

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 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 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd 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.

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

Bayer. Landesamt für Umweltschutz
Bürgermeister-Ulrich-Str. 160
86179 Augsburg
Germany
Tel.: 0049-821/9071-0

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

August 2005

3. Country:

Germany

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.

Lech-Donau-Winkel

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:

Since the actual site area was announced as Special Protected Area according to the EU Birds Directive in 2002 the Ramsar site area has to be adapted to the new borderlines. Whereas the former area consisted of only 2 riverine reservoirs the new Ramsar site has now considerable portions of floodplains and extensive, alluvial forests with marsh areas, fens, storage lakes, quarry ponds, backwaters and extensively used greenlands and agricultural land.

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.

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.

48°44'N; 11°00'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.

Southern Germany; federal state of Bavaria; between Donauwörth and Neuburg a.d. Donau

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

average 390 m above NN

11. Area: (in hectares)

4014 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.

Expanded floodplains and extensive, alluvial forests along the rivers Lech and Donau with marsh areas, fens, storage lakes, quarry ponds, backwaters and extensively used greenlands.

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).

Criteria 1: The site contains representative and rare near-natural wetland types in the appropriate biogeographic region called Donau-Ille-Lech-Platte (D 64), for example:

- Natural eutrophic lakes with *Magno-potamion* or *Hydrochrition-type* vegetation
- Residual alluvial forests (*Alnion glutinoso-incanae*)
- Mixed oak-elm-ash forests of great rivers

Criteria 2: The site is part of the european NATURA-2000 network and supports several rare and endangered species, along a migratory pathway or flyway, how they are mentioned in the European Birds Directive. The site is an important staging and wintering area for waterbirds: The "Donaustausee Bertoldsheim " for example is a site of national importance for *Anas strepera* (Gadwall), and subnational importance (for Bavaria) for *Anas crecca* (Teal), *Anas penelope* (Wigeon), *Bucephala clangula* (Goldeneye), which are also part of the Bavarian Red List; and *Anas platyrhynchos* (Mallard).

The "Lechstausee Feldheim" is of national importance for *Anas crecca* (Teal) , *Anas strepera* (Gadwall) and subnational importance for *Anas platyrhynchos* (Mallard) and *Phalacrocorax carbo* (Cormorant).

The "Schnödhofer Baggerseen " provide habitats for *Actitis hypoleucos* (Common Sandpiper) and *Charadrius dubius* (Little Ringed Plover), which are part of the Bavarian Red List.

The site also includes threatened breeding bird species, which are typical for floodplain habitats, such as the kingfisher *Alcedo atthis*, *Ficedula albicollis* (Collared Flycatcher) or *Picus canus* (Grey-headed

woodpecker), and endangered amphibians such as *Bombina variegata* or aquatic mammals like *Castor fiber*.

The "Schönfelder Moos" and "Staudheimer Moor" are important for grassland birds such as *Numenius arquata* (Curlew) or *Vanellus vanellus* (Lapwing).

See also point 21 and 22

Criteria 3: The site is a hotspot of biological diversity and of evidently species richness. It contains a range of biological diversity occurring in these region, characteristically for floodplain areas and alluvial forests, for example the following habitat types:

Floating vegetation of ranunculus of plane, submountainous rivers; Lowland hay meadows *Galio-Carpinetum* oak hornbeam forests; *Stellario-carpinetum* oak hornbeam forests *Asperulo-fagetum* beech forests

Juniperus communis formations on calcareous heats or grasslands

Calcareous beech forests
Tilio-Acerion ravine forests
Molina meadows on chalk and clay (Eu-molinion)

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:

The site belongs to the continental region. The continental region includes natural habitats which are typical, but endangered in middle Europe, for example the Asperulo-Fagetum beech forests.

b) biogeographic regionalisation scheme (include reference citation):

The biogeographic region called continental region is used in the scheme of classification of biogeographic regions due to the Flora-Fauna-Habitat-Directive (NATURA 2000). The site is also part of a biogeographic region called Donau-Iller-Lech-Platte (D 64), developed by the German Federal Agency for Nature Conservation.

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 contains two separated artificial riverine reservoirs, which have been created by damming the rivers Lech and Donau for generating electricity, for flood protection and for water supply. At the "Lechstausee Feldheim" the waterlevel falls between October and April, uncovering large sandbanks and mudflats. At the "Donaustausee Bertoldsheim" are irregular fluctuations of the water level, depending on electricity requirements. The maximum depth of water is ca. 7 m. There are several quarry ponds with cane brake and reed. The climate is intermediate coastal-continental. At the stream courses of the rivers are regularly natural inundations. Only the flat and more quietly parts of the storage lakes are able to freeze up during the winter months.

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 area includes a large part of the floodplain area. The general land use consists of extensively used grasslands and more intensively used agricultural land. The climate is intermediate coastal-continental.

18. Hydrological values:

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

The site is important for flood protection and accumulation of ground water. Sediment trapping takes place at the storage lakes.

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.

O, M, Ts, 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 waterbodies are practically devoid of vegetation, the same applies to the concrete banks. There is growth of islands as well as shallow water bodies. In the area of the dam one finds reeds, residual alluvial forests and mixed oak elm-ash forests of great rivers; most of these habitats are endangered and rare.

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 noteworthy flora of the site is characteristic for natural alluvial forests, for example *Aconitum napellus*, *Arum maculatum*, *Carex alba* and *Populus nigra* to name just a few. *Cypripedium calceolus* and *Stipa pulcherimma ssp. Bavarica*, are listed in the Annex II of the Flora-Fauna-Habitat-Directive. Plants which are characteristic for backwater are *Hippuris vulgaris* and *Potamogeton perfoliatus*.

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 is mostly important as a staging area for waterbirds: Regularly counted (average value over a period of ten years) are for example *Bucephala clangula* / Goldeneye (over 370 Individuals), *Anas strepera* / Gadwall (over 700 Individuals, Criterion 6 is almost fulfilled, while not the whole habitat, but only parts of it are counted; the importance of the whole area could be even higher), *Anas crecca* / Teal (over 1000 Individuals), *Aythya fuligula* / Tufted duck (over 1600 Individuals), *Anas acuta* / Pintail (over 120 Individuals).

In the alluvial forests we find characteristic species like *Ficedula albicollis* / Collared Flycatcher (about 15 pairs), and *Dendrocopus medius* / Middle Spotted Woodpecker (about 12 pairs, these species have their main distribution in the west Donau-Valley), *Pernis apivoris* / Honey Buzzard (about 2 pairs), *Milvus milvus* / Red Kite (because of the main distribution of *Milvus milvus* in Germany, we have a special responsibility for these species), *Milvus migrans* / Black Kite and *Alcedo atthis* / Kingfisher (These species are all part of the German and Bavarian Red List).

The nature protection areas NSG Vogelfreistätte Feldheimer Stausee, NSG Donaualtwasser bei Leitheim provide habitats for *Luscinia svecica* / Bluethroat, *Circus aeruginosus* / Montagu's Harrier, *Charadrius dubius* / Little Ringed Plover, *Remiz pendulinus* / Penduline Tit (which are also all part of the German and Bavarian Red List).

The breeding birds of the Schönefelder Moos and Staudheimer Moor are *Numenius arquata* (Curlew) and *Vanellus vanellus* (Lapwing).

Summarized the site provides a great variety of rare and endangered bird species.

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:

No

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:

government and private ownership

b) in the surrounding area:

government and private ownership

25. Current land (including water) use:

a) within the Ramsar site:

The two riverine reservoirs are used for generating electricity, for flood protection and water supply. The floodplain area is used agricultural: with extensively used grasslands and more intensively used agricultural land. At the Bertoldsheimer Stausee watersport activities are not prohibited. The site is although used for fishing, hunting and swimming. Some areas of the site are used for the mining of gravel.

b) in the surroundings/catchment:

agricultural use, forestry, ground water exploitation

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:

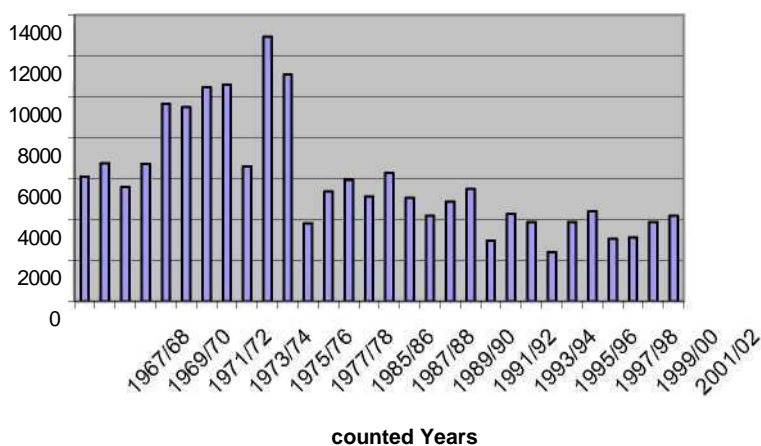
The stream course of the two rivers was regulated very early, most significant in the last 200 years.

The regulation influences the dynamic of the inundation, and on the dammed sections the natural inundation areas are cut off from the river. The agricultural use was intensified, the floodplain area was drained. The alluvial forests were used more intensively as well. In former times the numeric criterions to identify a wetland of international importance have not been as clear as they are today. So the specified criteria 5 and 6 based on waterbirds are not applicable for the site any longer:

As shown in picture 1, the number of 20.000 or more waterbirds for the site was never fulfilled since the international waterbird count (IWC) began in 1967/68. Due to that criterion 5 does not work in the past and presence.

The same is essential for criterion 6:

The site never supported **regularly** 1% of a biogeographic population of one species. The site supports in fact *Anas strepera* /Gadwall in 5 out of 12 years but reaches not regularly (>50% of the years) the required numbers of 600 individuals. The reason is that only two smaller parts of the site (Feldheimer Stausee and BertholdsheimerStausee) are counted. So the real population size of the site might even be higher.



Picture 1: Maximum numbers of waterbirds since the beginning of IWC

b) in the surrounding area:

No information available

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.

Within the site one finds three nature protection areas (NSG Vogelfreistätte Feldheimer Stausee, NSG Donaualtwasser bei Leitheim, NSG Donaualtwasser bei Schnödhof) and one landscape protection area (LSG Nordhänge des Donautals und Donaualtwasser).

The site is part of a Special Protected Area due to the European Birds Directive (Name: Donauauen

zwischen Lechmündung und Ingolstadt) and includes one FFH-Area (Donau mit Jura-Hängen

zwischen Leitheim und Neuburg).

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?:

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.

A management plan for the FFH - and SPA - Area is planned due to the six-year-reporting commitment of the EU-FFH-Directive, but not yet implemented.

29. Current scientific research and facilities:

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

International waterfowl counts are carried out regularly on two lakes of the area. The site is part of the wildlife protection program (Arten- und Biotopschutzprogramm) of the administrative district (Landkreis) Donau - Ries.

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.

There are different storage lakes at Genderkingen and Schnödhof, which are used for swimming, sailing and fishing. At the Feldheimer and BertoldsheimerStauseen hunting, fishing and boat traffic takes place. The Lech is also used for canoe-tours.

32. Jurisdiction:

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

Bavarian State Ministry of Environment, Public Health and Consumer Protection (Bayer. Staatsministerium für Umwelt, Gesundheit und Verbraucherschutz)

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.

Regierung von Schwaben

Sachgebiet 51

Fronhof 10

86152 Augsburg

Regierung von Oberbayern

Sachgebiet 51

Maximilianstraße 39

80538 München

34. Bibliographical references:

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

Explanation for the applied scheme in:

Bundesamt für Naturschutz (ed.) 1998: Das europäische Schutzgebietssystem NATURA 2000. BfN-

Handbuch zur Umsetzung der Fauna-Flora-Habitat-Richtlinie und der Vogelschutz-Richtlinie.

Bonn -

Bad Godesberg.

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