

Ramsar Information Sheet

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Netherlands Haringvliet



Designation date 29 August 2000 Site number 1244 Coordinates 51°47'45"N 04°07'34"E Area 10 880,00 ha

https://rsis.ramsar.org/ris/1244 Created by RSIS V.1.6 on - 1 November 2022

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 Ramsar site Haringvliet (10.880 ha) is a closed inlet that forms part of the Rhine and Maas delta via an open connection with the Hollands Diep. After the completion of the Haringvliet locks in 1970, the tide in the former brackish tidal area largely disappeared. The water became fresh up to the locks and the tide was limited. From 2019, the Haringvliet locks will be sligthly opened (so-called Kierbesluit) when the water level on the Haringvliet is lower than at sea. Salt water can flow through the locks, causing the western part of the Haringvliet to become brackish again. This is action is aimed to (partly) restore the rare brackish ecological conditions, especially to favor migratory fish species. Besides the locks the Haringvliet is also connected to the North Sea via Spui, Oude Maas and Nieuwe Waterweg.

On the banks of Voorne-Putten, the Hoeksche Waard and Goeree-Overflakkee, the landscape consists of grass buntings, reed and rush fields, vegetated and bare sand and mud flats bordering the open water. A number of former flats have grown into extensive areas (Ventjagersplaten and Slijkplaat) through foreshore defense and backfilling with soil. The island of Tiengemeten is located in the Haringvliet. Part of the reed lands and saline buntings have been transformed by grazing into grassland of brackish soil (silver meadow), while ungrazed parts have developed into reed, brackish brush and scrub. The site is especially important for water birds and migratory fish species.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	Wageningen Environmental Research
Postal address	PO Box 47 6700 AA Wageningen The Netherlands

National Ramsar Administrative Authority

Institution/agency Ministry of Agriculture Nature and Food Quality

	Bezuidenhoutseweg 73
	P.O. Box 20401
	2500 EK The Hague
Postal address	The Netherlands

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

From year 2015 To year 2020

2.1.3 - Name of the Ramsar Site

Official name (in English, French or	Haringvliet
Unofficial name (ontional)	Originally designated as 'Buitendiikse terreinen Haringvliet'

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 O No (

(Update) B. Changes to Site area No change to area

^(Update) For secretariat only: This update is an extension

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including Yes (likely)

applicable Criteria) changed since the previous RIS?

(Update) Are the changes Positive
Negative
Positive
P

^(Update) Positive % 100

^(Update) No information available

^(Update) Optional text box to provide further information

For almost 50 years the Haringvliet has been closed off from the North Sea by the Haringvlietdam. For all these years the migration routes of fish species like European eel, Atlantic herring and Atlantic salmon were blocked by this structure. By slightly opening the sluices in spring 2020, an attempt was made to restore these migration routes. First monitoring results reveal that millions of migratory fish have past the sluices.

ng 📝 s?	^(Update) Changes resulting from causes operating within the existing boundaries?
³'s □ s?	^(Update) Changes resulting from causes operating beyond the site's boundaries?
.g., ≱)?□	^{Update)} Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?

(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?

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

A slight return of the tides as well as a brackish zone. Criterion 7 now applies as the site is important for migratory fish species in the rivers Rhine and Meuse in Europe.

Voc C	^{pdate)} Is the change in ecological character negative, human-induced
163 0	AND a significant change (above the limit of acceptable change)

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps 0

Boundaries description

The boundary of the Ramsar site is equal to the Natura 2000-site with the same name. In 2014 the Site boundary was delineated more accurately and aligned with the Natura 2000 site, resulting in an increase of 152 ha.

2.2.2 - General location

a) In which large administrative region does	Zuid-Holland
the site lie?	
b) What is the nearest town or population	Several villages and cities among which Hellevoetsluis with a population of 40.312 in 2021 (Source:
centre?	CBS, Netherlands Statistics).

2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 10880

Area, in hectares (ha) as calculated from 10948.482

GIS boundaries

2.2.5 - Biogeography

Biogeographic regions	
Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Atlantic

Other biogeographic regionalisation scheme

The bio-geographic regions dataset used, contains the official delineations used in the Habitats Directive (92/43/EEC) and for the EMERALD Network set up under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

The Haringvliet is designated as a Natura 2000 site (both SAC and SPA) and can therefore be considered important for maintaining the biodiversity of the Atlantic biogeographic region. Besides the species mentioned under criterion 2, the site has also been designated as a SAC for a range of habitat types (Annex I of HD, see section 3.4) and SPA for a number of bird species that are not on Annex I of the BD.

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

Optional text box to provide further information infor

Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	100,026
Start year	2015
End year	2020
Source of data:	Sovon, Dutch Centre for Field Ornithology
Optional text box to provide further	Start season 2015/2016. End season 2019/2020. Peak numbers for all five seasons > 20,000. Average
information	100,026 individuals.

Criterion 6 : >1% waterbird population

Optional text box to provide further The 1% waterbird population thresholds are based on the 7th Edition of the Conservation Status Repo		
information (CSB7)	Optional text box to provide further	The 1% waterbird population thresholds are based on the 7th Edition of the Conservation Status Report
	information	(CSR7).

Criterion 7 : Significant and representative fish

Justification The Haringvliet is the entry point for migratory fish between the North Sea and the European rivers Rhine and Meuse. For almost 50 years is was closed off from the North Sea by the Haringvlietdam. For all these years the migration routes of fish species like European eel, Atlantic herring and Atlantic salmon were blocked by this structure. After a slight but permanent opening off the Haringvliet sluices in spring 2020, millions of migratory fish have past the sluices, as the first monitoring results reveal.

Criterion 8 : Fish spawning grounds, etc.

The site has an important function as a spawning, nursery and feeding ground for a range of fish species and is part of the migration route for many others. The site has among others been designated as a SAC for the conservation of a range of fish species like Sea lamprey Petromyzon marinus, River lamprey Lampetra fluviatilis, Allis shad Alosa alosa, Twaite shad Alosa fallax, Salmon Salmo salar, Bitterling Rhodeus sericeus amarus and Bullhead Cottus gobio

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								
BRYOPHYTA/ BRYOPSIDA	Drepanocladus sendtneri	×					National red list species	
BRYOPHYTA/ BRYOPSIDA	Fissidens adianthoides	×					National red list species	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Oenanthe lachenalii	×					National red list species	
TRACHEOPHYTA/ LILIOPSIDA	Schoenoplectus triqueter	Ø			LC		National red list species	
Fungi								
BASIDIOMYCOTA / AGARICOMYCETES	Tricholoma fulvum	×					National red list species	

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

Phylum	Scientific name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est.	% occurrence 1)	UCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others											
ARTHROPODA/ INSECTA	Bombus muscorum	Ø000								National red list species	
ARTHROPODA/ INSECTA	Bombus veteranus	2000								National red list species	
CHORDATA/ MAMMALIA	Castor fiber		rooo				LC			National red list species	The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ MAMMALIA	Microtus oeconomus						LC			National red list species	The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
Fish, Mollusc and Cru	stacea										
CHORDATA/ ACTINOPTERYGII	Alosa alosa		e de la compañía de la				LC				The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ ACTINOPTERYGII	Alosa fallax	2000	VOOR				LC			National red list species	
MOLLUSCA/ GASTROPODA	Assiminea grayana	Ø000					LC			National red list species	
CHORDATA/ ACTINOPTERYGII	Cottus gobio						LC				The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.

Phylum	Scientific name	Species qualifies under criterion 2 4 6 9	Species contribute under criterion 3 5 7	S Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA / CEPHALASPIDOMORPHI	Lampetra fluviatilis			s			LC				The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
MOLLUSCA/ GASTROPODA	Mercuria confusa	ØOOC								National RL category 2004: CR	
CHORDATA / CEPHALASPIDOMORPHI	Petromyzon marinus			×			LC				The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ ACTINOPTERYGII	Rhodeus amarus	ØOOC		×			LC			National red list species	The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ ACTINOPTERYGII	Salmo salar			s.							The site is also designated as a Special Area of Conservation (SAC) for this species and is part of the Natura 2000 network within the European Union.
Birds						1			1		
CHORDATA/ AVES	Acrocephalus schoenobaenus						LC				The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anas acuta	999C		811	2015/16-2019/20	1.4	LC			National red list species	Reference population: North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anas clypeata	777C		2296	2015/16-2019/20	3.5	LC			National red list species	Reference population: North-west & Central Europe (win). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anas crecca			11324	4 2015/16-2019/20	2.3	LC			National red list species	Reference population: crecca, North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Anas penelope			2456	3 2015/16-2019/20	1.8	LC			National red list species	Reference population: Western Siberia & NE Europe/NW Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anas platyrhynchos			1302	2 2015/16-2019/20	0.2	LC				Reference population: platyrhynchos, North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anas strepera			2014	9 2015/16-2019/20	16.8	LC				Reference population: strepera, North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anser albifrons			630	2015/16-2019/20	0.1	LC				Reference population: albifrons, NW Siberia & NE Europe/North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.

Phylum	Scientific name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est	occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Conter Status	Justification
CHORDATA/ AVES	Anser anser			8924	2015/16-2019/20	0.9	LC				Reference population: anser, NW Europe/South-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Anser erythropus	ØØ.] 0	2015/16-2019/20	0	VU		V		Reference population: NE Europe & W Siberia/Black Sea & Caspian. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Ardea alba			236	2015/16-2019/20	0.3	LC			National red list species	Reference population: alba, W, C & SE Europe/Black Sea & Mediterranean. Foraging. resting
CHORDATA/ AVES	Aythya ferina			370	2015/16-2019/20	0.2	VU				Reference population: North-east Europe/North-west Europe. Foraging. resting
CHORDATA/ AVES	Aythya fuligula		ØØOC] 14799	2015/16-2019/20	1.7	LC				Reference population: North-west Europe (win). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Aythya marila		ØØOC] 1	2015/16-2019/20	0	LC				Reference population: marila, Northern Europe/Western Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Branta leucopsis			23460	2015/16-2019/20	2	LC				Reference population: Russia/Germany & Netherlands. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Calidris alpina			809	2015/16-2018/19	0.1	LC				Reference population: alpina, NE Europe & NW Siberia/W Europe & NW Africa. Foraging, resting
CHORDATA/ AVES	Charadrius alexandrinus	ØØ00] 1	2015/16-2019/20	0	LC			National red list species	Reference population: alexandrinus, West Europe & West Mediterranean/West Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Charadrius hiaticula	ØØ O O] 41	2016/17-2018/19	0.1	LC			National red list species	Reference population: hiaticula, Northern Europe/Europe & North Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Chroicocephalus ridibundus			5182	2015/16-2019/20	0.2					Reference population: W Europe/W Europe, W Mediterranean, West Africa. Breeding, foraging, resting
CHORDATA/ AVES	Circus aeruginosus)			LC				The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Cygnus columbianus			8	2015/16-2019/20	0	LC				Reference population: bewickii, Western Siberia & NE Europe/North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA / AVES	Cygnus olor			6574	2015/16-2019/20	3.3	LC				Reference population: North-west Mainland & Central Europe. Foraging, resting

Phylum	Scientific name	S qu cu 2	uali uali und rite 4	ies fies er fion 6 9	c (Spe ontri uno crite 5	cies butes der erion 7 8	Po Si	op. ize	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Egretta garzetta	Z	Z (J	V		3	2 2	2015/16-2017/18	0	LC			National red list species	Reference population: garzetta, Western Europe, NW Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Falco peregrinus	Ø	2		Ī							LC	Ø		National red list species	The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Fulica atra		Z (20	Jø	V		251	167 2	2015/16-2019/20	1.6	LC				Reference population: atra, North-west Europe (win). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Haematopus ostralegus		2		I	V		47	79 2	2015/16-2019/20	0.1	NT				Reference population: ostralegus, Europe/South & West Europe & NW Africa. Foraging, resting
CHORDATA/ AVES	lchthyaetus melanocephalus		Z	20	Ī	V		23	51 2	2015/16-2019/20	1					Reference population: W Europe, Mediterranean & NW Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Larus fuscus		2			V] 17	61 2	2015/16-2019/20	0.3	LC				Reference population: intermedius, S Scandinavia, Netherlands, Ebro Delta, Spain. foraging, resting
CHORDATA/ AVES	Limosa limosa	Z	2		J	V] 16	68 2	2016/17-2019/20	0.2	NT			National red list species	Reference population: limosa, Western Europe/NW & West Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Luscinia svecica		2		J							LC				The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Mergus serrator	Ø	2			V		23	32 2	2015/16-2019/20	0.3	LC			National red list species	Reference population: North-west & Central Europe (win). foraging, resting
CHORDATA/ AVES	Numenius arquata	Z	2		Ī	V		54	48 2	2015/16-2019/20	0.1	NT			National red list species	Reference population: arquata, Europe/Europe, North & West Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Pandion haliaetus		Z		Z							LC				The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Phalacrocorax carbo		2		Z	V		23	601 2	2015/16-2019/20	0.4	LC				Reference population: sinensis, Northern & Central Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Platalea leucorodia			20	Ø	V		45	57 2	2015/16-2019/20	2.9	LC				Reference population: leucorodia, West Europe/West Mediterranean & West Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.

Phylum	Scientific name	Spe qua un crite 2 4	ecies lifies der erion 6 9	со со 3	Species ntribut under riterior 5 7	s es n 8	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Pluvialis apricaria			2	ØD		2505	2016/17-2018/19	0.3	LC			National red list species	Reference population: altifrons, Northern Europe/Western Europe & NW Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Podiceps cristatus	DØ		1	ØD		1430	2015/16-2019/20	0.2	LC				Reference population: cristatus, North-west & Western Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Recurvirostra avosetta	DØ		1	ØD		268	2015/16-2019/20	0.3	LC				Reference population: Western Europe & North-west Africa (bre). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Sterna hirundo	ZZ		V	ØD		1191	2015/16-2019/20	0.2	LC			National red list species	Reference population: hirundo, Northern & Eastern Europe (bre). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Sternula albifrons			1	ØD		47	2015/16-2019/20	0.2	LC			National red list species	Reference population: albifrons, Europe north of Mediterranean (bre). The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Tadorna tadorna			1	ØD		2239	2015/16-2019/20	0.9	LC				Reference population: North-west Europe. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Thalasseus sandvicensis	DØ		ø	ØD		7653	2015/16-2019/20	4.5	LC				Reference population: sandvicensis, Western Europe/West Africa. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.
CHORDATA/ AVES	Vanellus vanellus	OØ		V	ØD		5767	2015/16-2019/20	0.1	NT				Reference population: Europe, W Asia/Europe, N Africa & SW Asia. The site is also designated as a Special Protection Area (SPA) for this species and is part of the Natura 2000 network within the European Union.

1) Percentage of the total biogeographic population at the site

Bird data are provided by SOVON, Dutch Centre for Field Ornithology.

The 1% waterbird population thresholds are based on the 7th Edition of the Conservation Status Report (CSR7).

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
Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation	V		The site is also designated as a Special Area of Conservation (SAC) for this habitat type and is part of the Natura 2000 network within the European Union.
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	Ø	Priority habitat type	The site is also designated as a Special Area of Conservation (SAC) for this habitat type and is part of the Natura 2000 network within the European Union.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	V		The site is also designated as a Special Area of Conservation (SAC) for this habitat type and is part of the Natura 2000 network within the European Union.

Optional text box to provide further information

The site is also designated as a Special Area of Conservation (SAC) for the habitat types listed above and is part of the Natura 2000 network within the European Union.

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

4.1 - Ecological character

The landscape is characterized by open water (a gradient from brackish to fresh), sandbanks and mudflats, fresh and brackish water grasslands, reed land and scrub. The area is important for migratory fish species (after opening of the Haringvliet locks in 2019) but is especially important for a wide range of water birds.

A plant community of European interest that occurs is: Lemno-Nitelletum capillaris

- The ecosystem services mainly refer to:
- the opportunities for water recreation;
- the ability to store fresh water (especially i.r.t. potential impacts of climate change) to be drained into the North Sea;
- the ability for agriculture to take fresh water in (for irrigation or livestock drinking water) or drain water off.

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

Inland wetlands				
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		1		
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3		

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
4: Seasonally flooded agricultural land		2	

4.3 - Biological components

4.3.1 - Plant species

<no data available>

4.3.2 - Animal species

<no data available>

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)

The climate according to Köppen is rainy (Cbf).

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)
a) Maximum elevation above sea level (in netres)
Entire river basin
Upper part of river basin
Middle part of river basin
Lower part of river basin 🖉

More than one river basin \Box

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 Haringvliet is a dammed former estuary which is part of the Rhine/Meuse Delta.

4.4.3 - Soil

Mineral 🗹

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

No available information 🗖

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

Please provide further information on the soil (optional)

The general soil types are: Alluvial, Brown forest soils and montane soils

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 surface water		No change					

Water destination

Presence?	Changes at RIS update
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.

Part of the water from the river Rhine and Maas flows into this former sea arm which is regularly discharged into the North Sea (i.e. Voordelta) through the sluices at the west side of the lake.

In 2005 the connection with the sea was re-opened for 10% to restore the freshwater-salt gradient, mainly as a reason to restore natural values like restoring the opportunities for fish species to migrate between fresh waters and the sea.

Discussions are still going on to what extent the former gradients of all dammed arms of the sea in this part of the Netherlands can be restored.

Without a restored tidal system many shores need to be artificially stabilized to prevent erosion by waves. The lack of strong tidal currents also causes that more or less polluted river sediments are precipitated in the Haringvliet.

4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site 🗹

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

Sediment regime unknown

Please provide further information on sediment (optional):

Sediment supplied by the Rhine and Maas settle at this site.

4.4.6 - Water pH

Unknown 🗵

Please provide further information on pH (optional):

Probably no change although the pH of the water was not exactly known at the time of completing this database.

4.4.7 - Water salinity

Fresh (<0.5 g/l) 🗵

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

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

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

Unknown 🗖

Please provide further information on salinity (optional):

The estuary character of the site has, to a certain extend, been restored. Brackish conditions occur again at the western part of the site which borders the North Sea.

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic 🗹

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

Unknown 🗖

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

The dissolved or suspended nutrients in water were not exactly known at the time of completing this database.

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 i) broadly similar O ii) significantly different 🖲

site itself:

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/Significanc	
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium	
Fresh water	Water for energy production (hydro-electricity)	Medium	
Wetland non-food products	Other	Medium	
Wetland non-food products	Reeds and fibre	Medium	

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance	
Recreation and tourism	Water sports and activities	Medium	
Recreation and tourism Picnics, outings,		Medium	
Recreation and tourism	Recreational hunting and fishing	Medium	
Scientific and educational	Long-term monitoring site	High	

Supporting Services

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

Other ecosystem service(s) not included above:

Site: Angling 65%, Boating 65%, Tourism and leisure 15%, Extractive operations 1%, Dams, reservoirs & hydro-electric activities 2%, Farming 5%, Commercial fisheries 65%, Shipping traffic 50%, Conservation and research 32%, Water management 100%, Reed cutting 5%.

Ongoing biodiversity monitoring is one of the obligatory activities in relation to the designated Natura2000 habitat types and/or species. SOVON, the Dutch Bird Research Organisation, coordinates for instance a continues national bird monitoring program in which it cooperates with 7000 volunteers, research institutes and organisations in the monitoring of birds throughout the Netherlands (among others the Haringvliet).

Main research in the Delta (including the Haringvliet) is carried out by the Institute for Coast and Sea and the Center for Marine and Estuarine Ecology in Yerseke.

The site has an important function for water recreation on the water and along its shores.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

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 \Box 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

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	Я.	V
Private ownership		
Ontonio	Mitcheller Alexa Development Office	In the subscription of the subscription

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)		×
Foundation/non- governmental organization/trust	V	

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

a) within the Ramsar site:

The site is partly owned by Natuurmonumenten and Staatsbosbeheer; the main part is state ownership (Dienst der Domeinen, Ministerie van Financiën).

b) in the surrounding area:

The adjacent waters (Voordelta, Hollands Diep and Krammer-Volkerak) are state owned, on land several private owners.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for	Rijkswaterstaat (Ministry of Infrastructure and Environment) Staatsbosbeheer, see: https://www.staatsbosbeheer.nl/Natuurgebieden/haringvliet			
managing the site: Natuurmonumenten, see: https://www.natuurmonumenten.nl/natuurgebieden/tiengemeten				
Provide the name and/or title of the person	See https://www.staatsbosbeheer.nl/Natuurgebieden/haringvliet and			
or people with responsibility for the wetland:	https://www.natuurmonumenten.nl/natuurgebieden/tiengemeten			
	Zuid-Holland, Boompjes 200, 3011 XD Rotterdam, P.O. Box 556, 3000 AN Rotterdam, Tel. +31 (010) 402 62 00, Fax +31 (010) 404 79 27			
Postal address:	Staatsbosbeheer head office, P.O. Box 2, 3800 AA Amersfoort, the Netherlands, tel. +31 (0)30-6926111			
	97 000			
E-mail address:	info@staatsbosbeheer.nl			

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)
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Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Tourism and recreation areas	Medium impact	Medium impact	×	No change	X	No change
Housing and urban areas	Medium impact	Medium impact	×	No change	×	No change
Commercial and industrial areas	Medium impact	Medium impact	×.	No change	×.	No change

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Salinisation	Low impact	Low impact	×	increase	×	unknown

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Utility and service lines (e.g., pipelines)	Low impact	Low impact	×	No change		No change
Shipping lanes	Low impact	Low impact	s.	No change	×	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		No change	S	No change

Human intrusions and disturbance

RIS for Site no. 1244, Haringvliet, Netherlands

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

Natural system modifications						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	High impact	High impact	×	decrease	×	No change

Pollution						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Medium impact	Medium impact	×	No change	Ø	No change

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	Haringvliet	https://www.natura2000.nl/gebied en/zuid-holland/haringvliet	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Ecological Network (NEN)	Haringvliet	https://www.government.nl/topics /nature-and-biodiversity/nationa l- ecological-network-nen	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Haringvliet	http://datazone.birdlife.org/sit e/factsheet/1202	whole
Other non-statutory designation	KBA Haringvliet	http://www.keybiodiversityareas. org/site/factsheet/1202	whole

5.2.3 - IUCN protected areas categories (2008)

- la Strict Nature Reserve 🗖
- Ib Wilderness Area: protected area managed mainly for wilderness protection
 - Il 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
Hydrology management/restoration	Implemented
Habitat manipulation/enhancement	Implemented
Improvement of water quality	Implemented
Faunal corridors/passage	Implemented

RIS for Site no. 1244, Haringvliet, Netherlands

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

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

5.2.5 - Management planning

Is there a site-specific management plan 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 Yes O No processes with another Contracting Party?

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

The island Tiengemeten has a visitor centre. Excursions concentrate at the island Tiengemeten and the Korendijkse Slikken (at the northern border of the Haringvliet). These areas have nature trails and hikes. Information is available through booklets, websites etc.

URL of site-related webpage (if relevant): https://www.natura2000.nl/gebieden/zuid-holland/haringvliet

5.2.6 - Planning for restoration

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

Further information

https://www.rijkswaterstaat.nl/water/projectenoverzicht/haringvliet-haringvlietsluizen-op-een-kier Past planning period the Haringvliet sluices were (slighly) opened in order to restore the fish migration between the North Sea and the European rivers Rhine and Meuse.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Plant community	Implemented
Water regime monitoring	Implemented
Plant species	Implemented
Soil quality	Implemented
Animal species (please specify)	Implemented
Animal community	Implemented
Water quality	Implemented

Ongoing biodiversity monitoring is one of the obligatory activities in relation to the designated Natura2000 habitat types and/or species. SOVON, the Dutch Bird Research Organisation, coordinates for instance a continues national bird monitoring program in which it cooperates with 7000 volunteers, research institutes and organisations in the monitoring of birds throughout the Netherlands (among others the Haringvliet).

Main research in the Delta (including the Haringvliet) is carried out by the Institute for Coast and Sea (RIKZ, Middelburg, www.rikz.nl) and the Center for Marine and Estuarine Ecology (NIOO/CEMO, www.nioo.nl) in Yerseke.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

The site equals the Natura 2000-boundaries. For up-to-date information and references about the site see https://www.natura2000.nl/gebieden/zuid-holland/haringvliet.

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) <no file available>

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

iv. relevant Article 3.2 reports <no file available>

v. site management plan <1 file(s) uploaded>

vi. other published literature <no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



- (John Janssen, -)

6.1.4 - Designation letter and related data

Designation letter <2 file(s) uploaded>

Date of Designation 2000-08-29