



# Ramsar Information Sheet

Update version, previously published on 1 January 2002

## Sweden

### Mörrumsån-Pukavik



Designation date	14 November 2001
Site number	1123
Coordinates	56°09'13"N 14°43'28"E
Area	2 557,00 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 lower half of the river Mörrumsån (some 30 km in length) and the shore surrounding the bay at the river mouth. Fifteen red-listed species of fungi have been found, and the endemic *Hygroaster lacteus* is present on small islands in the river. It is one of the foremost areas in Sweden for populations of some fish species. Sport and commercial fishing, chiefly for salmon *Salmo salar* and brown trout *Salmo trutta*, but also for eel *Anguilla anguilla*, are of great importance. The site contains areas of high national interest for nature conservation, cultural heritage and geology.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	Ake Widgren, Helene Pettersson, (NFP Jenny Lonnstad)
Institution/agency	Länsstyrelsen i Blekinge län (AA Naturvårdsverket)
Postal address	Länsstyrelsen i Blekinge län, S-371 86 Karlskrona, Sweden (AA Naturvårdsverket, S-106 48 Stockholm) (AA registrar@naturvardsverket.se) (AA Phone +46 10 698 10 00) (AA Fax +46 10 698 16 00)
E-mail	blekinge@lansstyrelsen.se
Phone	+46 10 22 40 000
Fax	+46 10 22 40 223

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

From year	2012
To year	2015

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Mörrumsån-Pukavik
Unofficial name (optional)	Mörrumsån-Pukavik (river and bay)

#### 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 <input checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has decreased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>

#### 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 <input checked="" type="radio"/> Negative <input type="radio"/> Positive & Negative <input type="radio"/>
(Update) No information available	<input checked="" type="checkbox"/>
(Update) Changes resulting from causes operating within the existing boundaries?	<input type="checkbox"/>
(Update) Changes resulting from causes operating beyond the site's boundaries?	<input type="checkbox"/>
(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?	<input type="checkbox"/>
(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?	<input checked="" type="checkbox"/>
(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.	

The border of the site has been more accurately drawn. Some arable land, forest, built-up areas that aren't wetlands have been excluded. A few small wetlands that aren't part of the river system and don't qualify for international importance has also been excluded. The site now includes all part of the river and the small bays that were supposed to be part of the site when the site was designated of which some were excluded due to incorrect digitalisation in the RIS-map from 2006.

(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

#### Boundaries description (optional)

The marine part of the site follows the shoreline or where the water is about 6 meters deep. The rest of the site follows the riverside including a buffer zone of land, or more land area where there are nature reserve along the river.

### 2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

### 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):

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

### 2.2.5 - Biogeography

#### Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardys Biogeographical Provinces	11 = Middle European Forest
Marine Ecoregions of the World (MEOW)	Baltic seas
EU biogeographic regionalization	Continental region, Boreal region
Freshwater Ecoregions of the World (FEOW)	Ecoregion 406 - Northern Baltic drainages

#### Other biogeographic regionalisation scheme

Nordiska ministerrådet, 1977. Naturgeografisk regionindelning av Norden. NU B 1977:34 NMR 29a, "9 Blekinges sprickdalsterräng och ekskogsområde" and "12a Sydöstra Smålands skog- och sjörika slättområden" .

DMEER 2002 (EEA) Digital Map of European Ecological Regions: mostly "Sarmatic mixed forest" and in the most western part of the site "Baltic mixed forest".

### 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 is important for sediment and nutrient retention and export. The site is also important for water purification and maintenance of water quality.
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Other ecosystem services provided 

There is excellent fishing at the site.
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Other reasons 

A representative example of a natural wetland type (permanent river and connecting shallow marine waters) in the EU Continental region (partly in EU Boreal region).
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- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification 

The site supports particular elements of biological diversity that are characteristic of the EU Continental region. The river has a unique diversity of species and contains a large number of taxa, among them several red-listed species. The bay harbours an interesting marine bird fauna. The site has the most important population of <i>Salmo salar</i> in the southern part of the Baltic sea. The benthic fauna in Mörrumsån is extremely rich in species. More than 180 taxa have been found in the river, some of them nationally red-listed. The fungi flora close to the river is unique, including one species only found at the site. In the nature reserve Kåringahejan as many as 15 red-listed species have been found.
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- Criterion 4 : Support during critical life cycle stage or in adverse conditions

- Criterion 7 : Significant and representative fish

Justification 





The site has a great fish diversity, some species nationally redlisted like <i>Vimba vimba</i> . Supports a significant proportion of several fish species including <i>Salmo salar</i> , <i>Salmo trutta</i> that are representative of wetland benefits. Apart from the Emån river (also a Ramsar site), there is no other place in Sweden where the populations of the two salmonid species salmon <i>Salmo salar</i> and brown trout <i>Salmo trutta</i> are found in greater numbers.
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- Criterion 8 : Fish spawning grounds, etc.

Justification 

The site is of international importance as spawning and recruitment area for fish, primarily salmon and brown trout.
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#### 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
<i>Baldellia repens</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Swedish Red List 2015 (EN).	The species has a significant population in the lower part of the river. See textbox below.
<i>Dichelyma capillaceum</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Swedish Red List 2015 (NT).	Occurs along the shores to the river. See textbox below.
<i>Limosella aquatica</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC 	<input type="checkbox"/>	Swedish Red List 2015 (NT).	Occurs along the river. See textbox below.

Criterion 2 and 3: For all species, their status in the Swedish Red List and general information for that classification, their distribution 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/>.

*Hygroaster lacteus* has been found on small islands in the river. This species is not known from any other site in the world, /Swedish Red List 2015 (NE). Criteria 2 och 3 are applicable.

### 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								
<b>Birds</b>																	
CHORDATA/AVES	 <i>Alcedo atthis</i>	Common Kingfisher	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU). EC Birds Directive Annex I.	Good breeding and foraging habitats results in regular breeding. See textbox below.
CHORDATA/AVES	 <i>Hydroprogne caspia</i>	Caspian Tern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Good breeding and foraging habitats results in regular breeding. See textbox below.
CHORDATA/AVES	 <i>Stemula albigifrons</i>	Little Tern	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU). EC Birds Directive Annex I.	Good breeding and foraging habitats results in regular breeding. See textbox below.
CHORDATA/AVES	 <i>Thalasseus sandvicensis</i>	Sandwich Tern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (VU).	See textbox below.
<b>Fish, Mollusc and Crustacea</b>																	
CHORDATA/ACTINOPTERYGII	 <i>Anguilla anguilla</i>	Eel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (CR).	See textbox below.
MOLLUSCA/BIVALVIA	 <i>Margaritifera margaritifera</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (EN).	See textbox below.
CHORDATA/ACTINOPTERYGII	 <i>Salmo salar</i>	Salmon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	EC Habitats Directive Annex II.	See textbox below and info under 3.1
CHORDATA/ACTINOPTERYGII	 <i>Salmo trutta</i>	Brown trout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		The most important population in the south part of the Baltic sea. Ref. Fiskeriverket 2001. See textbox below and info under 3.1
MOLLUSCA/BIVALVIA	 <i>Unio crassus</i>	Thick Shelled River Mussel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (EN).	See textbox below.
CHORDATA/ACTINOPTERYGII	 <i>Vimba vimba</i>	Zarte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT).	See textbox below and info under 3.1
<b>Others</b>																	
CHORDATA/MAMMALIA	 <i>Lutra lutra</i>	European Otter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Swedish Red List 2015 (NT). EC Habitats Directive Annex II.	See textbox below.

1) Percentage of the total biogeographic population at the site

Criterion 2: For all species, their status in the Swedish Red List and general information for that classification as well as their distribution etc can be found at <http://artfakta.artdatabanken.se>.

Criteria 2, 3, 7 and 8: Observation of the species can be found in the Swedish database for observations <http://www.artportalen.se/>. Data about bivalvia: <http://www.musselportalen.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
Fennoscandian natural rivers	<input checked="" type="checkbox"/>	Near-natural river systems or parts of such systems containing nutrient-poor water. The water level shows great amplitude. The water-dynamics can vary and contain waterfalls, rapid streams, calm water, and small lakes adjacent to the river.	According to the article 13-report in 2013, this habitat has an unfavourable conservation status for the Swedish parts of all the EU-biogeographical regions existing in Sweden.
Large shallow inlets an bays	<input checked="" type="checkbox"/>	Large indentations of the coast where, in contrast to estuaries, the influence of freshwater is generally limited. These areas are generally sheltered from wave action and contain a great diversity of habitats with a variety of benthic communities.	According to the article 13-report in 2013, this habitat has an unfavourable conservation status for the Swedish parts of all the EU-biogeographical regions existing in Sweden.



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

### 4.1 - Ecological character

The site consists of the river Mörrumsån and the bay Pukavik in the Baltic Sea where the river has its outlet. The river has a unique diversity of species and contains a large number of taxa, for example is the benthic fauna extremely rich in species. Along the river there are both grazed pastures and wetland meadows. Pastures are surrounded by beautiful stands of broad-leaved trees, and on the banks the dominating tree vegetation consists of a mixed deciduous forest. Further up on the slopes, where the terrain is more plateau-like, conifers dominate. Further south along the river, there is a lot of agricultural land. The bay has brackish water. Along the coast line there are clusters of islands and islets. On the islands in the bay, the main vegetation is grazed grassland and bushlands with juniper *Juniperus communis*, but there are bare rocky islands as well. The coast along the bay contains oak *Quercus robur* forests, bushland, deciduous forests and rocky areas, forested with pine *Pinus sylvatica*. There are also a lot of meadows in the coastal zone. The bay harbours an interesting marine bird fauna. The site is important for *Salmo salar* and other fishes of interest for fishing. Measures have been done to increase the possibilities for species to migrate in the river and pass the dams built for hydro-electric power.

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

#### Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters		1	990	Representative
H: Intertidal marshes		4	5	Representative

#### 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		2	144	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		3	30	Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
broad-leaved deciduous forests	36

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Osmunda regalis</i>	royal fern	very common along the river

##### Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RiS update
<i>Nymphoides peltata</i>		Potentially	No change

#### 4.3.2 - Animal species

##### Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range / endemism/other
CHORDATA/AVES	<i>Actitis hypoleucos</i>	Common Sandpiper				

### 4.4 - Physical components

#### 4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mid with no dry season, warm summer)

Unknown

#### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

RIS for Site no. 1123, Mörrumsån-Pukavik, Sweden

- 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 catchment area is the river Mörrumsån. Its outlet is in the Baltic sea.

4.4.3 - Soil

Mineral

(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

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	
Usually seasonal, ephemeral or intermittent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input type="checkbox"/>	No change
Marine water	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

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

There are many dams in the river, three within the site and several others upstream the site. These dams affect the water regime.

4.4.5 - Sediment regime

Sediment regime is highly variable, either seasonally or inter-annually

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

Sediment regime unknown

Please provide further information on sediment (optional):

Highly variable and seasonally, but most of the sediment transportation occurs through the site.

4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4)

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

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Mixohaline (brackish)/Mixosaline (0.5-30 g/l)

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

Euhaline/Eusaline (30-40 g/l)

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

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Mesotrophic

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

Unknown

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 site consists of the river and the large bay of the Baltic sea. The surroundings mostly consist of more arable land, built-up areas, conifer forests and areas with deeper water in the Baltic.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Low
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	High
Spiritual and inspirational	Inspiration	High

Supporting Services

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

Within the site:

Outside the site:

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
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
National/Federal government	<input checked="" type="checkbox"/>	<input type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Commercial (company)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### 5.1.2 - Management authority

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

Länsstyrelsen i Blekinge län

Provide the name and title of the person or people with responsibility for the wetland:

Naturvårdsdirektören/Avdelningschefen (Head of Department)

Postal address:

S-371 86 Karlskrona, Sweden

E-mail address:

blekinge@lansstyrelsen.se

## 5.2 - Ecological character threats and responses (Management)

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

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Annual and perennial non-timber crops	Low impact	Low impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

#### Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Renewable energy	High impact	Low impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use			<input type="checkbox"/>		<input checked="" type="checkbox"/>	

#### 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	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Household sewage, urban waste water	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Industrial and military effluents	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Agricultural and forestry effluents	Low impact	Low impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

Some of the existing hydroelectric power plants and dams have a negative impact on the ecological status, preventing fish from migrating. Water rights for some of them need to be reconsidered.

## 5.2.2 - Legal conservation status

### Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Blekinge arkipelag	<a href="http://www.blekingearkipelag.se/">http://www.blekingearkipelag.se/</a>	partly

### Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	7 Natura sites, described under national legislation until the database accepts more than one Natura site here.		partly

### National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Bird Sanctuaries	Altogether 9 bird sanctuaries in the Bay	<a href="http://skyddadnatur.naturvardsverket.se/">http://skyddadnatur.naturvardsverket.se/</a>	partly
Natura 2000 SCI (1)	SE0410054 Åmma	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPÅmma050909.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPÅmma050909.pdf</a>	partly
Natura 2000 SCI (2)	SE0410066 Spraglehall	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPSpraglehall050909.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPSpraglehall050909.pdf</a>	partly
Natura 2000 SCI (3)	SE0410068 Pukaviksbukten	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPPukaviksbukten050909.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPPukaviksbukten050909.pdf</a>	partly
Natura 2000 SCI (4)	SE0410075 Kåringahejan	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPKåringahejan050909.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPKåringahejan050909.pdf</a>	partly
Natura 2000 SCI (5)	SE0410128 Mörrumsån	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPMörrumsån050909.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPMörrumsån050909.pdf</a>	partly
Natura 2000 SCI (6)	SE0410164 Hämas	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPHämas050909.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPHämas050909.pdf</a>	partly
Natura 2000 SCI (7)	SE0410233 Elleholm	<a href="http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPElleholm2006.pdf">http://www.lansstyrelsen.se/blekinge/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natura2000/BPElleholm2006.pdf</a>	partly
Nature Reserve (1)	Kåringahejan	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/karingahejan/Pages/index.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/karingahejan/Pages/index.aspx</a>	partly
Nature Reserve (2)	Stilleryd	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/stilleryd/Pages/index.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/stilleryd/Pages/index.aspx</a>	partly
Nature Reserve (3)	Spraglehall	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/solvesborg/spraglehall/Pages/index.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/solvesborg/spraglehall/Pages/index.aspx</a>	partly
Nature Reserve (4)	Hönebygget	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/Honebygget/Pages/default.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/Honebygget/Pages/default.aspx</a>	partly
Nature Reserve (5)	Åmma	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/olofstrom/amma/Pages/index.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/olofstrom/amma/Pages/index.aspx</a>	partly
Nature Reserve (6)	Elleholm	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/elleholm/Pages/index.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/elleholm/Pages/index.aspx</a>	partly
Nature Reserve (7)	Mörrumsåns dalgång	<a href="http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/morumsans-dalgang/Pages/index.aspx">http://www.lansstyrelsen.se/blekinge/Sv/djur-och-natur/skyddad-natur/naturreservat/karlshamn/morumsans-dalgang/Pages/index.aspx</a>	partly

## Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Blekinge archipelago	<a href="http://datazone.birdlife.org/site/factsheet/blekinge-archipelago-sweden">http://datazone.birdlife.org/site/factsheet/blekinge-archipelago-sweden</a>	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	Partially implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Hydrology management/restoration	Proposed
Faunal corridors/passage	Partially implemented

Species

Measures	Status
Threatened/rare species management programmes	Proposed

Human Activities

Measures	Status
Regulation/management of recreational activities	Partially implemented
Research	Partially implemented

Other:

Most parts of River Mörrumsån and the bay Pukavik included in the Ramsar site have restrictions concerning fishing according to national fishery regulations.

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:

There is an information centre for the salmon (and the river etc) close to the site. It's established and run by a forest company (that owns the fishing rights).

URL of site-related webpage (if relevant):

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but a plan is being prepared

Further information

Actually there are no plans in preparation but there are intentions to make plans for a future restoration measures adjacent to the Ramsar site, with the purpose to improve the water quality in the bay Pukavik (the southern part of the Ramsar site). The County would like to restore the inner parts of the long and narrow bay Marsundet (between Elleholm and Stensnäs). Today that part is farmed, thanks to a dyke and draining measures. The County would also like to create a wetland where the channel from Vesan has in outlet in the Baltic sea (close to the village Norje).

5.2.7 - Monitoring implemented or proposed

Monitoring of salmon and trout populations in the river (Swedish Board of Fisheries).  
Monitoring activity and pollution control in the bay Pukaviksbukten (The Coastal Management and Protection Association).



## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Biosfärområde Blekinge Arkipelag. 2012. .

Fiskeriverket. 2001. Havsöringens ekologi.

Gärdenfors, U (ed.) 2015. Rödlistade arter i Sverige 2015 - The 2015 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala.

Limnodata HB. 1986. Vad händer med laxens föda i Mörrumsån? - en undersökning av bottenfaunan i Mörrumsån – rapport, juni 1986.

Länsstyrelsen Blekinge Län & Karlshamn kommun. 1998. Mörrumsån – en hotad naturresurs.

Rappe, C. (ed). 1999. Baltic Salmon Rivers – Status in the late 1990's as reported by the countries in the Baltic region. The Swedish Environmental Protection Agency.

Sportfiskarna. 2011. Laxfisket i Bottenvikens älvars amt i Mörrumsån.

#### 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

<1 file(s) uploaded>

vi. other published literature

<1 file(s) uploaded>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



River Mörrumsån north of Mörrum. ( Länsstyrelsen Blekinge, Lars-Göran Olsén, 04-10-2011 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2001-11-14