



Ramsar Information Sheet

Published on 22 June 2023

Update version, previously published on : 1 January 2008

Latvia Lake Engure



Designation date	25 July 1995
Site number	738
Coordinates	00°00'N 00°00'E
Area	19 762,00 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

Lake Engure Ramsar site is located on the western coast of the Gulf of Riga. It includes a shallow freshwater coastal lake rich in emergent vegetation, shallow waters of Gulf of Riga up to the ten meters isobath, wet forests on the western shore of the lake and lakeshore grasslands. The water table of the lake was artificially lowered in 1842, when the lake was connected to the Gulf of Riga, the Baltic Sea, with a canal, thus lowering the water level for about 1.5 m and decreasing the area of the lake by a half (from ~ 90 km² to 45 km², nowadays open water covers only 35 km²). Most of the newly created terrestrial areas were used for low intensity agriculture, mostly pasturing, or overgrew with forest and bushes.

Nowadays the area holds 188 nesting bird species and large numbers of migratory birds species, and more than 860 vascular plant species.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	Nature Conservation Agency
Postal address	Nature Conservation Agency Baznicas Street 7, Sigulda, Latvia, LV-2150

National Ramsar Administrative Authority

Institution/agency	Ministry of Environmental Protection and Regional Development
Postal address	Peldu Street 25, Riga, Latvia, LV-1494

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

From year	2000
To year	2019

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Lake Engure
Unofficial name (optional)	Engures ezers

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 type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	No change to area
(Update) For secretariat only: This update is an extension	<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?	No
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2.2 - Site location

2.2.1 - Defining the Site boundaries

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

Former maps	0
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Boundaries description

Initially, the borders of the Ramsar site overlapped with the borders of Lake Engure Nature Park (also Natura 2000 site). Currently the borders of the Ramsar site coincide with the borders of the Lake Engure Nature Park, except the eastern border (the coastal marine area of the Ramsar site Lake Engure was included in the marine Natura 2000 site "Rīgas līča rietumu piekraste", thus being excluded from the nature park to avoid overlapping (amendments in the regulations defining the borders of nature parks, 2011). The site area is calculated more precisely.

2.2.2 - General location

a) In which large administrative region does the site lie?	The area is located in Engure, Talsi, Tukums and Roja Municipalities
b) What is the nearest town or population centre?	Engure, Mersrags villages

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
Other scheme (provide name below)	Boreal biogeographical region
Udvardy's Biogeographical Provinces	boreo-nemoral

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

Hydrological services provided

Lake Engure Ramsar site includes the largest ancient lagoon lake in Latvia (3500 ha) of natural origin. Although altered by human-caused modifications in the past, it is still one of the richest biodiversity areas in Latvia. Lake Engure is a typical representative of coastal freshwater lakes - remnants of Littorina Sea, the precursor of the Baltic Sea. It is unique because all other lakes of similar origin at the eastern coast of the Baltic Sea have been drained completely or changed to a large extent (surrounded by dams, heavily polluted by sewage waters, lost open water area due to overgrowing).

- Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

There are three bird species of global conservation concern recorded breeding at Engure Ramsar site, which are listed in Annex I of the Bird Directive, these are Corncrake *Crex crex* – up to 20 pairs and White-tailed Eagle *Haliaeetus albicilla* – 1 pair.

48 bird species nesting on the Lake Engure Ramsar site are listed in the Birds Directive 2009/147/ES Annex I and are considered as threatened in Europe: ducks (about 865 pairs, all species together), Mute Swan *Cygnus olor* (80-100 pairs), Black-headed Gull *Larus ridibundus* (4000-6000 pairs), other gulls (several hundred), Common Coot *Fulica atra* (750 pairs) and different grebe species (350 pairs) or around up to 8500 breeding pairs of waterbirds in 2010 (Anon., 2011). Consequently at the end of breeding season Lake Engure supports at least 25000 waterbirds.

64 species are nationally protected (included in the Regulation of the Cabinet of Ministers “On the List of Specially Protected Species and Species with Exploitation Limits” (No. 396, issued in 14.11.2000.), and Regulation of the Cabinet of Minister “Regulation on Designation and Management of Microreserves, their Protection and Order of Designation of Boundaries of Microreserves and their Buffer Zones” (No. 940, issued in 18.12.2012.)).

According to the habitat classification of the Council Directive’s 92/43/EEC (Habitats Directive) Annex I, 21 rare habitat types are present in Lake Engure Ramsar site, some of them with very few localities throughout the country: 1150* Coastal lagoons, 1170* Reefs, 1630* Baltic Boreal coastal meadows, 1210 Annual vegetation on drift lines, 1220 Perennial vegetation on drift lines, 1310 *Salicornia* and other annuals colonising mud and sand, 1640 Boreal Baltic sandy beaches with perennial vegetation, 2110 Embryonic shifting dunes, 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes), 2130* Fixed dunes with herbaceous vegetation (grey dunes), 2180 Wooded dunes of Atlantic, Continental and Boreal region, 3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* sp., 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation, 6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caerulea*), 5130 *Juniperus communis* formations on heaths or calcareous grasslands, 7210* Calcareous fens with *Cladium mariscus* and species of *Caricion davalliana*, 7230 Alkaline fens, 9010* Western taiga, 9080* Fennoscandian deciduous swamp woods, 91D0* Bog woodland, 91E0* Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, *Alnion incanae*, *Salicion albae*).

The site is particular with a large diversity and high number of threatened vascular plant species, some of them acknowledged as rare throughout Europe, e.g. *Liparis loeselii*, *Linaria loeselii*, *Dianthus arenarius* ssp. *arenarius* (listed in the Habitats Directive’s Annex II). The large variety of habitats hosts numerous rare animal species, e.g. *Vertigo* spp., *Triturus cristatus* etc.

- Criterion 3 : Biological diversity

Justification

Number of nesting bird species (188) and vascular plant species (more than 860 species) prove the importance of Lake Engure Ramsar site for maintaining the biological diversity of this region.

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

Optional text box to provide further information

Totally, about 40 bird species considered as threatened in Europe have been recorded nesting in Engure Ramsar site. There were ducks (865 pairs, all species together), Mute Swan *Cygnus olor* (150 pairs), Black-headed Gull *Larus ridibundus* (5400 pairs), other gulls (up to 500 pairs), Common Coot *Fulica atra* (750 pairs) and different grebe species (around 350 pairs) or around 8350 breeding pairs of waterbirds in 1996-2010 (Anon., 2011). Consequently at the end of breeding season Lake Engure supports at least 28950 waterbirds. During winter internationally important concentrations of Long-tailed Duck *Clangula hyemalis* and Velvet Scoter *Melanitta fusca*, as well as concentration of moulting Goldeneye *Bucephala clangula* in summer have been recorded along the western coast of the Gulf of Riga but this wintering and moulting area is wider than Lake Engure Ramsar site.

Criterion 5 : >20,000 waterbirds

Overall waterbird numbers

20000

Start year

2000

End year

2010

Optional text box to provide further information

Although numbers of breeding waterfowl have declined during last 10 years at Lake Engure, it still fits criterion of 20000 birds. There were ducks (865 pairs, all species together), Mute Swan *Cygnus olor* (80-100 pairs), Black-headed Gull *Larus ridibundus* (4000-6000 pairs), other gulls (470 pairs), Coot *Fulica atra* (750 pairs) and different grebe species (up to 350 pairs) or around 8350 breeding pairs of waterbirds in 1996-2010. Using recent very low breeding success values (e.g. ca. 25% hatching success for ducks, 0.5 fledged young's per pair of Black-headed Gull *Larus ridibundus*) it is possible to calculate number of fledged young's for groups mentioned above which constituted 10650 individuals. Number of non-breeding immature Mute Swan *Cygnus olor* and moulting ducks exceeding local breeders was at least 2200 individuals. Consequently at the end of the breeding season Lake Engure supports at least 28950 waterbirds.

Criterion 6 : >1% waterbird population

Optional text box to provide further information

Grus Grus is an estimated number of 2000 individuals in migration stopover, so it makes 1.3 %.

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Dianthus arenarius</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	EN	EU Habitats Directive Annex II
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Linaria loeselii</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NT	<input type="checkbox"/>	EN	EU Habitats Directive Annex II
TRACHEOPHYTA / LILIOPSIDA	<i>Liparis loeselii</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	EN	EU Habitats Directive Annex II

Linaria loeselii (EU Habitats Directive) 0-20 individuals.
 Liparis loeselii 207-307 individuals.
 Dianthus arenarius ssp. arenarius 1284-1328 individuals.

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

Phylum	Scientific 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								
Others																	
CHORDATA / MAMMALIA	<i>Canis lupus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>		EU Habitats directive (Annex IV)
CHORDATA / MAMMALIA	<i>Castor fiber</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	VU	EU Habitats directive (Annex V)
CHORDATA / MAMMALIA	<i>Lutra lutra</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EN	EU Habitats directive (Annex II)
CHORDATA / MAMMALIA	<i>Lynx lynx</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EN	EU Habitats directive (Annex IV)
Birds																	
CHORDATA / AVES	<i>Anas platyrhynchos</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	600			LC	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 45-600 ind.
CHORDATA / AVES	<i>Anser albifrons</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5000			LC	<input type="checkbox"/>	<input type="checkbox"/>		concentration 500-5000 ind.
CHORDATA / AVES	<i>Anser fabalis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5000			LC	<input type="checkbox"/>	<input type="checkbox"/>		concentration 500-5000 ind.
CHORDATA / AVES	<i>Ardea cinerea</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	300			LC	<input type="checkbox"/>	<input type="checkbox"/>		concentration 300 ind.
CHORDATA / AVES	<i>Aythya ferina</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19			VU	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 2-19 ind.
CHORDATA / AVES	<i>Bucephala clangula</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4600			LC	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 4600-8000 ind.
CHORDATA / AVES	<i>Chroicocephalus ridibundus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5000				<input type="checkbox"/>	<input type="checkbox"/>		concentration, wintering
CHORDATA / AVES	<i>Clangula hyemalis</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30000			VU	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 30000-45000 ind., concentration 22000 ind
CHORDATA / AVES	<i>Crex crex</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5			LC	<input type="checkbox"/>	<input type="checkbox"/>		reproducing 2-10 pairs
CHORDATA / AVES	<i>Cygnus cygnus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88			LC	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 88 ind.
CHORDATA / AVES	<i>Cygnus olor</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3225			LC	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 422-3225 ind.
CHORDATA / AVES	<i>Fulica atra</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2			LC	<input type="checkbox"/>	<input type="checkbox"/>		Wintering 0-2 ind.

Phylum	Scientific 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								
CHORDATA / AVES	<i>Gavia arctica</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5600			LC	<input type="checkbox"/>	<input type="checkbox"/>		concentration 5600 ind., wintering 50-130 ind.
CHORDATA / AVES	<i>Gavia stellata</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5600			LC	<input type="checkbox"/>	<input type="checkbox"/>		concentration 5600 ind., wintering 50-130 ind.
CHORDATA / AVES	<i>Grus grus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2000		1.3	LC	<input type="checkbox"/>	<input type="checkbox"/>		concentration 1000-3000 ind., reproducing 10-25 pairs Population North-east & Central Europe/North Africa
CHORDATA / AVES	<i>Haliaeetus albicilla</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3			LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		reproducing 3 pairs, wintering 2-17 ind.
CHORDATA / AVES	<i>Larus argentatus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4000			LC	<input type="checkbox"/>	<input type="checkbox"/>		wintering 4000 ind.
CHORDATA / AVES	<i>Larus canus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3200			LC	<input type="checkbox"/>	<input type="checkbox"/>		wintering 3200 ind.
CHORDATA / AVES	<i>Larus marinus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	290			LC	<input type="checkbox"/>	<input type="checkbox"/>		wintering 290 ind.
CHORDATA / AVES	<i>Larus minutus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15000				<input type="checkbox"/>	<input type="checkbox"/>		concentration 15000 ind.
CHORDATA / AVES	<i>Melanitta fusca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2500			WU	<input type="checkbox"/>	<input type="checkbox"/>		wintering 2500 ind.
CHORDATA / AVES	<i>Melanitta nigra</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3000			LC	<input type="checkbox"/>	<input type="checkbox"/>		wintering 3000-6000 ind.
CHORDATA / AVES	<i>Phalacrocorax carbo</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	210			LC	<input type="checkbox"/>	<input type="checkbox"/>		wintering 5-210 ind.

1) Percentage of the total biogeographic population at the site

There are three bird species of global conservation concern recorded breeding at Engure Ramsar site, which are listed in Annex I of the Bird Directive, these are Corncrake *Crex crex* – up to 20 pairs and White-tailed Eagle *Haliaeetus albicilla* – 1 pair.

48 bird species nesting the Lake Engure Ramsar site are listed in the Birds Directive 2009/147/ES Annex I and are considered as threatened in Europe: ducks (about 865 pairs, all species together), Mute Swan *Cygnus olor* (80-100 pairs), Black-headed Gull *Larus ridibundus* (4000-6000 pairs), other gulls (several hundred), Common Coot *Fulica atra* (750 pairs) and different grebe species (350 pairs) or around up to 8500 breeding pairs of waterbirds in 2010 (Anon., 2011). Consequently at the end of breeding season Lake Engure supports at least 25000 waterbirds.

64 species are nationally protected (included in the Regulation of the Cabinet of Ministers “On the List of Specially Protected Species and Species with Exploitation Limits” (No. 396, issued in 14.11.2000.), and Regulation of the Cabinet of Minister “Regulation on Designation and Management of Microreserves, their Protection and Order of Designation of Boundaries of Microreserves and their Buffer Zones” (No. 940, issued in 18.12.2012.)).

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
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	<input checked="" type="checkbox"/>		EU Habitats Directive
1150* Coastal lagoons	<input checked="" type="checkbox"/>		EU Habitats Directive

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
1170* Reefs	<input checked="" type="checkbox"/>		EU Habitats Directive
1630* Baltic Boreal coastal meadows	<input checked="" type="checkbox"/>		EU Habitats Directive
1210 Annual vegetation on drift lines	<input checked="" type="checkbox"/>		EU Habitats Directive
1220 Perennial vegetation on drift lines	<input checked="" type="checkbox"/>		EU Habitats Directive
1640 Boreal Baltic sandy beaches with perennial vegetation	<input checked="" type="checkbox"/>		EU Habitats Directive
2110 Embryonic shifting dunes	<input checked="" type="checkbox"/>		EU Habitats Directive
2130* Fixed dunes with herbaceous vegetation (grey dunes)	<input checked="" type="checkbox"/>		EU Habitats Directive
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	<input checked="" type="checkbox"/>		EU Habitats Directive
2180 Wooded dunes of Atlantic, Continental and Boreal region	<input checked="" type="checkbox"/>		EU Habitats Directive
3140 Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> sp.	<input checked="" type="checkbox"/>		EU Habitats Directive
7210* Calcareous fens with <i>Cladium mariscus</i> and species of <i>Caricion davallianae</i>	<input checked="" type="checkbox"/>		EU Habitats Directive
7230 Alkaline fens	<input checked="" type="checkbox"/>		EU Habitats Directive
9010* Western taiga	<input checked="" type="checkbox"/>		EU Habitats Directive
9080* Fennoscandian deciduous swamp woods	<input checked="" type="checkbox"/>		EU Habitats Directive
91D0* Bog woodland	<input checked="" type="checkbox"/>		EU Habitats Directive
91E0* Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)	<input checked="" type="checkbox"/>		EU Habitats Directive
6530* Fennoscandian wooded meadows	<input checked="" type="checkbox"/>		EU Habitats Directive
6270* Fennoscandian lowland species-rich dry to mesic grasslands	<input checked="" type="checkbox"/>		EU Habitats Directive
6230* Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	<input checked="" type="checkbox"/>		EU Habitats Directive
6120* Xeric sand calcareous grasslands	<input checked="" type="checkbox"/>		EU Habitats Directive

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
9070 Fennoscandian wooded pastures	<input checked="" type="checkbox"/>		EU Habitats Directive
9050 Fennoscandian herb-rich forests with <i>Picea abies</i>	<input checked="" type="checkbox"/>		EU Habitats Directive
7140 Transition mires and quaking bogs	<input checked="" type="checkbox"/>		EU Habitats Directive
3260 Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation	<input checked="" type="checkbox"/>		EU Habitats Directive

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

4.1 - Ecological character

Lake Engure covers about 35 km² (open water), the average depth is 1 m (ranging from 0.3m to 2 m). The lake is dyseutrophic. According to the level of nutrients, the lake is eutrophic or polytrophic. The depth of mud on the lake bottom is on average 1-1.2 m (mostly 0.5-0.8 m). No sharp water fluctuations occur; inputs of brackish waters from the Gulf of Riga rarely happen, however, the impacts on the biota are insignificant. Lake Engure Ramsar site includes the largest ancient lagoon lake in Latvia (3500 ha). Up to 40 % of the lake is covered by reed beds (*Phragmites australis*, *Typha angustifolia* and *Typha latifolia*). Rather large areas are covered by different stonewort *Chara* sp. stands. The lake is surrounded by pine forests on the eastern side and by mixed forests on the western side.

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	Reefs	1	3064	Representative
E: Sand, shingle or pebble shores	Costal sand dunes and inland dunes	2	24	Representative
H: Intertidal marshes	Boreal Baltic coastal meadows	3	16	Rare
J: Coastal brackish / saline lagoons		4	9	Representative
K: Coastal freshwater lagoons		4		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	Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation	4	5	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	1	2466	Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools	Alkaline fens, Calcareous fens	2	1756	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands	Transitional mires	3	43	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands	Bog woodland	4	19	Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
9: Canals and drainage channels or ditches		4	

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
2180 Wooded dunes of the Atlantic, Continental and Boreal region	1167
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)	32
9050 Fennoscandian herb-rich forests with <i>Picea abies</i>	11
9070 Fennoscandian wooded pastures	30
6120* Xeric sand calcareous grasslands	3
6230* Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	5
6270* Fennoscandian lowland species-rich dry to mesic grasslands	21
6530* Fennoscandian wooded meadows	6
9010* Western Taiga	308
9080* Fennoscandian deciduous swamp woods	226
91E0* Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	54

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Atriplex calotheca</i>	
TRACHEOPHYTALILIOPSIDA	<i>Blysmus rufus</i>	
TRACHEOPHYTA/PSILOTOPSIDA	<i>Botrychium virginianum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Cardamine bulbifera</i>	
TRACHEOPHYTALILIOPSIDA	<i>Carex buxbaumii</i>	
TRACHEOPHYTALILIOPSIDA	<i>Carex magellanica irrigua</i>	
TRACHEOPHYTALILIOPSIDA	<i>Carex ornithopoda</i>	
TRACHEOPHYTALILIOPSIDA	<i>Carex pseudobrizoidea</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Centaurium littorale</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Centaurium pulchellum</i>	
TRACHEOPHYTALILIOPSIDA	<i>Cladium mariscus</i>	
TRACHEOPHYTALILIOPSIDA	<i>Corallorhiza trifida</i>	
TRACHEOPHYTALILIOPSIDA	<i>Dactylorhiza fuchsii</i>	
TRACHEOPHYTALILIOPSIDA	<i>Dactylorhiza incarnata</i>	
TRACHEOPHYTALILIOPSIDA	<i>Dactylorhiza incarnata cruenta</i>	
TRACHEOPHYTALILIOPSIDA	<i>Dactylorhiza maculata</i>	
TRACHEOPHYTALILIOPSIDA	<i>Festuca altissima</i>	
TRACHEOPHYTALILIOPSIDA	<i>Glyceria striata</i>	
TRACHEOPHYTALILIOPSIDA	<i>Gymnadenia conopsea</i>	
TRACHEOPHYTALILIOPSIDA	<i>Hammarbya paludosa</i>	
TRACHEOPHYTALILIOPSIDA	<i>Herminium monorchis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Hydrocotyle vulgaris</i>	
TRACHEOPHYTALILIOPSIDA	<i>Juncus gerardii</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Lathyrus japonicus maritimus</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Lathyrus niger</i>	
BRYOPHYTA/BRYOPSIDA	<i>Leucobryum glaucum</i>	Pop. size 0-1 sq.m area
TRACHEOPHYTALYCOPODIOPSIDA	<i>Lycopodiella inundata</i>	
TRACHEOPHYTALYCOPODIOPSIDA	<i>Lycopodium annotinum</i>	
TRACHEOPHYTALYCOPODIOPSIDA	<i>Lycopodium annotinum dubium</i>	
TRACHEOPHYTALYCOPODIOPSIDA	<i>Lycopodium clavatum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Lysimachia maritima</i>	
TRACHEOPHYTALILIOPSIDA	<i>Malaxis monophyllos</i>	
BRYOPHYTA/JUNGERMANNIOPSIDA	<i>Moerckia hibernica</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Montia fontana</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Myrica gale</i>	
TRACHEOPHYTALILIOPSIDA	<i>Najas marina</i>	
TRACHEOPHYTALILIOPSIDA	<i>Neottia cordata</i>	
TRACHEOPHYTALILIOPSIDA	<i>Ophrys insectifera</i>	
TRACHEOPHYTALILIOPSIDA	<i>Orchis militaris</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Orobanche reticulata pallidiflora</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pedicularis sceptrum-carolinum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pinguicula vulgaris</i>	
TRACHEOPHYTALILIOPSIDA	<i>Platanthera bifolia</i>	
TRACHEOPHYTALILIOPSIDA	<i>Platanthera chlorantha</i>	
TRACHEOPHYTALILIOPSIDA	<i>Poa remota</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Potentilla anglica</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Primula laurentiana</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pulsatilla pratensis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pyrola media</i>	
TRACHEOPHYTALILIOPSIDA	<i>Ruppia maritima</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Salix macilenta</i>	
TRACHEOPHYTALILIOPSIDA	<i>Schoenus ferrugineus</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Serratula tinctoria</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Taraxacum palustre</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Viola persicifolia</i>	
TRACHEOPHYTALILIOPSIDA	<i>Zannichellia palustris</i>	

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Amelanchier canadensis</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Aster salignus</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Impatiens glandulifera</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Impatiens parviflora</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Lactuca tatarica</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Photinia floribunda</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Rosa rugosa</i>	Actual (minor impacts)	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Rumex confertus</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Sambucus nigra</i>	Potential	No change
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Solidago canadensis</i>	Actual (minor impacts)	No change

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
ARTHROPODA/INSECTA	<i>Aeshna viridis</i>				
CHORDATA/AVES	<i>Alca torda</i>	240			wintering 0-240 ind.
CHORDATA/AVES	<i>Alcedo atthis</i>	2			reproducing 0-2 pairs, concentration 1-10 ind.
CHORDATA/AVES	<i>Anas penelope</i>	7			wintering 0-7 ind.
CHORDATA/AVES	<i>Ardea alba</i>	250			reproducing 250-260 pairs
CHORDATA/AVES	<i>Asio flammeus</i>				reproducing 0-2 pairs
CHORDATA/AVES	<i>Aythya fuligula</i>	110			wintering 6-110 ind.
CHORDATA/AVES	<i>Aythya marila</i>	7			wintering 0-7 ind.
ARTHROPODA/INSECTA	<i>Carabus nitens</i>				
ARTHROPODA/INSECTA	<i>Chalcophora mariana</i>				
CHORDATA/AVES	<i>Charadrius hiaticula</i>	1			
ARTHROPODA/INSECTA	<i>Coenonympha hero</i>	30			
CHORDATA/ACTINOPTERYGII	<i>Coregonus lavaretus</i>				
CHORDATA/REPTILIA	<i>Coronella austriaca</i>	100			Pop. size 100-200 ind.
CHORDATA/AVES	<i>Dendrocopos leucotos</i>	3			permanent 3-4 pairs
ARTHROPODA/INSECTA	<i>Dytiscus latissimus</i>	300			Pop. size 300-600 ind.
CHORDATA/AVES	<i>Emberiza hortulana</i>	1			reproducing 0-2 pairs
CHORDATA/AMPHIBIA	<i>Epidalea calamita</i>				
ARTHROPODA/INSECTA	<i>Euphydrys maturna</i>	90			Pop. size 90-180 ind.
ARTHROPODA/INSECTA	<i>Graphoderus bilineatus</i>	50			Pop. size 0-50 ind.
CHORDATA/AVES	<i>Hydroprogne caspia</i>	80			concentration 80-100 ind.
CHORDATA/REPTILIA	<i>Lacerta agilis</i>				
ARTHROPODA/INSECTA	<i>Leucorrhinia albifrons</i>	3000			Pop. size 3000-4000 ind.
ARTHROPODA/INSECTA	<i>Leucorrhinia caudalis</i>				
ARTHROPODA/INSECTA	<i>Leucorrhinia pectoralis</i>	1000			Pop. size 1000-5000 ind.
ARTHROPODA/INSECTA	<i>Libellula fulva</i>				

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Limosa limosa</i>	10			
CHORDATA/AVES	<i>Locustella luscinioides</i>				
ARTHROPODA/INSECTA	<i>Lopinga achine</i>	500			
CHORDATA/AVES	<i>Lyrurus tetrix tetrix</i>	10			
CHORDATA/AVES	<i>Mergellus albellus</i>	43			wintering 0-43 ind.
CHORDATA/ACTINOPTERYGII	<i>Misgurnus fossilis</i>				
CHORDATA/MAMMALIA	<i>Mustela erminea</i>				
CHORDATA/MAMMALIA	<i>Myotis dasycneme</i>				
CHORDATA/AVES	<i>Panurus biarmicus</i>				
CHORDATA/AVES	<i>Picooides tridactylus</i>	3			permanent 3-5 pairs
CHORDATA/AVES	<i>Podiceps cristatus</i>	79			Wintering 2-79 ind.
CHORDATA/AVES	<i>Podiceps grisegena</i>	2			Wintering 0-2 ind.
CHORDATA/AVES	<i>Podiceps nigricollis</i>				
CHORDATA/AMPHIBIA	<i>Rana arvalis</i>				
CHORDATA/ACTINOPTERYGII	<i>Rhodeus amarus</i>				
CHORDATA/MAMMALIA	<i>Sicista betulina</i>				
ARTHROPODA/INSECTA	<i>Stenagostus rufus</i>				
CHORDATA/AVES	<i>Sterna paradisaea</i>	2			reproducing 0-5 pairs
CHORDATA/AVES	<i>Sternula albitrons</i>	1			reproducing 0-2 pairs
CHORDATA/AVES	<i>Thalasseus sandvicensis</i>	500			concentration 1-500 ind.
CHORDATA/AMPHIBIA	<i>Triturus cristatus</i>				
MOLLUSCA/GASTROPODA	<i>Vertigo genesii</i>				
MOLLUSCA/GASTROPODA	<i>Vertigo geyeri</i>				Pop. size 190000 sq m
CHORDATA/ACTINOPTERYGII	<i>Cottus gobio</i>				
CHORDATA/CEPHALASPIDOMORPHI	<i>Lampetra fluviatilis</i>				
CHORDATA/CEPHALASPIDOMORPHI	<i>Lampetra planeri</i>				
MOLLUSCA/GASTROPODA	<i>Vertigo angustior</i>				
CHORDATA/AVES	<i>Aegolius funereus</i>				permanent 0-3 pairs
CHORDATA/AVES	<i>Anser anser</i>				
CHORDATA/AVES	<i>Anthus campestris</i>	1			reproducing 0-1 pairs
CHORDATA/AVES	<i>Aquila pomarina</i>	1			reproducing 0-1 pairs
CHORDATA/AVES	<i>Aythya nyroca</i>	1			reproducing 0-1 pairs
CHORDATA/AVES	<i>Botaurus stellaris</i>	35			reproducing 25-35 pairs
CHORDATA/AVES	<i>Bubo bubo</i>	3			permanent 2-3 pairs
CHORDATA/AVES	<i>Caprimulgus europaeus</i>	7			reproducing 7-12 pairs
CHORDATA/AVES	<i>Chlidonias niger</i>	100			reproducing 100-200 pairs
CHORDATA/AVES	<i>Ciconia ciconia</i>	2			reproducing 2-3 pairs
CHORDATA/AVES	<i>Ciconia nigra</i>	1			reproducing 0-2 pairs
CHORDATA/AVES	<i>Circus aeruginosus</i>	15			reproducing 15-30 pairs
CHORDATA/AVES	<i>Circus pygargus</i>	1			reproducing 0-2 pairs

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Dryocopus martius</i>	7			permanent 7-9 pairs
CHORDATA/AVES	<i>Ficedula parva</i>	50			reproducing 50-80 pairs
CHORDATA/AVES	<i>Ixobrychus minutus</i>	1			reproducing 0-1 pairs
CHORDATA/AVES	<i>Lanius collurio</i>	5			reproducing 5-10 pairs
CHORDATA/AVES	<i>Lullula arborea</i>	10			reproducing 10-15 pairs
CHORDATA/AVES	<i>Mergus merganser</i>	10			reproducing 10-20 pairs, wintering 308-1986 ind.
CHORDATA/AVES	<i>Mergus serrator</i>	132			Wintering 3-132 ind.
CHORDATA/AVES	<i>Pandion haliaetus</i>	1			reproducing 1 pairs
CHORDATA/AVES	<i>Pernis apivorus</i>	1			reproducing 1-2 pairs
CHORDATA/AVES	<i>Picus canus</i>	5			permanent 5-10 pairs
CHORDATA/AVES	<i>Porzana parva</i>	80			reproducing 80-100 pairs
CHORDATA/AVES	<i>Porzana porzana</i>	10			reproducing 10-20 pairs
CHORDATA/AVES	<i>Sterna hirundo</i>	200			reproducing 200-350 pairs
CHORDATA/AVES	<i>Tadorna tadorna</i>	30			reproducing 30 pairs
CHORDATA/AVES	<i>Tetrao urogallus</i>	1			

4.4 - Physical components

4.4.1 - Climate

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

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- 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.

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

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

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

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

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

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

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

Significant accretion or deposition of sediments occurs on the site

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

Significant transportation of sediments occurs on or through the site

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

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

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

Sediment regime unknown

4.4.6 - Water pH

Acid (pH<5.5)

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

Circumneutral (pH: 5.5-7.4)

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

Alkaline (pH>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

Hyperhaline/Hypersaline (>40 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

Mesotrophic

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

Oligotrophic

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

Dystrophic

(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

Ecosystem service	Examples	Importance/Extent/Significance
Wetland non-food products	Other	
Wetland non-food products	Timber	

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	
Recreation and tourism	Recreational hunting and fishing	
Recreation and tourism	Picnics, outings, touring	
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	
Scientific and educational	Major scientific study site	

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	not relevant for 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 checked="" type="checkbox"/>
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

About 70% of all land in this territory is owned by the state, other 30% are owned by local municipalities or private owners.

5.1.2 - Management authority

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

Nature Conservation Agency

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

Nature Conservation Agency (Pieriga regional administration)

Postal address:

Baznicas Street 7,
Sigulda, Latvia, LV-2150

E-mail address:

pasts@daba.gov.lv

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Tourism and recreation areas	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Water regulation

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Low impact	Low impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Gathering terrestrial plants	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Logging and wood harvesting	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
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 checked="" type="checkbox"/>	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Vegetation clearance/land conversion	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Problematic native species	Low impact	Low 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	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Habitat shifting and alteration	Low impact	Low impact	<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

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	Engures ezers		whole
EU Natura 2000	Rigas lica rietumu piekraste		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
marine protected area	Rigas lica rietumu piekraste	https://www.daba.gov.lv/lv/rigas-lica-rietumu-piekraste	partly
nature park	Engures ezers	https://www.daba.gov.lv/lv/engures-ezers	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Engures ezers		whole

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
Re-vegetation	Partially implemented
Land conversion controls	Partially implemented
Hydrology management/restoration	Proposed

Species

Measures	Status
Control of invasive alien animals	Partially implemented

Human Activities

Measures	Status
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Partially implemented

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented
Plant community	Implemented
Plant species	Implemented
Birds	Implemented

Mainly the Laboratory of Ornithological Research (Institute of Biology) does the scientific research in the territory including long-term monitoring of bird populations, studies on impacts of management measures in the lake, etc. The Laboratory of Hydrobiology does long-term scientific studies on the hydrology, hydrobiology and ecological status of Lake Engure. Over the recent years, several studies had been carried out, e.g. vegetation mapping in the lake. Many students of biology perform their research activities in the area. In the period 2010-2013, Lake Engure catchment area was used as a model region for studying interactions between human and natural processes (Melecis, 2011).

Several long-term monitoring programmes are carried out in the site:

- Habitat mapping LIFE-Nature project "Protection and management of coastal habitats in Latvia" (2003),
- Monitoring of Natura 2000 sites – species and habitats (habitats, plants, birds, 2008-2012, within national monitoring programme, coordinated by Nature Conservation Agency),
- Monitoring of coastal dune habitats (since 2002, within national monitoring programme, coordinated by Nature Conservation Agency),
- Monitoring of geological coastal processes (since 2002, coordinated by Latvian Environment, Geological and Meteorological Centre).

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Račinskis E. 2004. Important Bird Areas of European Union importance in Latvia. Riga, LOB.
https://www.daba.gov.lv/sites/daba/files/media_file/jt_rigas-rietumkr-091.pdf
https://www.daba.gov.lv/sites/daba/files/data_content/dp_engures-ez-111.pdf

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:



Eastern shore of Lake Engure, pasture (Agnese Priede, 01-07-2013)



Eastern shore of Lake Engure, pasture (Agnese Priede, 01-07-2013)



Berzciems village, sea shore (Agnese Priede, 16-05-2011)



Mersrags, sea shore (Agnese Priede, 15-09-2008)



Berzciems village, sea shore (Agnese Priede, 10-06-2011)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1995-07-25