**Norway**

Nordre Oyeren

- **Designation date**: 24 July 1985
- **Site number**: 307
- **Coordinates**: 59°51'52"N 11°09'48"E
- **Area**: 6,440.70 ha

https://rsis.ramsar.org/ris/307

Created by RSIS V.1.6 on - 8 May 2020
1 - Summary

Nordre Øyeren is northern Europe’s largest inland delta, formed by the three rivers: Glomma, Nitelva and Leira. Nitelva and Leira meet at the area known as Svellet and then flow towards where the delta of Norway’s largest river, Glomma, flows into Øyeren. During spring floods, the rivers deposit large amounts of gravel, sand, silt and clay. The delta is built up of 3 km³ of loose material, mainly deposits from the last ice age. The delta platform is 10 km long, in other words a third of Øyeren’s length. The amount of land in the delta is constantly changing. It has grown fourfold in the last hundred years, and is formed like a long “bird-foot” delta. With the current water regulations, the water levels fluctuate 3-4 metres during a year. Large variations in water levels and the influence of the rivers create varying natural conditions. This is one of the main reasons for the areas species diversity and the large populations of birds, fish, benthic organisms and plants. Early in spring, when water levels are lowest, large areas of mudbank are exposed, where migrant birds have good access to food. The area’s main function for birdlife is a staging and feeding site during migration. The reserve is also considered internationally important as a staging area, and in particular ducks and waders use Øyeren both during spring and autumn migration. For several species, the totals for Øyeren are higher than any other site in Norway. Øyeren is also important as a wintering site and has Norway’s largest numbers of the whooper swan. A total of 260 species are recorded in the reserve, of which 133 species associated with wetlands, among these 11 species breed regularly (the most common being mallard), as well as several passerines, especially reed bunting. Several pairs of osprey nest around the reserve and use the area to hunt. The area is also important for the general biodiversity and Øyeren is Norway’s most species-rich lake, also as far as fish are concerned. The aquatic plant communities and damp meadow community dominate the delta area. Varying natural condition make Øyeren one of northern Europe’s most species-rich lakes as far as water plants are concerned. The mud banks and shallow waters have a species-rich fauna of invertebrates and the fertile vegetation also provides good conditions for several mammals.
2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name: Ellen Haakonsen Karr
Institution/agency: Norwegian Environment Agency
Postal address: P.O. Box 5672 Torgarden, N-7485 Trondheim, Norway
E-mail: post@miljodir.no
Phone: +47 73 58 05 00

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

From year: 1994
To year: 2016

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Nordre Oyeren

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

<table>
<thead>
<tr>
<th>Changes to Site boundary</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The boundary has been delineated more accurately</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>The boundary has been extended</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>The boundary has been restricted</td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changes to Site area</th>
<th>the area has increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Site area has been calculated more accurately</td>
<td>□</td>
</tr>
<tr>
<td>The Site area has been delineated more accurately</td>
<td>□</td>
</tr>
<tr>
<td>The Site area has increased because of a boundary extension</td>
<td>✓</td>
</tr>
<tr>
<td>The Site area has decreased because of a boundary restriction</td>
<td>□</td>
</tr>
</tbody>
</table>

2.1.5 - Changes to the ecological character of the Site

6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?

Not evaluated

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 boundaries of the Ramsar site is the same as the borders of Nordre Øyeren nature reserve, Sørumsneset nature reserve, Holmen nature reserve, Jølsen nature reserve and Stilla and Brauterstilla nature reserve.

2.2.2 - General location

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

b) What is the nearest town or population centre? Lillestrøm

2.2.3 - For wetlands on national boundaries only
RIS for Site no. 307, Nordre Oyeren, Norway

2.2.4 - Area of the Site

Official area, in hectares (ha): 6440.7
Area, in hectares (ha) as calculated from GIS boundaries: 6438.64

2.2.5 - Biogeography

<table>
<thead>
<tr>
<th>Biogeographic regions</th>
<th>Biogeographic region</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU biogeographic regionalization</td>
<td>Boreal</td>
</tr>
<tr>
<td>Other scheme (provide name below)</td>
<td>Boreonemoral vegetation zone, transitional section (Bn-OC)</td>
</tr>
</tbody>
</table>

Other biogeographic regionalisation scheme

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

Other reasons

North Europe’s largest inland delta, shaped like a long “bird’s foot delta” formed by the confluence of three rivers. With the exception of some farming the delta is relatively intact. Large variations in water levels and the influence of the rivers create varying natural conditions.

☐ Criterion 2: Rare species and threatened ecological communities

☐ Criterion 3: Biological diversity

Justification

Large variations in water levels and temperature create varying natural conditions. This is the main reason for the diversity of species and the large populations of birds, fish, benthic organisms and plants. Cold water from the river Glomma dominates the main river course, whereas the shallow areas with still water have relatively warm water in summer. Early in spring, when water levels are lowest due to extraction, large areas of mudbanks are exposed where migrant birds have good access to food. Nordre Øyeren is perhaps the most important inland staging site for migrant waterbirds in the whole of southern Norway. Together with the Dokkal delta in Randfjorden, Løgved delta and Åkersvika by lake Mjøsa, Nordre Øyeren is a major element in an important system of inland wetlands; it has the greatest diversity of fish species in Norwegian freshwaters, with 25 of 27 known species found. The vegetation varies a lot from extremely rich in the area around Svellet to the cold shallows dominated by water form rivers. 325 wetland plant species are recorded, of which over 50 are purely aquatic species (submerged for more than half of the growing season).

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

☐ Criterion 7: Significant and representative fish

Justification

Characteristic fish in shallow bays with clear water include roach Rutilus rutilus, orfe Leuciscus idus, perch Perca fluviatilis, bream Abramis brama, and pike Esox lucius. Open areas with more turbulent water have a fish community including roach, bream, white bream Blicca bjoerkna, bleak Alburnus alburnus and occasionally ruff Acerina cernua as the dominating species. The fish fauna are influenced by colder water from Glomma are characterised by fewer warm loving species and instead species including dace Leuciscus leuciscus and perch, as well as grayling Thymallus thymallus, whitefish Coregonus lavaretus and burbot Lota lota.

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

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Criterion 2</th>
<th>Criterion 3</th>
<th>Criterion 4</th>
<th>IUCN Red List</th>
<th>CITES Appendix I</th>
<th>Other status</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potamogeton pusillus</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>LC</td>
<td></td>
<td>National red list - EN</td>
<td></td>
</tr>
</tbody>
</table>

3.3 - Animal species whose presence relates to the international importance of the site
<table>
<thead>
<tr>
<th>Phylum</th>
<th>Scientific name</th>
<th>Common name</th>
<th>Species qualifies under criterion</th>
<th>Species contributes under criterion</th>
<th>Pop. Size</th>
<th>Period of pop. Est.</th>
<th>% occurrence</th>
<th>IUCN Red List</th>
<th>CITES Appendix</th>
<th>CMS Appendix</th>
<th>Other Status</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>Anas crecca</td>
<td>Eurasian Teal; Green-winged Teal</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Migration, maximum numbers 7608 individuals. For Criterion 6 there should be a population of minimum 5000 individuals to fulfill this criterion. It is possible that this criterion is fulfilled for the Ramsar site, but it is not well documented.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Anas penelope</td>
<td>Eurasian Wigeon</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Migration - spring and autumn</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Anas querquedula</td>
<td>Garganey</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - EN</td>
<td>Occasional visitor in spring, summer and Autumn.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Anser anser</td>
<td>Greylag Goose</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Criterion 4: The site is an important staging site - maximum number of ind. observed 1400 in Autumn 2017.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Anser anser brachyrhynchus</td>
<td>Pink-footed Goose</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Criterion 4: Important staging area - maximum number of ind. observed 2500 in spring 2015.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Aythya fuligula</td>
<td>Tufted Duck</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Criterion 4: Important staging site for this species.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Aythya marila</td>
<td>Greater Scaup</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - VU</td>
<td>Criterion 4: Important staging site for this species.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Bucephala clangula</td>
<td>Common Goldeneye</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Criterion 4: Important staging site for this species.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Circus cyaneus</td>
<td>Northern Harrier</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - EN</td>
<td>Regularly observed in the area.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Crex crex</td>
<td>Corn Crake</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - CR</td>
<td>Observed in small numbers, possibly breeding.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Cygnus cygnus</td>
<td>Whooper Swan</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td></td>
<td>456 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Annex II, Bern Convention</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Mergus merganser</td>
<td>Common Merganser</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Criterion 4: Important staging area for this species.</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Numenius arquata</td>
<td>Eurasian Curlew</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - VU</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Phalacrocorax carbo</td>
<td>Osprey, Western Osprey</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Annex II, CMS</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Philomachus pugnax</td>
<td>Ruff</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - EN</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Phasianus colchicus</td>
<td>Spotted Crake</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - VU</td>
</tr>
<tr>
<td>CHORDATA / AVES</td>
<td>Sterna hirundo</td>
<td>Common Tern</td>
<td>☑️</td>
<td>☑️</td>
<td>LC</td>
<td>☑️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National red list - EN</td>
</tr>
</tbody>
</table>
CHORDATA /
AVES
Tringa nebularia
  
  
Common
Greenshank
 
 
LC 
Criterion 4: Important staging area for this species.

CHORDATA /
AVES
Vanellus vanellus
  
  
Northern Lapwing
  
  
NT 
National red list - EN 
Criterion 4: Important staging and breeding site for this species.

Fish, Mollusc and Crustacea

CHORDATA /
ACTINOPTERYGII
Abramis brama
  
  
Aral bream
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Alburnus alburnus
  
  
Bleak; Bleak; Bleak
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Blicca bjoerkna
  
  
White bream
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Coregonus lavaretus
  
  
Baltic whitefish
  
  
VU 

CHORDATA /
ACTINOPTERYGII
Esox lucius
  
  
Ruff
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Gymnocephalus cernua
  
  
Baltic whitefish
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Leuciscus idus
  
  
Golden orfe
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Leuciscus leuciscus
  
  
Common dace
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Lota lota
  
  
Thin-tailed burbot; Thin-tailed burbot
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Perca fluviatilis
  
  
European perch
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Rutilus rutilus
  
  
Roach
  
  
LC 

CHORDATA /
ACTINOPTERYGII
Thymallus thymallus
  
  
European grayling; European greyling; European grayling
  
  
LC 

1) Percentage of the total biogeographic population at the site

According to the National Red List for species 2015 there is a total of 77 red-listed species of birds in Norway. Of these 64 are registered in Nordre Øyeren.

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

<table>
<thead>
<tr>
<th>Name of ecological community</th>
<th>Community qualifies under Criterion 2?</th>
<th>Description</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>inland delta</td>
<td>✅</td>
<td>Nordre Øyeren is the largest inland delta in Northern Europe.</td>
<td>Norwegian red list for habitat types - NT.</td>
</tr>
<tr>
<td>Oxbow lakes</td>
<td>✅</td>
<td>As a part of the Ramsar site we find the nature reserve Stilla and Brauterstilla. This nature reserve consist of two oxbow lakes. We also find several oxbow lakes in Nordre Øyeren nature resene.</td>
<td>Norwegian red list for habitat types - EN (oxbow lakes, meanders and flood channels)</td>
</tr>
</tbody>
</table>
4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

Nordre Øyeren is northern Europe’s largest inland delta, formed by the three rivers Glomma, Nitelva and Leira. Nitelva and Leira meet at the area known as Svellet and then flow towards where the delta of Norway’s largest river, Glomma, flows into Øyeren. During spring floods the rivers deposit large amounts of gravel, sand, silt and clay. The delta is built up of 3 km³ loose material, mainly deposits from the last ice age. The delta platform is 10 km long. The amount of land in the delta is constantly changing. It has grown fourfold in the last hundred years and is formed like a long “bird-foot” delta. With the current water regulations, the water levels fluctuate 3-4 metres during a year. Large variations in water levels and the influence of the rivers create varying natural conditions. This is one of the main reasons for the Site’s species diversity and the large populations of birds, fish, benthic organisms and plants. Water levels are lowest in early spring when large areas of mud banks are exposed, providing excellent access to food for abundant birdlife staging and feeding on the Site during spring and autumn migration. Øyeren is also important as a wintering site. The area is also important for the general biodiversity and Øyeren is Norway’s most species-rich lake, also as far as fish are concerned. The aquatic plant communities and damp meadow community dominate the delta area.

In 1992 an additional nature reserve was established in the north of Øyeren, adjacent to Nordre Øyeren Nature Reserve.

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

<table>
<thead>
<tr>
<th>Inland wetlands</th>
<th>Local name</th>
<th>Ranking of extent (1: greatest - 4: least)</th>
<th>Area (ha) of wetland type</th>
<th>Justification of Criterion 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh water &gt; Flowing water &gt;&gt; L: Permanent inland deltas</td>
<td>Nordre Øyeren</td>
<td>1</td>
<td></td>
<td>Unique</td>
</tr>
<tr>
<td>Fresh water &gt; Flowing water &gt;&gt; M: Permanent rivers/streams/ creeks</td>
<td></td>
<td>3</td>
<td></td>
<td>Rare</td>
</tr>
<tr>
<td>Fresh water &gt; Lakes and pools &gt;&gt; O: Permanent freshwater lakes</td>
<td></td>
<td>2</td>
<td></td>
<td>Representative</td>
</tr>
</tbody>
</table>

Other non-wetland habitat

<table>
<thead>
<tr>
<th>Other non-wetland habitats within the site</th>
<th>Area (ha) if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td></td>
</tr>
</tbody>
</table>

4.3 - Biological components

4.3.1 - Plant species

<table>
<thead>
<tr>
<th>Invasive alien plant species</th>
<th>Scientific name</th>
<th>Common name</th>
<th>Impacts</th>
<th>Changes at RIS update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impatiens glandulifera</td>
<td></td>
<td>Potentially</td>
<td></td>
<td>No change</td>
</tr>
<tr>
<td>Ricciocarpus natans</td>
<td></td>
<td>No impacts</td>
<td></td>
<td>No change</td>
</tr>
<tr>
<td>Solidago canadensis</td>
<td></td>
<td>Potentially</td>
<td></td>
<td>No change</td>
</tr>
</tbody>
</table>

4.3.2 - Animal species

<table>
<thead>
<tr>
<th>Invasive alien animal species</th>
<th>Phylum</th>
<th>Scientific name</th>
<th>Common name</th>
<th>Impacts</th>
<th>Changes at RIS update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neovison vison</td>
<td>CHORDATA/MAMMALIA</td>
<td>American Mink</td>
<td>Potentially</td>
<td></td>
<td>No change</td>
</tr>
</tbody>
</table>

4.4 - Physical components

4.4.1 - Climate

<table>
<thead>
<tr>
<th>Climatic region</th>
<th>Subregion</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Mesast Mid-Latitude climate with cold winters</td>
<td>Dfb: Humid continental (Humid with severe winter, no dry season, warm summer)</td>
</tr>
</tbody>
</table>

4.4.2 - Geomorphic setting
**4.4.3 - Soil**

Mineral ✔

(update) Changes at RIS update
No change ✔ Increase ○ Decrease ○ Unknown ○

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

<table>
<thead>
<tr>
<th>Presence?</th>
<th>Changes at RIS update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually permanent water present</td>
<td></td>
</tr>
</tbody>
</table>

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

Glomma and Øyeren are regulated for production of hydroelectricity.

**4.4.5 - Sediment regime**

Sediment regime unknown ○

<no data available>

**4.4.6 - Water pH**

Unknown ✔

**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**

Eutrophic ✔

(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 ✔
4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

<table>
<thead>
<tr>
<th>Ecosystem service</th>
<th>Examples</th>
<th>Importance/Extent/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland non-food products</td>
<td>Livestock fodder</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Regulating Services

<table>
<thead>
<tr>
<th>Ecosystem service</th>
<th>Examples</th>
<th>Importance/Extent/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erosion protection</td>
<td>Soil, sediment and nutrient retention</td>
<td>High</td>
</tr>
<tr>
<td>Pollution control and detoxification</td>
<td>Water purification/waste treatment or dilution</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Cultural Services

<table>
<thead>
<tr>
<th>Ecosystem service</th>
<th>Examples</th>
<th>Importance/Extent/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation and tourism</td>
<td>Recreational hunting and fishing</td>
<td>Medium</td>
</tr>
<tr>
<td>Recreation and tourism</td>
<td>Picnics, outings, touring</td>
<td>Medium</td>
</tr>
<tr>
<td>Recreation and tourism</td>
<td>Nature observation and nature-based tourism</td>
<td>High</td>
</tr>
<tr>
<td>Scientific and educational</td>
<td>Educational activities and opportunities</td>
<td>High</td>
</tr>
<tr>
<td>Scientific and educational</td>
<td>Major scientific study site</td>
<td>High</td>
</tr>
<tr>
<td>Scientific and educational</td>
<td>Important knowledge systems, importance for research (scientific reference area or site)</td>
<td>High</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Within the Ramsar Site</th>
<th>In the surrounding area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other types of private individual owner(s)</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

5.1.2 - Management authority

The site is managed by the County Governor of Oslo and Akershus, which is under instructions of Norwegian Environment Agency.

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

County Governor of Oslo and Akershus

Postal address:
Pb 8111 Dep
N-0032 OSLO

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

<table>
<thead>
<tr>
<th>Factors adversely affecting site</th>
<th>Actual threat</th>
<th>Potential threat</th>
<th>Within the site</th>
<th>Changes</th>
<th>In the surrounding area</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock farming and ranching</td>
<td>Low impact</td>
<td>Low impact</td>
<td>✓</td>
<td>No change</td>
<td>✓</td>
<td>No change</td>
</tr>
</tbody>
</table>

Transportation and service corridors

<table>
<thead>
<tr>
<th>Factors adversely affecting site</th>
<th>Actual threat</th>
<th>Potential threat</th>
<th>Within the site</th>
<th>Changes</th>
<th>In the surrounding area</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads and railroads</td>
<td>Low impact</td>
<td>Low impact</td>
<td>✓</td>
<td>No change</td>
<td>✓</td>
<td>No change</td>
</tr>
</tbody>
</table>

Natural system modifications

<table>
<thead>
<tr>
<th>Factors adversely affecting site</th>
<th>Actual threat</th>
<th>Potential threat</th>
<th>Within the site</th>
<th>Changes</th>
<th>In the surrounding area</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dams and water management/use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unspecified/others</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Invasive and other problematic species and genes

<table>
<thead>
<tr>
<th>Factors adversely affecting site</th>
<th>Actual threat</th>
<th>Potential threat</th>
<th>Within the site</th>
<th>Changes</th>
<th>In the surrounding area</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasive non-native/ alien species</td>
<td>unknown impact</td>
<td>Medium impact</td>
<td>✓</td>
<td>No change</td>
<td>✓</td>
<td>No change</td>
</tr>
</tbody>
</table>

Pollution

<table>
<thead>
<tr>
<th>Factors adversely affecting site</th>
<th>Actual threat</th>
<th>Potential threat</th>
<th>Within the site</th>
<th>Changes</th>
<th>In the surrounding area</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial and military effluents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural and forestry effluents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unspecified</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Climate change and severe weather

<table>
<thead>
<tr>
<th>Factors adversely affecting site</th>
<th>Actual threat</th>
<th>Potential threat</th>
<th>Within the site</th>
<th>Changes</th>
<th>In the surrounding area</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storms and flooding</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please describe any other threats (optional):

Road 22 runs through a small part of the reserve.

5.2.2 - Legal conservation status

How is the Site managed?, S5 - Page 1
National legal designations

<table>
<thead>
<tr>
<th>Designation type</th>
<th>Name of area</th>
<th>Online information url</th>
<th>Overlap with Ramsar Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature Reserve</td>
<td>Holmen</td>
<td></td>
<td>whole</td>
</tr>
<tr>
<td>Nature Reserve</td>
<td>Jølsen</td>
<td></td>
<td>whole</td>
</tr>
<tr>
<td>Nature Reserve</td>
<td>Nordre Øyeren</td>
<td></td>
<td>whole</td>
</tr>
<tr>
<td>Nature Reserve</td>
<td>Stilla and Brautstersilla</td>
<td></td>
<td>whole</td>
</tr>
<tr>
<td>Nature Reserve</td>
<td>Sørumsneset</td>
<td></td>
<td>whole</td>
</tr>
</tbody>
</table>

Non-statutory designations

<table>
<thead>
<tr>
<th>Designation type</th>
<th>Name of area</th>
<th>Online information url</th>
<th>Overlap with Ramsar Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important Bird Area</td>
<td>Nordre Øyeren and Sørumsneset</td>
<td><a href="http://www.birdlife.org/datazone/sitefactsheet.php?id=3172">http://www.birdlife.org/datazone/sitefactsheet.php?id=3172</a></td>
<td>partly</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Measures</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal protection</td>
<td>Implemented</td>
</tr>
</tbody>
</table>

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 ✔
- 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 ✔

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

The visitor centre “Fetsund Lenser” is a authorized visitor centre located at the border to the Ramsar site.

URL of site-related webpage (if relevant): http://mia.no/besokssentervatmark

5.2.6 - Planning for restoration

- Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

<no data available>
6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references


Information Sheet on Ramsar Wetlands (RIS), page 11


6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

ii. a detailed Ecological Character Description (ECD) (in a national format)

iii. a description of the site in a national or regional wetland inventory

iv. relevant Article 3.2 reports

v. site management plan

vi. other published literature

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Nordre Øyeren ( Gunnor
Planstad, 15-05-2013 )

6.1.4 - Designation letter and related data

Designation letter

Date of Designation 1985-07-24