

## Ramsar Information Sheet

Published on 6 July 2022 Update version, previously published on : 11 June 1996

# **Ireland**Dundalk Bay



Designation date 7 June 1996

Site number 834

Coordinates 53°57'14"N 06°20'07"W

Area 4 768,00 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

Dundalk Bay is located in the north-east of Ireland. It is a large exposed and shallow estuarine complex, extending c.15km from Castletown River on the Cooley Peninsula in the north, to Annagassan/Salterstown in the south. The bay is on average 4-5km in width, although the Ramsar site occupies a slightly smaller area and excludes the permanent marine waters of the bay. The site has excellent examples of marine and coastal wetlands. These include intertidal mud and sand flats, estuarine waters, intertidal marshes, sand and shingle shores. The extensive marine and coastal wetlands and the shallow nature of the wider bay provide important resources for waterbirds and make it the most important area for wintering waterbirds on the east coast of Ireland.

The site is designated as a Special Area of Conservation (SAC) under the EU Habitats Directive, as it contains representative and unique examples of coastal and marine habitats and natural wetland types within the Atlantic biogeographic region.

The site is designated a Special Protection Area (SPA) under the EU Birds Directive due to the presence of nationally and internationally important populations of species listed on Annex I of the Birds Directive and/or regularly occurring migratory waterbirds. Under this designation, the wetland habitat is also protected as a resource for the regularly-occurring migratory waterbirds that utilise it. The area of the SPA is more extensive than the Ramsar site and includes the shallow permanent marine waters of the bay.

The extensive estuaries, intertidal sand and mud flats support the largest concentration of wintering waterbirds on the east coast (regularly in excess of 50,000). The coastal and marine habitats host rich faunal communities of bivalves molluscs, marine worms and crustaceans providing a key food resource for wintering waterbirds (including waders, gulls, waterfowl) which feed in the intertidal area of Dundalk Bay. As well as providing food the extensive saltmarsh areas are used as high-tide roosts by waterbirds. At night the site is used by roosting geese and swans. The shallow open waters of the bay provide foraging habitat for gulls, sea duck, mergansers and grebes.

#### 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 National Parks and Wildlife Service, 90 North King Street, Postal address Smithfield, Dublin,

Ireland

D07 N7CV

#### National Ramsar Administrative Authority

Institution/agency | National Parks & Wildlife Service, Department of Housing, Local Government and Heritage

National Parks and Wildlife Service, Department of Housing, Local Government and Heritage 90 North King Street,

Postal address Smithfield, Dublin, Ireland D07 N7CV

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

From year 2004 To year 2019

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or **Dundalk Bay** 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 O No (Update) B. Changes to Site area No change to area  $^{ ext{(Update)}}$  For secretariat only. This update is an extension  $\square$ 

#### 2.1.5 - Changes to the ecological character of the Site

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

#### 2.2 - Site location

#### 2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps 0

#### Boundaries description

The boundary of Dundalk Bay Ramsar site was delineated as the same boundary as the original Special Protection Area in 1994 (but the latter was subsequently enlarged). The Ramsar site occupies the small estuarine inlet at Ballymascanlan and the extensive intertidal habitats of the wider Dundalk Bay. The boundary of the SAC includes all of the Ramsar site but also includes the estuarine waters of Dundalk Harbour and the subtidal waters (dredged channel) connecting Dundalk Harbour to the open waters of the Bay. Both the Ramsar site and the SAC lie within the larger area of Dundalk Bay SPA. The SPA also includes some additional saltmarsh habitat and an extensive area of open water habitat extending from Riverstown in the North (just east of Giles Quay) to Dunany Point in the South. Details of the SPA and SAC can be viewed here: https://www.npws.ie/protected-sites. 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 Mapping layers: Saltmarsh and Marine Community mapping.

The mapped layers were subsequently inspected by a site visit to confirm the presence of the habitats. Habitat areas were subsequently estimated by reference to the available imagery and GIS habitat layers and should be considered representative but approximate. The mapped area, as calculated from the GIS boundary, differs slightly from the official boundary of the Ramsar site. This is due to historic mapping issues generally as a result of differing mapping projections and variations in high and low water marks.

#### 2.2.2 - General location

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

Border Region (NUTS 3)

b) What is the nearest town or population

Dundally Town

on 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?

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

#### 2.2.4 - Area of the Site

Official area, in hectares (ha): 4768

Area, in hectares (ha) as calculated from 4836.34

GIS boundaries 4836.3

#### 2.2.5 - Biogeography

Biogeographic regions

| Diogoograpino rogiono                 |                      |
|---------------------------------------|----------------------|
| Regionalisation scheme(s)             | Biogeographic region |
| Marine Ecoregions of the World (MEOW) | Atlantic             |

Other biogeographic regionalisation scheme

British Isles, Palearctic (WWF Terrestrial Ecoregions), Northern British Isles (FEOW).

### 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

The vast intertidal and estuarine habitats of Dundalk Bay are important for storm protection (mitigation of flooding and coastal erosion). The complex of coastal and estuarine habitats and the communities (plant and invertebrate) which they support are important for nutrient cycling, carbon 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.

With the cycling of carbon and nutrients estuarine systems have a role in climate regulation. Provisioning - aquaculture (extensive industry within the site)

Other ecosystem services provided

Recreation and tourism - boat activity, fishing, beach walking, watersports (adjacent to population centre) Scientific and educational - Long-term monitoring site

Biodiversity - intertidal, coastal and estuarine habitats, plant communities and associated invertebrate, bird and mammal species.

Other reasons

Dundalk Bay contains representative and unique examples of marine habitats and natural wetland types within the Atlantic biogeographic region, i.e. tidal mudflats and sandflats, sand, and shingle shores and intertidal marshes. The site is of significant conservation importance because it supports a complex of interconnected wetland types. Dundalk Bay contains the most extensive saltmarshes found in Ireland. Three main areas of saltmarsh habitat occur mostly comprising Atlantic Sea Meadows and variable amounts of the alien invasive Common Cordgrass (Spartina anglica). Beds of eelgrass (Zostera noltii) are also present within the intertidal, while stoney banks with coastal plant communities are present in upper shore.

- Criterion 2 : Rare species and threatened ecological communities
- Criterion 3 : Biological diversity

The site is of international importance as the extensive intertidal habitats within the site support significant populations of over wintering waterbirds. The site is one of the most important sites for wintering waterbirds in Ireland. The site provides good quality habitat for the feeding and roosting requirements of the various bird species which winter here making it a significant wetland for maintaining the biological Justification diversity of the Atlantic biogeographic region. The site also supports significant stands of Eel grass (Zostera noltii), a species known to be declining internationally, which is important to maintain the biological diversity within the Atlantic biogeographic region. The diversity of interconnected wetland habitats (intertidal mud and sand flats, estuarine waters, intertidal marshes and sand, shingle shores) 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

☑ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers 57622

| Start year      | 2010                                   |
|-----------------|--|
|                 |  |
| Source of data: | The Irish Wetland Bird Survey (I-WeBS) |

#### ☑ Criterion 6 : >1% waterbird population

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

Crambe maritima is listed as near threatened in Ireland due to decline in area of occupancy; future population reduction is suspected (Curtis & McGough 1988; Wyse Jackson et al, 2016).

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

| 3.3 - An      | mai species                     | WH  | ose        | presence rea     | ales         | to the interna      | uonai in | ibor                | tance o             | i the sit         | €   |   |
|---------------|---------------------------------|-----|------------|------------------|--------------|---------------------|----------|---------------------|---------------------|-------------------|---|---|
| Phylum        | Scientific name                 | qua | criterio   | nder contributes | Pop.<br>Size | Period of pop. Est. |          | IUCN<br>Red<br>List | CITES<br>Appendix I | CMS<br>Appendix I | Other Status  | Justification   |
| Birds         |                                 |     |            |                  |              |                     |          |                     |                     |                   |   |   |
| CHORDATA AVES | Anas acuta                      | V   | <b>2</b> 0 |                  | 161          | 2010-2015           |          | LC                  |                     |                   | Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | National (BoCCI) classification, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Anas clypeata                   | V   | <b>2</b> 0 |                  | 14           | 2010-2015           |          |                     |                     |                   | Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | National (BoCCI) classification, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Anas crecca                     |     | <b>2</b> 0 |                  | 450          | 2010-2015           |          | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Wintering site, assemblage of over 20,000   |
| CHORDATA AVES | Anas penelope                   | V   | <b>2</b> 🗆 |                  | 475          | 2010-2015           |          |                     |                     |                   | Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | National (BoCCI) classification, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Anser albifrons<br>flavirostris | V   | <b>/</b>   |                  | 65           | 2010-2015           |          |                     |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)                | Annex I listing, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Anser anser                     |     | <b>1</b>   |                  | 327          | 2010-2015           |          | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Wintering site, assemblage of over 20,000   |
| CHORDATA AVES | Aythya fuligula                 | V   | <b>2</b> 🗆 |                  | 3            | 2010-2015           |          | LC                  |                     |                   | Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | National (BoCCI) classification, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Aythya marila                   | V   | <b>2</b> 0 |                  | 3            | 2010-2015           |          | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification (IUCN Europe region) | IUCN classification, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Branta bernicla<br>hrota        |     | <b>V</b>   |                  | 1852         | 2010-2015           | 4.6      |                     |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Internationally important population, wintering site, assemblage of over 20,000 hrota, Canada & Greenland/Ireland               |
| CHORDATA AVES | Bucephala<br>clangula           | V   | <b>/</b>   |                  | 53           | 2010-2015           |          | LC                  |                     |                   | Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | National (BoCCI) classification, wintering site, assemblage of over 20,000  |
| CHORDATA AVES | Calidris canutus                |     | <b>V</b>   |                  | 7062         | 2010-2015           | 1.3      | NT                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Internationally important population, wintering site, assemblage of over 20,000 islandica, NE Canada & Greenland/Western Europe |
| CHORDATA AVES | Cygnus cygnus                   | V   | <b>/</b>   |                  | 10           | 2010-2015           |          | LC                  |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)                | Annex I listing, wintering site, assemblage of over 20,000  |
|               | 1                               |     |            |                  |              |                     | 1        |                     |                     |                   |   |   |

| Phylum             | Scientific name            | qua | criterio   | nder contributes |      | Period of pop. Est. | %<br>occurrence<br>1) | IUCN<br>Red<br>List | CITES<br>Appendix I | CMS<br>Appendix I | Other Status  | Justification  |
|--------------------|----------------------------|-----|------------|------------------|------|---------------------|-----------------------|---------------------|---------------------|-------------------|---|--|
| CHORDATA/<br>AVES  | Cygnus olor                |     | <b>2</b> - |                  | 39   | 2010-2015           |                       | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Maintaining biological diversity, wintering site   |
| CHORDATA /         | Egretta garzetta           | 1   |            |                  | 36   | 2010-2015           |                       | LC                  |                     |                   | Listed on Annex I of the EU Birds Directive.  | Annex I listing (Birds Directive)  |
| CHORDATA/<br>AVES  | Gallinago<br>gallinago     |     | <b>2</b> - |                  | 15   | 2010-2015           |                       | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Maintaining biological diversity, wintering site   |
| CHORDATA/<br>AVES  | Gavia arctica              | ¥   | <b>2</b> - |                  | 5    | 2010-2015           |                       | LC                  |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)  | Annex I listing, and wintering site,   |
| CHORDATA /<br>AVES | Gavia immer                | V   | <b>V</b>   | 00000            | 25   | 2011-2015           |                       | LC                  |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of<br>Conservation Concern in Ireland (Colhoun and Cummins<br>2013), and Vulnerable classification IUCN Europe region) | Annex l listing, IUCN classification and wintering site  |
| CHORDATA /<br>AVES | Gavia stellata             | V   | <b>2</b> - |                  | ] 16 | 2010-2015           |                       | LC                  |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of<br>Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Annex I listing, and wintering site  |
| CHORDATA /<br>AVES | Haematopus<br>ostralegus   | V   | <b>Z</b> - |                  | 6012 | 2010-2015           |                       | NT                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)  | IUCN classification and wintering site, assemblage of over 20,000  |
| CHORDATA /<br>AVES | Limosa Iapponica           | V   | <b>V</b>   |                  | 3012 | 2010-2015           | 2                     | NT                  |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)  | Annex I listing, internationally important population, wintering site, assemblage of over 20,000 lapponica, Northern Europe/Western Europe |
| CHORDATA /<br>AVES | Limosa limosa              | V   | <b>V</b>   |                  | 3708 | 2010-2015           | 4.7                   | NT                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)  | IUCN classification, internationally important population, wintering site, assemblage of over 20,000 islandica, Iceland/Western Europe     |
| CHORDATA /<br>AVES | Numenius arquata           | V   | <b>Z</b> - |                  | 713  | 2010-2015           |                       | NT                  |                     |                   | Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)  | National (BoCCI) and IUCN classification and wintering site, assemblage of over 20,000   |
| CHORDATA/<br>AVES  | Phalacrocorax carbo        |     | <b>2</b> - |                  | 127  | 2010-2015           |                       | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Maintaining biological diversity, wintering site.  |
| CHORDATA /<br>AVES | Philomachus<br>pugnax      |     | <b>2</b> - |                  | 4    | 2010-2015           |                       |                     |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Site for passage migrants, maintaining biodiversity  |
| CHORDATA /         | Pluvialis apricaria        | V   | <b>2</b> - |                  | 7428 | 2010-2015           |                       | LC                  |                     |                   | Listed on Annex I (Birds Directive), Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)  | Annex I listing, National (BoCCI) classification and wintering site, assemblage of over 20,000   |
| CHORDATA /         | Podiceps auritus           | 1   |            |                  | 3    | 2010-2015           |                       | VU                  |                     |                   | Listed on Annex I of the EU Birds Directive.  | Annex I listing (Birds Directive)  |
| CHORDATA /         | Podiceps cristatus         |     | <b>2</b> - |                  | 36   | 2010-2015           |                       | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Wintering site, part of assemblage of over 20,000  |
| CHORDATA / AVES    | Tachybaptus<br>ruficollis  |     | <b>2</b> - |                  | 3    | 2010-2015           |                       | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Maintaining biological diversity, wintering site   |
| CHORDATA/<br>AVES  | Tadorna tadorna            |     | <b>2</b> - |                  | 327  | 2010-2015           |                       | LC                  |                     |                   | Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Wintering site, part of wintering assemblage of over 20,000.   |
| CHORDATA/<br>AVES  | Thalasseus<br>sandvicensis | ¥   |            |                  | 24   | 2010-2015           |                       | LC                  |                     |                   | Listed on Annex I (Birds Directive), Amber-listed in Birds of<br>Conservation Concern in Ireland (Colhoun and Cummins 2013)   | Annex I listing  |

| Phylum            | Scientific name   | Species contributes under criterion 3 5 7 8 | Pop.<br>Size | Period of pop. Est. | IUCN<br>Red<br>List | CITES<br>Appendix I | CMS<br>Appendix I | Other Status | Justification   |
|-------------------|-------------------|---|--------------|---------------------|---------------------|---------------------|-------------------|--------------|---|
| CHORDATA/<br>AVES | Tringa totanus    |   | 1688         | 2010-2015           | LC                  |                     |                   |              | National (BoCCI) classification, part of wintering assemblage of over 20,000.           |
| CHORDATA/<br>AVES | Vanellus vanellus |   | 4243         | 2010-2015           | NT                  |                     |                   |              | National (BoCCI) and IUCN classifications, part of wintering assemblage of over 20,000. |

<sup>1)</sup> 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. Dundalk 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.

LWeBS data (from the period 2006/07 to 2015/16) lists internationally important populations of Light-bellied Brent Goose (Branta bernicla hrota), Knot (Calidris canutus), Black-tailed Godwit (Limosa limosa) and Bar - tailed Godwit (Limosa lapponica), The Light-bellied Brent Goose is Vulnerable as several important European populations have declined (Birdwatch Ireland). Knot is Near Threatened on a global scale (IUCN) as subpopulations have experienced population declines; the European population is Least Concern. The Black-tailed Godwit is Vulnerable within Europe and Near Threatened globally; it has undergone rapid declines in Europe and in parts of its global range owing to changes in agricultural practices. The Bar-tailed Godwit's European population is stable but declining globally and is Near threatened. I-WeBS data (same period) also lists nationally important populations of Greylag Goose (Anser anser), Shelduck (Tadorna tadorna), Teal (Anas crecca), Mallard (Anas platyrhynchos), Pintail (Anas acuta), Common Scoter (Melanitta nigra), Little Egret (Egretta garzetta), Oystercatcher (Haematopus ostralegus), Ringed Plover (Charadrius hiaticula), Golden Plover (Pluvialis apricaria), Dunlin (Calidris alpina), Northern Lapwing (Vanellus vanellus), Curlew (Numenius arquata), Redshank (Tringa totanus), Cormorant (Phalacrocorax carbo) and Turnstone (Arenaria interpres). The EU population status for the Pintail is Threatened (EUNIS). Red breasted Merganser has undergone moderately rapid declines in Europe and is Near threatened (IUCN). The Oystercatcher, is undergoing rapid population declines across the European part of its global range and its overall global population trend is decreasing, it listed as Vulnerable in Europe and as Near Threatened globally (IUCN).

Dundalk Bay is designated as a Special Protection Area for the important populations of regularly occurring migratory species including some listed on Annex I of the EU Birds Directive: Great Crested Grebe (Podiceps cristatus), Greylag Goose, Light - bellied Brent Goose, Shelduck, Teal. Mallard, Pintail, Common Scoter, Red - breasted Merganser, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover (Pluvialis squatarola), Northern Lapwing, Knot, Dunlin (Calidris alpina), Black - tailed Godwit, Bar - tailed Godwit, Curlew, Redshank, Black - headed Gull (Larus ridibundus), Common Gull (Larus canus) and Herring Gull (Larus argentatus). Under this SPA designation the wetland habitat is also protected as a resource for the regularly-occurring migratory water birds that utilise it.

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

#### RIS for Site no. 834, Dundalk Bay, Ireland

| Name of ecological community  | Community qualifies under<br>Criterion 2? | Description  | Justification  |
|---|---|--|--|
| Zostera noltii community  | Ø   | The site supports areas of eelgrass.   | This habitat has a restricted distribution in Ireland. It is considered threatened on the Ospar list of threatened or declining habitats   |
| Saltmarsh community   | ✓   | Atlantic salt meadows and Mediterranean salt meadows occur within the site.  | This community has a restricted distribution within the biogeographical range.   |
| Fine sand community complex   |   | occurs both intertidally and subtidally within Dundalk Bay and reflects the gradation of fine sediment across the bay, present from the upper to the lower shore and occurs in the Mudflats and sandflats. | 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. |
| Muddy fine sand community   |   | This intertidal community is confined to the upper shore sediments; it is associated with the estuarine areas of the Castletown River and runs in a narrow band along the eastern margin of the bay.       | 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. |
| Estuaries (1130)  | ✓   |  | Annex I Habitats Directive   |
| Perennial vegetation of stony banks (1220)                            | ✓   |  | Annex I Habitats Directive   |
| Mudflats and sandflats not covered by seawater at low tide (1140)     | V   |  | Annex I Habitats Directive   |
| Salicomia and other annuals colonizing mud and sand (1310)            | <b>2</b>                                  |  | Annex I Habitats Directive   |
| Atlantic salt meadows (Glauco -<br>Puccinellietalia maritimae) (1330) | <b>V</b>                                  |  | Annex I Habitats Directive   |
| Mediterranean salt meadows (Juncetalia maritimi). (1410)              | V   |  | Annex I Habitats Directive   |

#### Optional text box to provide further information

Additional information:
- Fine sand community: subtidal element occurs in the shallow channels running through the sandflat at the western margins of the site and the larger channel of the Castletown River.

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

#### 4.1 - Ecological character

The site contains a diverse range of wetland habitats. Many of the marine, estuarine and coastal communities within the site are key contributors to its overall biodiversity by virtue of their structure and function. As such they represent keystone communities. The site is a large bay-like estuarine complex, extending c.15 km from north to south and on average 4-5km in width, although the portion of the bay which forms the Ramsar site is narrower (approximately 3km in width). It is located on the shores of a large town with a significant port. It contains the estuaries of a number of moderately sized rivers, intertidal mudflats and sandflats, areas of saltmarsh, Salicornia and other annuals colonising mud, Eel grass beds and sand and shingle shores.

Shingle beaches are particularly well represented in Dundalk Bay. The shingle is mostly stable, occurring on post-glacial raised beaches. The shingle often occurs in association with intertidal shingle, saltmarsh and/or shingle-based grassland and supports a significant and diverse vegetation community.

The inner bay is shallow and intertidal. The site contains the largest expanse of intertidal sand/mudflats on the east coast of Ireland and has a very marked tidal range. It is predominantly influenced by the sea, though several rivers drain into the bay from the west. The bay encompasses the estuaries of a number of moderately sized rivers, principally the Castletown, the Flurry, the Fane and the Glyde/Dee. These rivers drain fairly intensive agricultural catchments, and the Castletown flows through Dundalk town and serves the port. The Castletown River is routinely dredged for navigation purposes for the deepwater port of Dundalk. This river, in the northwest corner of the bay, cuts through the intertidal zone and the smaller River Fane flows into the southeast corner.

Saltmarsh vegetation occurs in four main areas and two types are represented –Atlantic and Mediterranean salt meadows. The extensive sandflats and mud flats (over 4,000 ha) are comprised of ecological communities such as muddy fine sand communities and fine sand community complexes. In the centre of Dundalk Bay there is a gravel community dominated by polychaetes. These habitats host a rich fauna of bivalves molluscs, marine worms and crustaceans.

The ecological character of the benthic habitats of the site has been altered in recent times by a proliferation in dredging activities. A dredge fishery for cockles (Cerastoderma edule) has taken place in Dundalk Bay intermittently since 2001 (Fahy et al. 2005). Since 2007 the fishery has been regulated by a fishery management plan which includes a range of fishery controls and harvest control rules. The annual out take is based on an annual biomass survey and a 33% harvest rate. Prior to 2001, cockles were harvested by hand gathering and raking, but landings data were not recorded.

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

#### Marine or coastal wetlands

| Marine or coastal wetlands                              |                                   |  |                              |                              |
|---|-----------------------------------|--|------------------------------|------------------------------|
| Wetland types (code and name)                           | Local name                        | Ranking of extent (1: greatest - 4: least) | Area (ha)<br>of wetland type | Justification of Criterion 1 |
| B: Marine subtidal aquatic beds (Underwater vegetation) | Eelgrass                          | 0  |                              |                              |
| E: Sand, shingle or pebble shores                       | Shingle or pebble shores          | 4  | 12                           | Representative               |
| F: Estuarine waters                                     | Estuarine waters                  | 3  | 72                           | Representative               |
| G: Intertidal mud, sand or salt flats                   | Intertidal mudflats and sandflats | 1  | 4227                         | Representative               |
| H: Intertidal marshes                                   | Saltmarsh                         | 2  | 523                          | Representative               |

(ECD) Habitat connectivity

The site provides a complex system of estuarine, coastal and marine habitats that are interconnected and dependent on each other for the maintenance of the overall structure and function of the site.

#### 4.3 - Biological components

#### 4.3.1 - Plant species

Other noteworthy plant species

| Other noteworthy plant species |                 |  |
|--------------------------------|-----------------|--|
| Phylum                         | Scientific name | Position in range / endemism / other   |
| TRACHEOPHYTA/MAGNOLIOPSIDA     | Crambe maritima | Near Threatened on Irish Red Data<br>List for Vascular Plants (2016)                         |
| TRACHEOPHYTA/LILIOPSIDA        | Zostera noltii  | Important food resource for waterbirds. Restricted distribution in the biogeographical area. |

Invasive alien plant species

| Phylum                  | Scientific name  | Impacts                | Changes at RIS update |
|-------------------------|------------------|------------------------|-----------------------|
| TRACHEOPHYTA/LILIOPSIDA | Spartina anglica | Actual (major impacts) | unknown               |

#### 4.3.2 - Animal species

Other noteworthy animal species

| Phylum            | Scientific name            | Pop. size | Period of pop. est. | % occurrence | Position in range<br>/endemism/other |
|-------------------|----------------------------|-----------|---------------------|--------------|--------------------------------------|
| CHORDATA/AVES     | Anas platyrhynchos         |           |                     |              |                                      |
| CHORDATAVAVES     | Anser brachyrhynchus       |           |                     |              |                                      |
| CHORDATAVAVES     | Arenaria interpres         |           |                     |              |                                      |
| CHORDATA/AVES     | Calidris alba              |           |                     |              |                                      |
| MOLLUSCA/BIVALVIA | Cerastoderma edule         |           |                     |              |                                      |
| CHORDATA/AVES     | Charadrius hiaticula       |           |                     |              |                                      |
| CHORDATA/AVES     | Chroicocephalus ridibundus |           |                     |              |                                      |
| MOLLUSCA/BIVALVIA | Ensis siliqua              |           |                     |              |                                      |
| CHORDATAVAES      | Larus argentatus           |           |                     |              |                                      |
| CHORDATAVAVES     | Larus canus                |           |                     |              |                                      |
| CHORDATA/AVES     | Larus fuscus               |           |                     |              |                                      |
| CHORDATAVAVES     | Larus marinus              |           |                     |              |                                      |
| CHORDATAVAVES     | Melanitta nigra            |           |                     |              |                                      |
| CHORDATA/AVES     | Mergus serrator            |           |                     |              |                                      |
| MOLLUSCA/BIVALVIA | Mytilus edulis             |           |                     |              |                                      |
| CHORDATAVAVES     | Pluvialis squatarola       |           |                     |              |                                      |
| CHORDATAVAVES     | Tringa nebularia           |           |                     |              |                                      |

#### Optional text box to provide further information

A number of wintering waterbird species occur at this site in numbers of national importance, are part of the assemblage of species which use this site and contribute to its biodiversity value.

## 4.4 - Physical components

#### 4.4.1 - Climate

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

#### 4.4.2 - Geomorphic setting

| a) Minimum elevation above sea level (in metres) | ()                                       |                                       |                                |                   |
|--|--|---------------------------------------|--------------------------------|-------------------|
| a) Maximum elevation above sea level (in metres) | 20                                       |                                       |                                |                   |
|  | Entire river basin                       |                                       |                                |                   |
|  | Upper part of river basin                |                                       |                                |                   |
|  | Middle part of river basin               |                                       |                                |                   |
|  | Lower part of river basin                |                                       |                                |                   |
|  | More than one river basin $\square$      |                                       |                                |                   |
|  | Not in river basin $\square$             |                                       |                                |                   |
|  | Coastal 🗹                                |                                       |                                |                   |
| Please name the river basin or basins. If the    | site lies in a sub-basin, please also na | ame the larger river basin. For a coa | ıstal/marine site, please name | the sea or ocean. |
| Castletown River, Irish Sea                      |  |                                       |                                |                   |

| RIS for Site no. 834, D                          | Oundalk Bay, Ireland  |                                  |   |
|--|---|----------------------------------|---|
|  |   | Mineral <b>☑</b>                 |   |
|  | (Update) Changes  | at RIS update No change          | Increase O Decrease O Unknown O   |
|  | 3   | Organic <b>☑</b>                 |   |
|  | (Update) Changes  |                                  | Increase O Decrease O Unknown O   |
|  | 0   | ble information                  | middad O Bedicase O diffiliowii O   |
|  |   |                                  |   |
|  | change as a result of changin<br>ons (e.g., increased salinity or |                                  |   |
|  | mation on the soil (optional)                                     |                                  |   |
| The site itself is largel shale or slate bedrock | -   | l of sands and muds an           | d tidal marsh. The dominant soil type surrounding the site is fine loam ove   |
| 4.4.4 - Water regime                             |   |                                  |   |
| 9  |   |                                  |   |
| Water permanence Presence?                       | Changes at RIS update   |                                  |   |
| Usually permanent water present                  | No change   |                                  |   |
|  |   |                                  |   |
| Source of water that maintain<br>Presence?       | Predominant water source  | Changes at RIS update            |   |
| Water inputs from surface water                  |   | No change                        |   |
| Marine water                                     | ✓   | 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   |                                  |   |
|  |   |                                  |   |
| Please add any comments                          | on the water regime and its de                                    | eterminants (if relevant). Use t | his box to explain sites with complex hydrology.  |
|  | •   | •                                | rough the intertidal zone. It is routinely dredged for navigation purposes.   |
|  |   |                                  | bitats have been previously assessed and deemed not be causing a<br>aters from the Castletown River which maintain the structure and function o |
|  | and deep water channe   |                                  |   |
|  |   |                                  |   |
| 4.4.5 - Sediment regim                           |   |                                  |   |
| Signific   | cant erosion of sediments occ                                     | urs on the site 🗹                |   |
|  | <sup>(Update)</sup> Changes                                       | at RIS update No change          | Increase O Decrease O Unknown O   |
| Significant accretion o                          | or deposition of sediments occ                                    | urs on the site 🗹                |   |
|  | (Update) Changes  | at RIS update No change          | Increase O Decrease O Unknown O   |
| Sediment regime is highli                        | y variable, either seasonally or                                  | inter-annually 🗹                 |   |
|  |   |                                  |   |
|  | (Update) Changes  | at RIS update No change          | Increase O Decrease O Unknown O   |
|  | Sediment reg  | gime unknown 🗖                   |   |
| Please provide further inform                    | mation on sediment (optional):                                    | :                                |   |
|  |   |                                  | dications of accretion at the site rather than erosion; the saltmarsh has and Dundalk Marshes more than doubling in width in places. However,   |
| some of this area is lil                         |   |                                  | e is quite open. There are extensive areas of Rock armour present at the  |
| site.  |   |                                  |   |
| 4.4.C. \Motorroll                                |   |                                  |   |
| 4.4.6 - Water pH                                 |   |                                  |   |
|  |   | aline (pH>7.4) ☑                 |   |
|  | (Update) Changes  | _                                | Increase O Decrease O Unknown O   |
|  |   | Unknown                          |   |
|  |   |                                  |   |
| 4.4.7 - Water salinity                           |   |                                  |   |
|  | Euhaline/Eusal  | line (30-40 g/l) 🗹               |   |
|  | (Update) Changes  | at RIS update No change ©        | Increase O Decrease O Unknown O   |

Unknown  $\square$ 

#### 4.4.8 - Dissolved or suspended nutrients in water

| Eutrophic   |  |
|---|--|
| (Update) Changes at RIS update  | No change O Increase O Decrease O Unknown <b>⊚</b>                     |
| Mesotrophic (   |  |
| (Update) Changes at RIS update  | No change O Increase O Decrease O Unknown ⊚                            |
| Oligotrophic (  |  |
| (Update) Changes at RIS update  | No change O Increase O Decrease O Unknown <b>⊚</b>                     |
| Dystrophic (  |  |
| (Update) Changes at RIS update  | No change O Increase O Decrease O Unknown <b>⊚</b>                     |
| Unknown (   |  |
| 4.4.9 - Features of the surrounding area which may affect th  | e Site   |
| Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i site itself: | i) broadly similar $O$ ii) significantly different $oldsymbol{\Theta}$ |
| Surrounding area has greater urbanisation or development  | $\overline{\mathscr{D}}$   |
| Surrounding area has higher human population density [  | $\overline{\mathscr{D}}$   |

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

Surrounding area has significantly different land cover or habitat types

Dundalk Bay is located on the periphery of a large town and associated deep water port. The landscape around this bay is mostly quite low-lying and flat. As the site is so large the adjacent habitats vary somewhat. Most of the land adjacent to the shore is dominated by farmland including significant areas located behind tall berms in low-lying areas. These areas contain a variety of habitats including wet grassland in unmanaged areas and large areas of tillage in some more intensively managed sections. There is also some extensive urban development with Dundalk Town adjacent to northern section.

#### 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) | Medium                         |  |

Surrounding area has more intensive agricultural use  $\ensuremath{\checkmark}$ 

Regulating Services

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

#### Cultural Services

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

Supporting Services

| Ecosystem service | Examples  | Importance/Extent/Significance |  |
|-------------------|---|--------------------------------|--|
| Biodiversity      | Supports a variety of all life<br>forms including plants,<br>animals and<br>microorganizms, the genes<br>they contain, and the<br>ecosystems of which they<br>form a part | Medium                         |  |

| Within the site: 1000s    |  |
|---------------------------|--|
| Outside the site: 10 000s |  |

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

#### 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<br>their existence is strongly linked with the maintenance of the ecological<br>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

|      |      | owners  |      |
|------|------|---------|------|
| I UL | JIIC | OWITEIS | HIIP |

| Category                           | Within the Ramsar Site | In the surrounding area |
|------------------------------------|------------------------|-------------------------|
| Provincial/region/state government | <b>/</b>               |                         |

#### Private ownership

| Category                                   | Within the Ramsar Site | In the surrounding area |  |
|--|------------------------|-------------------------|--|
| Other types of private/individual owner(s) |                        | ✓                       |  |

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

National Parks & Wildlife Service (NPWS). Department of Culture, Heritage and the Gaeltacht,

Please list the local office / offices of any Louth County Council.

agency or organization responsible for Environmental Protection Agency (EPA).

managing the site: 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

National Parks and Wildlife Service,

90 North King Street, Smithfield, Dublin,

Postal address:

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          | High impact   |                  |                 | No change | <b>✓</b>                | No change |
| Commercial and industrial areas  | High impact   |                  |                 | No change | <b>✓</b>                | No change |

#### Water regulation

| Factors adversely affecting site | Actual threat  | Potential threat | Within the site | Changes   | In the surrounding area | Changes   |
|----------------------------------|----------------|------------------|-----------------|-----------|-------------------------|-----------|
| Water abstraction                | unknown impact |                  | ✓               | No change |                         | No change |

#### Agriculture and aquaculture

| Factors adversely affecting site      | Actual threat | Potential threat | Within the site | Changes   | In the surrounding area | Changes   |
|---------------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Annual and perennial non-timber crops | Medium impact |                  |                 | No change | <b>&gt;</b>             | No change |
| Livestock farming and ranching        | Low impact    | High impact      | ✓               | No change | <b>✓</b>                | No change |

#### Transportation and service corridors

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes   | In the surrounding area | Changes   |
|----------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Shipping lanes                   | Medium impact | Medium impact    | <b>2</b>        | No change |                         | No change |
| Roads and railroads              | Medium impact |                  |                 | No change | ✓                       | No change |

| biological resource use                  | ological 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         |                  | <b>✓</b>        | No change |                         | No change |

| Factors adversely affecting site                           | Actual threat                | Potential threat | Within the site | Changes           | In the surrounding area | Changes           |
|--|------------------------------|------------------|-----------------|-------------------|-------------------------|-------------------|
| Recreational and tourism activities                        | Medium impact                |                  | ✓               | No change         |                         | No change         |
| utural system modification                                 | IS                           |                  |                 |                   |                         |                   |
| Factors adversely affecting site                           | Actual threat                | Potential threat | Within the site | Changes           | In the surrounding area | Changes           |
| Unspecified/others   | Medium impact                |                  | ✓               | No change         |                         | No change         |
| Invasive non-native/<br>alien species                      | High impact                  |                  | V               | No change         |                         | No change         |
| vasive and other problems Factors adversely affecting site | Actual threat                | Potential threat | Within the site | Changes           | In the surrounding area | Changes           |
|  |                              | l                |                 |                   |                         |                   |
| Allution   |                              |                  |                 |                   |                         |                   |
| Factors adversely affecting site                           | Actual threat                | Potential threat | Within the site | Changes           | In the surrounding area | Changes           |
| Factors adversely  | Actual threat  Medium impact | Potential threat | Within the site | Changes No change | In the surrounding area | Changes No change |
| Factors adversely affecting site Household sewage,         |                              | Potential threat |                 |                   | In the surrounding area |                   |

\*Natural system modifications: Other- Dykes, embankments, artificial beaches, general. This is deemed a medium threat within the site (NPWS 2015a, 2015b).

Siltation rate changes, dumping, depositing of dredged deposits is deemed a medium threat inside the site (NPWS, 2015a, 2015b).

#### 5.2.2 - Legal conservation status

| Regional (international) legal designations | <u> </u>   |  |                          |
|---|--|--|--------------------------|
| Designation type                            | Name of area   | Online information url                             | Overlap with Ramsar Site |
| EU Natura 2000                              | Dundalk Bay Special Area<br>of Conservation. Site<br>Code:000455 | https://www.npws.ie/protected-si<br>tes/sac/000455 | partly                   |
| EU Natura 2000                              | Dundalk Bay Special<br>Protection Area. Site<br>Code:004026      | https://www.npws.ie/protected-si<br>tes/spa/004026 | partly                   |

National legal designations

| Designation type | Name of area                                  | Online information url | Overlap with Ramsar Site |
|------------------|---|------------------------|--------------------------|
| Bird Sanctuary   | Ballymas canlan Estuary<br>Wildfowl Sanctuary |                        | partly                   |
| Bird Sanctuary   | Lurgan Green Wildfowl<br>Sanctuary            |                        | partly                   |

Non-statutory designations

| Designation type    | Name of area | Online information url   | Overlap with Ramsar Site |
|---------------------|--------------|--|--------------------------|
| Important Bird Area | Dundalk Bay  | http://datazone.birdlife.org/sit<br>e/factsheet/dundalk-bay-iba-irel and | whole                    |

#### 5.2.3 - IUCN protected areas categories (2008)

| . 🗆 | la Strict Nature Reserve   |
|-----|--|
|     | lb 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  |

#### 5.2.4 - Key conservation measures

Legal protection

|  | Measures         | Status      |
|--|------------------|-------------|
|  | Legal protection | Implemented |

| Trabitat                                  |             |
|---|-------------|
| Measures                                  | Status      |
| Catchment management initiatives/controls | Implemented |
| Land conversion controls                  | Implemented |

#### Species

| Measures                | Status      |
|-------------------------|-------------|
| Threatened/rare species | Implemented |
| management programmes   | implemed    |

#### **Human Activities**

| Trainian / Ibarraco                              |             |
|--|-------------|
| Measures   | Status      |
| Regulation/management of was tes                 | Implemented |
| Fisheries<br>management/regulation               | Implemented |
| Harvest controls/poaching enforcement            | Implemented |
| Regulation/management of recreational activities | Implemented |
| Research   | Implemented |

#### Other

The Dundalk Ramsar site lies within the Dundalk Bay SAC and SPA. Under the European and national legislation, Ireland must maintain at favourable conservation status areas designated as Special Areas of Conservation and Special Protection Areas. 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: Estuaries (1130), Mudflats and sandflats not covered by seawater at low tide (1140), Perennial vegetation of stony banks (1220), Salicornia and other annuals colonizing mud and sand (1310), Atlantic salt meadows (Glauco - Puccinellietalia maritimae) (1330), 1410 Mediterranean salt meadows (Juncetalia maritimi).
- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA; and Wetlands & waterbirds.

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. Dundalk Bay is routinely surveyed as part of I-WeBS which provides comprehensive counts of the bird species using the site. Under the Water Framework Directive water quality of the bay is monitored at regular intervals by the EPA and/or local authority.

#### 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 O No 🖲

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

URL of site-related webpage (if relevant): https://www.npws.ie/protected-sites

#### 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      |
|-------------------------|-------------|
| Animal community        | Implemented |
| Plant species           | Implemented |
| Birds                   | Implemented |
| Water regime monitoring | Implemented |
| Water quality           | 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 monitored under this programme. As an 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 this programme. The site is monitored under the I-WEBS 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

Curtis, T.G.F & McGough, H.N. (1988) The Irish Red Data Book 1 Vascular Plants. Wildlife Service Ireland Dublin.

Fahy, E., Carroll, J. & Murran, J. (2005). The Dundalk cockle (Cerastoderma edule) fishery in 2003-2004. Irish Fisheries Investigations 14, 16pp. Biomass, size and age structure of Cockles (Cerastoderma edule) in Dundalk Bay, May 2010. Marine Institute Unpublished Report,

Kingston, N. (2012) Checklist of protected & rare species in Ireland. Unpublished National Parks & Wildlife Service Report.

McCorry, M. & Ryle, T. (2009). Saltmarsh Monitoring Project 2007-2008. Vol. 3. Unpublished report to the National Parks and Wildlife Service, Dublin.

NPWS (2016a) Conservation objectives for Dundalk Bay SAC [000455]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2013) Site Synopsis for Dundalk Bay SAC [000455]. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2015a) Dundalk Bay SAC [000455]. Natura 2000 Form. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2016b) Conservation objectives for Dundalk Bay SPA [0004026]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2015b) Dundalk Bay SPA Natura 2000 Form [004026]. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. NPWS (2014) Site Synopsis for Dundalk Bay SPA [004026]. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. IUCN 2014. IUCN Red List of Threatened Species. Version 2014.2. . Downloaded on June 2017.

Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland Birdwatchlreland.ie

http://www.ramsar.org

http://eunis.eea.europa.eu

The Irish Wetland Bird Survey (I-WeBS).

#### 6.1.2 - Additional reports and documents

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

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

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

iv. relevant Article 3.2 reports

<no file available?

v. site management plan

vi. other published literature

<no data available>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site



Dundalk Bay ( NPWS, 02



Dundalk Bay ( NPWS, 02



Dundalk Bay ( NPWS, 02-06-2017 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1996-06-07