

# Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

## Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2<sup>nd</sup> edition, as amended by COP9 Resolution IX.1 Annex B). A 3<sup>rd</sup> edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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### 1. Name and address of the compiler of this form:

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DD MM YY

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Designation date

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Site Reference Number

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### 2. Date this sheet was completed/updated:

September 2014

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### 3. Country:

Norway

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### 4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Trondheimfjord wetland system  
(International No. 1198, National No: 36)

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### 5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or  
b) Updated information on an existing Ramsar site

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### 6. For RIS updates only, changes to the site since its designation or earlier update:

#### a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

**If the site boundary has changed:**

- i) the boundary has been delineated more accurately ; or  
ii) the boundary has been extended ; or  
iii) the boundary has been restricted\*\*

and/or

**If the site area has changed:**

- i) the area has been measured more accurately ; or  
ii) the area has been extended ; or  
iii) the area has been reduced\*\*

**\*\* Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

**b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:**

Adjustments of the application of the Criteria are performed in the RIS, due to better knowledge about the area since the previous RIS.

The area is extended with approximate 1079 ha. There is not considered to be any major changes in the ecological character of the Ramsar site.

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**7. Map of site:**

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

- i) a **hard copy** (required for inclusion of site in the Ramsar List): ;  
ii) an **electronic format** (e.g. a JPEG or ArcView image) ;  
iii) a **GIS file providing geo-referenced site boundary vectors and attribute tables** .

**b) Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The boundaries for the Ramsar site are the same as the boundaries for the protected areas;

- Gaulosen Nature Reserve and Landscape Protection Area
- Eidsbotn Bird Sanctuary,
- Rinnleiret Nature Reserve,
- Vikanbukta Bird Sanctuary,
- Vinnan and Velvangen Bird Sanctuary,
- Falstadbukta Bird Sanctuary,
- Alnes Bird Sanctuary,
- Tynesfjæra Bird Sanctuary,
- Ørin Nature Reserve
- Kausmofjæra Bird Sanctuary,
- Bjørga Bird Sanctuary,
- Vikaleiret Bird Sanctuary and

- Lundleiret Bird Sanctuary.

There are some differences between the border of Rinnleiret nature reserve and the Ramsar site. Map that shows the boundaries for the Ramsar site is attached.

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### 8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Gaulosen: 63° 20' N 10° 13' E  
Eidsbotn: 63° 44' N 11° 16' E  
Rinnleiret: 63° 47' N 11° 26' E  
Ørin: 63° 48' N 11° 27' E

New sub sites:

Vinnan and Velvangen: 63° 28' N 10° 47' E

Vikanbukta: 63° 28' N 10° 52' E

Falstadbukta: 63° 42' N 11° 03' E

Alnes: 63° 43' N 11° 12' E

Tynesfjæra: 63° 45' N 11° 19' E

Kausmofjæra: 63° 48' N 11° 26' E

Bjørga: 63° 49' N 11° 26' E

Vikaleiret: 63° 51' N 11° 18' E

Lundleiret: 64° 01' N 11° 25' E

Entire site: 63° 42' N 11° 03' E

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### 9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

The site is situated in Sør- and Nord-Trøndelag Counties.

The site is situated in more than one area/composed of several separate areas, and the different areas are located in the following municipalities:

Trondheim and Melhus municipality: Gaulosen. Nearest town being Trondheim with approximate 160.000 inhabitants.

Stjørdal municipality: Vikanbukta and Vinnan and Velvangen. Nearest town being Stjørdal with approximate 21750 inhabitants.

Levanger municipality: Eidsbotn, Rinnleiret, Falstadbukta, Alnes and Tynesfjæra. Nearest town being Levanger with approximate 18750 inhabitants.

Verdal municipality: Rinnleiret, Ørin, Kausmofjæra and Bjørga. Nearest town being Verdal with approximate 14300 inhabitants.

Inderøy municipality: Vikaleiret. Nearest town is Verdal.

Steinkjer municipality: Lundleiret. Nearest town is Steinkjer with approximate 21200 inhabitants.

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### 10. Elevation: (in metres: average and/or maximum & minimum)

0 m – 5 m.a.s.l.

**11. Area:** (in hectares)

Gaulosen:	251,8 ha (nature reserve 64,3 ha and 4,7 ha; landscape protection area 182,8 ha)
Eidsbotn:	194,9 ha
Rinnleiret:	186,0 ha
Ørin:	48,4 ha
Vinnan and Velvangen:	193,5 ha
Vikanbukta:	81,1 ha
Falstadbukta:	127,7 ha
Alnes:	112,6 ha
Tynesfjæra:	106,2 ha
Kausmofjæra:	100,4 ha
Bjørga:	103,7 ha
Vikaleiret:	43,5 ha
Lundleiret:	210,7 ha
Total:	1760,5 ha

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Trondheimsfjord wetlands are of great importance to migratory birds, in particular geese, ducks and waders, and wintering seabirds. They consist of sheltered tidal mudflats, shallow marine waters, saltmarshes and includes the two largest river estuaries in the fjord, one of them (Gaulosen) being one of very few unspoilt large-river estuaries in southern Norway.

The thirteen subsites have similar ecological structure with huge sheltered mudflats. Gaulosen, Rinnleiret, Ørin and Falstadbukta are in addition also influenced by rivers bringing fresh water into the system. The equal ecological structures of the sites provide an ecological connection, where migrating birds uses several of the sites for staging. In this way we have a network of wetlands used for migrating birds in Trondheimsfjorden.

During migration we find many of the same species (and birds) in the different sites. In winter we find a different situation. Most of the bird-species then only uses a few sites. As an example we only find Oystercatcher in the sites Rinnleiret and Ørin. In this way the different sites are important for maintaining diversity for the different wintering birds.

**13. Ramsar Criteria:**

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9

**14. Justification for the application of each Criterion listed in 13 above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Criterion 1:** The sheltered areas along Trondheimsfjorden are representative tidal marine wetlands for the bio-geographic region with Gaulosen being one of very few unspoilt large-river estuaries in southern

Norway. Rinnleiret is also unique for this wetland type in the region as it is Norway's largest salt-influenced wet meadows.

**Criterion 2:** The site is important for several red listed species, especially for waterfowl during migration. But it also has value for wintering birds, invertebrates and plants. Among regular red listed species we find: EN (Endangered): Horned Pondweed *Zannichellia palustris*, Fungi *Phellinus hippophaeicola*, Wolf Spider *Arctosa Cinerea* VU (Vulnerable): Black Tailed Godwit *Limosa limosa*, Greater Scaup *Aythya marila*, Ruff *Philomachus pugnax*, Skylark *Aluda arvensis*, Common Tern *Sterna hirundo*, Bean Goose *Anser fabalis*, Black Guillemot *Cepphus Grylle* (wintering and breeding), *Salix triandra* Eurasian Otter *Lutra lutra* is common in all subsites and probably breeds in several areas. Red list categories are given according to the national red list from 2010. See also points 21 and 22.

**Criterion 4:** These sites are of vital importance for both migratory birds (either regional or Arctic), and for large numbers of wintering diving ducks, divers and grebes of eastern origin – especially in the staging period before migration in spring. The local breeding population of diving ducks (e.g. Eiders) in the fjord also relies on the sites. See point 22 for more details.

Several of the sub-sites have small populations of moulting Common Eider *Somateria mollissima* (the Gaulosen area up to 1500 birds), some also have a few Velvet Scoters *Melanitta fusca* (NT), Goldeneye *Bucephala clangula*, Red-breasted Mergansers *Mergus serrator*, and Goosanders *Mergus merganser*.

The Svalbard population of Pink-footed Goose *Anser brachyrhynchus* has its most important stopover and feeding site in these areas on their route between the breeding/moulting areas at Spitsbergen and the wintering sites in Denmark, Belgium and the Netherlands. The migration of arctic waders also brings in thousands of birds. See also point 22.

**Criterion 5:** Approximate 73.900 (2013) Pink-footed Geese *Anser brachyrhynchus* regularly uses the wetlands and the nearby agriculture areas in the northern part of Trondheimsfjorden during migration, most of them uses the Ramsar site (Heggøy and Øien 2014). Turnover over individuals can be observed as many birds carry marked neckbands. In several of the sub-sites the maximum numbers of geese counted at one point in time is 3000-10.000 individuals, but the turnover-rates indicates that a lot more geese is using the sites, and surely more than the criterion of 20.000 birds altogether. In addition comes thousands of diving ducks (e.g. 2000-2500 Common Eiders at Gaulosen and Ørin) and waders during both spring and autumn migration.

**Criterion 6:** Nearly the entire Svalbard population of Pink-footed Goose *Anser brachyrhynchus* (73.900 out of 81.500 individuals in 2013) uses the sites as a staging area both in spring and autumn. Common Eider *Somateria mollissima* also occurs in high numbers, especially in the area Vinnan and Velvengen during spring. For this area there are several counts of Common Eider that exceed the 1% level (4250 ind), with a maximum of 5000 individuals, but also several of the other areas have high numbers. The total of wintering Common Eider is considered to be between 15.000 and 20.000 individuals, but this also includes areas outside the Ramsar site.

Maximum numbers of Pink-footed goose in the period 2008-2013. (Artsdatabanken.no)

Subsite	2008	2009	2010	2011	2012	2013
Ørin/Kausmofjæra	13000	4000	6000	10000	4000	5000
Lundleiret	3000	5000	7000	6000	2000	2000
Rinnleiret	3000	4500	3000	4000	2500	4000
Tynesfjæra	2000	3000	2000	350	2000	210
Eidsbotn	1800	3000	1500	3000	3000	4000
Alnesfjæra	2000	3000	800	8000	4520	4000
Falstadbukta	1000	3000	2000	10000	8000	5000
Gaulosen	800	2400	4800	2500	426	1500

**Criterion 8:** The local fjord population of Herring *Clupea berengius* is of special importance, e.g. for migrating and locally breeding diving ducks when these feed on deposited rowan along the shoreline in spring. Ørin, Gaulosen and Vinnan and Velvängen are spawning area for the local fjord population of Herring *Clupea berengius*. Salmon *Salmo salar* and Sea Trout *Salmo trutta* uses some of the sites as a migrating path. Sea Trout also uses some of the sites at feeding area.

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:**

1. Boreonemoral vegetation zone, weakly oceanic section (BnO1) (Gaulosen), and southern boreal vegetation zone, weakly oceanic section (SbO1) (the three other sub-sites).
2. Atlantic

**b) biogeographic regionalisation scheme** (include reference citation):

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

**16. Physical features of the site:**

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Geology	The composition of the bedrock varies from sub-site to sub-site, but in general the bedrock is of less importance as it is covered with deep layers of marine and/or fluvial deposits.
Geomorphology	Glaci-fluvial deposits have formed the shallow marine bays along Trondheimsfjorden; at two of the sites the transport and sedimentation of clay, silt and sand by large rivers (Gaula and Verdalselva) have formed estuaries and brackish conditions with high biological production. Both Gaula and Verdalselva are large rivers, draining water from huge areas (several 1000 km <sup>2</sup> ).
Water depth/ fluctuations	Large areas of shallow water, less than 3 meters depth. The variation between high and low tides measured at Trondheim averages annually 162 cm.
Climate	The wetland system lies along Trondheimsfjorden, in an area of relatively warm and humid summers (700-1000 mm annual precipitation), and relatively mild winters. The area receives precipitation 200-220 days in a year.

**17. Physical features of the catchment area:**

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The catchment areas are rather heterogeneous as the site comprises of thirteen relatively widespread sub-sites. In general they are characterized by large cultivated areas along the rivers, extensive forests in the valley slopes and barren mountains on the high level parts. Along the rivers there are deep layers of fluvial deposits, while moraine dominates as soil type in the valley slopes and mountain areas. Especially in the areas nearest to the fjord, the bedrock consists mostly of nutrient-rich slates and greenstones from the Cambrosilurian period. The climate in the catchment areas becomes wetter and colder as the distance from the fjord is getting longer.

**18. Hydrological values:**

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Both Gaula and Verdalselva have originally an enormous flooding control capacity, but due to degradation of surrounding wetlands in the catchment area the annual spring flooding in recent years has taken larger proportions than usual. Both rivers also transport huge amounts of sediments, mostly deposited at the estuaries and there contributing to a high production of biological material. The shorelines are stabilized by bushes like e.g. *Hippobobhae rhamnoides*.

## 19. Wetland Types

### a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts • U • Va •  
Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

### b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

A, F, G, B, H, J, E, D

## 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Situated in the boreal zone, and characterized by clay, silt or gravel shores with tidal zones, partly covered with kelp beds. Three of the sub-sites are (parts of) large river estuaries with extensive tidal mud- and sandflats. At one locality large seagrass *Zoostera* beds exists - inside the brackish lagoon of Eidsbotn. The shorelines are at places dominated by wet salt-influenced vegetation, e.g. *Carex palacea* and *Carex (palacea) x vacillans*, and swamps with *Carex mackenziei*. One site is a mainly salt-influenced wet meadow. (Rinnleiret). Bushes of *Hippobobhae rhamnoides* are typical for several of the localities.

## 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Some of the vegetation societies (wet, salt-influenced meadows) have been described as rare, and a few red listed species (Norwegian Red-List 2010) are present at Rinnleiret and Ørin; *Salix triandra* (VU) *Stuckenia pectinata* (NT), *Zannichellia palustris* ssp. *palustris* (EN) and *Dactylorhiza incarnata*. Wild stands of *Hippobobhae rhamnoides* have colonized the inner shoreline at Ørin, Rinnleiret and Gaulosen.

## 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

### Mammals:

The Harbour Porpoise *Phocoena phocoena* is regularly seen in Gaulosen, where also the Eurasian Otter *Lutra lutra* (VU- national red list, NT – IUCN Red list) breeds. Eurasian Otter is common in several parts of the Ramsar site, and probably breeds several places.

### Birds:

Nationally rare or internationally rare or interesting species: As a staging area for the Svalbard population of Pink-footed Goose *Anser brachyrhynchus* the site is famous and most important; 73.900 birds use the wetlands in Trondheimsfjorden during spring and autumn migration.

Nationally common species: All sites are important for migratory and wintering birds. Gaulosen has as a large colony of Black-headed Gull *Chroicocephalus ridibundus* (NT) (1500 pairs in 1993), Common Gull *Larus canus* and Common Tern *Sterna hirundo* (VU). Rinnleiret is a breeding site for many wader species – although overgrowing of the wet meadows here has led to a decrease in the populations. The following species are particularly noteworthy: Common Eider *Somateria mollissima* (regional wintering pop. 10.000-20.000 individuals), Red-throated Diver *Gavia stellata* (concentrations of 20-40 birds on most sub-sites), Slavonian Grebe *Podiceps auritus* (staging area for locally 300-400 breeding pairs), Dunlin *Calidris alpina* (more than thousand, variable during migration), Broad-billed Sandpiper *Limicola falcinellus* (stage area in spring, 10-20 ind.), and Temminck's Stint *Calidris temminckii* (breeding pop. 10-15 pairs in the 1970-ties and 1980-ties, now rare breeder), Black Tailed Godwit *Limosa limosa* (VU – national red list, NT –IUCN red list) uses the site during migration but normally in low numbers. The estuary at river Verdalselva next to Ørin holds Norway's largest spring assemblage of Black Scoter *Melanitta nigra* (more than 1000 individuals have been recorded). Gaulosen has the last 10-15 years become very important as a staging area for Greylag Goose *Anser anser* in autumn. Red list categories are given according to the national red list 2010.

Rinnleiret and Ørin have the largest population of wintering Eurasian Oystercatcher *Haematopus ostralegus* in Norway, with 100-200 birds through the winter.

#### **Fish:**

Gaulosen, Vinnan and Velvangen and Ørin are spawning areas for the local fjord population of Herring *Clupea berengius*.

#### **Invertebrates**

The Coleoptera *Rhantus notaticollis* (NT) and *Arctosa Cinerea* (EN) is recorded at Rinnleiret. *Arctosa Cinerea* is also recorded in the outlet of Verdalselva (river).

### **23. Social and cultural values:**

**a)** Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

None in particular.

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, tick the box  and describe this importance under one or more of the following categories:

- i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:



- iv) sites where 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:

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**24. Land tenure/ownership:**

- a) within the Ramsar site: Private
- b) in the surrounding area: Private/State (marine area)

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**25. Current land (including water) use:**

- a) within the Ramsar site:

The sites are used for recreation and fishing. Both Gaulosen and Rinnleiret are used for bathing and sunbathing. The wet meadows at Gaulosen are grazed by cattle.

- b) in the surroundings/catchment:

Mostly agriculture. The water in the big rivers is used for irrigation. At some places industry etc. is situated close to the protected areas.

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**26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:**

- a) within the Ramsar site:

Overgrowing of the landscape has been a problem in the breeding sites of waders at Rinnleiret.

Re-establishing of grazing sheep has improved the situation.

- b) in the surrounding area:

Generally low, but hunting may be a problem, causing disturbance inside the protected sites. Adjacent to Ørin a major landfill has been a source of debate, but is now removed and there is suggested to extend the protected area.

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**27. Conservation measures taken:**

- a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

All sites protected according to the Nature Conservation Act, but with different categories (see point 7b): Gaulosen is included in the European network of biogenetic reserves as a salt-marsh site.

Gaulosen is an Important Bird Area (330 ha) (NO037). The area in Levanger, Verdalen, Inderøy and Steinkjer is a part of the IBA NO034 Inner Trondheimsfjord Wetland system.

The rivers Gaula and Verdalselva that have its outlets in the Ramsar site are protected against any hydropower development.

- b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

- c) Does an officially approved management plan exist; and is it being implemented?:

A management plan for Gaulosen was endorsed in 1984, a revised plan for Gaulosen was finalized in 2009 and is being implemented.

d) Describe any other current management practices:

None in particular. A not completed plan though exists for Rinnleiret, regarding only cutting of bushes and vegetation to stop the overgrowing of the landscape. Parts of the area are also grazed by sheep after removal of vegetation.

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**28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

An extension of the protected areas Ørin is under preparation.

An extension and revision of the nature protected areas in Gaulosen is soon to be implemented.

There is a plan to merge and extend the protected areas Ørin and Kausmofjæra.

The suggestion is on a public hearing and it is suggested to extend the protected areas with 50,9 ha.

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**29. Current scientific research and facilities:**

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Trondheimsfjorden (including all thirteen sub-sites) is one of 10 areas in the national monitoring programme for wintering seabirds and waterfowl. In addition a voluntary NGO-based monitoring goes on concerning bird watching counts and ringing activities. The breeding population of Common Eider *Somateria mollissima* in the inner part of Trondheimsfjorden is included in the national monitoring program for seabirds (SEAPOP), and this implicates three of the sub-sites.

At Rinnleiret other research institutions such as The Norwegian University for Science and Technology (NTNU), Nord-Trøndelag University College (HINT), and Bioforsk also undertake activities within the areas of botanical studies, management practices potentially supporting biodiversity etc.

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**30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

An information booklet is produced by the management authorities, comprising Ramsar sites in Trøndelag. A number of different leaflets exist, as does posters on the sites. At Rinnleiret and Ørin there is in addition an ongoing cooperation program between the management authority and the local primary school concerning litter collection in the area.

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**31. Current recreation and tourism:**

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

The sites are used quite often by tourists and residents for walking, fishing, bathing (Gaulosen and Rinnleiret) and bird-watching. There is also an ongoing project with developing tourism based on the bird-watching.

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**32. Jurisdiction:**

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Norwegian Environment Agency, Pb 5672 Sluppen, 7485 Trondheim

Ph +47 73580500

Fax +47 73580501

Email: [postmottak@miljodir.no](mailto:postmottak@miljodir.no)

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**33. Management authority:**

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

The site is managed by the County Governor of Sør-Trøndelag and Nord-Trøndelag, which are under the instruction of DN.

Addresses:

County Governor of Sør-Trøndelag, Statens Hus, N-7468 Trondheim (phone: +47 74 16 80 00) E-mail: [postmottak@fmst.no](mailto:postmottak@fmst.no).

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### 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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