# Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 version

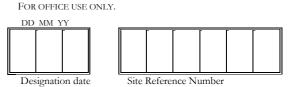
Available for download from http://www.ramsar.org/ris/key\_ris\_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 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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2.1	Date this sheet was completed/updated:
11.0	06.2008
3. (	Country:
Sw	veden

## 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. Tjålmejaure-Laisdalen Valley (Tjålmejaure-Laisdalen)

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  $\Box$ ; or

b) Updated information on an existing Ramsar site  $\boxtimes$ 

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: $\boxtimes$

# 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\*\*  $\Box$ 

\*\* **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):  $\Box$ ;

ii) an electronic format (e.g. a JPEG or ArcView image)  $\Box$ ;

iii) a GIS file providing geo-referenced site boundary vectors and attribute tables  $\Box$ .

## 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 boundary is the same as the Natura 2000 site Tjålmejaure SE0820714.

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.
66°15'N 016°11'E

#### 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 Tjålmejaure-Laisdalen site is situated in the mountainous area of northwest Sweden about 70 km northwest of the town of Arjeplog, in the county of Norrbotten (population 253 254), municipality of Arjeplog (pop. 3 159).

**10. Elevation:** (in metres: average and/or maximum & minimum) min.- max. 460-1 080 metres

11. Area: (in hectares)21 400 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. The area of Tjålmejaure and Laisdalen consists of two converging valleys. The water courses of both valleys join to form a delta in lake Yraft, and the site comprises a number of lakes, bogs, marshes, as well as riparian forest and subalpine birch forest. The southern valley has many lakes with shallow shores which are important breeding sites for birds. The northern valley, Laisdalen, is one of the most wildlife-abundant valleys in the Swedish mountain area, and forms an important species distribution corridor into nearby mountainous areas. The site supports a rich avian fauna and is an important breeding and staging area for a large number of 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.

## 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).

1. Tjålmejaure-Laisdalen contains a representative example of a natural wetland type in the alpine region in the sense of two converging valleys with a mixture of wetlands, lakes, bogs and the rivers Laisälven and Barasjåkkå. The site consists of a delta in the lake Yraft.

2. Nationally red listed bird species include e.g. hen harrier (*Circus cyaneus*) (VU) and ruff (*Philomachus pugnax*) (VU). Both species are listed in the EU Birds directive, Annex I.

Other red listed species at the site are lynx (*Lynx lynx*) (VU) and wolverine (*Gulo gulo*) (globally listed as VU, nationally as EN), both listed in the EU Habitat directive, Annex II.

3. Apart from the species mentioned above, the site supports a rich avian fauna such as arctic tern (*Sterna paradisaea*), black-throated diver (*Gavia arctica*), bluethroat (*Luscinia svecica*), golden eagle (*Aquila chrysaetos*), golden plover (*Pluvialis apricaria*), great snipe (*Gallinago media*), merlin (*Falco columbarius*), osprey (*Pandion haliaetus*), red-necked phalarope (*Phalaropus lobatus*), short-eared owl (*Asio flammeus*), white-tailed eagle (*Haliaeetus albicilla*), whooper swan (*Cygnus cygnus*) and wood sandpiper (*Tringa glareola*). All of the mentioned species are listed in the EU Birds directive, Annex I.

**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:

# Alpine

b) biogeographic 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 site is formed by two mountain river valleys which converge above Yraft lake, forming a large delta. The southern valley (Tjålmejaure) contains a series of lakes with wide, flat shores. The northern valley (Laisdalen) is much narrower. The natural hydrology of the system remains intact because the valley has not been developed for hydro-electrical power.

The climate in the county of Norrbotten is characterized by cold winters and short summers. Tjålmejaure-Laisdalen is situated in the alpine region, with relatively harsh conditions during the winter season. The average temperature is  $-13^{\circ}$  C (January) and  $12^{\circ}$  C (July).

# 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 bedrock in the area is mainly acid. Some parts consist of alkaline bedrock (limestone, marble). Moraine is the dominating soil type in the area and open bedrock is common at higher altitudes (some of the mountains have peaks reaching over 1600 meters above the sea level). The area has a low impact of human activities. Reindeer management has been present in the area for a long time. Tjålmejaure-Laisdalen is situated in the alpine region with relatively harsh conditions during the winter season.

## 18. Hydrological values:

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

There are several lakes and streams within the Ramsar site, with a major function regarding flood control and sediment trapping. The stream Laisälven passes through the northern parts of the area.

# 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 •	Ε	• F	• G	• H •	• I	• J • K • 2			Zk(a)	
			<u>О</u> •Р Хр•Ү		-		-	Ss•	<u>Tp</u>	Ts•	<u>U</u> • <u> </u>	<u>Va</u> •	
Human-made: 1	• 2	• 3	• 4 •	5	• 6	• 7	• 8	• 9	• Zł	x(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.

# L, M, O, Tp, U, Va, Xf

#### 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 southern parts of the site reach 700-1000 meters above the sea level and contains mainly alpine heaths and mires where *Salix* is very abundant. The valleys along the rivers Laisälven and Barasjåkkå are dominated by the subalpine birch forest *Betula pubescens.ssp. Czerepanovii* (some parts like meadows) and mires. In the northern parts stands of scattered old pine bring out the qualities of an old growth forest. In the delta in Lake Yraft there are meadows and *Salix*. The Ramsar site provides ecosystem services concerning recreation (e.g hunting, fishing, bird-watching, hiking) and ecological factors like biodiversity, sediment trapping, flood control, etc.

## 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*.

#### 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*.

Apart from the species mentioned above (14), mammals at the site also include the brown bear (*Ursus arctos*) and pine marten (*Martes martes*).

#### 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 frequently used by the indigenous Saami people for reindeer grazing. Only the northeastern part of the area has been subject to archaeological surveys. That part of the area contains numerous archaeological sites, mainly hearths, places for food storage and sacrificial sites which represent the Sami hunting society and later reindeer husbandry. In the area there are also sites with prehistoric settlements. The area from the Yraft delta and downstream Laisälven is listed as being of national importance due to its high cultural values. Along Laisälven there are findings and remains of settlements from prehistoric to modern times. These remains, both archaeological and historical, represent a wide diversity of cultures; hunting and gathering, reindeer husbandry, farming and mining.

**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: State-owned.

b) in the surrounding area: **State-owned**.

# 25. Current land (including water) use:

a) within the Ramsar site:

The site is used mainly for reindeer husbandry and recreational activities (e.g. sport fishing, hunting and hiking.). The Kungsleden - a hiking trail through the Swedish mountains - passes through the Laisdalen valley. The site lies between the neighbouring Vindelfjällen Nature Reserve and the Pieljekaise National Park

b) in the surroundings/catchment:

The area is mainly used for reindeer husbandry, fishing, hunting, nature conservation and hiking..

# 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:

Prospecting for minerals may occur in parts of the site in the future.

b) in the surrounding area:

# 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.

Tjålmejaure-Laisdalen is listed as being of national importance for nature conservation, and the site has been included in the Natura 2000 network:

- SE0820714 Tjålmejaure (21 618 ha) SPA
- SE0820056 Laisdalens fjällurskog (72 705 ha) pSCI
- SE0820294 Yraft (717 ha) pSCI

Most of the site (17,800 ha) is also designated as a bird sanctuary (Tjålmejaure, established in February 1967). Part of the site is included in a nature reserve:

• Laisdalens fjällurskog Nature Reserve – total area 79 374, thereof 74 790 ha on land. The reserve was established in April 2000, and the decision includes an officially approved management plan. The reserve is state-owned but managed by the County Administrative

Board of Norrbotten. This vast reserve came to include several smaller reserves that already existed in the area. Although included in Laisdalens fjällurskog NR, one small reserve within the Ramsar site has remained in its previous form: Yrafdeltat Nature Reserve, which was established in May 1974, and covers an area of 690 ha.

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

Ia  $\Box$ ; Ib  $\boxtimes$ ; II  $\Box$ ; III  $\Box$ ; IV  $\Box$ ; V  $\Box$ ; VI  $\Box$ 

c) Does an officially approved management plan exist; and is it being implemented?: A conservation/management plan has been approved according to the Natura 2000 legislation.

d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:

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

29. Current scientific research and facilities:

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

# 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.

# 31. Current recreation and tourism:

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

The popular hiking trail Kungsleden passes through the Ramsar site. Some parts of the area are also used for sport fishing and hunting.

# 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc. The County Administrative Board of Norrbotten

#### 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 County Administrative Board of Norrbotten

## 34. Bibliographical references:

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

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.

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