

Ramsar Information Sheet

Published on 7 March 2023 Update version, previously published on : 11 June 1996

IrelandBannow Bay



Designation date 7 June 1996 Site number 840

Coordinates 52°13'52"N 06°47'50"W

Area 958,00 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

Bannow Bay is situated in county Wexford on the south east coast of Ireland. It is a large, very sheltered estuarine system with a narrow outlet to the sea. It is up to 14km along its northeast/south-west axis and has an average width of about 2 km. It is fed by two main rivers; the Corock, and the Owenduff, and by the Tintern stream, as well as numerous other smaller streams to the north and south-west.

The site is designated as a Special Area of Conservation (SAC) under the EU Habitats Directive, as it contains representative and natural examples of marine habitats and natural wetland types within the Atlantic biogeographic region. Eleven habitats listed on Annex I of Habitats Directive occur at this site. These comprise of coastal habitats of vegetated shingle, saltmarshes (Salicornia flats, Atlantic and Mediterranean) and sand dunes. Marine habitats include estuaries together with extensive intertidal sand and mudflats. Saltmarshes of exceptional species diversity are found above the sand and mudflats, particularly at the sheltered areas south of the site. Mediterranean and thermo Atlantic halophilous scrub (Sarcocornetea fruticosi) occurs at the site and is the rarest of the four Annex I Saltmarsh habitats found in Ireland. Within Bannow Bay, it is found in saltpans and tidal muds and often on higher gravelly saltmarsh. It is characterised by the presence of the legally protected perennial glasswort (Sarcocornia perennis).

The bay is a designated Special Protection Area under the EU Birds Directive due to the presence of nationally and internationally important waterbird populations which are regularly occurring and/or listed on Annex I of the EU Birds Directive. Under this designation the wetland habitat is also protected as a resource for the regularly-occurring migratory waterbirds that utilise it. According to the I-WeBS data (2010-2015) internationally important populations of Light-bellied Brent Goose, and nationally important populations of Shelduck, Little Egret, Golden Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit and Curlew occur at the site. Bannow Bay is recognised as an Important Bird Area (IBA) and part of the site is a Wildfowl Sanctuary. Bannow Bay supports an excellent diversity of wintering waterbirds and is one of the most important sites in the south-east.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

National Parks and Wildlife Service Department of Housing, Local Government and Heritage.

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.

National Parks and Wildlife Service, 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 Spanish)

Unofficial name (optional)

Cuan Bhanú

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

(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

<3 file(s) uploaded>

Former maps 0

Boundaries description

The boundary of Bannow Bay Ramsar site was delineated as the same boundary as the original Special Protection Area in 1994 (but the latter was subsequently enlarged). This site is contained within the boundaries of both the EU Birds Directive (2009/147/EC) Special Protection Area for Bannow Bay together with the EU Habitats Directive (92/43/EEC) boundary for Bannow Bay SAC. Although the Ramsar site is smaller and focused on the intertidal habitats within the Bay it is an integral part of the wider wetland complex that is SPA and SAC. Details of the SAC/SPA can be found on the NPWS website at: https://www.npws.ie/protected-sites. Within this area a number of GIS data layers were used to define the Ramsar habitats within the site. These included:

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

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

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.

$\gamma \gamma \gamma$	General	location
Z.Z.Z -	General	location

a) In which large administrative region does the site lie?	South East (NUTS 3)
b) What is the nearest town or population centre?	Wexford

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?

2.2.4 - Area of the Site

Official area, in hectares (ha): 958

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

2.2.5 - Biogeography

Biogeographic regions

Brogoograpino rogiono	
Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Atlantic
EU biogeographic regionalization	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 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. The freshwater, estuarine and coastal complex is important within the context of coastal dynamics with implications for erosion processes, storm and flood protection.

Other ecosystem services provided

Bannow Bay contains representative and natural examples of marine habitats and natural wetland types of the Atlantic biogeographic region, i.e. estuaries, tidal mudflats and sandflats, saltmarshes and rivers. This system of freshwater, estuarine and fully marine habitats provides a complex of interdependent wetland ecosystems which dictate the structure and function of the site and support important populations of habitats, plants and waterbirds. The estuarine and intertidal habitats and the communities (plant and invertebrate) which they support are important for nutrient cycling, carbon sequestration and sediment trapping. With the cycling of carbon and nutrients estuarine systems have a role in climate regulation.

Other reasons

This is a site of considerable conservation and biodiversity value because it supports good examples of a range of coastal habitats and species. Saltmarshes of exceptional species diversity are found above the sand and mudflats, particularly at the sheltered areas south of the site. Mediterranean and thermo Atlantic halophilous scrub (Sarcocornetea fruticosi) occurs at the site and is the rarest of the four Annex I Saltmarsh habitats found in Ireland. Within Bannow Bay, it is found in saltpans and tidal muds and often on higher gravelly saltmarsh. It is characterised by the presence of the legally protected perennial glasswort (Sarcocornia perennis). Biological monitoring informs local and national habitat and species conservation assessment and waterbird monitoring provides data on long term population trends. The site provides a location for scientific and educational study and research and is also important for tourism and recreation. The site has a well developed aquaculture industry and produces shellfish.

☑ Criterion 2 : Rare species and threatened ecological communities

information

Rare (high conservation concern) wintering bird species are defined as:

Regularly occurring species (occurring in at least 3 out of 10 seasons of monitoring or 30% of seasons; based on FWebs data from 2006/07 to 2015/16) and that are:

- Red Listed in Ireland's national Red List (Birds of Conservation Concern in Ireland (BoCCI) published by Colhoun and Cummins (2013)
- Classified as VU in IUCN Global and/or European regional list
- Listed in Annex I of the European Union Birds Directive

Several species of high conservation status at local, european and/or global level are part of the wintering waterbird assemblage at this site e.g. Wigeon, Goldeneye, Great Northern Diver, Oystercatcher and Bartailed Godwit.

Criterion 3 : Biological diversity

Optional text box to provide further

The site is important for presence of eleven interconnected habitats which are representative of the biogeographic region and also listed on Annex I of the EU Habitats Directive. Halophilous scrub at the site is one of only two examples in the country. This complex interconnected system of wetland habitats Justification supports Internationally important numbers of wintering waterbirds, including an internationally important population of Light-bellied Brent Goose. 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 contribute to biodiversity within the biogeographical region.

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

Optional text box to provide further

The site is of international importance as the extensive intertidal habitats support important populations of over wintering waterbirds. The complex of intertidal mud and sandflat habitats and saltmarsh habitats provide key foraging and resting habitat for over wintering and migratory waterbirds

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further information Light-bellied Brent Goose winter at this site in numbers of international importance. There are eight populations of Brent Goose including three populations of the Light-bellied hrota subspecies. The Lightbellied Brent goose population that breeds in Canada's eastern Queen Elizabeth Islands, winters almost entirely in Ireland, with small numbers in Britain, France, the Channel Islands and Spain (Lewis et al, 2019).

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

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4 Re Lis	CITES Appendix I	Other status	Justification
Plantae							
TRACHEOPHYTA/ MAGNOLIOPSIDA	Sarcocornia perennis	2				Plant Red Data Book; Flora (Protection) Order	Red listed in Ireland and FPO species

Sarcocornia perennis, Perennial Glasswort, is listed as Vulnerable in the Plant Red Data Book and the Vascular Plant Red List (Curtis & McGough, 1988; Stewart & Church, 1992; Wyse Jackson et al, 2016). The species is protected under National Legislation - The Flora (Protection) Order, 1999 [SI 94/1999]. In Ireland its distribution is restricted to the south-east coast where it is found in salt-pans. Mediterranean and thermo-Atlantic Halophilous scrubs (1420) is characterised in Ireland by the presence of Perennial Glasswort on saltmarsh, this saltmarsh habitat is the rarest of the four Annex I saltmarsh habitats found in Ireland. Bannow Bay is one of two coastal sites where Perennial Glasswort has been recorded in Ireland (the other being Ballyteige Burrow further east along the shoreline in Co. Wexford) (McCorry & Ryle, 2009).

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

Phylum	Scientific name	Species qualifies und criterion 2 4 6	Species contributes under criterion 9 3 5 7 8	Pop. Size	Period of pop. Est.	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others										
CHORDATA/ MAMMALIA	Lutra lutra						V		Annex II (Habitats Directive)	Annex II (Habitats Directive)
CHORDATA/ MAMMALIA	Phoca vitulina		0000			LC			Annex II (Habitats Directive)	Annex II (Habitats Directive)

Phylum		Species qualifies under criterion 1 2 4 6 9			Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
--------	--	---	--	--	---------------------	-----------------------	---------------------	---------------------	-------------------	--------------	---------------

Birds											
CHORDATA/ AVES	Anas crecca		2 🗆		234	2011-2015		LC		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintaining biodiversity
CHORDATA/ AVES	Anas penelope	V	2 0	00000	296	2011-2015				Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage
CHORDATA/ AVES	Branta bernicla hrota		V	00000	820	2011-2015	2.1			Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Internationally important numbers of the Branta bernicla hrota population of Brent Goose, part of wintering assemblage
CHORDATA/ AVES	Bucephala clangula	V	2 0		5	2011-2015		LC		Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage
CHORDATA/ AVES	Calidris alpina	V	2 🗆		845	2011-2015		LC		Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage
CHORDATA/ AVES	Calidris canutus		2 🗆		173	2011-2015		NT		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintaining biodiversity
CHORDATA/ AVES	Egretta garzetta	V		00000	19	2011-2015		LC		Listed on Annex I (Birds Directive)	Annex I listing
CHORDATA/ AVES	Gavia immer	V	2 🗆	00000	4	2011-2015		LC		Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	Annex I listing and IUCN Europe classifications, part of wintering assemblage
CHORDATA/ AVES	Gavia stellata	V	2 0	00000	2	2011-2015		LC		Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, part of wintering assemblage
CHORDATA/ AVES	Haematopus ostralegus	√	2 🗆		617	2011-2015		NT		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification (IUCN Europe region)	IUCN classification, part of wintering assemblage
CHORDATA/ AVES	Limosa lapponica	1	2	00000	772	2011-2015		NT		Listed on Annex I (Birds Directive), Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Annex I listing, part of wintering assemblage
CHORDATA/ AVES	Limosa limosa	V	2 0	00000	256	2011-2015		NT		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification (IUCN Europe region)	VU IUCN classification Europe, part of wintering assemblage
CHORDATA/ AVES	Numenius arquata	V	2 -		580	2011-2015		NT		Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications, part of wintering assemblage
CHORDATA/ AVES	Phalacrocorax carbo		2 0		15	2011-2015		LC		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintaining biodiversity
CHORDATA/ AVES	Pluvialis apricaria	V	2		3793	2011-2015		LC		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, part of wintering assemblage
CHORDATA/ AVES	Podiceps cristatus		2 0		1	2011-2015		LC		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintaining biodiversity
	Tachybaptus ruficollis		2 -		5	2011-2015		LC		Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintaining biodiversity

Phylum	Scientific name	Speci qualifies criteri 2 4	under contributes	Pop. Size	Period of pop. Est.	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Tadorna tadorna			322	2011-2015	LC			Amber-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	Part of wintering assemblage, maintaining biodiversity
CHORDATA/ AVES	Tringa totanus	Z Z (223	2011-2015	LC			Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013)	National (BoCCI) classification, part of wintering assemblage.
CHORDATA/ AVES	Vanellus vanellus	2 2		1317	2011-2015	NT			Red-listed in Birds of Conservation Concern in Ireland (Colhoun and Cummins 2013), and Vulnerable classification IUCN Europe region)	National (BoCCI) and IUCN classifications, part of wintering assemblage.

¹⁾ Percentage of the total biogeographic population at the site

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

I-WeBS data (from the period 2006/07 to 2015/16) lists an internationally important population of the Light - bellied Brent Goose occurring at the site. According to Birdwatch Ireland (Birdwatch.ie) the species is Amber-listed as the majority winter at less than ten sites and the Irish population is internationally significant. The European population has been evaluated as Vulnerable as several important populations have declined. This data also lists nationally important populations of Shelduck, Little Egret (Egretta garzetta), Golden Plover, Grey Plover, Lapwing, Dunlin, Black - tailed Godwit, Bar - tailed Godwit and Curlew. The EU population status for the Dunlin is Depleted (EUNIS). The Northern Lapwing, a consistent visitor at the site, is listed as 'Near Threatened' within Europe and Vulnerable globally on the IUCN red list. EUNIS lists the EU population status of this species as Threatened. According to the IUCN the Curlew is under-going rapid decline throughout Europe (Vulnerable) and globally (Near Threatened).

Bannow Bay is a designated Special Protection Area (EU Natura 2000 site) for the following regularly occurring wintering waterbirds some of which are listed on Annex I of the EU Birds Directive: Light - bellied Brent Goose (Branta bernicla hrota), Shelduck (Tadorna tadorna), Pintail (Anas acuta), Oystercatcher (Haematopus ostralegus), Golden Plover (Pluvialis apricaria), Grey Plover (Pluvialis squatarola), Northern Lapwing (Vanellus vanellus), Knot (Calidris canutus), Dunlin (Calidris alpina), Black - tailed Godwit (Limosa limosa), Bar - tailed Godwit (Limosa lapponica), Curlew (Numenius arquata) and Redshank (Tringa totanus). Under this SPA designation the wetland habitat is also protected as a resource for the regularly-occurring migratory waterbirds that utilise it.

Mammals known to occur within the site include the Common Seal (Phoca vitulina) and the Otter (Lutra lutra). The latter species is listed as Near Threatened by IUCN.

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

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Saltmarsh community	Ø	A wide range of communities are supported by the Saltmarsh habitat at the site.	The saltmarsh communities support the structure and function of the site. The communities associated with the saltmarsh areas have a restricted distribution within the biogeographical range
Zostera noltii community	Ø	Zostera noltii dominated community occurs in the upper and mid shore between Gorteens and Saltmills	This habitat has a restricted distribution in Ireland. It is considered threatened on the Ospar list of threatened or declining habitats
Atlantic salt meadows (Glauco- Puccinellietalia maritimae) [1330]	V	Saltmarsh	Annex I (Habitats Directive)
Mediterranean salt meadows (Juncetalia maritimi) [1410]	V	Saltmarsh	Annex I (Habitats Directive)
Estuaries [1130]	✓		Annex I (Habitats Directive)
Mudflats and sandflats not covered by seawater at low tide [1140]	V		Annex I (Habitats Directive)
Embryonic shifting dunes [2110]	✓	Sand dune	Annex I (Habitats Directive)
Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi) [1420].	Ø	Saltmarsh	Annex I (Habitats Directive)
Annual vegetation of drift lines [1210]	✓		Annex I (Habitats Directive)
Perennial vegetation of stony banks [1220]	✓		Annex I (Habitats Directive)
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]	2	Sand dune	Annex I (Habitats Directive)
Salicornia and other annuals colonising mud and sand [1310]	✓	Saltmarsh	Annex I (Habitats Directive)

Optional text box to provide further information

The SAC includes the following habitat types which do not lie within the Ramsar site but are an integral part of this wetland complex: fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Annex I (Habitats Directive), The Bannow Bay SPA and SAC includes additional areas of stony bank, drift line, sand dune and saltmarsh habitat, intertidal mud and sandflat habitat and shallow nearshore waters which are not included in the Ramsar site but are also an integral part of this wetland complex.

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

4.1 - Ecological character

Bannow Bay is an excellent example of an enclosed estuarine system. It is a relatively large estuarine site, approximately 14km long on the south coast of County Wexford. It is a typical coastal estuary with large areas of mud and sand flats, and restricted access to the sea. Small rivers and streams to the north and south-west flow into the bay and their sub-estuaries form part of the site. The southern end of the bay supports a mosaic of sand dunes, saltmarshes, soft and hard sea cliffs and extensive sandy beaches. The geology of the site is mainly Ordovician slate rocks with some Cambrian slate east of Bannow Island. Narrow shingle beaches occur in places along the edge of the estuary. Saltmarshes of exceptional species diversity and rarity are found above the sand and mudflats, particularly at the south of the site. The beach at Bannow Island is somewhat sheltered and as a result undergoes less erosion than might be expected at the mouth of a bay or estuary.

The bivalve Barnea candida, also known as white piddock, is rarely recorded in Ireland. It is known to burrow into wood, peat and soft rocks (e.g. hard clay or chalk) on the lower shore and in the subtidal. Within this site a relatively extensive bed occurs intertidally at the northern end of the beach at Newtown. A Zostera noltii dominated community occurs in the upper and mid shore between Gorteens and Saltmills. This community has a limited distribution within the biogeographical range.

The site supports internationally important populations of wintering Light-bellied Brent Goose together with nationally important populations of a number of other wintering waterbird species. The site is used by otter and by harbour seal.

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

Marine or coastal wetlands

marriro or ocaciar monariac				
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		1		
E: Sand, shingle or pebble shores				
F: Estuarine waters	Estuarine waters	4	133	Representative
G: Intertidal mud, sand or salt flats	Intertidal mudflats and sandflats	1	834	Representative
H: Intertidal marshes	Intertidal marshes	3	12	Representative

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/LILIOPSIDA	Asparagus officinalis	
TRACHEOPHYTA/LILIOPSIDA	Zostera noltii	

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update	
TRACHEOPHYTA/LILIOPSIDA	Spartina anglica	Potential	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
MOLLUSCA/BIVALVIA	Barnea candida				
CHORDATA/AVES	Pluvialis squatarola	63	2011-2015		Occurs in nationally important numbers

Optional text box to provide further information

White piddock occurs outside of the Ramsar site but is an integral part of the wetland complex.

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)

a) Minimum elevation al	pove sea level (in metres)		
a) Maximum elevation al	,		
a) Maximum olovation at	metres) 4		
	En	tire river basin	
	Upper par	t of river basin	
	Middle par	t of river basin	
	Lower par	t of river basin 🗹	
	More than o	one river basin	
	No	t in river basin	
		Coastal 🗹	
Please name the river basin	or basins. If the site lies in a	sub-basin, please also name	e the larger river basin. For a coastal/marine site, please name the sea or ocean.
Irish Sea			
4.4.3 - Soil			
		Mineral 🗹	
	(Update) Changes	_	Increase O Decrease O Unknown O
		ole information	illidease O Dedrease O Officiowii O
A			
Are soil types subject to condition	change as a result of changinons (e.g., increased salinity or	acidification)? Yes O No	
4.4.4 - Water regime			
Water permanence Presence?	Changes at DIS undate		
Usually permanent water	Changes at RIS update No change		
present	140 ondings		
Source of water that maintain			
Presence? Water inputs from surface	Predominant water source	Changes at RIS update	
water Marine water	✓	No change No change	
Walino Water	(e)	- Tro onango	
Water destination Presence?	Changes at RIS update		
Marine	No change		
			this box to explain sites with complex hydrology: pal being the Owenduff and the Corock which enter at the top end of the
	aries from part of the si		sal boing the eventual and the ecologic which chair at the top one of the
4.4.5 - Sediment regim	е		
Signific	cant erosion of sediments occ	urs on the site 🗹	
	(Update) Changes	at RIS update No change	Increase O Decrease O Unknown O
Significant accretion o	r deposition of sediments occ	urs on the site 🗹	
	(Update) Changes	at RIS update No change	Increase O Decrease O Unknown O
	Sediment red	gime unknown \square	
Please provide further inform	nation on sediment (optional)		
			elements of saltmarsh systems (NPWS, 2013). An area of Halophilous
			rennis, on salt marsh, located at Grange at the mouth of Bannow Bay, has
			osion (McCorry 30 & Ryle 2009). This is deemed the rarest Annex I derable reduction in sand-dune habitat due to natural erosion in recent
past (Wexford County	Council, 2013).		
440 144			
4.4.6 - Water pH			
		aline (pH>7.4) 🗹	
	^(Update) Changes	at RIS update No change	Increase O Decrease O Unknown O
		Unknown	

4.4.7 - Water salinity

Fresh (<0.5 g/l	
^(Update) Changes at RIS update	No change ⊙ Increase O Decrease O Unknown O
Euhaline/Eusaline (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

Unknown 🗹

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

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

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density 🗹

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

Surrounding area has significantly different land cover or habitat types $\ensuremath{\overline{\psi}}$

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

There are no significant populated areas bordering Bannow Bay, the small seaside village of Fethard-upon-Sea is close by. The surrounding land is low lying improved agricultural grassland with one-off housing.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

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	Low
Climate regulation	Local climate regulation/buffering of change	Low
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	Low
Hazard reduction	Flood control, flood storage	Medium
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Medium

Cultural Services

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

Supporting Services

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

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?

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 $% \left(1\right) =\left(1\right) \left(1\right) $	
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

		owne	
I UL	ш	OWITE	

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	/	

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, Wexford County Council,

Please list the local office / offices of any 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@housing.gov.ie

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	Medium impact	unknown impact No change		2	No change	

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dredging	Medium impact	Medium 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
Livestock farming and ranching	Medium impact			No change	✓	No change
Marine and freshwater aquaculture	Medium impact		/	No change		No change

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Aircraft flight paths	Low impact		✓	No change	✓	No change
Roads and railroads	Low impact		✓	No change		No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collectin terrestrial animals	Low impact		✓	No change		No change
Fishing and harvestin aquatic resources	9 Medium impact	High impact	/	No change		No change

	anges
Recreational and tourism activities Low impact High impact No change No change	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	Medium impact		✓	No change		No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Household sewage, urban waste water	High impact		✓	No change		No change
Agricultural and forestry effluents	Low impact			No change	2	No change

Please describe any other threats (optional):

Other threats within the site as listed on Natura Form SAC (NPWS 2016) include Removal of sediment Medium threat; Dumping depositing of dredged deposits Medium threat; Erosion High threat; Removal of beach material Medium threat; Off -road driving High threat. Discharges High threat.

According to McCorry & Ryle (2009) Common Cordgrass Spartina anglica is present at this site, an invasive species of saltmarsh and mudflats, and it is a threat to the intertidal mudflats and Salicornia flats found at this site.

5.2.2 - Legal conservation status

Regional (international) legal designations

Regional (international) legal designat	0110		
Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Bannow Bay Special Area of Conservation. Site Code:000697	https://www.npws.ie/protected-si tes/sac/000697	whole
EU Natura 2000	Bannow Bay Special Protection Area. Site Code:004033	https://www.npws.ie/protected-si tes/spa/004033	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Wildfowl Sanctuary	Bannow Bay Wildfowl Sanctuary	https://www.npws.ie/protected-si tes/wildfowl-sanctuaries	whole

Non-statutory designations

January Laurighten			
Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Bannow Bay	http://datazone.birdlife.org/sit e/factsheet/bannow-bay-iba-irela nd	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 for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

egai protection		
Measures	Status	
Legal protection	Implemented	

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Land conversion controls	Implemented

Species

-p		
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 Bannow Bay Ramsar site lies within the Bannow Bay SAC and SPA. Under 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], Annual vegetation of drift lines [1210], Perennial vegetation of stony banks [1220], Salicornia and other annuals colonising mud and sand [1310], Spartina swards (Spartinion maritimae) [1320], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi) [1420], Embryonic shifting dunes [2110], Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120], Fixed coastal dunes with herbaceous vegetation ('grey dunes') [2130],
- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA; and Wetlands [A999].

Legislation in the Republic of Ireland affords protection to bird species outside of designated sites e.g. all wild bird species are afforded protection by The Wildlife Act 1976. Waterfowl shooting is under license only, managed by the National Parks & Wildlife Service. Bannow Bay 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 O No \odot

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No

processes with another Contracting Party?

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
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. This site is sampled and 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

Stewart, N. F. and Church, J. M. (1992) Red Data Books of Britain and Ireland. Joint Nature Conservation Committee and Office of Public Works.

The Irish Red Data Book (1988) T.G.F.Curtis & H.N.McGough

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

McCorry, M. & Ryle, T. (2009). Saltmarsh Monitoring Project 2007-2008. Volume 5. Unpublished report to the National Parks and Wildlife Service. Dublin.

Annex I Appropriate Assessment Report for Aquaculture in Bannow Bay SAC (Site code: 000697). Marine Institute 2016

Gittings, T. and O'Donoghue, P. (2016). Bannow Bay Special Protection Area: Appropriate Assessment of Aquaculture. Unpublished report prepared by Atkins for the Marine Institute.

Wexford County Council (2013) County Wexford Biodiversity Action Plan 2013-2018.

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

NPWS (2012) Conservation Objectives: Bannow Bay SAC 000697. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Site Synopsis for Bannow Bay SAC [000697]. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2016) Bannow Bay SAC 000697 Natura 2000 Form. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Conservation objectives supporting document -coastal habitats for Bannow Bay SAC 000697. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2011) Conservation objectives supporting document -marine habitats for Bannow Bay SAC 000697. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Conservation Objectives: Bannow Bay SPA 004033. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015) Bannow Bay SPA 004033 Natura 2000 Form. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Site Synopsis for Bannow Bay SPA 004033. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Conservation objectives supporting document for Bannow Bay SPA 004033. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

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://wpe.wetlands.org/search,

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 data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site



Bannow Bay (National Parks and Wildlife Service, 12/8/17)



Bannow Bay (National Parks and Wildlife Service 12/8/17)



Bannow Bay (National Parks and Wildlife Service, 12/8/17)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1996-06-07