



# Ramsar Information Sheet

Published on 2 November 2022

Update version, previously published on : 15 December 2014

## Netherlands

### Biesbosch



Designation date	23 May 1980
Site number	197
Coordinates	51°44'54"N 04°47'33"E
Area	9 640,00 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

Ramsar site Biesbosch (9640 ha) is a fresh water tidal estuary in the Rhine/Maas river system, though dammed from the (main tidal influence) of the sea in 1970. The site consists of a floodplain, polders, marshland and swamp forest, and is intersected by many formerly tidal creeks. The site consists of three parts: Sliedrechtse and Dordtsche Biesbosch north of the Nieuwe Merwede and de Brabantse Biesbosch south of it. The site is adjacent to the Ramsar site "Hollands Diep" in the west.

The Biesbosch was created in the year 1421 during the notorious Sint Elizabeth flood. This resulted in an inland sea of 30.000 hectares under influence of river waters and the tide. The water of the rivers contained sand and mud which sedimented and formed high sand flats. Since then the Biesbosch was a vast freshwater tidal area for many centuries. It was characterised by treacherous tidal forests with Salix (partly in use as coppice: "grienden"), alternated with bare sand and mudflats, reed-marshes and rush fields. The tidal channels had steep banks.

The development of the vegetation and the further sediment accumulation were influenced largely by humans. After some time of sediment accumulation the "grienden" were used for agriculture. Because of the regular inundations the soils were very fertile. To create a quicker drainage of the river water between 1850 and 1870 the Nieuwe Merwede was dug. In this way the Biesbosch was cut in two. The drainage of the water of the Maas was increased by digging the Bergse Maas and the Amer around 1900. Due to the quicker drainage the water became quieter in the larger areas. This increased the sediment accumulation, which could lead to more polders.

After the construction of the Deltaworks the Biesbosch changed substantially. After the closing of sluices of the Ramsar site "Krammer-Volkerak" in 1960 and the Ramsar site "Haringvliet" in 1970 the tide reduced from on average two meters to some decimeters. The dynamic tidal area changed into a rough marsh land in which the differences in heights between flats and channels slowly diminished. The rush fields and reed marshes have partly disappeared, parts are converted into polders, while drinking water reservoirs are constructed. In spite of these interferences the landscape of islands and winding water courses essentially still exists. The site is especially important as a spawning and nursery area for fish species and breeding, resting and foraging area for many water bird 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
Postal address	Bezuidenhoutseweg 73 P.O. Box 20401 2500 EK The Hague 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 Spanish)	Biesbosch
Unofficial name (optional)	originally designated as: De Biesbosch

#### 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
--	----

## 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. The original Ramsar Site was extended in 2013 to follow the Natura 2000 boundary, resulting in the addition of an area of over 6,800 ha.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Noord-Brabant and Zuid-Holland
--	--------------------------------

b) What is the nearest town or population centre?	Several villages and cities among which Dordrecht with a population of 119.115 in 2021 (Source: CBS, Netherlands Statistics).
---	---

### 2.2.3 - For wetlands on national boundaries only

RIS for Site no. 197, Biesbosch, Netherlands

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
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

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

Other reasons

The almost 10.000 ha fresh water tidal system of the Biesbosch is a unique ecosystem within the Atlantic Biogeographic region. It's an area of rivers, creeks, ponds, wet grasslands and vast alluvial forests, which attracts a wide range of species (groups) in substantial numbers throughout the year. This kind of habitat has been strongly deteriorated elsewhere in Europe.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The Biesbosch 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

The Ramsar site is also part of the Natura 2000 network in the European Union. It is designated as a Special Protection Area (SPA) for the functions that it provides to specific breeding and non-breeding bird species (e.g. migratory, hibernating, sleeping, resting, foraging). The site is also designated as a Special Area of Conservation (SAC) for specific non-bird species (and habitat types, see section 3.4). See also Natura2000 - Standard data form <https://natura2000.eea.europa.eu/>

- Criterion 5 : >20,000 waterbirds

Overall waterbird numbers

75,869

Start year

2015

End year

2020

Source of data:

Sovon, Dutch Centre for Field Ornithology

Optional text box to provide further information

Peaknumbers for all five seasons > 20,000. Average 75,869 individuals.

- Criterion 6 : >1% waterbird population

Optional text box to provide further information

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

- Criterion 8 : Fish spawning grounds, etc.

Justification

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 Blueback Glut Herring *Alosa alosa*, Twaite Shad *Alosa fallax*, Salmon *Salmo salar*, Sea Lamprey *Petromyzon marinus*, River Lamprey *Lampetra fluviatilis*, Bitterling *Rhodeus sericeus amarus*, Weatherfish *Misgurnus fossilis*, Spined Loach *Cobitis taenia* 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
<b>Plantae</b>								
TRACHEOPHYTA/ LILIOPSIDA	<i>Dactylorhiza incarnata</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National red list species	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Euphorbia palustris</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	National red list species	
BRYOPHYTA/ BRYOPSIDA	<i>Orthotrichum rogeri</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	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.
TRACHEOPHYTA/ LILIOPSIDA	<i>Schoenoplectus triqueter</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	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				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								
<b>Others</b>																	
CHORDATA/ MAMMALIA	<i>Castor fiber</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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Microtus oeconomus</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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National red list species; subspecies endemic to the Netherlands	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	<i>Myotis dasycneme</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"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>		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.
<b>Fish, Mollusc and Crustacea</b>																	
CHORDATA/ ACTINOPTERYGII	<i>Alosa alosa</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 checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Alosa fallax</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 checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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.
MOLLUSCA/ GASTROPODA	<i>Anisus vorticalus</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"/>					<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Barbus barbus</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"/>	National red list species	

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								
CHORDATA / ACTINOPTERYGII	<i>Cobitis taenia</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 checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Cottus gobio</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 checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		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 / CEPHALASPIDOMORPHI	<i>Lampetra fluviatilis</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 checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Mercuria confusa</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"/>				<input type="checkbox"/>	<input type="checkbox"/>	National red list species	
CHORDATA / ACTINOPTERYGII	<i>Misgurnus fossilis</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 checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	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 / CEPHALASPIDOMORPHI	<i>Petromyzon 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 checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		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 / BIVALVIA	<i>Pisidium amnicum</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"/>				<input type="checkbox"/>	<input type="checkbox"/>	National red list species	
MOLLUSCA / BIVALVIA	<i>Pseudanodonta complanata</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"/>			VU	<input type="checkbox"/>	<input type="checkbox"/>	National red list species	
CHORDATA / ACTINOPTERYGII	<i>Rhodeus amarus</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 checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Salmo salar salar</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 checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		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.
<b>Birds</b>																
CHORDATA / AVES	<i>Acrocephalus schoenobaenus</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"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Alcedo atthis</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"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Anas acuta</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	760	2015/16-2019/20	1.3	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Anas clypeata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2076	2015/16-2019/20	3.2	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Anas crecca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8206	2015/16-2019/20	1.6	LC	<input type="checkbox"/>	<input type="checkbox"/>	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.

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								
CHORDATA/AVES	<i>Anas penelope</i>	<input checked="" 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"/>	10752	2015/16-2019/20	0.8		<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Anas platyrhynchos</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"/>	2796	2015/16-2019/20	0.1	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Anas strepera</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21447	2015/16-2019/20	17.9	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Anser albifrons</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	44387	2015/16-2019/20	3.7	LC	<input type="checkbox"/>	<input type="checkbox"/>	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.
CHORDATA/AVES	<i>Anser anser</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"/>	7992	2015/16-2019/20	0.8	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Ardea alba</i>	<input checked="" 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"/>	416	2015/16-2019/20	0.5	LC	<input type="checkbox"/>	<input type="checkbox"/>	National red list species Reference population: alba, W, C & SE Europe/Black Sea & Mediterranean. 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	<i>Ardea purpurea</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"/>	22	2015/16-2018/19	0.1	LC	<input type="checkbox"/>	<input type="checkbox"/>	Reference population: purpurea, West Europe & West Mediterranean/West Africa. foraging, resting
CHORDATA/AVES	<i>Aythya ferina</i>	<input checked="" 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"/>	420	2015/16-2019/20	0.2	VU	<input type="checkbox"/>	<input type="checkbox"/>	Reference population: North-east 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	<i>Aythya fuligula</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13767	2015/16-2019/20	1.5	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Botaurus stellaris</i>	<input checked="" 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"/>	31	2015/16-2019/20	0.4	LC	<input type="checkbox"/>	<input type="checkbox"/>	National red list species Reference population: stellaris, W Europe, NW Africa (bre). foraging, resting, breeding
CHORDATA/AVES	<i>Branta leucopsis</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"/>	10178	2015/16-2019/20	0.8	LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Bucephala clangula clangula</i>	<input checked="" 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"/>	853	2015/16-2019/20	0.1		<input type="checkbox"/>	<input type="checkbox"/>	National red list species Reference population: clangula, North-west & Central Europe (win). foraging, resting
CHORDATA/AVES	<i>Chroicocephalus ridibundus</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"/>	3893	2015/16-2019/20	0.1		<input type="checkbox"/>	<input type="checkbox"/>	Reference population: W Europe/W Europe, W Mediterranean, West Africa. foraging, resting



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								
CHORDATA/AVES	<i>Circus aeruginosus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Cygnus columbianus</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"/>	25	2015/16	0.1	LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Cygnus olor</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"/>	1331	2015/16-2019/20	0.7	LC	<input type="checkbox"/>	<input type="checkbox"/>		Reference population: North-west Mainland & Central Europe. foraging, resting
CHORDATA/AVES	<i>Fulica atra</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"/>	13677	2015/16-2019/20	0.9	LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Haliaeetus albicilla</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"/>				LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		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	<i>Limosa limosa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1001	2015/16-2019/20	1.3	NT	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Locustella luscinioides</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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Luscinia svecica</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"/>	<input type="checkbox"/>		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	<i>Mergellus albellus</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"/>	189	2015/16-2019/20	0.6	LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Mergus merganser</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"/>	347	2015/16-2019/20	0.2	LC	<input type="checkbox"/>	<input type="checkbox"/>		Reference population: merganser, 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	<i>Pandion haliaetus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Phalacrocorax carbo</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"/>	98	2015/16-2019/20	0	LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Platalea leucorodia</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	475	2015/16 and 2019/20	3	LC	<input type="checkbox"/>	<input type="checkbox"/>		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	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>Podiceps auritus</i>	<input checked="" 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"/>	11	2015/16-2019/20	0.1	VU	<input type="checkbox"/>	<input type="checkbox"/>		Reference population: auritus, North-east Europe (small-billed). foraging, resting
CHORDATA/AVES	<i>Podiceps cristatus</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"/>	1800	2015/16-2019/20	0.3	LC	<input type="checkbox"/>	<input type="checkbox"/>		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	<i>Porzana porzana</i>	<input checked="" 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"/>	18	2015/16-2019/20	0	LC	<input type="checkbox"/>	<input type="checkbox"/>	National red list species	Reference population: Europe/Africa. foraging, resting, breeding
CHORDATA/AVES	<i>Recurvirostra avosetta</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"/>	245	2019/20	0.3	LC	<input type="checkbox"/>	<input type="checkbox"/>		Reference population: Western Europe & North-west Africa (bre). foraging, resting
CHORDATA/AVES	<i>Tadorna tadorna</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"/>	519	2015/16-2019/20	0.2	LC	<input type="checkbox"/>	<input type="checkbox"/>		Reference population: North-west Europe. foraging, resting
CHORDATA/AVES	<i>Tringa totanus</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"/>	98	2019/20	0.1	LC	<input type="checkbox"/>	<input type="checkbox"/>	National red list species	Reference population: totanus, Northern Europe (breeding). foraging, resting
CHORDATA/AVES	<i>Vanellus vanellus</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"/>	4709	2015/16-2019/20	0.1	NT	<input type="checkbox"/>	<input type="checkbox"/>		Reference population: Europe, W Asia/Europe, N Africa & SW Asia. foraging, resting

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
Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>CallitrichoBatrachion</i> vegetation	<input checked="" type="checkbox"/>		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.
Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> )	<input checked="" type="checkbox"/>		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.
Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation	<input checked="" type="checkbox"/>		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	<input checked="" type="checkbox"/>		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.
Xeric sand calcareous grasslands	<input checked="" type="checkbox"/>	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.
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)	<input checked="" type="checkbox"/>	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.

[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

After the construction of the Deltaworks the Biesbosch substantially changed. After the closing of Krammer-Volkerak in 1960 and Haringvliet in 1970 the tide reduced from an average two meter to some decimetres. The dynamic tidal area changed into a rough marsh land with *Urtica dioica*, *Convolvulus arvensis* and *Symphytum officinale* in which the differences in heights between flats and channels slowly diminished. The rush fields, reed marshes and tidal forest have partly disappeared, parts were impoldered and drinking water reservoirs were constructed. In spite of these interferences the landscape of islands and winding water courses essentially still exists and it is still determined by the tides, river dynamics and high eutrophic levels. It is now characterised by rivers, creeks, mud flats, reed marshes, embarked "grienden" en polders. Because of the diminishing of the tide the zones shifted and became smaller.

Plant communities of European interest that occur are:

- Lemno-Nitellatum capillaries
- Ranunculo fluitantis-Potametum perfoliati
- Stratiotetum
- Utricularietum vulgaris
- Groenlandietum

After southern Flevoland the Biesbosch ranks second as most important area for Bluethroat; a bird that breeds in rough reed lands. Furthermore it is an important breeding area for other birds of marshes (such as Marsh Harrier, Spotted Crake, Savi's Warbler and Sedge Warbler) and for birds of watery sites with forests (Cormorant and Kingfisher).

In spite of the big changes that occurred in the area, the Biesbosch is still a very important breeding area for birds of marshes and water birds. Although the disappearance of the tide made the Biesbosch less attractive to some species, it is still an internationally important staging and wintering area for many water birds and birds of prey. The Brabantse Biesbosch is mainly important as staging, foraging and resting area for thousands of ducks and geese.

Because of the great diversity of bird species and the presence of Beavers there is a lot of nature recreation. The Biesbosch is the place where the first Beavers were reintroduced in the Netherlands (in the late 1980's) and it is still one of the best places in the Netherlands to spot them or to find the tracks. This makes the Beaver one of the most important tourist attractions. The area is made accessible by some paths and by canoe. There is a visitors centre where you can watch the Beavers near their lodge with a camera. There are also special excursions at night where you can spot the Beavers "live". With the regular breeding of Sea eagles recent years, another nature attraction can nowadays be observed in the Biesbosch.

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

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		1	3277	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4	1446	
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		0		
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		3	1542	Rare

#### 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	2313

### 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 climates according to Köppen are rainy (Cfb) and montane (EH).

### 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.

The relevant catchment areas for the Biesbosch are the catchments of the rivers Meuse and Rhine.

### 4.4.3 - Soil

No available information

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

Please provide further information on the soil (optional)

The general soil types are: Alluvial, Brown forest soils and montane soils. The general land use is forestry, pasture farming, arable farming, unproductive land (high mountains).

### 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	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels 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.

The site was a freshwater tidal estuary until the construction of a barrier dam (Haringvliet dam) in 1970. The construction of the dam caused a considerable reduction in the tidal amplitude of the site (from 2 m to 0.2 m). As a result strong erosion of the banks and sedimentation of the channels took place. Sedimentation of strongly polluted silt took place mainly between 1970 and 1975. Some polders have been transformed into water basins, used for water storage of drinking water. Between 1995 and 2015 some 3500 ha of nature restoration is planned to take place.

### 4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site

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

Sediment regime unknown

Please provide further information on sediment (optional):

The rivers carry a lot of sediment in the form of sand and clay to the site. Sandbanks arise due to differences in flow speed in the system of channels and creeks. These sandbanks become overgrown after which the vegetation traps even more sediment.

#### 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  Decrease  Unknown

Unknown

#### 4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

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

Unknown

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

Although water quality improves, the river water is currently still carrying a high load of nitrogen (3.77 mg/l) and phosphate (0.18 mg/l).

#### 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
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Drinking water for humans and/or livestock	Medium
Fresh water	Water for energy production (hydro-electricity)	Medium

##### Regulating Services

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

##### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Recreation and tourism	Recreational hunting and fishing	Low
Recreation and tourism	Water sports and activities	High
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Educational activities and opportunities	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 microorganisms, the genes they contain, and the ecosystems of which they form a part	High
Nutrient cycling	Carbon storage/sequestration	High

Other ecosystem service(s) not included above:

The hydrological values of the Biesbosch include flood control, sediment and nutrient retention and water purification.

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).

Visitors centre, excursions, hide, information booklet

Arable farming 5 - 35%, Reed cutting <5%, Commercial fisheries 5 - 35%, Angling, (Ground-)water extraction 5 - 35%, Residential (scattered) <5%, Wind mills, Shipping traffic 5 - 35%, Visitors centre, Nautical sports, Military training, Water management >95%, Dams, reservoirs & hydro-electric activities 5 - 35%.  
An estimated 2 million visits per year.

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

Description if applicable

Some of the uses of the ecosystem are very old. In the extended reed lands reed cutting still takes place on a small scale. The reed is used for embankments and for traditional roofs. Also some of the former "grienden" are still in use as coppice. The wood is used for baskets, bean poles, handles for shovels and rakes, traditional fences and for shore and bank defence.

- 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

4.6 - Ecological processes

<no data available>

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

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

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

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

a) within the Ramsar site:

The site is owned by the state, Staatsbosbeheer and private owners.

b) in the surrounding area:

Surrounding area: the water (Hollands Diep) is 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 managing the site:

Main management authority

Postal address:

Staatsbosbeheer, P.O. Box 2, 3800 AA Amersfoort, the Netherlands, tel. 030-6926111

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)

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

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Industrial and military effluents	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Agricultural and forestry effluents	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	Biesbosch	<a href="https://www.natura2000.nl/gebieden/noord-brabant/biesbosch">https://www.natura2000.nl/gebieden/noord-brabant/biesbosch</a>	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Ecological Network (NEN)	Biesbosch	<a href="https://www.government.nl/topics/nature-and-biodiversity/national-ecological-network-nen">https://www.government.nl/topics/nature-and-biodiversity/national-ecological-network-nen</a>	whole
National Park	De Biesbosch	<a href="https://np-debiesbosch.nl/">https://np-debiesbosch.nl/</a>	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Biesbosch	<a href="http://datazone.birdlife.org/site/factsheet/1229">http://datazone.birdlife.org/site/factsheet/1229</a>	whole
Important Plant Area	Biesbosch & Nieuwe Hollandse Waterlinie	<a href="https://atlas.natuurlijkkapitaal.nl/important-plant-areas">https://atlas.natuurlijkkapitaal.nl/important-plant-areas</a>	partly
Other non-statutory designation	KBA Biesbosch	<a href="http://www.keybiodiversityareas.org/site/factsheet/1229">http://www.keybiodiversityareas.org/site/factsheet/1229</a>	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
Habitat manipulation/enhancement	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

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

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

Several visitor centres <https://np-debiesbosch.nl/wat-vind-je-waar/bezoekerscentra/>

URL of site-related webpage (if relevant):

### 5.2.6 - Planning for restoration

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

### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Water quality	Implemented
Plant community	Implemented
Animal community	Implemented
Plant species	Implemented
Soil quality	Implemented
Animal species (please specify)	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 continuous 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).

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

The site equals the Natura 2000-boundaries. Voor up-to-date information and references about the site see <https://www.natura2000.nl/gebieden/noord-brabant/biesbosch>.

#### 6.1.2 - Additional reports and documents

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

<no file available>

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

<no file available>

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

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<1 file(s) uploaded>

vi. other published literature

<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 1980-05-23