



Ramsar Information Sheet

Published on 16 March 2022

Update version, previously published on : 11 June 1996

Ireland Cork Harbour



Designation date	7 June 1996
Site number	837
Coordinates	51°52'36"N 08°16'47"W
Area	1 436,00 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

Cork Harbour Ramsar site is part of a large, sheltered bay system with several river estuaries and extensive intertidal habitats. Cork Harbour lies on the south coast of Ireland and is renowned for being one of the finest natural harbours in the world. Cork City is the second largest city in Ireland and is located upstream of the Ramsar site on the River Lee. Cork Harbour is an important seaport and the headquarters of the Irish Navy are located here. It is also an important area for chemical and pharmaceutical industries and its hinterland is dominated by urban and residential development. The Cork Harbour Ramsar site lies within the wider and extensive wetland system that is Cork Harbour and is focussed on four separate areas of intertidal habitat. These areas are an integral part of the larger (though also fragmented) Cork Harbour Special Protection Area (SPA) and part of the Ramsar site lies within the Great Island Channel Special Area of Conservation (SAC). Cork Harbour SPA has been selected as an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterbirds, making it one of the top five sites in the country. Owing to the sheltered conditions within Cork Harbour Intertidal mud and sand flat habitats are extensive and saltmarsh habitat is scattered throughout. These habitats are important for both roosting and wintering waterbirds. Great Island Channel SAC which lies within the Cork Harbour wetland complex is designated for intertidal mud and sandflat habitat and for saltmarsh. Cork Harbour also has a breeding colony of Common Tern which is of national importance and it is important for post breeding tern aggregations.

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 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

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)

Unofficial name (optional)

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?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<2 file(s) uploaded>

Former maps

Boundaries description

The boundary of Cork Harbour Ramsar site was delineated as the same boundary as the original Special Protection Area in 1994. The Ramsar site and original SPA covers intertidal habitats at Lough Mahon, Great Island Channel, Whitegate Bay and Lough Beg. The SPA boundary was subsequently enlarged and the Ramsar site is now a smaller part of the current SPA which comprises most of the main intertidal areas of Cork Harbour. The boundaries for Cork Harbour Ramsar site focus on some of the main wetland habitats of the wider area of Cork Harbour Special Protection Area boundary (SPA). Part of the SPA and the Ramsar site is also a Special Area of Conservation (northern intertidal channels). Details of the SPA and SAC can be viewed here: <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 data layers: Salt marsh and Marine communities.

The mapped layers were subsequently inspected by a site visit to confirm the accuracy of the mapped habitats. Discrepancies between the original boundary for the Ramsar site and the current boundary are likely as a result of mapping projection anomalies.

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

Cork Harbour is an extensive and complex wetland system with many sheltered inlets and bays, along with areas of open water. Several rivers discharge into the site. The estuarine and intertidal habitats and the communities (plant and invertebrate) which they support are important for nutrient cycling, carbon sequestration and sediment trapping. The estuarine habitats 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. Cork Harbour has a role in the natural control of flooding and in mitigating the effects of storms.

Other ecosystem services provided

Cork Harbour is important for biological recording (birds, cetaceans), for recreation (watersports activities) and for aquaculture (oyster cultivation). It is an important site for waterbird biodiversity. The extensive intertidal mud and sand flat, estuarine, shallow water and saltmarsh habitats are a key resource for feeding, roosting and loafing waterbirds which regularly occur at this site in numbers of over 20,000 each winter. With the cycling of carbon and nutrients estuarine systems have a role in climate regulation.

Other reasons

Cork Harbour contains representative and natural examples of marine habitats and natural wetland types within the Atlantic biogeographic region, i.e. estuaries, tidal mudflats, sandflats and saltmarshes. Combined these habitats provide an interconnected and interdependent mosaic of habitats. The main intertidal habitats of Cork Harbour are designated as a EU Natura 2000 site (Special Protection Area) and one area of sheltered intertidal habitat, Great Island Channel, is also a designated Special Area of Conservation.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The assemblage of wintering birds including those of high (Red Listed in Ireland, Vulnerable in Europe and/or Globally) and medium (Amber Listed species in Ireland) conservation status contributes to biodiversity within the biogeographical region.

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

- Criterion 5 : >20,000 waterbirds

Overall waterbird numbers

Start year

Source of data:

- Criterion 6 : >1% waterbird population

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

None identified for this site

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>Alcedo atthis</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"/>	2	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
CHORDATA/ AVES	<i>Anas acuta</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16	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, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Anas clypeata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Anas crecca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1208	2011-2015	0.2	LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Anas penelope</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1356	2011-2015	0.1		<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Anas strepera</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Aythya ferina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015		VU	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Global & Europe)	National (BoCCI) and IUCN classifications, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Aythya fuligula</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26	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, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Aythya marila</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015		LC	<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 classification, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Branta bernicla hrota</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	53	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Bucephala clangula</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	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, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Calidris alpina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4316	2011-2015	0.3	LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Calidris canutus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	135	2011-2015		NT	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Cygnus olor</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	44	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Egretta garzetta</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	101	2011-2015	0.1	LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive).	Annex I listing, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Gallinago gallinago</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	44	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.

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>Gavia immer</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	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, IUCN classification, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Haematopus ostralegus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1633	2011-2015	0.2	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 classification, wintering site, assemblage > 20,000.
CHORDATA/ AVES	<i>Ichthyaeetus melanocephalus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	68	2011-2015	0.1		<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, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Limosa lapponica</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	300	2011-2015	0.3	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, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Limosa limosa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2867	2011-2015	2.6	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 classification, Wintering site, assemblage > 20,000 Population islandica, Iceland/Western Europe is of international importance.
CHORDATA/ AVES	<i>Numenius arquata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1502	2011-2015	0.2	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, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Phalacrocorax carbo</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	333	2011-2015	0.3	LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Philomachus pugnax</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015			<input type="checkbox"/>	<input type="checkbox"/>	Annex I (Birds Directive). Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex listing and - occurs regularly on passage, part of assemblage of >20,000
CHORDATA/ AVES	<i>Pluvialis apricaria</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4067	2011-2015	0.4	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, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Podiceps auritus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2011-2015		VU	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive)	Annex I listing, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Podiceps cristatus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	105	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Somateria mollissima</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	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 classification, wintering site, assemblage > 20,000
CHORDATA/ AVES	<i>Sterna hirundo</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"/>	102	2005		LC	<input type="checkbox"/>	<input type="checkbox"/>	Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland	Annex I listing, regular breeding species, post breeding assemblage.
CHORDATA/ AVES	<i>Tachybaptus ruficollis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	73	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Tadorna tadorna</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1057	2011-2015	0.4	LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Thalasseus sandvicensis</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"/>	170	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, post breeding assemblage, summer visitor
CHORDATA/ AVES	<i>Tringa erythropus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2011-2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Wintering site, assemblage > 20,000, maintaining biodiversity.
CHORDATA/ AVES	<i>Tringa totanus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1526	2011-2015	0.4	LC	<input type="checkbox"/>	<input type="checkbox"/>	Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, wintering site, assemblage > 20,000.

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>Vanellus vanellus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1917	2011-2015	0.1	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, wintering site, assemblage > 20,000.

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. Cork Harbour is an 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.

Cork Harbour is a designated Special Protection Area due to the presence of the following species listed on Annex I of the EU Birds Directive and/or regularly occurring migratory species: Little Grebe (*Tachybaptus ruficollis*), Great Crested Grebe (*Podiceps cristatus*), Cormorant (*Phalacrocorax carbo*), Grey Heron (*Ardea cinerea*), Shelduck (*Tadorna tadorna*), Wigeon (*Anas penelope*), Teal (*Anas crecca*), Pintail (*Anas acuta*), Shoveler (*Anas clypeata*), Red-breasted Merganser (*Mergus serrator*), Oystercatcher (*Haematopus ostralegus*), Golden Plover (*Pluvialis apricaria*), Grey Plover (*Pluvialis squatarola*), Lapwing (*Vanellus vanellus*), Dunlin (*Calidris alpina*), Black-tailed Godwit (*Limosa limosa*), Bar-tailed Godwit (*Limosa lapponica*), Curlew (*Numenius arquata*), Redshank (*Tringa totanus*), Black-headed Gull (*Chroicocephalus ridibundus*), Common Gull (*Larus canus*), Lesser Black-backed Gull (*Larus fuscus*). It is also designated for Annex I breeding Common Terns (*Sterna hirundo*). Under this SPA designation the wetland habitat is also protected.

The site supports a breeding colony of Common Terns. Post breeding assemblages of both Common and Sandwich Terns occur in Cork Harbour. A range of passage waders occurs regularly in autumn, including Spotted Redshank and Green Sandpiper. It is an important site for gulls in winter and autumn, especially Common Gull and Lesser Black-backed Gull (NPWS Site Synopsis)

The Kingfisher occurs at the site; according to the IUCN it is undergoing rapid population declines and is deemed Vulnerable across the European part of its extremely large global range, the EU population is Threatened (EUNIS).

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
Mytilus edulis dominated community	<input checked="" type="checkbox"/>	The site supports beds of both intertidal and subtidal Blue Mussel.	M. edulis beds are included in the OSPAR (Annex V) list of threatened and declining species and habitats. ICES found sufficient evidence for the decline and threat of this habitat over the whole OSPAR area (ICES 2002).
1140 Mudflats and sandflats not covered by seawater at low tide	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
1310 Salicornia and other annuals colonising mud and sand	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)
1330 Atlantic salt meadows (Glaucopuccinellietalia maritima)	<input checked="" type="checkbox"/>		Annex I (Habitats Directive)

Optional text box to provide further information

The intertidal habitats of Great Island Channel are designated as part of the Great Island Channel SAC. Otherwise the intertidal and estuarine habitats are protected within Cork Harbour SPA as wetland habitats of importance for the bird populations which they support.

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

4.1 - Ecological character

Cork Harbour is a complex system comprising a mosaic of wetland habitats including the estuarine component of a number of rivers together with areas of permanent open marine water, extensive intertidal mudflats and pockets of salt marsh. The Ramsar site covers four separate bays and inlets within Cork Harbour and contains elements of all of these habitats including intertidal mudflats which provide an important feeding resource for wintering waterbirds. The site has an unusual and complex tidal regime which does not follow a normal tidal cycle and the mudflats flood and empty rapidly rather than following a normal 6 hour cycle. The muds of the harbour are quite soft and often anoxic and typically support a community of polychaetes, oligochaetes and bivalves. Pockets of *Mytilus edulis* also occur within the site. Green algal species occur on the flats, especially *Ulva* Spp. The non native invasive species Cordgrass (*Spartina* spp.) has colonised the intertidal flats in places, especially at Rossleague and Belvelly. The surrounding landscape is comprised of improved agricultural grassland and urban development including heavily industrialised areas.

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
A: Permanent shallow marine waters	Shallow marine waters	4	90	Representative
F: Estuarine waters	Estuarine waters	2	260	Representative
G: Intertidal mud, sand or salt flats	Mudflats and sandflats	1	870	Representative
H: Intertidal marshes	Saltmarsh	3	145	Representative

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Saline, brackish or alkaline water > Lakes >> Q: Permanent saline/brackish/alkaline lakes		1		
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2		

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Agricultural grassland and woodland	62

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/LILIOPSIDA	<i>Sporobolus anglicus</i>	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 /endemism/other
CHORDATA/AVES	<i>Anas platyrhynchos</i>				
CHORDATA/AVES	<i>Ardea cinerea</i>				
CHORDATA/AVES	<i>Arenaria interpres</i>				
CHORDATA/AVES	<i>Larus canus</i>				
CHORDATA/AVES	<i>Larus fuscus</i>				
CHORDATA/AVES	<i>Pluvialis squatarola</i>				
CHORDATA/AVES	<i>Tringa nebularia</i>				
CHORDATA/MAMMALIA	<i>Tursiops truncatus</i>				

Optional text box to provide further information

All Irish waters are a whale and dolphin sanctuary. Cork Harbour has a number of semi-resident bottlenose dolphins (*Tursiops truncatus*) (Ryan et al., 2010). Bottlenose dolphins are protected under the Irish Wildlife Act (1976) and are given special protection under Annex II E.U. Habitats Directive. They and all other cetaceans are also protected under Annex IV of the Habitats Directive.

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.

Celtic 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	No change

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"/>	unknown
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

Sediment regime unknown

Please provide further information on sediment (optional):

Saltmarshes occur within the site, accretion and erosion are natural elements of saltmarsh systems.

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

Please provide further information on dissolved or suspended nutrients (optional):

The Water Framework Directive status 2011-2015 for the site is listed as GOOD
See: <https://gis.epa.ie/EPAMaps/>

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, including Cork city, which is a major port. Cork harbour and port form the largest industrial area on Ireland's south coast. The site is situated adjacent to the second largest city in Ireland, it is an important seaport and industrial area. Sections of the site have adjacent urban or residential areas while the chemical and pharmaceutical industries also feature prominently. Cork Harbour is an important site for the pharmaceutical and chemical industries, particularly the areas of Ringaskiddy and Little Island in the west and north-west of the area. The topography of the surrounding landscape is gently undulating, with a diverse coastal environment comprising built areas, shallow cliffs, intertidal mudflats, reed beds, shingle and rocky shores. Over two thirds of the shoreline is dominated by man made structures such as sea walls and rock reinforcements, however parts of the coast remain natural and characterised by rural agricultural land-use with much less influence from human activities.

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
Wetland non-food products	Other	Low

Regulating Services

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

Cultural Services

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

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	High
Soil formation	Accumulation of organic matter	Medium
Soil formation	Sediment retention	Medium
Nutrient cycling	Carbon storage/sequestration	Medium
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium

Optional text box to provide further information

The importance of site for each of the services is generally not known, so this is estimated only.

Outside the site: 10 000s

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"/>
Commercial (company)	<input 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.
Cork City Council.
Environmental Protection Agency (EPA).
Department of Communications, Climate Action and Environment.
Marine Institute.
Inland Fisheries Ireland (IFI).

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
Commercial and industrial areas	Low impact	Low impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Housing and urban areas	Low impact	High impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Marine and freshwater aquaculture	High impact		<input checked="" type="checkbox"/>	No change	<input 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	High impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Shipping lanes	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Aircraft flight paths	unknown impact		<input checked="" 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	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	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" 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	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
Unspecified			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Household sewage, urban waste water	unknown impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Industrial and military effluents	unknown impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Agricultural and forestry effluents	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

Cork Harbour is the most heavily industrialized estuary in Ireland with pharmaceutical, electrochemical and petrochemical industries established on the foreshore. Large centres of human habitation lie adjacent to this site, including Cork city, which is a major port. Cork harbour and port form the largest industrial area on Ireland's south coast. Several locations around the harbour currently have no treatment facilities at all (Cobh, Passage West/ Monkstown, Carrigaline, Crosshaven and Whitegate/Agahda). Others have only preliminary/primary treatment (e.g. Ringaskiddy). Plans are currently underway to improve sewage facilities in the lower part of the Harbour (Cork County Council, 2013b) (Cited NPWS 2014b).
 The invasive plant species *Spartina anglica* occurs at the site.
 Threats listed above are taken from NPWS (2014b and 2015a).

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Cork Harbour Special Protection Area. Site Code: 004030	https://www.npws.ie/protected-sites/spa/004030	whole
EU Natura 2000	Great Island Channel Special Area of Conservation. Site Code: 001058	https://www.npws.ie/protected-sites/sac/001058	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Wildfowl Sanctuary	Douglas Estuary	NPWS.ie	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Cork Harbour	http://datazone.birdlife.org/site/factsheet/cork-harbour-iba-ire-land	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

Species

Measures	Status
Threatened/rare species management programmes	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 Cork Harbour Ramsar site lies within the Cork Harbour SPA (004030) and The Great Island Channel SAC (001058) lies within and overlaps with part of the Ramsar site. 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 SPA and the SAC are listed below; these can be accessed on NPWS.ie.

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA; and Wetlands [A999].
- To maintain or restore the favourable conservation condition of the Qualifying Interests listed for the site: 1140 Mudflats and sandflats not covered by seawater at low tide 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)

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. Cork Harbour is routinely surveyed as part of I-WeBS which provides comprehensive counts of the bird species using the site.

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

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 species (please specify)	Implemented
Water regime monitoring	Implemented
Water quality	Implemented
Plant community	Implemented
Plant species	Implemented
Animal community	Implemented
Birds	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. Cork Harbour is sampled and monitored under this programme.

As a EU Natura 2000 site, it is required under Article 12 of the EU Birds Directive and Article 17 of the Habitats Directive 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 I-WeBS scheme. The site is regularly inspected by the National Parks and Wildlife Service Conservation Rangers for the area.

Marine mammal sightings within the site are recorded by Irish Whale and Dolphin Group.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Burke, B. & Crowe, O. (2016) Post-breeding Tern Report 2016: Assessment of Numbers and Distribution of Post-breeding Terns at a Selection of East and South Coast Wetlands in August & September 2016. BirdWatch Ireland I-WeBS Team Report. BirdWatch Ireland, Wicklow.

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

Ryan, Conor & Rogan, Emer & Cross, Tom. (2011). The use of Cork Harbour by Bottlenose dolphins *Tursiops truncatus* Montagu (1821). Irish Naturalists' Journal. 31. 1-9. 10.2307/41419206.

Lewis, L. J., Burke, B., Fitzgerald, N., Tierney, T. D. & Kelly, S. (2019) Irish Wetland Bird Survey: Waterbird Status and Distribution 2009/10-2015/16. Irish Wildlife Manuals, No. 106. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

NPWS (2014a) Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015a) Cork Harbour SPA 004030. Natura 2000 Form. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015b) Site Synopsis for Cork Harbour SPA 004030.. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014b) Conservation objectives supporting document for Cork Harbour SPA 004030. 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 08 October 2017. Birdwatchireland.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)

<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:



Cork Harbour (NPWS, October 2017)



Cork Harbour (NPWS, October 2017)



Cork Harbour (NPWS, October 2017)



Cork Harbour (NPWS, October 2017)



Cork Harbour (NPWS, October 2017)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation