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.

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Note	tor	compi	lers:

- 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.

FOR OFFICE USE ONLY.
DD MM YY
Designation date Site Reference Number

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

Timo Asanti & Pekka Rusanen, Finnish Environment Institute, Nature Division, PO Box 140, FIN-00251 Helsinki, Finland. Timo.Asanti@ymparisto.fi

2. Date this sheet was completed/updated:

January 2004

3. Country:

Finland

4. Name of the Ramsar site:

Vanhankaupunginlahti, Laajalahti

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):

Yes.

b) digital (electronic) format (optional):

Yes.

6. Geographical coordinates (latitude/longitude):

Vanhankaupunginlahti 60°12′ N 25°00′ E, Laajalahti 60°11′ N 24°49′ 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 two separate areas are situated in the province of Southern Finland, on the coast of the Gulf of Finland. Vanhankaupunginlahti is located in the geographical centre of Helsinki city, 5 km northeast of the capital city's centre. Laajalahti is also located in the metropolitan area, in Espoo city, 9 km east of the city centre. The distance between the two areas is 8.5 km. Helsinki (184 sq.km of land) has ca. 555 500 and Espoo (312 sq.km of land) ca. 213 300 residents.

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

13 - 0 m

9. Area: (in hectares)

508 ha

10. Overview:

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

The bays form an important wetland complex especially for breeding and migrating waterfowl and waders. The recreational importance is very notable, being located inside major population centres.

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).

- 1) A representative example of near-natural wetland types (estuarine waters, shallow sea bays) in the EU Boreal region, including 2 priority natural wetland habitat types (boreal Baltic coastal meadows, Fennoscandian deciduous swamp woods).
- 2) 1 globally and 3–5 nationally threatened bird species, 1 nationally threatened Fungi aphyllophorales species. Threatened birds (VU in Finnish Red List) include Black-

headed Gull (*Larus ridibundus*) with up to 700 pairs in Laajalahti, Lesser Spotted Woodpecker (*Dendrocopos minor*) with 10–15 pairs and Great Reed Warbler (*Acrocephalus arundinaceus*).

6–7 species of the EU Birds Directive Annex I breed in the area, including e.g. Bittern (*Botaurus stellaris*), Spotted Crake (*Porzana porzana*) and Corncrake (*Crex crex*) (globally VU).

- 4) The bays form an important staging area during migration periods, peak numbers reaching >2 000 ducks. Peak numbers of Finland's responsibility species include e.g. >1 000 individuals of both Wigeons (*Anas penelope*), Teals (*A. crecca*) and Goosanders (*Mergus merganser*). Waders include e.g. hundreds of both Ruffs (*Philomachus pugnax*) (Birds Directive) and Wood Sandpipers (*Tringa glareola*) (Birds Directive). The breeding waterfowl includes ca. 400–700 pairs of 14 species.
- **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:

Hemiboreal forest vegetation zone.

b) biogeographic regionalisation scheme (include reference citation):

Etelä-Suomen ja Pohjanmaan metsien suojelun tarve-työryhmä. Puheenjohtaja: Ruuhijärvi, R., Sihteerit: Kuusinen, M., Raunio, A. and Eisto, K. 2000. Metsien suojelun tarve Etelä-Suomessa ja Pohjanmaalla. Etelä-Suomen ja Pohjanmaan metsien suojelun tarve-työryhmän mietintö. Suomen ympäristö 437. Ympäristöministeriö. Helsinki.

Working group on the need for forest protection in southern Finland and Ostrobothnia. Chairman Ruuhijärvi, R., Secretaries Kuusinen, M., Raunio, A. and Eisto, K. 2000. Forest protection in southern Finland and Ostrobothnia. The Finnish Environment 437. Ministry of the Environment.

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.

Geology: Geochemically included in South Finland high metamorphic area. Bedrock is composed of microline granite, mica schist and mica gneiss.

Origins: Natural.

Hydrology: Vanhankaupunginlahti: mean inflow of River Vantaanjoki 17 m³/s and low flow in summer 2 m³/s.

Soil type and chemistry: Mainly silt and clay. Vanhankaupunginlahti: major subsoil type mud-clay (over 90 %), minor types silt and sand. Turf and mud layers contain over 20 000 mg/kg of both aluminium and iron. Concentrations of heavy metals do not exceed the limit values for soil.

Water quality: General quality passable. Eutrophic. Waters turbid in Vanhankaupunginlahti because of clayey water of River Vantaanjoki. Salinity 0–4 ‰ in Vanhankaupunginlahti and ca. 3–5 ‰ in Laajalahti.

Depth of water: Water-level usually low in spring and high in autumn and winter. Vanhankaupunginlahti: Maximum 5 m, mean 1.4 m. Water-level varies irregularly, depending on inflow of River Vantaanjoki and inflow of brackish water from sea. Laajalahti: 0.5–2 m.

Climate: Duration of growing season ca. 175 days, mean annual temperature ca. +5 °C, mean annual rainfall ca. 700 mm. Waters ice-covered normally from mid December to mid April. Hemiboreal forest vegetation zone.

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).

No data available.

16. Hydrological values:

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

None significant.

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:

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.

F – Estuarine waters

A – Sea bays

I – Black Alder swamp forests

H – Brackish alluvial meadows

18. General ecological features:

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

Vanhankaupunginlahti: Area 316 ha, including ca. 140 ha of water. Head of the bay (ca. 140 ha) is covered by growths of Common Reed (*Phragmites australis*) with >30 small ponds inside. Growths of Grey Club-rush (*Schoenoplectus tabernaemontani*), Common Club-rush (*S. lacustris*) and Lesser Bulrush (*Typha angustifolia*) occur in many areas. Submerged vegetation is scarce. Shores are fringed by a zone of Black Alder (*Alnus glutinosa*) swamps. Meadows are scarce, only ca. 12 ha. Agricultural land and an arboretum adjoin the area on the eastern side.

Laajalahti: Area 192 ha, including ca. 130 ha of water. Shores are covered by extensive growths (>30 ha) of Common Reed. Small coastal meadows and submerged vegetation are species-rich. The most abundant aquatic plants are Spiked Water-milfoil (*Myriophyllum spicatum*), Rigid Hornwort (*Ceratophyllum demersum*), Brackish Water-crowfoot (*Ranunculus baudotii*) and Fennel-leaved Pondweed (*Potamogeton pectinatus*).

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*.

Threatened aphyllophorales include *Gloiodon strigosus* (VU in Finnish Red List) at Vanhankaupunginlahti.

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.

A breeding attempt of White-backed Woodpecker (*D. leucotos*) (CR) took place in 1994 in Vanhankaupunginlahti and 1–2 individuals have wintered annually in the area since then. Sporadic breeders include Moorhen (*Gallinula chloropus*) (VU).

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 socioeconomic values.

Both areas are of great importance for outdoor recreation and birdwatching, being located inside major population centres. Significant values also include scientific research and environmental education. Vanhankaupunginlahti includes a provincially important traditional rural biotope (5 ha).

22. Land tenure/ownership:

(a) within the Ramsar site:

Vanhankaupunginlahti is owned by Helsinki city and the state. Laajalahti is state-owned.

23. Current land (including water) use:

(a) within the Ramsar site:

None significant.

(b) in the surroundings/catchment:

There is a heavy pressure for building along the margins of both areas.

24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Vanhankaupunginlahti has suffered considerably from wastewaters of Helsinki city and from inflow of nutritious River Vantaanjoki. >60 % of Helsinki city wastewaters were conducted into the bay until 1986. The bay has become heavily eutrophicated and both benthic fauna and submerged vegetation disappeared in the 1960s, recovering since the 1990s. Nutrients which have earlier accumulated in bottom sediments are still mobilized and exploited by planktonic organisms. River Vantaanjoki dissolves nutrients and clay from surrounding fields into Vanhankaupunginlahti causing eutrophication and turbidity.

Laajalahti became eutrophic primarily because of a sewage treatment plant which was started nearby in the late 1950s. There was also a dump in close contact with the bay until the early 1980s. Submerged vegetation and benthic fauna disappeared in the 1960s, recovering since the late 1980s. Nutrient-rich bottom sediments still eutrophicate waters and overgrowing is continuing.

There is a heavy pressure for building along the margins of both areas and new settlements have already increased disturbance. Expansion of a ring road beside Laajalahti increases noise pollution and reduces meadows and forests in western parts. One third of reed area and Black Alder swamps has been destroyed by land filling in Laajalahti since the 1950s. In Vanhankaupunginlahti, a major power line crossing over the bay causes risk for larger bird species. Strong populations of Raccoon Dog (*Nyctereutes procyonoides*) and American Mink (*Mustela vison*) cause damage to the breeding of birds in both areas.

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.

The sites are included in the Natura 2000 Network, designated both as SPA and SCI, and in the Waterfowl Habitats Conservation Programme. Viikki Protected Area (250 ha) was established in 1959 and 1962, and further extended in 1987. Laajalahti Protected Area (190 ha) was established first in 1979, extended in 1993 and 1995–96.

In Vanhankaupunginlahti, wastewater discharge was stopped in 1987 and also the waters of River Vantaanjoki have purified in recent years. Submerged vegetation and benthic fauna have started to recover. In Laajalahti, after reducing use of the sewage plant in 1975 and stopping it completely in 1986, the water quality has improved and both submerged vegetation and benthic fauna have recovered during the 1990s. Trapping of Raccoon Dogs and American Minks has been intensified recently in both areas.

A management and land use plan was established for Viikki Protected Area in 1994 and a restoration and management plan in 1998. Planning of restoration, research and education were carried out under the EU Life project in 1997–2001. The annual management of meadows was started in 1993 by mowing and in 1995 by grazing in an area of 8 ha. Another coastal meadow of ca. 5 ha has been grazed almost continuously for decades.

A management and land use plan was established for Laajalahti Protected Area in 1993. Grazing of meadows, which was stopped in the early 1970s, was started again in 1993 in an area of ca. 30 ha.

26. Conservation measures proposed but not yet implemented:

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

Conservation of the Natura 2000 sites outside the already protected areas will be carried out under the Nature Conservation Act. In Vanhankaupunginlahti, removal of vegetation from the overgrown areas will be carried out as well as ponds and pasture meadows will be enlarged.

27. Current scientific research and facilities:

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

Bird populations of Vanhankaupunginlahti have been under observation since the late 19th century. Annual counts of the breeding bird fauna and migratory waterfowl and waders have been carried out since 1986. The flora was surveyed in 1991–96, and the benthic fauna in 1992. The water quality has been monitored since the 1930s. Birdringing specialized in warblers (*Acrocephalus* spp.) has been regular since the late 1960s.

The breeding waterfowl and waders of Laajalahti have been surveyed regularly since 1984. Observation of migratory waterfowl and waders have been regular since the 1960s.

The vegetation of meadows was monitored in 1993–96 and the aquatic flora was surveyed in 1994. Bird-ringing specialized in warblers (*Acrocephalus* spp.) has been regular since the early 1970s.

28. Current conservation education:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The areas form very important education sites for schools and university. An environmental education centre of Espoo city is located in Laajalahti and of Helsinki city in Vanhankaupunginlahti.

29. Current recreation and tourism:

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

Both areas are very popular for outdoor recreation and birdwatching.

Vanhankaupunginlahti: A nature information centre, six birdwatching towers, four nature trails and a hide have been constructed. The mouth of River Vantaanjoki is a popular area for recreation fishing, and the annual introduction of young fish includes ca. 60 000 Salmons (*Salmo salar*), 50 000 Sea Trouts (*S. trutta*) and 200 000 Whitefishes (*Coregonus lavaretus*). Laajalahti: A nature information centre, two birdwatching towers and a nature trail have been constructed.

30. Jurisdiction:

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

a) Vanhankaupunginlahti: Helsinki city; Uusimaa Regional Environment Centre. Laajalahti: Metsähallitus – Forest and Park Service, Natural Heritage Services, Southern Finland, **b**) Ministry of the Environment.

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.

Vanhankaupunginlahti: Helsinki city; Uusimaa Regional Environment Centre, PO Box 36, FIN-00521 Helsinki, Finland. Ms Kaarina Heikkonen: kaarina.heikkonen@hel.fi and Mr Ilpo Huolman: ilpo.huolman@ymparisto.fi

Laajalahti: Metsähallitus – Forest and Park Service, Natural Heritage Services, Southern Finland, PO Box 94, FIN-01301 Vantaa, Finland. Mr Erkki Virolainen erkki.virolainen@metsa.fi

32. Bibliographical references:

scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Hirvonen, H. 1994. Laajalahden pesivän vesi- ja rantalinnuston muutokset vuosina 1984–1993. Metsähallituksen luonnonsuojelujulkaisuja A 27.

Kala- ja vesitutkimus Oy, Mikkola-Roos, M. & Hirvonen, H. 1996. Toukolanranta, rakentamisen ympäristövaikutukset, ekologinen näkökulma II. Helsingin kaupunkisuunnitteluviraston julkaisuja 20.

Leivo, M. 2000. Suomen kansainvälisesti tärkeät lintualueet. Linnut-vuosikirja 1999. (English summary: Important Bird Areas in Finland).

Leivo, M., Asanti, T., Koskimies, P., Lammi, E., Lampolahti, J., Mikkola-Roos, M. & Virolainen, E. 2002. Suomen tärkeät lintualueet FINIBA. BirdLife Suomen julkaisuja 4, Suomen graafiset palvelut, Kuopio.

Malinen, S. (toim.) 1993. Viikin-Vanhankaupunginlahden luonnonsuojelualueen hoito- ja käyttösuunnitelma 1994–2003. Manuscript. Helsingin kaupungin ympäristökeskus.

Metsähallitus 1993. Laajalahden luonnonsuojelualueen hoito- ja käyttösuunnitelma. Metsähallituksen luonnonsuojelujulkaisuja B 4.

Mikkola-Roos, M. & Oesch, T. 1998. Ekologinen tila, kunnostus- ja hoitosuunnitelma; Viikki-Vanhankaupunginlahti. Helsingin kaupungin ympäristökeskuksen julkaisuja 3.

Mikkola-Roos, M. & Yrjölä, R. (toim.) 2000. Viikki; Helsingin Vanhankaupunginlahden historiaa ja luontoa. Kustannusosakeyhtiö Tammi. Helsinki. (English summary: Viikki, a Helsinki suburb with a natural history of its own).

Nieminen, S. 1995. Laajalahden luonnonsuojelualueen kasvillisuuden seuranta vuosina 1993–94. Manuscript. Metsähallitus, luonnonsuojelu.

Rusanen, P. 1996. Espoon Laajalahden pesivä vesi- ja rantalinnusto 1996. Manuscript. Metsähallitus, Etelärannikon puistoalue.

Venetvaara, J. & Lammi, E. 1994. Laajalahden vesikasvillisuuskartoitus kesällä 1994. Biologitoimisto Jari Venetvaara Oy.

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