

Designation date: 16/12/82 Ramsar Site no. 274

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

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:

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

April 12 2012

3. Country:

Austria

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.

Lower Inn Reservoirs (Stauseen am Unteren Inn)

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:

No change.

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): ;
(Map unchanged from 2003 RIS)
- 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 boundary follows the shoreline of three reservoir waterbodies and the border of Austria.

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.

approximate center 48°17'47"N/13°16'20"E, limits 48°16'N/13°03'E to 48°22'N/13°24'N

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 a section of the river Inn, right downstream the city of Braunau (population: ~ 18.000). It is located in the north-western part of Austria (province of Upper Austria) where the Inn forms the national border between Austria and Germany. There is a bordering nature reserve on the Bavarian side, which complies with the terms of the Ramsar Convention (Unterer Inn, 7DE017).

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

320 m (min) to 350 m (max).

11. Area: (in hectares)

870

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 described is one of central Europe's most important waterfowl habitats. Above all, the area acquires its importance as a wintering and rest area for migrating birds, the species diversity is considerably high (> 100). Moreover, many species breeding in this area are endangered to various degrees, including *Nycticorax nycticorax* and *Sterna hirundo*. The reservoir areas are diversely structured because they are subjected to a constant silting process. Pioneer plant communities are developing. Thus the area comprises various types of habitats, which are highly endangered on the national level, like muddy banks with Bidention-vegetation. There is also riverine forest as a result of successional vegetation development on sediments deposited by the river since regulation.

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
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

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:

In spite of modifying the Inn into a chain of reservoirs for hydropower, this wetland represents a set of habitat types, which has become rare in the whole biogeographic region. Alluvial forests, as found along the Inn, as well as the sediment banks are endangered and rare. Despite anthropogenic changes (i.e. embankments, dykes, changes of the hydrologic conditions), still a dynamic floodplain development can be observed along that stretch of the river Inn. This results in a rather heterogeneous mosaic of open sediment banks and areas with successional vegetation of various ages. This also results in improved ecological conditions for a large number of bird species (in particular wading, aquatic and marsh species).

Criterion 2:

The site is of international importance to a wide variety of bird species. Referring to the Birds Directive 79/409/EEC, many species are listed in Annex I, amongst them *Alcedo atthis*, *Bubo bubo*, *Circus aeruginosus*, *Dryocopus martius*, *Egretta alba*, *Egretta garzetta*, *Gavia arctica*, *Haliaeetus albicilla*, *Ixobrychus minutus*, *Lanius collurio*, *Larus melanocephalus*, *Luscinia svecica*, *Nycticorax nycticorax*, *Pernis apivorus*, *Picus canus* and *Sterna hirundo*. Moreover, a large number of other species occur in the area, amongst them various ducks and waders.

Criterion 3:

Despite the fact that further research has to be carried out to gain information on the overall species and habitat diversity, present data and the information given in the statements for the other criteria listed indicate, that the wetland has to be considered to contribute to the overall species diversity within the biogeographic region (OHNMACHT et al. 1994).

Criterion 4:

This wetland is of particular international importance as a waterfowl habitat. Above all, the area acquires its importance as a wintering and rest area for water- and wading birds during their migration and wintering. Species breeding in this area include nationally critically endangered species like *Nycticorax nycticorax* and *Sterna hirundo*.

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:

Continental

b) biogeographic regionalisation scheme (include reference citation):

COUNCIL DIRECTIVE 92/43/EEC [article 1 (c) (iii)] of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as amended by the Accession Act of Austria, Finland and Sweden (OJ L 1, 1.1.1995, p.135)

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 area is characterized by sediments from the tertiary and quaternary period. The soil types are typical for alluvial wetlands; the most frequent types are loamy sand, sandy loam and medium loam. The river Inn is similar to an alpine river with glacial drain. Today, it is a chain of artificial reservoirs. The disruption of the river continuum led to a reduction of the river's velocity, thus accelerating sedimentation. The medium average precipitation is 840mm. Fog occurs on 60-100 days a year (October to January).

17. Physical features of the catchment area:

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

Refer to 16.

18. Hydrological values:

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

By anthropogenic changes, the hydrology of this area was modified. A dynamic floodplain development with regular flooding occurs at a rather reduced level. This is a result of prevention measures from flood damage in the surroundings by means of dykes. Also, water levels are artificially regulated by dams of hydroelectric power stations.

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.

M, 6, 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.

On the one hand the site is characterized by the river Inn itself, on the other hand alluvial forests with *Salix alba* and *Fraxinus excelsior* as well as successional vegetation with *Bidens cernuus* on sediment/silk-banks are characteristic for the habitats within the site.

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.*

The whole area is characterized by alluvial wetland forests and muddy banks formed by sedimentation. These habitats support nationally rare plants such as *Mattencia struthiopteris*, *Butomus umbellatus*, *Eleocharis acicularis* and *Hippuris vulgaris*. Besides that, extensive *Phragmites australis* beds are conspicuous.

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.*

The area is known for the population of European beaver (*Castor fiber*), which was reintroduced in the 1970'ies. Latest data indicate that even the European Otter (*Lutra lutra*) is beginning to re-immigrate. Besides that, the river Inn is known as one of the scarce Austrian habitats of Eurasian Huchen (*Hucho bucho*).

The Ramsar site is known for sheltering large numbers of waders and waterbirds, especially during periods of migration. According to results from monthly counts since 1999, larger resting groups are formed by: *Anas crecca* (> 1400), *Anas platyrhynchos* (> 3000), *Anas strepera* (max. > 1.400 in 2010), *Aythya fuligula* (> 700) *Fulica atra* (> 600), *Numenius arquata* (> 300), *Philomachus pugnax* (> 300) and *Vanellus vanellus* (> 3.000). Within the Ramsar site a breeding colony of *Larus ridibundus* is located. This colony can shelter up to 10.000 individuals.

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 site itself, being a nature conservation area, is of no value in economic terms. Agricultural and forestry use only occurs within the surrounding areas. The river Inn itself has gained some historical importance as being the national border between Germany (Bavaria) and Austria.

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 property

b) in the surrounding area:

private property

25. Current land (including water) use:

a) within the Ramsar site:

Human activities include fishing, hunting and boating

b) in the surroundings/catchment:

Agriculture and forestry, fishing, hunting, bicycle-touring and hiking along the site.

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:

Recreational activities as mentioned in point 31 have been noted to have had adverse impact on the area's waterbirds communities. Fishing and hunting activities may disturb nesting and roosting birds. Eutrophication in general could provide serious damage to the ecology of the whole system.

b) in the surrounding area:

Refer to (a).

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.

In 1978 the authorities of Upper Austria declared the Lower Inn as a Nature Conservation Area. This is the highest protection status referring to local law. Various research projects, including reservoir ecosystem studies, waterbirds counts and monitoring programmes are carried out. The province has set up information boards dealing with the lower Inn and a steering committee, comprising representatives of Austria and Bavaria, was established. The main task of the steering committee and its working group is to provide legal entities for settling conflicts and ensuring the long-term quality of the area. In 2002, regulations in legislation for hunting, fishing and boating were modified to prevent the impacts mentioned in section 26. In 2004 the site was declared as a SPA and SCI (following COUNCIL DIRECTIVE 79/409/EEC) by decree.

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

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.

Avifaunistic counts are carried out regularly. Besides that, mechanisms of sediment deposition, with formation of new islands and vegetation succession, are monitored.

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.

Along the site several notice-boards were built up, which give a brief synopsis of species, especially birds, and habitats which occur in the area. Also, there are two observation platforms which enable visitors to get an impression of the area's landscape.

31. Current recreation and tourism:

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

Recreation and touristic activities remain focussed on fishery, hunting, boating and cycling.

32. Jurisdiction:

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

The province's authorities:

Amt der Oberösterreichischen Landesregierung

Direktion für Landesplanung, wirtschaftliche und ländliche Entwicklung

Abteilung Naturschutz

Bahnhofplatz 1

A-4021 Linz

0043 732 7720 11871

0043 732 7720 211899

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.

Refer to 32.

34. Bibliographical references:

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

Ohnmacht A.M. & Grabher M. (1994). Ramsar-Bericht 2: Stauseen am Unteren Inn. UBA Monographien, Bd. 47: 117pp.

Schuster, A., 2004: Beiträge zur Ökologie und Brutbiologie des Nachtreihers in der Reichersberger Au.-Egretta 47: 115-141.

Sabathy, E. & A. Schuster, 2004: Brutbestand der Wasservögel am unteren Inntal im Jahr 2000.- Egretta 47: 1 – 38.

Billinger K., Eisner, J., Moertelmaier, T., 2009: Stauseen am Unteren Inn.- Important Bird Areas – Die wichtigsten Gebiete für den Vogelschutz in Österreich (Ed. M. Dvorak), Verlag Naturhistorisches Museum Wien: 414 – 423.

Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
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