

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

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th 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 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
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.

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

Sture Westerberg
Länsstyrelsen i Norrbottens län,
S-971 86 Luleå, Sweden.
Sture.Westerberg@lansstyrelsen.se

Jenny Lonnstad
Naturvårdsverket (Swedish EPA),
S-106 48 Stockholm, Sweden.
jenny.lonnstad@naturvardsverket.se

FOR OFFICE USE ONLY.

DD MM YY

--	--	--

Designation date

--	--	--	--	--	--

Site Reference Number

2. Date this sheet was completed/updated:

July 2013

3. Country:

Sweden

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.

Mannavuoma

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

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:

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 Arc View image) ;
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .
Included in the GIS file for all Swedish Ramsar sites version 2013.

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 catchments boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a water body, etc.

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.

68°28'N 22°20'E (Centre point, falls outside the site).
68°27'N 22°19'E (Centre point of the eastern part),
68°28'N 22°17'E (Centre point of the western part),
68°28'N 22°21'E (Northeast corner),
68°28'N 22°15'E (Southwest corner).

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.

Mannavuoma is situated in the very north of Sweden, about 7 km west of the community Karesuando, in the county of Norrbotten (population 248 400), municipality of Kiruna (population 23 000).

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

Average 325 metres

11. Area: (in hectares)

705 hectares

12. General overview of the site:

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

Mannavuoma is characterized by mixed mires with large areas of palsa mires, bogs, string mixed mires rich in flarks and pools. Small topogenous fens are spread in the area. In the northern parts, especially along the shores of the river Muonioälven we find deciduous wet forests rich in species. The flark-pools are excellent habitats for birds, especially waders. Mannavuoma's diversity of wetland types make good prerequisites for a rich animal and plant life.

Mannavuoma is adjacent to the Ramsar Wetland Lätäseno-Hietajoki in Finland, thus constituting a transboundary site. Only the river Muonioälven separates the sites from each other.

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: Mannavuoma contains a representative example of natural wetland types for the most northern part of the EU boreal region. The site contains the Ramsar wetland types Tundra wetlands (Vt), Forested peatlands (Xp), Non-forested peatland (U), Permanent rivers (M), Permanent freshwaters marshes and pools (Tp) and Shrub-dominated wetlands (W). The Tundra Wetlands consists of palsa mires and that type is rare in the EU boreal region. The other wetlands types are representative for the northern part of the region and in very good condition. The site is especially noteworthy for the well-developed bog areas, the bog areas are typical for the northern parts of the boreal region, they are not raised and some of them have strings that form nets. The mires in the area have good possibilities to continue function as a carbon sink and storage.

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) bio geographic region:

Alpine

b) bio geographic regionalisation scheme (include reference citation):

European Environment Agency. 2003. Europe's environment: the third assessment, p 231. Environmental assessment report No 10. Luxembourg: Office for Official Publications of the European communities.

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.

The river Mounioälven runs along the eastern and northern parts of the area. The mire is divided in a western and an eastern part by the great lake Mannajärvi. The bedrock consists of granite and pegmatite. The dominating soil type is peat, but in the south-east part of the western area till is the dominating soil type. The south-east part of the eastern area consists of glaciofluvial sediments. Precipitation is low with an average annual rainfall of approximately 400 mm. The average temperature is -3 ° C and the vegetation period is approximately 110 days.

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 catchments area is 6 816 ha. Approximately 36% consists of coniferous forest, 16% of deciduous forest, 32% of mires, 10% of water and 6% of shrub heaths. The bedrock in the catchment mainly consists of granite and pegmatite except for the western which consists of basic igneous rock and sedimentary rock. The soil types are peat, till and glaciofluvial sediments.

18. Hydrological values:

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

The area is undisturbed and there are no damages on the hydrology. There aren't any investigations done about hydrological values in the area. The peatlands store and sequestrates carbon.

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.

U, Vt, W, Xp, Tp, M

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.

The foremost habitats of Mannavuoma are aapa and palsa mires. Mannavuoma is situated in the flat area between Karesuando and Mauno, with large areas comprising of bogs and string mixed mires. Along the river Muonioälven we find deciduous wet forests and on the moor grow coniferous forests mixed with elements of birch. The landscape in these arctic regions is characterised by the impact of thermal frost.

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.*

Mnium ambiguum –bryophyte growing in richer wet forests (former red-listed now LC).

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. 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.*

The site support bird species which are nationally red-listed and/or included in Annex 1 of the EU Bird Directive (marked with *), such as Red-necked Phalarope**Phalaropus lobatus*, Temminck's Stint *Calidris temminckii* (NT) and Eurasian Golden Plover* *Pluvialis apricaria*.

The critically endangered Lesser white-fronted goose* (*Anser erythropus*) has been observed in the area in the year 1988.

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:

The area is used for reindeer grazing.

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?

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:

24. Land tenure/ownership:

- a) within the Ramsar site:

Private and church-owned

- b) in the surrounding area:

Mainly private land.

25. Current land (including water) use:

- a) within the Ramsar site:

Reindeer farming.

- b) in the surroundings/catchments:

Most of the surroundings are unexploited. Activities performed in the surroundings are reindeer farming small-scale forestry and agriculture.

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:

No threats are identified.

- b) in the surrounding area:

No threats are identified.

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.

Mannavuoma has no formal protection, but the wetland is inaccessible with vast parts surrounded by water and situated in roadless country resulting in a natural form of protection. There is no management plan for the area.

- 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?:

No management plan exists.

d) Describe any other current management practices:

The Environmental Code includes fundamental provisions for the management of land and water areas. One of the provisions is about how areas of national interest due to their natural value should be taken care of when there are development plan and applications for permits etc under a large number of Acts are considered. This Ramsar site has the status of being of national interest.

28. Conservation measures proposed but not yet implemented:

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

There is a proposal to forbid drainage at the site.
No other conservation measures are proposed.

29. Current scientific research and facilities:

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

There is no current scientific research.

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.

There are no current CEPA activities in the area.

31. Current recreation and tourism:

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

There are no current recreation or tourist activities.

32. Jurisdiction:

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

County Administrative Board of Norrbotten, S-971 86 Luleå, Sweden

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.

County Administrative Board of Norrbotten, S-971 86 Luleå, Sweden
Tel. +46 920 960 00. E-mail: norrbotten@lansstyrelsen.se (to the registry).

34. Bibliographical references:

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

Gärdefors, U. (ed.) 2010. Rödlistade arter i Sverige 2010 - The 2010 Red List of Swedish Species. Artdatabanken, SLU, Uppsala.
Länsstyrelsen i Norrbottens län. 2004. Våtmarker i Norrbottens län. Rapport 6/2004.

Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org