAP:**
**1)** Amend Figure 5.1 to notate the Murragh lands in accordance with the spelling in the OSI Map.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)** Amend Figure 6.4 to show the proposed secondary route in an alternative colour to the proposed primary route.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)**Amend Figure 7.0 ‘Character Areas within LAP lands’ to incorporate a portion of the lands in the ‘Station Character Area immediately west of the railway line to the Central Character area.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)** Amend Fig 11.0 ‘Growth Areas and Phases’ to show Phase 1 extend into a limited area of Phase 2.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**SUMMARY OF PROPOSED AMENDMENTS TO THE ENVIRONMENTAL REPORT/SEA:**
**1)** Amend Table 3.1 of the SEA Environmental Report to include the Habitats Directive.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**2)** Include a summary table in Section 8 of the Environmental Report/SEA outlining the key recommendations, associated policy/objectives or higher level plans/strategies responsible for protecting the vulnerabilities described in implementing the plan.

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**3)** Include a sentence in Appendix 2, Section 3.3, first paragraph indicating that no re-zoning or de-zoning occurred on foot of the Flood Risk Assessment as follows:

'No rezoning or de-zoning has occurred in the preparation of the Plan as a result of the Flood Risk Assessment.'

Scott Cawley Ltd. Comment: No implications on Appropriate Assessment conclusion.

**4)** Duplicate Fig 4.5 of the SEA/Environmental report in Appendix 2.

**SUMMARY OF PROPOSED AMENDMENTS TO THE NATURA IMPACT STATEMENT:**

**1)** Amend Fig. 3 as set out in the latter part of the NIS to show the presence of salt marsh habitat.

Scott Cawley Ltd. Comment: This is BirdWatch Ireland's Report. Fingal Council to amend the map to show presence of salt marsh habitat. No implications on Appropriate Assessment conclusion.

**2)** Amend Section 3.2.5 of the NIS to sate that the Murragh Marsh overlaps with the Baldoyle Bay SPA.

Scott Cawley Ltd. Comment: To do.

---

Note: Any recommendations arising from the AA comments above have been incorporated into the final Portmarnock South Local Area Plan.

**Appendix G**

**COMHAIRLE CONTAE FHINE GALL**

**FINGAL COUNTY COUNCIL**

**MONDAY 8th JULY, 2013**

**ITEM NO.**

**PORTMARNOCK SOUTH LOCAL AREA PLAN**

**Motion : Cllr Judy Dunne**

"That it is ensured that the flood plains of the Sluice River to the South of Portmarnock be protected to ensure its integrity."

**Response:** The LAP acknowledges the importance of the adjacent wetlands to the south and north of the plan lands. The Sluice River Marsh, a proposed Natural Heritage Area [pNHA] located further to the north of the plan lands supports a diverse range of wetland plants and animals. The Sluice River represents a regionally important salmonid system. The Fingal Development Plan and the Fingal Biodiversity Plan are fully committed to the protection of plant, birds and fauna associated with these marsh wetlands. Objectives of the Fingal Development Plan seek to *'protect the integrity of proposed Natural Heritage Areas [pNHA's], Natural Heritage Areas [NHA's], Statutory Nature Reserves, Refuges for Fauna and Annex 1 Habitats'.* The Fingal Biodiversity Plan also seeks to protect and manage the Sluice River Marsh and its surrounding lands for protected plant species and migratory birds.

**Recommendation:** No change

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Judy Dunne**

"To ask the Manager that development on the LAP Lands should have a minimum negative impact on views from Strand Road and Coast Road and be subject to a visual impact analysis."

**Response:** The LAP acknowledges the visual sensitivities of the plan lands and the surrounding area. There are protected views along the Coast Road affording attractive views of Baldoyle Bay and Portmarnock peninsula to the east as designated in the Fingal Development Plan. The designations for this area under the Fingal Development Plan are incorporated into this LAP. The LAP at Sections 5.3.1 'Ridgeline and Views' requires that all planning applications will need to be accompanied by a visual impact assessment, including cross sections and photomontages to

assist the Planning Authority in determining the full visual impact of proposed development on the plan lands and on the adjoining high amenity lands. This will form part of the overall urban design appraisal as set out in Section 7.9 Urban Design Appraisal of the LAP. Objective GI23 of the LAP reflects this and requires a visual impact assessment of new development on the surrounding landscape, including cross sections and photomontages at planning application stage.

**Recommendation:** No change.

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Amendment to the above motion arising at Council Meeting on 8th July 2013.** The LAP to include a sentence stating that buildings heights along the edge of the plan lands should not be higher than one and a half storeys.

**Response:** This motion was agreed at the above meeting and the LAP will be amended accordingly at Section 7.0 'Urban Design' where relevant to state the above. Specifically, a new sentence will be included at Section 7.4 'Building Heights' as follows, '*To minimise visual impact, buildings along the southern and eastern edges of the plan lands should not be higher than one and a half storeys to eaves or parapet level.*'

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Judy Dunne**

"To ask the Manager that development on the LAP Lands should have a minimum negative impact on views from Station Road and be subject to a visual impact analysis."

**Response:** The LAP acknowledges the visual sensitivities of the plan lands and the surrounding area. There are protected views along the Coast Road affording attractive views of Baldoyle Bay and Portmarnock peninsula to the east as designated in the Fingal Development Plan. The designations for this area under the Fingal Development Plan are incorporated into this LAP. The LAP at Sections 5.3.1 'Ridgeline and Views' requires that all planning applications will need to be accompanied by a visual impact assessment, including cross sections and photomontages to assist the Planning Authority in determining the full visual impact of proposed development on the plan lands and on the adjoining high amenity lands. This will form part of the overall urban design appraisal as set out in Section 7.9 Urban Design

Appraisal of the LAP while views from Station Road are not specifically referenced. Objective GI23 of the LAP requires a visual impact assessment of new development on the surrounding landscape, including cross sections and photomontages at planning application stage.

**Recommendation:** No change.

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Judy Dunne**
That the draft local area plan Section 6.1.3 entitled Bus be amended to read, 'The Council will facilitate relevant stakeholders including developers to engage with public transport operators to seek improvements to the bus transport network, particularly with regard to a bus link to Portmarnock Train Station and a bus route through the plan lands and the provision of a bus turning area will be provided at the Dart Railway station".

**Report:** This motion is considered reasonable and a new sentence will be included in the LAP to this effect.

**Recommendation:** Include the following after the third sentence at Section 6.1.3 of the LAP as follows:

*'Each planning application, shall as may be applicable, provide for bus access, stops/laybys and/or turning areas to serve future feeder bus services to Portmarnock train station. Such proposals must be subject to appropriate assessment screening.*

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion based on the requirement for all planning applications to undergo Appropriate Assessment Screening.

**Motion: Cllr Judy Dunne**
Given that the Manager has outlined in his report that the existing pumping station at Portmarnock Bridge is currently at capacity and a new pumping station and overflow outfall is required, replacing the existing, which will then cater for existing and proposed development, that draft local area plan be amended that no planning permission under the Plan can be granted until this has been completed first.

**Response:** As outlined in Section 9.2 of the LAP, the existing pumping station at Portmarnock Bridge is at near capacity and as such the LAP recognises the need to seek its replacement. This has been the situation for the last number of years and in the granting of the 2007 permission to the current landowner

(Helsingor Properties ltd.) the planning authority worked with the landowner to resolve the situation, providing a new pumping station which would not only serve the plan lands but the surrounding Portmarnock lands. The LAP continues to provide for such a new pumping station subject to Appropriate Assessment, etc.

While it is acknowledged that a new pumping station is required to serve the development of the plan lands, the planning authority is satisfied that the existing pumping station (in all probability the pumping station at Moyne Road, subject to some upgrades and having regard to all relevant environmental and engineering assessments) can accommodate up to 100 units. In the granting of the first 100 units the planning authority is satisfied that there will not be further deterioration in the water quality and/or environmental amenity of the area, and it would be hoped that the upgrades necessary at the pumping station would result in a net improvement in the current situation.

However, the requirements to fully assess any proposal to proceed with up to 100 housing units in advance of the pumping station while acceptable in principle would not be permitted to proceed if it were not to pass an Appropriate Assessment or was considered to cause undue impact on the amenity of the area.

**Recommendation:** Having regard to the lack of reference to the Moyne Road pumping station and its use in the interim subject to appropriate upgrading pending the construction and operation of a new pumping station, the text on page 50 should be amended and augmented accordingly.

Similarly, to ensure that there is no ambiguity or issues regarding the protection of the Baldoyle Estuary appropriate changes/amendments to section 11, page 58 are proposed.

Amend/replace the second and third paragraphs on page 50 to read as follows:

*'An existing foul water pumping station is located outside of the plan lands close to Portmarnock Bridge to the north and serves the surrounding area. Currently Portmarnock Village and lands on Station Road drain to Portmarnock Bridge Pump -station. The sewage is subsequently pumped to a high point on Coast Road from where it falls by gravity to the Moyne Road Pumpstation and from there on to the North Fringe Sewer and onto Ringsend via Sutton Pumpstation. Portmarnock Bridge Pumpstation had a history of overflowing but did not have any recorded overflows last year. This is mainly as a result of improved equipment and communications at Portmarnock Bridge. However, it is acknowledged that the pumpstation is at 'near' capacity.*

*All of the flows from Portmarnock Bridge, plus some additional flows from Moyne Road, are pumped from the Moyne Road Pumpstation to the North Fringe Sewer near the roundabout on Coast Road adjacent to the Baldoyle lands. The existing pumps at Moyne Road are smaller than those at Portmarnock Bridge but have capacity to deal with the flows by pumping for longer durations. There is sufficient capacity, at present, in the Moyne Road Pumpstation to cater for the flows from an additional 100 houses in the Portmarnock South LAP lands. This will require the existing pumps to run for longer periods. As the existing pumps are currently smaller than those at Portmarnock Bridge and in view of the proposed additional load it may be considered appropriate to upgrade the existing pump sets to those with greater capacity and efficiency and a lower energy demand. This improvement should offset any increased risk generated by the addition of 100 houses. This would be subject to detailed assessment (including Appropriate Assessment, in particular as neither Portmarnock Bridge nor Moyne Road Pumpstation has an overflow storage tank).*

*The plan for the development of the Portmarnock South LAP lands provides for a new Pumpstation which will replace the existing Portmarnock Bridge Pumpstation and allow for the Moyne Road Pumpstation to be downsized. This will be required following the completion for the first 100 units. The new pumpstation will have at minimum 24 hour overflow storage tank which will effectively deal with overflow situations. Although the development of the LAP lands will increase the potential impact of any overflow to the Bay, the provision of the storage will substantially reduce the likelihood of an overflow, thereby substantially reducing the risk of pollution. The provision of an overflow pipe is still required for those exceptional events where a combination of failures occur. The detailed design of a new pumping station and associated outfalls will be subject to planning approval, Appropriate Assessment and Foreshore License.*

*In general, while considering the sensitivity of the SAC designated area and the requirements of the Water Framework Directive, the Water Services Department in principle consider it feasible that the proposed development can be catered for without any adverse effect on the environment and in fact there is likely to be an overall improvement on the existing situation.'*

Insert within section 11.5, Growth Area 1, under 'Water and Drainage' as a first bullet point

*'Prior to the occupation of any new dwellings on site the applicant shall ensure that the existing pumping stations have been appropriately assessed (including Appropriate Assessment, as applicable) and upgraded to provide for any additional load, which shall in any event not exceed 100 residential units.*

*The continued use of the existing pumping stations at Portmarnock Bridge and/or Moyne Road shall be considered an interim situation to serve no more than 100 additional dwellings and the applicant/developer shall demonstrate compliance with this in the making of any planning applications for these lands.'*

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** Based on the manager's response and recommendation, no implications are envisaged on the Appropriate Assessment conclusion.

**Motion: Cllr Judy Dunne**
Given that the formerly proposed realignment of the Moyne Road and new railway bridge has been deferred (thus giving continuing problems for HGV, s to access South Portmarnock) a high priority must be provided to widen Station Road, upgrade the junction with Drumnigh Road and improve safety on Drumnigh Road.

**Response:** Section 7 Urban Design of the LAP proposes Station Road as a tree lined avenue to the train station with a new pedestrian and cycle path located behind the new treeline providing an attractive and efficient link to Portmarnock train station. Figure 6.5 in Section 6 Movement and Transport shows the relationship of new dwellings to the Station Road with integrated pedestrian and cycle facilities. This preferred design solution will include widening of Station Road and exact design detail will be determined at planning application stage.

The Drumnigh Road/Station Road junction is proposed for upgrade as part of the infrastructural works required to facilitate development of the plan lands as set out in Section 11.5 'Social, Environmental and Physical Infrastructural Requirements for each phase of development.'

**Recommendation:** No change.

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Judy Dunne**
i) That the draft Local Area Plan is amended to remove Pobalscoil Neasain from the list of primary schools and included on the list of secondary schools at Section 8.2 Educational/Childcare Facilities.

ii) That the Manager liaise with the Department of Education and Skills on how best to transport students to the schools as none are within walking distance of the lands covered in the LAP.

**Response:** i) This Motion is considered reasonable and the LAP will be amended accordingly.

ii) As the lands are located within the Outer Public Safety Zone of Dublin Airport, schools and childcare facilities cannot be included within the LAP lands. The area is currently well served by primary and post-primary schools and a site has been reserved for a 16 classroom primary school within the Baldoyle-Stapolin LAP lands as well as an additional site in Clongriffin. This LAP provides for a network of pedestrian and cycle routes inclusive of pedestrian crossings connecting to the Baldoyle-Stapolin LAP lands and to the Clongriffin-Belmayne lands where future schools are proposed.

**Recommendation:**
i) Amend Section 8.2 of the LAP to include Pobalscoil Neasain on the list of secondary schools.

ii) No change.

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Cian O'Callaghan**
Section 8 8.7 Insert Objective as follows:

Consideration will be given to providing the Coastal Walkway on the coastal side of the road with appropriate screening

**Response:** The LAP proposes a maximum 3 metre wide greenway for walking and cycling along the eastern edge of the plan lands, in agreement with the National Parks and Wildlife Service and the National Transport Authority. By locating the coastal way within the LAP lands where it goes between Baldoyle and Portmarnock, this route has the potential to relieve pressures from the sensitive biodiversity/ecological sites in the area through managed access. The location of the route within the plan lands is also considered a safe, efficient and scenic route for pedestrians and cyclists with panoramic views over Baldoyle Bay. It is recognized that the proposed walkway forms part of Fingal's 'coastal walkway' and as such its design and siting should reflect and where appropriate, integrate with its coastal setting, subject to AA. If unduly separate from the coast it may not divert enough walkers/cyclists from the more scenic yet sensitive route along the coast, therefore, detailed design should consider this.

**Recommendation:** Amend G133 to insert as end of objective. 'The coastal walkway shall be designed and sited to reflect and where appropriate integrate with its coastal setting subject to Appropriate Assessment and detailed design assessment.'

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Cian O'Callaghan**

Section 6 6.2 Insert Objective as follows:

The realignment of the Hole in the Wall Road with the Drumnigh Road will be priority objective of this Local Area Plan

**Response:** The Hole in the Wall Road upgrade is a specific transport infrastructural requirement for the development of Phase 1 [1-300 dwelling units] of the plan lands as set out in Section 11.5 of the LAP 'Social, Environmental and Physical Infrastructural Requirements for each phase of development.' Consultants have been appointed by the Council to complete the preliminary design work on the upgrade.

**Recommendation:** No change.

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.

**Motion: Cllr Cian O'Callaghan**
Section 8.2 list of schools in local area:

Delete St. Marys NS, Grange Road and St. Peter and Pauls NS, Baldoyle and replace with: St. Laurence's NS, Baldoyle

**Response:** The motion to include St. Laurence's NS, Baldoyle in the list of schools at Section 8.2 of the LAP is considered reasonable and the LAP will be amended accordingly.

**Recommendation:** Include St. Laurence's NS, Baldoyle in the list of schools as set out in Section 8.2 of the LAP.

**IMPLICATIONS OF RECOMMENDATION ON APPROPRIATE ASSESSMENT:** No implications envisaged on Appropriate Assessment conclusion.