## **Information Sheet on Ramsar Wetlands (RIS)**

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

## Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Bureau. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

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DD MM YY

Designation date, Site Reference Number (16-12-1982, 7AT004)

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

Dr. Anita Matzinger Amt der Oö. Landesregierung Naturschutzabteilung Promenade 33 A-4010 Linz Phone +43-732-7720-11877 email Anita.Matzinger@ooe.gv.at

## 2. Date this sheet was updated:

September 22 2003

#### 3. Country:

Austria

## 4. Name of the Ramsar site:

Stauseen am Unteren Inn

#### 5. Map of site included:

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

- a) hard copy (required for inclusion of site in the Ramsar List): no
- b) digital (electronic) format (optional): yes
- **6. Geographical coordinates** (latitude/longitude):

 $48^{\circ}18'N\,/\,013^{\circ}16'E$ 

## 7. General location:

Include in which part of the country and which large administrative region(s), 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).

**8. Elevation:** (average and/or max. & min.)

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

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

870

#### 10. Overview:

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.

#### 11. Ramsar Criteria:

Circle or underline 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).

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## 12. Justification for the application of each Criterion listed in 11. 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, Ixobrycus 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 endangered species like *Nycticorax nycticorax* and *Sterna hirundo*.

#### **Criterion 5:**

The Ramsar site is known for sheltering large numbers of waders and waterbirds, especially during periods of migration. According to results from counts during the last years, larger resting groups are formed by: Anas crecca (> 700), Anas platyrhynchos (> 2000), Anas strepera (> 500), Aythya fuligula (> 500) Fulica atra (> 500), Numenius arquata (> 200), Philomachus pugnax (> 200) and Vanellus vanellus (> 800). Within the Ramsar site a breeding colony of Larus ridibundus is located. This colony shelters up to 10.000 individuals.

**13. 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)

## 14. 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).

## 15. Physical features of the catchment area:

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

Refer to 14.

#### 16. 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.

## 17. 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:



#### **Inland:**



#### **Human-made:**



#### 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

## 18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

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.

#### 19. Noteworthy flora:

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. *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 *Matteucia struthiopteris*, *Butomus umbellatus*, *Eleocharis acicularis* and *Hippuris vulgaris*. Besides that, extensive *Phragmites australis* beds are conspicuous.

## 20. 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 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 hucho*).

#### 21. Social and 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.

## 22. Land tenure/ownership:

(a) within the Ramsar site:

private property

(b) in the surrounding area:

private property

## 23. 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

# 24. 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 described above have been noted to have had adverse impact on the area's waterbirds communities. Fishing and hunting activities may disturb nesting and roosting birds. Artificial feeding is considered to cause deterioration of the water quality and could thus possibly contribute to outbreaks of avian botulism. Eutrophication in general could provide serious damage to the ecology of the whole system.

(b) in the surrounding area:

Refer to (a)

#### 25. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

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 24.

#### **26.** Conservation measures proposed but not yet implemented:

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

The whole area is proposed as SPA (Special Protected Area) following COUNCIL DIRECTIVE 79/409/EEC on the conservation of wild birds of 2 April 1979, (OJ L 103, 25.4.1979, p. 1) and SCI (Site of Community Interest) following COUNCIL DIRECTIVE 92/43/EEC 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). Management plans, which will put emphasis on the protection and conservation of the site, are in preparation.

## 27. 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.

#### 28. Current conservation education:

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.

#### 29. 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.

#### **30. 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 Naturschutzabteilung Promenade 33 A-4010 Linz

#### 31. 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 30.

## 32. Bibliographical references:

scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 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.

Der Rat der Europäischen Gemeinschaft (1979): Richtlinie 79/409/EWG des Rates vom 2. April 1979 über die Erhaltung der wildlebenden Vogelarten. Amtsblatt der Europäischen Gemeinschaft, Reihe L 103: 1-6. [= COUNCIL DIRECTIVE 79/409/EEC on the conservation of wild birds of 2 April 1979, (OJ L 103, 25.4.1979, p. 1)]

Der Rat der Europäischen Gemeinschaft (1992): Richtlinie 92/43/EG des Rates vom 21. Mai 1992 zur Erhaltung der natürlichen Lebensräume sowie der wildlebenden Tiere und Pflanzen. Amtsblatt der Europäischen Gemeinschaft, Reihe L 206: 7-50. [= COUNCIL DIRECTIVE 92/43/EEC 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)]

Please return to: Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 o Fax: +41 22 999 0169 o e-mail: ramsar@ramsar.org