Ramsar Information Sheet

Published on 6 April 2017
Update version, previously published on : 31 January 2013

Sweden

Vattenån

ramsar

Designation date	19 March 2013
Site number	2180
Coordinates	62°35'36"N 15°19'25"E
Area	3 621,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

The site consists of the river Vattenån (in the east) and most of its upstream tributaries (in the west). The many upstream tributary rivers and creeks of the river Vattenån include more than 20 lakes. There are also a number of small mires and some wet forests adjacent to the river system. The river system is surrounded by a vast hilly area with forests untouched by man in modern times.

The Vattenån river system has high limnic values and is the purpose of designating the site. The site holds one of Europe's largest populations of freshwater pearl mussel (Margaritifera margaritifera) outside Russia. The lakes and streams are naturally limed and are inhabited by a stable population of trout (Salmo trutta), necessary for the accomplishment of the life-cycle of the fresh water pearl mussel. Otter (Lutra lutra) is also present.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

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Compiler 2

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2.1.2 - Period of collection of data and information used to compile the RIS

From year	2006
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Vattenån
Unofficial name (optional)	Vattenån (river)

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes ○ No ◉
(Update) B. Changes to Site area	No change to area

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	Yes (actual)
(Update) Are the changes	Positive ◉ Negative ○ Positive & Negative ○
(Update) No information available	☑
(Update) Changes resulting from causes operating within the existing boundaries?	☑
(Update) Changes resulting from causes operating beyond the site's boundaries?	☐
(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?	☐
(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?	☐

(Update) Please describe any changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site.

A nature reserve has been established for large parts of the eastern part of the Ramsar site. Now almost the whole of the Ramsar site is protected as a nature reserve.

(Update) Is the change in ecological character negative, human-induced AND a significant change (above the limit of acceptable change)	Yes ○

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps: 0

Boundaries description

The boundary of the Ramsar site corresponds to the nature reserves Helbetesbrännan and Vattenån, except for a few short sequences along Vattenån and where the reserves are adjacent.

2.2.2 - General location

a) In which large administrative region does the site lie? The counties of Västernorrland and Jämtland

b) What is the nearest town or population centre? Ånge (7 km)

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes ○ No ◉

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes ○ No ◉

2.2.4 - Area of the Site

Official area, in hectares (ha): 3621

Area, in hectares (ha) as calculated from GIS boundaries: 3624.21

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	The Palearctic realm: 3 West Eurasian Taiga
Bailey's Ecoregions	130 Subarctic division
WWF Terrestrial Ecoregions	Scandinavian-Russian taiga
Other scheme (provide name below)	boreal zone
Other scheme (provide name below)	Scandinavian-Russian taiga
EU biogeographic regionalization	Boreal

Other biogeographic regionalisation scheme

Nordiska ministerrådet, 1977: Naturgeografisk regionindelning av Norden. NUB 1977:34 Boreal zone (Sub-zone/region: NMR 30a, Norrlands vågiga bergkullterräng med mellanboreala skogsområden).

EEA, 2002. Digital Map of the European Ecological Regions (DMEER): Scandinavian-Russian taiga.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided	The site has some impact for regulating services such as flood control and catchment of sediment. The wetland area around the lakes and the river with its tributaries is quite small so the wetlands themselves do not play an important role in flood regulation, but the protected land area without forestry contribute to some extent. Downstream the site, the local municipality catch water from the river for treatment to drinking water quality.
Other ecosystem services provided	The site is used for recreational fishing.
Other reasons	The river and its many tributaries and lakes along the water course are representative "Permanent rivers and streams (M)" and "Permanent freshwater lakes (O)" for the EU boreal region. The streams are unaffected by forestry roads and leakage of organic and inorganic particles and nutrients, an environmental state that is not common in the region. The site holds one of Europe's largest populations of freshwater pearl mussel (Margaritifera margaritifera) outside Russia. The lakes and streams are naturally limed and are inhabited by a stable population of trout (Salmo trutta), necessary for the accomplishment of the life-cycle of the fresh water pearl mussel.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification	The site supports biodiversity in boreal natural rivers, peatlands and wet forests. The flora and fauna is representative or such habitats in the EU boreal region. The site is rich in species of large carnivores, birds, fish, lichens and bryophytes.

☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions

☑ Criterion 8 : Fish spawning grounds, etc.

Justification	The site supports one of the most valuable, protected populations of Freshwater pearl mussel Margaritifera margaritifera in Sweden. The site is of outmost importance for the long-term survival and re-colonisation of Brown trout Salmo trutta and Fresh water pearl mussels into the adjacent water systems in the region. The site holds all needed prerequisites for a long-term maintenance of the complex life-cycle of the globally endangered freshwater pearl mussel.

3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Aconitum lycoctonum	wolf's-bane	☐	☑	☐		☐		See textbox below the table and in section 3.1.
Daphne mezereum	Mezereon	☐	☑	☐		☐		See textbox below the table and in section 3.1.
Haploporus odorus		☑	☑	☐		☐	Swedish Red List 2015 (VU).	See textbox below the table and in section 3.1.
Letharia vulpina	Wolf lichen	☐	☑	☐		☐	Swedish Red List 2015 (NT).	See textbox below the table and in section 3.1.
Phellinus chrysoloma		☐	☑	☐		☐	Swedish Red List 2015 (NT).	See textbox below the table and in section 3.1.
Phellinus kamahi		☐	☑	☐		☐	Swedish Red List 2015 (NT).	See textbox below the table and in section 3.1.
Polygonatum verticillatum		☐	☑	☐		☐		See textbox below the table and in section 3.1.

Criterion 2 and 3: For all species, the Swedish red-list status and general information for that classification etc can be found at http://artfakta.artdatabanken.se/. Observation of the species can be found in the Swedish database for observations http://www.artportalen.se/.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
Birds																		
CHORDATA/ AVES	*Bubo bubo*	Eurasian Eagle-Owl	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Swedish Red List 2015 (VU). EU Birds Directive Annex I.	See text box below the table and in section 3.1.
CHORDATA/ AVES	*Buteo lagopus lagopus*	Rough-legged buzzard	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Swedish Red List 2015 (NT).	Breeding.
CHORDATA/ AVES	*Circus cyaneus*	Northern Harrier	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Swedish Red List 2015 (NT). EU Birds Directive Annex I.	See text box below the table and in section 3.1.
CHORDATA/ AVES	*Gavia stellata*	Red-throated Diver; Red-throated Loon	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Swedish Red List 2015 (NT). EU Birds Directive Annex I.	Breeding. See also text box below the table and in section 3.1.
CHORDATA/ AVES	*Perisoreus infaustus*	Siberian Jay	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Breeding. See text box below the table and in section 3.1.
CHORDATA/ AVES	*Picoides tridactylus*	Three-toed Woodpecker	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Swedish Red List 2015 (NT). EU Birds Directive Annex I.	Breeding. See text box below the table and in section 3.1.
Fish, Mollusc and Crustacea																		
MOLLUSCA/ BIVALVIA	*Margaritifera margaritifera*	Freshwater pearl mussel	☑	☑	☐	☐	☐	☐	☐	☑				EN	☐	☐	Swedish Red List 2015 (EN).	Breeding. The site holds all prerequisites needed for a long-term maintenance of the complex life-cycle of the freshwater pearl mussel. See text box below the table and in section 3.1.
CHORDATA/ ACTINOPTERYGII	*Salmo trutta*		☐	☑	☐	☐	☐	☐	☐	☑				LC	☐	☐		Breeding. The site contains good places for leks. See text box below the table and in section 3.1.
Others																		
CHORDATA/ MAMMALIA	*Canis lupus*	Wolf	☑	☐	☐	☐	☑	☐	☐	☐				LC	☑	☐	Swedish Red List 2015 (VU). EU Habitats Directive Annex II.	See text box below the table and in section 3.1.
CHORDATA/ MAMMALIA	*Lutra lutra*	European Otter	☑	☑	☐	☐	☐	☐	☐	☐				NT	☑	☐	Swedish Red List 2015 (NT). EU Habitats Directive Annex II.	Breeding. See text box below the table and in section 3.1.
CHORDATA/ MAMMALIA	*Lynx lynx*	Eurasian Lynx	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Swedish Red List 2015 (VU). EU Habitats Directive Annex II.	Breeding. See text box below the table and in section 3.1.
CHORDATA/ MAMMALIA	*Ursus arctos*	Brown Bear; Grizzly Bear	☐	☐	☐	☐	☑	☐	☐	☐				LC	☑	☐	Swedish Red List 2015 (NT).	See text box below the table and in section 3.1.

1) Percentage of the total biogeographic population at the site

Criterion 4 and 8: The site supports one of the most valuable, protected populations of Freshwater pearl mussel Margaritifera margaritifera in Sweden. The site is of outmost importance for the long-term survival and re-colonisation of Fresh water pearl mussels into the adjacent water systems in the EU boreal region. The site holds all prerequisites needed for a long-term maintenance of the complex life-cycle of the globally endangered freshwater pearl mussel.

Criterion 2, 4, 8: For all species, the Swedish red-list status and general information for that classification etc can be found at http://artfakta.artdatabanken.se/. Observation of the species can be found in the Swedish database for observations http://www.artportalen.se/.

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
EU9010. Western Taiga	☑	Natural old boreal forests with little or none human impact. They often contain a lot of dead and rotten wood, have a variation in tree age and length and species composition. Both wet and non-wet subtypes exist. They often support redlisted species.	The Habitat is listed in the EC Habitats Directive Annex I. It is considered to be in unfavourable conservation status in the Swedish part of the EU boreal region (report according to article 17 in 2013).
EU3210. Fennoscandian natural rivers	☑	EU-Boreal natural river systems with nutrient-poor water. The water level shows great amplitude, up to 6 m during the year. Especially high water level after snow melting. The water-dynamics can vary and contain waterfalls, rapid streams.	The Habitat is listed in the EC Habitats Directive Annex I. It is considered to be in unfavourable conservation status in the Swedish part of the EU boreal region (report according to article 17 in 2013).
EU3130. Oligotrophic to mesotrophic standing waters	☑	Aquatic to amphibious short perennial vegetation, oligotrophic to mesotrophic, of lake, pond and pool banks and water-land interfaces.	The Habitat is listed in the EC Habitats Directive Annex I. It is considered to be in unfavourable conservation status in the Swedish part of the EU boreal region (report according to article 17 in 2013).
EU7140. Transition mires and quaking bogs	☐	Peat-forming habitat on oligotrophic to mesotrophic waters, including characteristics intermediate between soligenous and ombrogenous mire types. Swaying swards, floating carpets or quaking mires are also included. It includes many plant communities.	The Habitat is listed in the EC Habitats Directive Annex I. It is considered to be in unfavourable conservation status in the Swedish part of the EU boreal region (report according to article 17 in 2013).
EU7310. Aapa mires	☐	Mire complexes characterised by centres of minerotrophic fen vegetation. Included mire units: mixed mires, string-fens, flark-fens, non-raised Sphagum fuscum-bogs, topogenous or soligenous lawn-, carpet or mud-bottom fens.	The Habitat is listed in the EC Habitats Directive Annex I. It is considered to be in unfavourable conservation status in the Swedish part of the EU boreal region (report according to article 17 in 2013).

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The site consists of the river Vattenån (in the east) and most of its up streams tributaries (in the west). The many tributary rivers and creeks of the river Vattenån include more than 20 lakes. There are also a number of small mires and some wet forests adjacent to the river system. The river system is surrounded by a vast hilly area with forests untouched by man in modern times.

The Vattenån river system has high limnic values and is the purpose of designating the site. The site holds one of Europe's largest populations of freshwater pearl mussel (Margaritifera margaritifera) outside Russia. The lakes and streams are naturally limed and are inhabited by a stable population of trout (Salmo trutta), necessary for the accomplishment of the life-cycle of the fresh water pearl mussel. Otter (Lutra lutra) is also present.

Main habitats are forest (2 750 hectares), open and forested mires (300 hectares) and open freshwater (200 hectares).

Habitats in the EU Habitats Directive present at the site are: Transition mires and quaking bogs (7140), Aapa mires (7310), Western Taiga (9010), Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea (3130), Natural dystrophic lakes and ponds (3160), Fennoscandian natural rivers (3210) and Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation (3260).

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		4		Rare
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		1		Rare
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4		Rare
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		2		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		3		Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		4		Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Boreal coniferouos forest	

4.3 - Biological components

4.3.1 - Plant species

<no data available>

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
CHORDATA/ACTINOPTERYGII	Carassius carassius	Crucian carp	Potentially	No change
CHORDATA/ACTINOPTERYGII	Oncorhynchus mykiss	Redband	Potentially	No change

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 205

a) Maximum elevation above sea level (in metres): 450

- Entire river basin ☐
- Upper part of river basin ☑
- Middle part of river basin ☐
- Lower part of river basin ☐
- More than one river basin ☐
- Not in river basin ☐
- Coastal ☐

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The Ramsar site includes the most upper parts of the river Vattenån, one of the tributaries to the river Ljungan. The area around the lakes Smådjuptjärnarna in the northeast of the Ramsar site is part of another catchment area.

4.4.3 - Soil

- Mineral ☑
  - (Update) Changes at RIS update: No change ◉ Increase ○ Decrease ○ Unknown ○
- Organic ☑
  - (Update) Changes at RIS update: No change ◉ Increase ○ Decrease ○ Unknown ○
- No available information ☐

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

Please provide further information on the soil (optional)

The geomorphology of the catchment area is dominated of the glacial moraine, mainly constituting of large boulders, covering most of the land area.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from rainfall	☐	No change
Water inputs from surface water	☑	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

The catchment area and the upstream tributary rivers and creeks of the river Vattenån are split on more than 20 lakes and small streams in-between. The river Vattenån is dominated by rapids with boulders and stones. Its torrents are unaffected by human interventions.

(ECD) Stratification and mixing regime: Stratification typical for lakes in the boreal region, cold winters with the warmest water at the bottom of the lake and summers with the warmest water in the surface water. Mixing during spring and autumn.

4.4.5 - Sediment regime

Sediment regime unknown ☐

Please provide further information on sediment (optional):

The site is unaffected by forestry, drainage and roads. The wetland area around the lakes and the river with its tributaries is quite small so the wetlands themselves do not play an important role in flood regulation, but the protected land area without forestry contribute to some extent. The site is the source of the watershed and since the site is so undisturbed there are only transport of sediments in a natural small amount, and the lakes and tarns catch some of these sediments. The site will probably contribute to sedimentation in slow-flowing parts and water purification. In general water quality is very good and downstream the site, the local municipality catch water from the river for treatment to drinking water quality.

4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4) ☑

(Update) Changes at RIS update: No change ◉ Increase ○ Decrease ○ Unknown ○

Unknown ☐

Please provide further information on pH (optional):

There is a natural liming of the water caused by intrusions of calcareous bedrock within the site. The water at the site has high buffering capacity and is therefore highly resistant to acidification.

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑

(Update) Changes at RIS update: No change ◉ Increase ○ Decrease ○ Unknown ○

Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

Oligotrophic ☑

(Update) Changes at RIS update: No change ◉ Increase ○ Decrease ○ Unknown ○

Unknown ☐

Please provide further information on dissolved or suspended nutrients (optional):

The water has very low contents of nutrients and low water-colour.

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has greater urbanisation or development ☐

Surrounding area has higher human population density ☐

Surrounding area has more intensive agricultural use ☐

Surrounding area has significantly different land cover or habitat types ☐

Please describe other ways in which the surrounding area is different:

The surrounding land area is used for forestry.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Low
Hazard reduction	Flood control, flood storage	Low

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Recreation and tourism	Recreational hunting and fishing	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	Medium

Within the site: 100s

Outside the site: 1000s

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ◉

4.5.2 - Social and cultural values

i) the site provides 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) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland ☐

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples ☐

iv) 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 ☐

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☑
Local authority, municipality, (sub)district, etc.	☑	☑

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	☑	☑
Commercial (company)	☐	☑

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Länsstyrelsen Västernorrland
SE-871 86 Härnösand, Sweden

Länsstyrelsen Jämtland
SE-831 86 Östersund, Sweden

Provide the name and title of the person or people with responsibility for the wetland: Enheten för Skyddad natur

Postal address:

Länsstyrelsen Västernorrland
SE-871 86 Härnösand, Sweden

Länsstyrelsen Jämtland
SE-831 86 ÖSTERSUND

E-mail address: vasternorrland@lansstyrelsen.se

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Canalisation and river regulation	Medium impact	Low impact	☑	No change	☐	No change

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Low impact	Medium impact	☑	No change	☑	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Logging and wood harvesting	Low impact	Medium impact	☑	No change	☑	No change
Fishing and harvesting aquatic resources	Low impact	Low impact	☑	No change	☑	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact	Low impact	☑	No change	☑	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified/others	Medium impact	Low impact	☑	No change	☐	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Low impact	Low impact	☑	No change	☐	No change
Problematic native species	Medium impact	Medium impact	☑	No change	☐	No change

Please describe any other threats (optional):

Activities connected with timber-floating in the late 19th century as well as pearl-fishing and the introduction of pike and char in some of the lakes have reduced the number and spread of trout and mussels within the catchment area.
A smaller dam is still partially regulating the river flow.
The use of rotenone in some of the medium-sized lakes during the 1980´s has temporarily affected the number of mussels' down-stream.
Invasive species are listed in 4.3.2, but there are two native species that may have a potential impact; Esox lucius (Common pike) and Carassius carassius (Crucian carp).

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Helvetesbrännan norra SAC & SPA	http://www.lansstyrelsen.se/jamtland/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura-2000/HelvetesbrännannorraSE0720201_Bp4.pdf	partly
EU Natura 2000	Helvetesbrännan södra SAC & SPA	http://www.lansstyrelsen.se/vasternorrland/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/Natura-2000/Bevarandeplaner/helvetesbrannan-se0710155.pdf	partly
EU Natura 2000	Vattenån SAC	http://www.lansstyrelsen.se/vasternorrland/SiteCollectionDocuments/Sv/djur-och-natur/skyddad-natur/Natura-2000/Bevarandeplaner/vattenan-se0710176.pdf	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve 1	Helvetesbrännans naturreservat (county of Jämtlands län)	http://www.lansstyrelsen.se/jamtland/Sv/djur-och-natur/skyddad-natur/naturreservat/bracke/helvetesbrannan/Pages/index.aspx	partly
Nature Reserve 2	Helvetesbrännans naturreservat (county of Västernorrlands län)	http://www.lansstyrelsen.se/vasternorrland/Sv/djur-och-natur/skyddad-natur/naturreservat-i-vasternorrland/ange-kommun/helvetesbrannan/Pages/default.aspx	partly
Nature Reserve 3	Vattenån	http://www.lansstyrelsen.se/vasternorrland/Sv/djur-och-natur/skyddad-natur/naturreservat-i-vasternorrland/ange-kommun/vattenan/Pages/default.aspx	partly
Nature Reserve 4	Flistersjöskogen	http://www.lansstyrelsen.se/vasternorrland/Sv/djur-och-natur/skyddad-natur/naturreservat-i-vasternorrland/ange-kommun/flistersjoskogen/Pages/default.aspx	partly

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

Ib Wilderness Area: protected area managed mainly for wilderness protection ☑

II National Park: protected area managed mainly for ecosystem protection and recreation ☐

III Natural Monument: protected area managed mainly for conservation of specific natural features ☐

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention ☐

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☐

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems ☐

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Partially implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

Other:

The management policy for the nature reserve includes prescribed fires for the forests on dry land as a natural disturbance in that ecosystem.

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

In the village of Borgsjö, by the highway E14, 19 km east of the Ramsar site, lies "naturum Ånge" which is a visitor centre for the nature in the municipality of Ånge, including the nature reserves containing parts of the Ramsar site.

A recreation area exists for the local community used for fishing and hiking. There are also five cottages open for public use as well as marked trails and information signposts.

URL of site-related webpage (if relevant): http://www.ange.se/turism

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal community	Implemented
Animal species (please specify)	Implemented

The monitoring programme includes investigations on pearl-mussels and limnic invertebrate fauna

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Arvidsson, B. and Söderberg, H. (red.) 2006: Flodpärlmussla – vad behöver vi göra för att rädda arten? Karlstad Universitet 2006:15.
Gärdenfors, U. (ed.) 2010. Rödlistade arter i Sverige 2010 - The 2010 Red List of Swedish Species. Artdatabanken, SLU, Uppsala
Eriksson, M.O.G., Henriksson, L. och Söderberg, H. 1998. Flodpärlmusslan i Sverige. Naturvårdsverket, Rapport 4887. Stockholm.
Isaksson, L. 1983. Urskogar och urskogsartade naturskogar i Jämtlands län. Länsstyrelsen i Jämtlands Län 1983:13
Jonsson, P. 1999. Helvetesbrännan – Brandhistorik, kulturhistoria och naturskogskvalitet. Publikation 1999:2. Länsstyrelsen i Västernorrlands län. Härnösand.
Länsstyrelsen i Västernorrlands län 2006. Bevarandeplan Natura 2000 - Helvetesbrännan SE 0710155
Länsstyrelsen i Västernorrlands län 2006. Bevarandeplan Natura 2000 - Vattenån SE0710176.
Simonsson, P. 1979. Urskogar och naturskogar i Västernorrlands län. Länsstyrelsen i Västernorrlands län 1979:11. Härnösand.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)
<no file available>

iii. a description of the site in a national or regional wetland inventory
<no file available>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

vi. other published literature
<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Vattenån-Vattensjön (*Länsstyrelsen Västernorrland, 09-07-2013*)

Vattenån (*Länsstyrelsen Västernorrland, 29-09-2005*)

Kniptjärnsbäcken (*Länsstyrelsen Västernorrland, 05-11-2008*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2013-03-19