



Ramsar Information Sheet

Published on 16 March 2022

Update version, previously published on : 25 October 1988

Ireland Baldoyle Bay



Designation date	25 October 1988
Site number	413
Coordinates	53°24'23"N 06°07'40"W
Area	203,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Baldoyle Bay, is located in north County Dublin, Ireland; 11km northeast of Dublin city centre. The site is situated just north of North Bull Island SPA, it is part of the Dublin Bay wetlands complex and lies within the UNESCO Dublin Bay Biosphere. Baldoyle Bay is a relatively small, narrow estuary separated from the open sea by a large sand dune system, though most of the dunes are now used as a golf course.

The site is a fine example of an estuarine system. Two small rivers, the Mayne River and the Sluice River, flow into the inner part of the estuary. Much of the estuary is sheltered from the sea by a large sand dune peninsula (now mostly a golf course). The Bay is designated as a Special Area of Conservation (SAC). Large areas of intertidal flats are exposed at low tide. These are mostly sands but grade to muds in the inner sheltered parts of the estuary. Extensive areas of Common Cord-grass seagrass beds occur in the inner estuary. There are five main areas of saltmarsh and Atlantic salt meadow is the dominant saltmarsh habitat type. The main area occurs in the north-west corner of the estuary and to the south of the estuarine river channel. A number of notable plant species occur within the brackish marsh along the Mayne River.

Baldoyle Bay is an important site for wintering waterbirds providing good quality feeding areas and roost sites for a diversity of species. The inner part of the estuary is designated as a Special Protection Area (SPA) under the EU Birds Directive for the following species: Light-bellied Brent Goose, Shelduck, Ringed Plover, Golden Plover, Grey Plover and Bar-tailed Godwit. Under this designation the wetland habitat is also protected. The site is of high conservation importance for supporting internationally important numbers of Light-bellied Brent Goose as well as nationally important populations of a further five species; some of which are listed on Annex I of the E.U. Birds Directive i.e. Red-throated Diver and Golden Plover, and others whose populations are under threat i.e. Oystercatcher. In autumn, passage migrants such as Curlew Sandpiper, Spotted Redshank and Green Sandpiper are regular in small numbers. Little Egret, a species which has recently colonised Ireland, also occurs at this site.

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.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
Postal address	National Parks and Wildlife Service, 90 North King Street, Smithfield, Dublin, Ireland D07 N7CV

National Ramsar Administrative Authority

Institution/agency	National Parks & Wildlife Service, Department of Housing, Local Government and Heritage.
Postal address	National Parks and Wildlife Service, 90 North King Street, Smithfield, Dublin, Ireland D07 N7CV

2.1.2 - Period of collection of data and information used to compile the RIS

From year

To year

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary Yes No

(Update) B. Changes to Site area No change to area

(Update) For secretariat only: This update is an extension

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? Not evaluated

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps

Boundaries description

The boundaries for this site were defined using the boundaries of the Baloyle Estuary Nature Reserve. Baldoyle Bay Ramsar site is smaller than and lies within both Balydoyle Bay SAC and SPA and is an integral part of this wider wetland system. Details of the SAC and SPA can be found on the NPWS website at <https://www.npws.ie/protected-sites>. Within this area a number of GIS data layers were used to define the Ramsar habitats within the site. These included:

- CORINE (Co-Ordinated Information on the Environment) land cover data sets (2012).
- Bing Maps Aerial - © Harris Corp, Earthstar Geographics LLC © 2017 Intermap Earthstar Geographics SIO © 2017 Microsoft Corporation.
- Environmental Protection Agency of Ireland Rivers and Lakes layers data layers.
- NPWS Marine community layer.

The mapped layers were inspected by a site visit to confirm the presence of the habitats. Habitat areas were subsequently estimated by reference to the available imagery and layers and should be considered representative but approximate.

2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Atlantic
EU biogeographic regionalization	Atlantic

Other biogeographic regionalisation scheme

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

This is a relatively small site which contains representative and natural examples of estuarine habitat types within the Atlantic biogeographic region. The estuary and intertidal habitats are separated from the sea by a large sand dune system (highly modified owing to management as a golf course). The dune (not within the Ramsar site owing to its modified nature, but nonetheless integral to the wetland system) and estuarine system is important in terms of storm protection (flood and coastal erosion mitigation). The presence of saltmarsh habitat and a small bed of eel grass is important for nutrient sequestration and sediment trapping. The estuary provides natural filtration services which are important for coastal water quality, however where input levels (e.g. chemicals, organic waste) are excessive the natural character of the estuary can be greatly affected.

Other ecosystem services provided

Other services
 The intertidal habitats are important for carbon sequestration, nutrient cycling, and natural filtration. With the cycling of carbon and nutrients estuarine systems have a role in climate regulation.

- Recreation and tourism (proximity to population centre; golf, watersports, fishing, day trips)
- Scientific and educational (long term biological monitoring e.g. birds; suitable for research; proximity to population centre)
- Biodiversity (supports a variety of life forms representative of the estuarine environment).

Other reasons

Baldoyle Bay is designated as EU Natura 2000 site (Special Area of Conservation) as it contains representative and natural examples of marine habitats and natural wetland types within the Atlantic biogeographic region are listed on Annex I of the E.U. Habitats Directive, i.e. tidal mudflats and sandflats, and saltmarshes. The three Annex I saltmarsh habitats, which occur at the site are: Salicornia and other annuals colonising mud and sand (1310), Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) (1330) and Mediterranean salt meadows (*Juncetalia maritimi*) (1410). Within Baldoyle Bay SAC, there are five main areas of saltmarsh and Atlantic salt meadow is the dominant saltmarsh habitat type. These saltmarshes are found in close association with each other. Combined these habitats provide an interconnected and interdependent mosaic of habitats.

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification

The site supports a diverse range of interconnected and interdependent marine and coastal wetland habitats and the species they support. The site provides good quality habitat for the feeding and roosting requirements of the various waterbird species which winter here making it a significant wetland for maintaining the biological diversity of the Atlantic biogeographic region. The diversity of interconnected wetland habitats (intertidal mud and sand flats, estuarine waters, and intertidal marshes) within the site make it a significant site for the maintenance of regional biodiversity.

Criterion 4 : Support during critical life cycle stage or in adverse conditions

3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA/ LILIOPSIDA	<i>Hordeum secalinum</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Floral Protection Order species and listed as VU on Ireland's Red List of Vascular plants	VU Red Listed Species in Ireland.

Meadow Barley, a tufted, perennial grass of lowland coastal and inland meadows and pastures, mostly on damp heavy soils and has been recorded in the past from 15 Irish counties; the majority of these sites were meadows bordering estuaries (Curtis & McGough, 1988). The species is protected in Ireland (FPO) and is listed as Vulnerable in the Irish Red Data Book (loc. cit. 1988; Wyse Jackson et al, 2016).

Borrer's saltmarsh Grass has been recorded from this site. The species is protected in Ireland (FPO) and is listed as Near Threatened in Irish Red Data List (Wyse Jackson et al, 2016). According to Curtis & McGough (1998) Borrer's Saltmarsh-grass, occurs in salt-marshes, muddy inlets and estuaries and is restricted to southern and eastern Ireland, where it has been recorded from Cork, Waterford, Wexford and Dublin. The only recent records are from the vicinity of Wexford Harbour and at Booterstown in Dublin. Apparently declining for reasons unknown.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Birds																	
CHORDATA/ AVES	<i>Anas acuta</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification and part of wintering assemblage
CHORDATA/ AVES	<i>Anas crecca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	138	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Maintaining biological diversity, part of wintering assemblage.
CHORDATA/ AVES	<i>Anas penelope</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	47	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification and part of wintering assemblage
CHORDATA/ AVES	<i>Branta bernicla hrota</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	503	2011-2015	1.3		<input type="checkbox"/>	<input type="checkbox"/>	1% threshold & Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	1% threshold exceeded for hrota population, (Canada & Greenland/Ireland), part of wintering assemblage
CHORDATA/ AVES	<i>Calidris alpina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	428	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage
CHORDATA/ AVES	<i>Calidris canutus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	191	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Maintaining biological diversity, part of wintering assemblage and national (BoCCI) classification.
CHORDATA/ AVES	<i>Egretta garzetta</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive)	Annex I listing,
CHORDATA/ AVES	<i>Gavia immer</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	Annex I listing, and National (BoCCI) and IUCN classifications, part of wintering assemblage.
CHORDATA/ AVES	<i>Gavia stellata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, and National (BoCCI) classification, part of wintering assemblage.
CHORDATA/ AVES	<i>Haematopus ostralegus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	536	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	IUCN classifications, part of wintering assemblage.

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Limosa lapponica</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, part of wintering assemblage
CHORDATA/AVES	<i>Limosa limosa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	275	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	IUCN classifications and part of wintering assemblage.
CHORDATA/AVES	<i>Numenius arquata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	86	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications, part of wintering assemblage.
CHORDATA/AVES	<i>Phalacrocorax carbo</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Maintaining biological diversity, part of wintering assemblage.
CHORDATA/AVES	<i>Pluvialis apricaria</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1650	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, and National (BoCCI) classification and part of wintering assemblage.
CHORDATA/AVES	<i>Podiceps cristatus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	104	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Maintaining biological diversity, part of wintering assemblage.
CHORDATA/AVES	<i>Tadorna tadorna</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	79	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Maintaining biological diversity, part of wintering assemblage.
CHORDATA/AVES	<i>Tringa totanus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	140	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification and part of wintering assemblage.
CHORDATA/AVES	<i>Vanellus vanellus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	270	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications and part of wintering assemblage.

1) Percentage of the total biogeographic population at the site

Wintering bird species listed under 3.3 have been selected based on an assessment of Irish Wetland Bird Survey data from the period 2006/07 to 2015/16. Baldoyle Bay is a Special Protection Area (SPA) for birds, however not all species listed for the SPA may be listed under 3.3 (or vice versa) as the SPA designation is based on other data and criteria.

I-WeBS data (from the period 2006/07 to 2015/16) lists internationally important populations of the Light-bellied Brent Goose at the site. According to Birdwatch Ireland (Birdwatch.ie) this species is Amber-listed as the majority winter at less than ten sites and the Irish population is internationally significant; the European population has been evaluated as Vulnerable as several important populations have declined. This species has not been assessed by IUCN. Nationally important wintering populations of Red-throated Diver, Great-crested Grebe, Oystercatcher and Golden Plover occur at the site (IWeBs data for same period). The Red-throated Diver and Golden Plover are listed on Annex I of the E.U. Birds Directive. According to IUCN the Oystercatcher, a widespread shorebird, is undergoing rapid population declines across the European part of its extremely large global range; globally the overall population trend is decreasing. It has therefore been deemed Vulnerable within Europe and Near Threatened globally; EUNIS deems the EU population of the species to be Threatened. Other wintering birds, Oystercatcher and Great-crested Grebe are listed as Birds of Conservation Concern in Ireland (Amber).

Baldoyle Bay is a designated Special Protection Area due to the presence of the following species listed on Annex I of EU Birds Directive and/or regularly occurring migratory species: Brent Goose (*Branta bernicla hrota*), Shelduck (*Tadorna tadorna*), Ringed Plover (*Charadrius hiaticula*), Golden Plover (*Pluvialis apricaria*), Grey Plover (*Pluvialis squatarola*) and Bar-tailed Godwit (*Limosa lapponica*). Under this SPA designation the wetland habitat is also protected as a source for the regularly-occurring migratory water birds that utilise it.

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Saltmarsh community	<input type="checkbox"/>	Atlantic salt meadows and Mediterranean salt meadows occur within the site.	This community has a restricted distribution within the biogeographical range.
Estuarine sandy mud with <i>Pygospio elegans</i> and <i>Tubificoides benedii</i> community complex	<input type="checkbox"/>	This community complex occurs from Portmarnock Point and Cush Point to the inner reaches of the site	This community is of importance for maintaining the structure and function of the site. The high densities of selected macro faunal species within this community provide a food resource for birds
Mudflats and sandflats not covered by seawater at low tide [1140]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Salicornia and other annuals colonising mud and sand [1310]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
<i>Zostera noltii</i> community	<input checked="" type="checkbox"/>	A small Eel grass bed occurs within the site	This habitat has a restricted distribution in Ireland. It is considered threatened on the Oskar list of threatened or declining habitats

[Optional text box to provide further information](#)

Intertidal mud and sandflat habitat within the SAC and SPA but outside of the Ramsar site are integral to the site and are used by wintering birds which also use the Ramsar site (NPWS, 2012).

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

Baldoyle Bay, is a relatively small, narrow estuary separated from the open sea by a large sand dune system, though most of the dunes are now used as a golf course. The site is a fine example of a sheltered estuarine system. It supports significant areas of both saltmarsh and intertidal mudflats and sandflats. Its location close to the large urban Dublin city area increases its importance as an area of high biodiversity value. It provides an important refuge for wintering wildfowl on the east coast of Ireland. Its proximity to a number of other Ramsar sites which also support wintering wildfowl makes it important in the context of maintaining the regional and local biodiversity of the area.

4.2 - What wetland type(s) are in the site?

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
E: Sand, shingle or pebble shores		4		
F: Estuarine waters	Estuary	3	22	Representative
G: Intertidal mud, sand or salt flats	Intertidal mudflats and sandflats	1	123	Representative
H: Intertidal marshes	Salt marsh	2	58	Representative

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTALILIOPSIDA	<i>Zostera noltii</i>	

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range / endemism / other
CHORDATA/AVES	<i>Pluvialis squatarola</i>	30	2011-2015		Exceeds 1% of the national threshold

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season, warm summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
 Upper part of river basin
 Middle part of river basin
 Lower part of river basin
 More than one river basin
 Not in river basin
 Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Irish Sea

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional)

The site itself is largely marine and comprised of sands and muds and tidal marsh.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input type="checkbox"/>	No change
Marine water	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Significant accretion or deposition of sediments occurs on the site

(Update) Changes at RIS update No change Increase Decrease Unknown

Sediment regime unknown

Please provide further information on sediment (optional):

Saltmarshes occur within the site, Accretion and erosion are natural elements of Saltmarsh systems. According to McCorry (2007): There are no indications of any significant loss in extent of ASM or MSM at this site. There are some small areas of erosion in places and these may have been exacerbated by infilling or sea defence measures (sea wall). There are some indications that the area of brackish marsh at Mayne including the MSM community containing Borrer's saltmarsh-grass has decreased. Older maps showed that the brackish vegetation was more extensive in the recent past. There are some signs of erosion along the seaward edge of the saltmarsh in the mid part of the estuary. Saltmarsh has developed over a thin band of mud overlying shingle and pebbles, and the mud is eroding away back to the stony deposits. There are also signs of erosion on the saltmarsh at the south-eastern corner of the estuary. Accretion has also occurred at the lower end of Portmarnock spit.

4.4.6 - Water pH

Alkaline (pH>7.4)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.7 - Water salinity

Mixohaline (brackish)/Mixosaline (0.5-30 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Euhaline/Eusaline (30-40 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ii) significantly different

- Surrounding area has greater urbanisation or development
- Surrounding area has higher human population density
- Surrounding area has more intensive agricultural use
- Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

Large centres of human habitation lie adjacent to this site i.e. Baldoyle and Portmarnock. The estuary is surrounded by land that is densely populated. Owing to the proximity of two large towns, the area is very popular for water sports and other amenities. The large sand dune peninsula, in the inner part of the site is now used as a golf course. The site is situated adjacent to Dublin City, the capital of Ireland; an area of intense development with a large seaport.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Low
Wetland non-food products	Other	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Low
Pollution control and detoxification	Water purification/waste treatment or dilution	Low
Climate regulation	Local climate regulation/buffering of change	Low
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	Low
Hazard reduction	Flood control, flood storage	Medium
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Water sports and activities	Medium
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Scientific and educational	Long-term monitoring site	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	Medium
Soil formation	Accumulation of organic matter	Low
Soil formation	Sediment retention	Low
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium
Nutrient cycling	Carbon storage/sequestration	Medium

Within the site:

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other

Category	Within the Ramsar Site	In the surrounding area
No information available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

All of the foreshore of Ireland is deemed owned by the State, unless a valid alternative title is provided. The foreshore of Ireland is classed as the land and seabed between the high water of ordinary or medium tides (shown HWM on Ordnance Survey maps) and the twelve-mile limit (12 nautical miles equals approximately 22.24 kilometers). Foreshore also covers tidal areas of rivers particularly estuaries (Housing.gov.ie).

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

National Parks & Wildlife Service (NPWS), Department of Culture, Heritage and the Gaeltacht.
 Fingal County Council.
 Environmental Protection Agency (EPA).
 Department of Communications, Climate Action and Environment.
 Marine Institute.

Provide the name and/or title of the person or people with responsibility for the wetland:

Maurice Eakin

Postal address:

National Parks and Wildlife Service,
 90 North King Street,
 Smithfield, Dublin,
 Ireland
 D07 N7CV

E-mail address:

maurice.eakin@chg.gov.ie

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	Medium impact	unknown impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Tourism and recreation areas	High impact	unknown impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	unknown impact	unknown impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	Medium impact	unknown impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Hunting and collecting terrestrial animals	Medium impact	unknown impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact	High impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	High impact	unknown impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Household sewage, urban waste water	Medium impact	unknown impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Industrial and military effluents	Medium impact	unknown impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Agricultural and forestry effluents	Medium impact	unknown impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

The area surrounding Baldoyle Bay is populated densely and so the main threats to the site include visitor pressure, disturbance to wildfowl and dumping. In particular, the dumping of spoil onto the foreshore presents a threat to the value of the site (NPWS 2013). The site is subject to natural eutrophication (NPWS 2015), no data is available regarding water quality under WFD as the site is classified as unassigned. According to (McCorry, 2007) common cordgrass (*Spartina anglica*) occurs at the site, however there is no evidence to indicate that *Spartina* swards are still spreading within Baldoyle Estuary; there are actually signs of recent dieback.

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Dublin Bay	http://www.dublinbaybiosphere.ie/	whole

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Baldoyle Bay SAC. Site Code: O00199	https://www.npws.ie/protected-sites/sac/000199	whole
EU Natura 2000	Baldoyle Bay Special Protection Area. Site Code:004019	https://www.npws.ie/protected-sites/spa/004016	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
nature reserve			whole
Nature Reserve	Baldoyle Estuary	https://www.npws.ie/nature-reserves	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Baldoyle Bay	http://datazone.birdlife.org/site/factsheet/baldoyle-bay-iba-ireland	whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Land conversion controls	Implemented
Improvement of water quality	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented
Control of invasive alien plants	Implemented

Human Activities

Measures	Status
Regulation/management of wastes	Implemented
Regulation/management of recreational activities	Implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Research	Implemented

Other:

The Baldoyle Bay Ramsar site within the Baldoyle Bay SAC (000199) and the Baldoyle Bay SPA (004016). Under European and national legislation, Ireland must maintain at favourable conservation status areas designated as Special Protection Areas and Special Areas of Conservation. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. Conservation objectives of this site have been set for the SAC and SPA and are listed below; these can be accessed on NPWS.ie.

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) for which the SAC has been selected: Mudflats and sandflats not covered by seawater at low tide (1140), Salicornia and other annuals colonizing mud and sand (1310), Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) (1330), Mediterranean salt meadows (*Juncetalia maritimi*)(1410).
- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA; and Wetlands [A999].

Legislation in the Republic of Ireland affords protection to bird species outside of designated sites e.g. all wild bird species are afforded protection by The Wildlife Act 1976. Waterfowl shooting is under license only, managed by the National Parks & Wildlife Service. Baldoyle Bay is routinely surveyed as part of IWeBS which provides comprehensive counts of the bird species using the site. The Baldoyle Ramsar site lies within the UNESCO Dublin Bay Biosphere.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

URL of site-related webpage (if relevant):

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Plant species	Implemented
Animal community	Implemented
Birds	Implemented
Plant community	Implemented

A requirement of the Water Framework Directive is that benthic macro-invertebrates must be sampled from coastal and transitional waters at least twice within a river basin cycle (6 years) in order to classify these water bodies. The site is sampled and monitored under this programme. As a EU Natura 2000 site, it is required under Article 12 and 17 of the EU Birds and Habitats Directives respectively, that the status and trends of the conservation objectives within the site are monitored and reported on every 6 years. The site is monitored under the IWeBS scheme. The site is regularly inspected by the National Parks and Wildlife Service Conservation Rangers for the area.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Colhoun, K. and Cummins, S. 2013. Birds of conservation concern in Ireland 2014-2019. Irish Birds 9: 523-544

McCorry, M. (2007). Saltmarsh Monitoring Project 2006. Unpublished report to the National Parks and Wildlife Service, Dublin.

McCorry, M. & Ryle, T. (2009). Saltmarsh Monitoring Project 2007-2008. Unpublished report to the National Parks and Wildlife Service, Dublin.

NPWS (2012) Conservation Objectives: Baldoyle Bay SAC 000199. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013) Site Synopsis for Baldoyle Bay SAC 000199. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Baldoyle Bay SAC 000199 Natura 2000 Form. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Baldoyle Bay SAC (site code 199) Conservation objectives supporting document -coastal habitats. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Baldoyle Bay SAC (site code 199) Conservation objectives supporting document - Marine Habitats. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Site Synopsis for Baldoyle Bay SPA 004016. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Baldoyle Bay SPA 004016 Natura 2000 Form. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Baldoyle Bay SPA 004016. Conservation objectives supporting document. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

IUCN 2017. The IUCN Red List of Threatened Species. Version 2017-2. <http://www.iucnredlist.org>. Downloaded on 14 October 2017.

BirdwatchIreland.ie

<http://www.ramsar.org>

<http://eunis.eea.europa.eu>

The Irish Wetland Bird Survey (IWeBS).

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Baldoyle Bay (NPWS, 6/9/17)



Baldoyle Bay (NPWS, 6/9/17)



Baldoyle Bay (NPWS, 6/9/17)



Baldoyle Bay (NPWS, 6/9/17)



Baldoyle Bay (NPWS, 6/9/17)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation