Ramsar Information Sheet

Published on 9 July 2018
Update version, previously published on : 1 January 2012

Norway

Giske Wetlands System

Designation date	18 March 1996
Site number	805
Coordinates	62°32'39"N 06°04'09"E
Area	553,30 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

The Giske Wetland System comprises six sub-sites, of which one is on the island of Giske and five on the island of Vigra. The sites are within a 10 km radius and it is natural to consider these together as far as waterfowl are concerned. The wetland system consists of extensive shallow marine bays with mud and sandflats and pebble shores. The flats allow large quantities of seaweed to accumulate, thus creating rich feeding opportunities for birds. A small area of dunes occurs at the site. Wet meadows separate the bays from peaty inland mires. One part of the site hosts a eutrophic fresh water marsh, with lush water vegetation, surrounded by mires.

The coastal environment is still varied, well developed and have a considerable botanical value. There are large areas of mudbanks and saltmarshes, in addition to this there are rare and threatened habitats and environments, such as sandy beaches and sand dunes. International red-listed plants occur, as well as several nationally rare and threatened animal species. Driftlines can be found here, constituting important staging areas for waders during migration. Productive and species-rich shallow soft-bottom areas can also be found, constituting important feeding- and staging areas during migration.

The extent of the wetlands and the geographic position make this area internationally important, in particular for birds. The Giske wetlands are famous for their rich bird life, with more than 220 bird species recorded. The birdlife is rich throughout the year, and a total of more than 20 000 waterbirds may at times be present. Several demanding and threatened species breed here. Large numbers of birds stage during passage and in particular waders in some sections may occur in large numbers, making this the most important site for waders in the county. The area is also important for other wetland bird species, including ducks, grebes, divers and waders.

The main function of each sub site:
- Roaldsanden: Migration and wintering area.
- Blindheimsvik: Staging area for ducks and waders, overwintering and breeding area for waterfowl.
- Rørvikvågen: Staging and wintering grounds for ducks and waders, also breeding area.
- Synesvågen: Feeding and wintering grounds, with breeding species of special interest.
- Giske/Rørvikvatnet: Staging area, especially for waders. Also important wintering and breeding location.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Pernille Kvernland
Institution/agency	Norwegian Environment Agency
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	1945
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Giske Wetlands System
Unofficial name (optional)	Giske våtmarkssystem

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

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?	No

(Update) Optional text box to provide further information

In general, developments in recent years have reduced the islands' biological value, which has in turn affected the protected areas. This includes overgrowing and various forms for exploitation.

Even though this area has previously been a breeding location for several red-listed species, there has been a decline for several of these species (this can not be directly associated with conditions inside the wetland area). For geese, however, there has been a great population increase the last 10-20 years. As a wetland area, this location still has important properties as breeding-, migration- and wintering area.

Increasing sea levels and stormy weather could increase the washout of drift lines, which constitute important feeding and staging areas for migrating wetland birds, such as waders.

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<7 file(s) uploaded>

Former maps	0

Boundaries description

The boundary is the same as for the six sub-sites; Roaldsand, Blindheimsvik, Giske Bird sanctuaries and Rørvikvatnet, Rørvikvågen and Synesvågen nature reserves.

2.2.2 - General location

a) In which large administrative region does the site lie?	Møre og Romsdal
b) What is the nearest town or population centre?	Ålesund, approx pop. est. 47 000 (2016)

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): 553.3

Area, in hectares (ha) as calculated from GIS boundaries: 550.78

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	2.Atlantic
Other scheme (provide name below)	1.Boreonemoral vegetation zone, highly oceanic section (Bn – O3).

Other biogeographic regionalisation scheme

1. Zonal division showing the variation in vegetation from south to north and from the lowlands to the mountains, and sectional graduation showing the variation between the coast and inland (In: Moen, A.1998. Nasjonalatlas for Norge; vegetasjon. Statens kartverk, Hønefoss).
2. Biogeographical regions of Europe, European Environment Agency, 2005

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

Other reasons: Giske wetland system is a good characteristic representative of an Atlantic coastal system. The area includes a broad spectrum of coastal habitats with large areas of mudbanks and saltmarshes. In addition, there are other rare and threatened environments such as sandy beaches and sand dunes. Some of these are well-developed and the area is therefore representative for these.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification: The extent of the wetlands and the geographic position make this area internationally important, in particular for birds such as loons, divers, waders and gulls. These areas are so-called hot-spots with a large biodiversity. The Giske wetlands are famous for their rich birdlife. More than 220 bird species have been recorded.

The variation of plant species is also great, with 190 different species registered.

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

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Ajuga reptans		☑	☐	☐		☐	National Red List: Considered as EN	
Carex paniculata		☑	☐	☐	LC	☐	National Red List: Considered as VU	This species occurs sparsely at one of the sub-sites.

Capitalized letters shows the species' status on the National Red List 2015.

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

Phylum	Scientific name	Common 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	*Anas acuta*	Northern Pintail	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	National Red List: Considered as VU	This species used to breed here, but this is likely no longer the case.

Phylum	Scientific name	Common 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	*Anas clypeata*	Northern Shoveler	☑	☐	☐	☐	☑	☐	☐	☐					☐	☐	National Red List: Considered as VU	This species used to breed here, but this is likely no longer the case.
CHORDATA / AVES	*Anas crecca*	Green-winged Teal; Eurasian Teal	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Criterion 4: This species breeds within the site. This site is also likely one of the most important areas for this species during autumn and winter.
CHORDATA / AVES	*Anas penelope*	Eurasian Wigeon	☐	☑	☐	☐	☑	☐	☐	☐					☐	☐		Criterion 4: This species breeds within the site. This site is also likely one of the most important areas for this species during autumn and winter.
CHORDATA / AVES	*Anser anser*	Greylag Goose	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This species occurs in large numbers during summer, although they are less common in winter. Newly established breeding species in this area.
CHORDATA / AVES	*Ardea cinerea*	Grey Heron; Gray Heron	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This site is an important overwintering area for this species.
CHORDATA / AVES	*Aythya marila*	Greater Scaup	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Red List: Considered as VU	Criterion 4: This species breeds within the site.
CHORDATA / AVES	*Calidris alpina*	Dunlin	☑	☑	☐	☐	☑	☐	☐	☐	5000			LC	☐	☐	Ann. II Berne Convention	5000 individuals (2005). Criterion 4: The site is important for this migrating wetland bird. Several thousands occur in the area.
CHORDATA / AVES	*Calidris maritima*	Purple Sandpiper	☑	☑	☐	☐	☑	☐	☐	☐	750			LC	☐	☐	Ann. II Berne Convention	750 individuals (2005). Criterion 4: This is a common species breeding within the site.
CHORDATA / AVES	*Charadrius hiaticula*	Common Ringed Plover	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Ann. II Berne Convention	Criterion 4: The site is important during autumn for this migrating wetland bird.
CHORDATA / AVES	*Chroicocephalus ridibundus*	Black-headed Gull	☐	☑	☐	☐	☐	☐	☐	☐					☐	☐	National Red List: Considered as NT	Criterion 4: The site is important during autumn for this migrating wetland bird. The area also partly functions as overwintering grounds.
CHORDATA / AVES	*Clangula hyemalis*	Oldsquaw; Long-tailed Duck	☑	☑	☐	☐	☐	☐	☐	☐				VU	☐	☐	National Red List: Considered as NT	Criterion 4: This location is an important overwintering area for this species.
CHORDATA / AVES	*Crex crex*	Corn Crake	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Red List: Considered as CR, Ann. II Berne Convention, Emerald Network	Criterion 2: This species occurs regularly during the breeding season.
CHORDATA / AVES	*Cygnus cygnus*	Whooper Swan	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Ann. II Berne Convention, Emerald Network	Criterion 4: This species occurs during winter.
CHORDATA / AVES	*Gallinago gallinago*	Common Snipe	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This species breeds within the site. This area is also important during autumn migration.
CHORDATA / AVES	*Gavia arctica*	Black-throated Loon; Arctic Loon	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Ann. II Berne Convention, Emerald Network	
CHORDATA / AVES	*Haematopus ostralegus*	Eurasian Oystercatcher	☐	☑	☐	☐	☐	☐	☐	☐				NT	☐	☐		Criterion 4: This species breeds within the site.

Phylum	Scientific name	Common 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	*Larus argentatus*	Herring Gull	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This species occur in large number and also breeds within the site. The site is important during autumn for this migrating wetland bird. The area also partly functions as overwintering grounds.
CHORDATA / AVES	*Larus canus*	Mew Gull	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Red List: Considered as NT	Criterion 4: This species breeds within the site. The area is important during autumn migration as well, and partly as an overwintering area.
CHORDATA / AVES	*Larus marinus*	Great Black-backed Gull	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: The site is important during autumn for this migrating wetland bird. The area also partly functions as overwintering grounds.
CHORDATA / AVES	*Limosa lapponica*	Bar-tailed Godwit	☐	☑	☐	☐	☐	☐	☐	☐				NT	☐	☐		Criterion 4: The site is important for this migrating wetland bird. The area also partly functions as overwintering grounds. Hundreds of individuals occur.
CHORDATA / AVES	*Linaria cannabina*	Common Linnet	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: There are thousands of small birds, especially on migration, as well as regionally important populations of several species such as Linnet Carduelis cannabina in summer.
CHORDATA / AVES	*Luscinia svecica*	Bluethroat	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Red List: Considered as NT	Criterion 4: This species breeds within the site.
CHORDATA / AVES	*Lymnocryptes minimus*	Jack Snipe	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: The site is especially important for this migrating wetland bird. Hundreds of individuals occur.
CHORDATA / AVES	*Melanitta fusca*	White-winged Scoter; Velvet Scoter	☑	☑	☐	☐	☐	☐	☐	☐				VU	☐	☐	National Red List: Considered as VU	Criterion 4: This location is an important overwintering area for this species.
CHORDATA / AVES	*Mergus serrator*	Red-breasted Merganser	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: The site is important for moulting, as well as during spring and autumn migration.
CHORDATA / AVES	*Numenius arquata*	Eurasian Curlew	☑	☑	☐	☐	☐	☐	☐	☐				NT	☐	☐	National Red List: Considered as VU	Criterion 4: This species is breeding here in low numbers. The area is important during autumn migration as well, and partly as an overwintering area.
CHORDATA / AVES	*Phalacrocorax aristotelis*	European Shag	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Ann. II Berne Convention	Criterion 4: This site is an important overwintering area for this species.
CHORDATA / AVES	*Phalacrocorax carbo*	Great Cormorant	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This site is an important overwintering area for this species.
CHORDATA / AVES	*Philomachus pugnax*	Ruff	☑	☑	☐	☐	☑	☐	☐	☐					☐	☐	National Red List: Considered as EN, Ann. III Berne Convention, Emerald Network	Criterion 4: This species occurs regularly during migration. Several thousands occur in the area.
CHORDATA / AVES	*Pluvialis apricaria*	European Golden Plover; European Golden-Plover	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This area is important during both spring and autumn migrations for this species. Several thousands occur in the area.
CHORDATA / AVES	*Pluvialis squatarola*	Grey Plover; Black-bellied Plover	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Criterion 4: This area is one of the most important areas in Norway for this species during autumn migrations.

Phylum	Scientific name	Common 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	*Podiceps grisegena*	Red-necked Grebe	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This species breeds within the site and some also stay during winter time.
CHORDATA / AVES	*Somateria mollissima*	Common Eider	☐	☑	☐	☐	☐	☐	☐	☐				NT	☐	☐	National Red List: Considered as NT	Criterion 4: This species breeds within the site.
CHORDATA / AVES	*Tadorna tadorna*	Common Shelduck	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Ann. II Berne Convention	Criterion 4: The site is a breeding area for this species.
CHORDATA / AVES	*Tringa totanus*	Common Redshank	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: This species breeds within the site. The area is important during autumn migration as well, and partly as an overwintering area.
CHORDATA / AVES	*Vanellus vanellus*	Northern Lapwing	☑	☑	☐	☐	☐	☐	☐	☐				NT	☐	☐	National Red List: Considered as EN	Criterion 4: This location is important for this species during both spring and autumn migration.
Others																		
CHORDATA / MAMMALIA	*Lutra lutra*	European Otter	☑	☐	☐	☐	☐	☐	☐	☐				NT	☑	☐	National Red List: Considered as VU, Ann. II Berne Convention, Emerald Network	
CHORDATA / MAMMALIA	*Phoca vitulina*	Harbor Seal	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	National Red List: Considered as VU, Ann. II Berne Convention, Emerald Network	Criterion 2: This species is resident, at times in good numbers.

1) Percentage of the total biogeographic population at the site

It is possible that in total the sub-sites can at times support at least 20 000 waterbirds at one time, and/or over 1% of the population of some wetland species. Lack of data, and not least lack of collation of data means that these criteria are not yet fulfilled. Several hundreds of ducks (Anatinae) and 5 000 gulls are registered (2005). Over 10 000 waterfowl winter at this wetland area (2005).

Capitalized letters shows the species' status on the National Red List 2015.

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
Sand-dune system	☑		National Red List: Considered as VU
Semi-natural grassland	☑		National Red List: Considered as VU

Optional text box to provide further information

Capitalized letters shows the species' status on the National Red List for Ecosystems and Habitat types 2011.

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

4.1 - Ecological character

The wetland system consists of extensive shallow marine bays with mud and sandflats and pebble shores. The flats allow large quantities of seaweed to accumulate, thus creating rich feeding opportunities for birds. A small area of dunes occurs at the site. Wet meadows separate the bays from peaty inland mires. One part of the site hosts a eutrophic fresh water marsh, with lush water vegetation, surrounded by mires.

The largest areas are shallow waters and tidal areas with various deposits. On the landward side are saltmarshes, seaweed wall communities, brackish communities and coastal marshes and also poor fens and moor. Rørvikvatnet is part of a large mire complex and part of a dune heath complex. The shallows and tidal water are used by staging and wintering divers, grebes, cormorants, waders, ducks and gulls, whereas the land area is used by breeding waders, rails, gulls and allies, ducks and passerines which are associated with wetlands. There are also hedgehog, deer, otter and seals in the area. The sand-dune system (NRL: VU) and tidal meadow system (NRL: NT) and semi-natural grassland (NRL: VU) are threatened habitat types found in this wetland system.

In general, developments in recent years have reduced the islands' biological value, which has in turn affected the protected areas. This includes overgrowing and various forms for exploitation.

Even though this area has previously been a breeding location for several red-listed species, there has been a decline for several of these species (this can not be directly associated with conditions inside the wetland area). For geese, however, there has been a great population increase the last 10-20 years. As a wetland area, this location has important properties as breeding-, migration- and wintering area.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters		1		
D: Rocky marine shores				
E: Sand, shingle or pebble shores		0		Rare
G: Intertidal mud, sand or salt flats		2		Rare
H: Intertidal marshes		3		

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 > Marshes & pools >> Ss: Seasonal/ intermittent saline/ brackish/ alkaline marshes/ pools				
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools				
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		4		

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Cakile maritima		Associated with sand dunes/beaches
Carex arenaria		Associated with sand dunes/beaches
Catabrosa aquatica		National Red List: Considered as NT
Gentianella amarella		Associated with sand dunes/beaches
Hygrocybe mucronella		National Red List: Considered as NT
Lysimachia thyrsiflora		species associated with damp meadows/freshwater bogs
Ranunculus sceleratus		species associated with damp meadows/freshwater bogs

Optional text box to provide further information

There is also registered some regionally rare plant species, however, according to the national red list these species are not threatened. Regionally rare species registered are: Lysimachia thyrsiflora, Luzula campestris, Ranunculus sceleratus, Veronica scutellata, Veronica arvensis, Carex cuprina, Carex flacca, Carex arenaria, Cakile maritima, Aira praecox, Bolboschoenus maritimus, Elytrigia juncea boreoatlantica.

Species listed under Biological components which are not yet included in the Catalogue of Life:
Elymus farctus: species associated with sand dunes/beaches
Senecio aquaticus: species associated with damp meadows/freshwater bogs

Capitalized letters shows the species' status on the National Red List 2015.

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	*Gallinago gallinago*	Common Snipe				Hundreds of individuals occur.
CHORDATA/AVES	*Anas platyrhynchos*	Mallard				Occur in relatively large numbers

Optional text box to provide further information

Capitalized letters shows the species' status on the National Red List 2015.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

The area has a typical oceanic climate with mild winters and relatively cool summers. Annual precipitation is moderate (1000 – 1500 mm), with the annual precipitation at the closest airport of 1300 mm. Close to 200 days experience at least 0,1 mm precipitation. Middle temperatures in January are 1,9°C, while in August it is close to 13°C.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 0

a) Maximum elevation above sea level (in metres): 13

- 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.

Norwegian 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 is varied with rocks, stones, gravel, sand, clay and silt. Peat and raw humus are also found, as is bare rock.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

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

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

Rørvikvatnet is only around 1 – 2 m deep, with stable water levels. The shallow coastal waters are no deeper than around 5 metres during the lowest low tides. The variation between high and low tides measured at Ålesund averages annually 123 cm.

4.4.5 - Sediment regime

Sediment regime unknown ☑

4.4.6 - Water pH

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

Dystrophic ☑

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

Unknown ☐

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

Rørvikvatnet is probably slightly dystrophic.

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:

The surrounding area includes scattered buildings and traditional agriculture with grass production (i.e. haymaking) and grazing. Ålesund Airport is close to the sub-sites at Roaldsanden, Blindheimsvik and Rørvikvannet.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Wetland non-food products	Livestock fodder	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
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	High
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Major scientific study site	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	Medium

Other ecosystem service(s) not included above:

The area is important for recreation (walking, bathing, riding, birdwatching, and non-commercial net fishing) as well as farming. At Roaldsand a nearby school uses the area for educational purposes, and also help to clean the area. At Giske (Kvalneset) in the north-west, there are remains of a site for drying fish. This site is also looked after by local school children.
In some sub-sites, there is some grazing by livestock, whereas the bird sanctuaries are used for activities including walking, hobby fishing and birdwatching. An ornithological station is established at Giske.

See Additional material for further information.

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

(ECD) Pressures and trends concerning any of the above, and/or concerning ecosystem integrity

Increasing sea levels and stormy weather could increase the washout of drift lines, which constitute important feeding and staging areas for migrating wetland birds, such as waders.

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	☑	☑

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):

Within the Ramsar site:
Private, although the state aviation authority (Avinor) owns part of Roaldsand Bird Sanctuary, Rørvikvatnet Nature Reserve and Blindheimsvik Bird Sanctuary.

In the surrounding area: Private and state (Avinor).

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: County Governor of Møre og Romsdal

Postal address: Fylkeshusa, 6404 Molde, Norway

E-mail address: postmottak@fmmr.no

5.2 - Ecological character threats and responses (Management)

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Wood and pulp plantations	Medium impact	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
Unspecified	Medium impact	Medium 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
Logging and wood harvesting	Medium impact	Medium impact	☑	No change	☐	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	Medium impact	☑	No change	☐	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified/others	High impact	High impact	☑	No change	☑	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	Low impact	Medium impact	☐	No change	☑	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	High impact	High impact	☑	No change	☑	No change
Unspecified	Medium impact	Medium impact	☑	No change	☑	No change
Garbage and solid waste	Medium impact	Medium impact	☐	No change	☑	No change
Household sewage, urban waste water	Low impact	Low impact	☐	No change	☑	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Storms and flooding	Low impact	High impact	☑	No change	☐	No change

Please describe any other threats (optional):

Within the Ramsar site:
There are a number of sand dunes at one sub-site where erosion from the wind is a natural process but where encroachment and overgrowing have reduced the natural dynamic process within this ecosystem.

Overgrowing due to changes in agriculture is considered to be the factor affecting the area most, as well as run-off of fertilizer at two to three sub-sites. Boat traffic creates some disturbance, as does windsurfing. Planting of shelter belts has also a negative effect. Several factors have had a negative contribution on the area's waterbirds in recent years, in particular overgrowing following cessation of grazing, as well as forestry plantations.

Increasing sea levels and stormy weather could increase the washout of drift lines, which constitute important feeding and staging areas for migrating wetland birds, such as waders.

In the surrounding area:
Changes in land use in the surrounding area have also had a negative effect on elements within the protected areas. The nearby airport poses a threat to three sub-sites, and plans to increase the security zone around the airport will probably affect one of these. Seepage is possible from an old rubbish dump just outside the site boundary.

Planting of alien coniferous tree species close to the protection border in the south, however, there is no sign of dispersion inside the protected area. Grazing has likely prevented the spread of these alien species.

There is sewage release from approx. 300 people into Synesvågen. This empties into 1-2 m depth, and result in local pollution. Ongoing plans to change the outlet into the fjord south of Syneset.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
bird protection area	Roaldsand, Blindheimsvik, Giske		whole
nature reserve	Rørvikvatnet, Rørvikvågen and Synesvågen		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

Other:

Management plans are being developed by the management authority. For some of the sub-sites wetland managment plans are finished and implemented.

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

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 ◉

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

An information booklet is produced by the management authorities, comprising all the Ramsar sites in Møre and Romsdal county.

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
Birds	Implemented

Several studies on migrating waders have been performed. Makkevika, within the Giske West Bird Protection Area, is Norway's oldest and perhaps Møre and Romsdal's most important ringing station. A new ringing hut was set up a few years ago.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Henriksen, S., Hilmo, O., 2015. Norsk rødliste for arter 2015 (red). Artsdatabanken, Norge - 2015 Norwegian Red List. Artsdatabanken, Norway

Lindgaard A, Henriksen S (eds) (2011) Norsk rødliste for naturtyper 2010. Artsdatabanken, Norge - 2010 Norwegian Red List for Ecosystems and Habitat Types. Artsdatabanken, Norway

Follestad, A., Evju, M., & Ødegaard, F. Effekter av klimaendringer for havstrand. NINA Rapport 667. 2011.

Ramsarområder i Møre og Romsdal En gjennomgang av status med hovedvekt på vegetasjon og tanker omkring framtidig skjøtsel Rapport 2007:01. Møre og Romsdal fylke, Areal- og miljøvernavdelinga.

Forvaltningsplan for Rørvikvatnet naturreservat, Giske kommune Rapport 2012: 09

Forvaltningsplan for Giske fuglefredningsområde, Giske kommune Rapport 2012: 06

Forvaltningsplan for Synesvågen naturreservat, Giske kommune Rapport 2012: 10

See other published literature

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
<3 file(s) uploaded>

vi. other published literature
<4 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Giske Bird Sanctuary (*Øivind Leren , 10-05-2015*)

Blindheimsvik Bird Sanctuary (*Øivind Leren , 10-05-2015*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation	1996-03-18