

# Ramsar Information Sheet

Published on 9 March 2018 Update version, previously published on : 1 January 2012

# **Norway**Dokkadelta



Designation date 6 August 2002 Site number 1188 Coordinates 60°47'51"N 10°08'59"E Area 375,00 ha

https://rsis.ramsar.org/ris/1188 Created by RSIS V.1.6 on - 18 May 2020

# 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

Dokkadelta is an extensive inland delta located in southern Norway. It was formed by the deposits from the rivers Dokka and Etna which have created a delta with varied wetland topography. Within the delta, there are large shallow areas, numerous small and larger islands, channels, bogs, meadows beside freshwater and clay-rich mudbanks, which are exposed when water levels are low due to regulation of downstrean Randsfjorden lake.

The area's main function is as a staging site for waterbirds during both spring and autumn migration. A number of nationally and regionally rare species breed or have bred in the delta. There are often over 1000 wildfowl in the area during spring, with the Eurasian teal Anas crecca being most common. Wildfowl numbers are lower during autumn. Waders are not that numerous, yet in a regional perspective, the area is also important for this group.

There are populations of 10 fish species in Randsfjorden. The trout population in Randsfjorden spawns in Dokka/Etna. The delta is important as a spawning place for several of Randfjorden's fish species. The mudbanks and shallow areas have a diverse invertebrate fauna. More crustacean species are recorded in the delta than anywhere else in Norway.

The waterside marshes and grassy meadows have a number of geographically interesting species and within the alder / bird-cherry woods along the river bank and channels a number of red-listed fungi occur.

# 2 - Data & location

# 2.1 - Formal data

2.1.1 - Name and address of the compiler of the	tnis Kis	oller of this R	าเร หเ
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Compiler 1

Name	Ellen Haakonsen Karr
Language of the con-	Name of the Continuous and all American
institution/agency	Norwegian Environmental Agency
Postal address	P.O. Box 5672 Torgarden, N-7485 Trondheim, Norway
E-mail	post@miljodir.no
Phone	+47 73 58 05 00

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

From year 2004

To year 2017

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Dokkadelta

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

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?

# 2.2 - Site location

# 2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps 0

Boundaries description

The border of the Ramsar site is the same as the border of Dokkdelta Nature Reserve.

2.2.2 - General location

a) In which large administrative region does the site lie?	Oppland
b) What is the nearest town or population	Dokka (App. population 2900 in 2016)

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?

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): 375

Area, in hectares (ha) as calculated from 374.16 GIS boundaries

# 2.2.5 - Biogeography

# Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	1. Boreal
Other scheme (provide name below)	2. Southern boreal vegetational zone, transitional section (SB-OC)

# Other biogeographic regionalisation scheme

- 1. Biogeographical regions of Europe, European Environment Agency, 2005
- 2. Zonal division showing the variation in vegetation from south to north and from the lowlands to the mountains, and sectional graduation showing the variation between the coast and inland (In: Moen, A. 1998. Nasjonalatlas for Norge; vegetasjon. Statens kartverk, Hønefoss).

# 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

J	Criterion 1	1. Renre	centative	rare	orunique	natural	or near-	natural	wetland	types
×.	Cilienon	i. Rebie	senialive.	lale	or unique	Haturai	or near-	Hatulai	welland	LVDES

Hydrological services provided

The area functions as a sediment trap and is important for fixing of nutrients.

Other reasons

The site is southern Norway's second largest inland delta with a number of permanent and temporary waterbodies, channels and oxbow lakes representative of this biogeographic region. There is a number of large and smaller islands with characteristic vegetation belts and large areas of fine-grained mudbanks with annual vegetation on exposed banks (Nanocyperetalia).

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

Justification

The site is important for a high diversity of bird species, both as a staging site during the migration and as a breeding site. In total, 223 different bird species are registered on the site (2011). The mudbanks and shallow areas have a diverse invertebrate fauna. More crustacean species are recorded in the delta than anywhere else in Norway.

- ☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 6 : >1% waterbird population
- ☑ Criterion 8 : Fish spawning grounds, etc.

luctification

The trout Salmo trutta population in Randsfjorden spawns in Dokka/Etna. The delta is important as a spawning place for several of Randsfjorden's fish species. The following fish-species use the site: the trout Salmo trutta, the European whitefish Coregonus lavaretus, the European perch Perca fluviatilis, the Northern pike Esox lucius, the common minnow Phoxinus phoxinus, the tree-spined stickleback Gasterosteus aculeatus, the ninespined stickleback Pungitius pungitius, the Arctic char Salvelinus alpines, the European smelt Osmerus eperlanus.

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Clavaria amoenoides		<b>2</b>	<b>2</b>				National Red List: Considered as VU	
Entoloma griseocyaneum		<b>✓</b>	✓				National Red List: Considered as VU	
Hygrocybe ingrata		<b></b> ✓	<b>V</b>		VU ©SI		National Red List: Considered as VU	
Microglossum olivaceum		<b>2</b>	<b>✓</b>				National Red List: Considered as VU	
Porpoloma metapodium		V	V				National Red List: Considered as EN	

Status is given according to National Red List 2015

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

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Phylum	Scientific name	Common name	Species qualifie under criterio 2 4 6	s col	Species ontributes under criterion	Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds		I .											
CHORDATA/ AVES	Acrocephalus scirpaceus	Eurasian Reed Warbler							LC				Criterion 4: This species breeds at the site.
CHORDATA/ AVES	Anas acuta	Northern Pintail			000	100			LC ©SF			National Red List: Considered as VU	(Up to 100 individuals) Criterion 4: Important staging area for this species.
CHORDATA/ AVES	Anas clypeata	Northern Shoveler										National Red List: Considered as VU	Criterion 4: Staging and breeding site for this species.
CHORDATA/ AVES	Anas crecca	EurasianTeal; Green-winged Teal			000				LC ●辭				(Up to 769 ind. observed in 2016) Criterion 4: The site is a staging area for this species in spring.
CHORDATA/ AVES	Anas penelope	Eurasian Wigeon			مام				LC				(Up to 85 ind. observed in 2016) Criterion 4: The site is a staging area for this species in spring.
CHORDATA/ AVES	Anas querquedula	Garganey										National Red List: Considered as EN	Criterion 4: Breeding site for this species.
CHORDATA/ AVES	Anser brachyrhynchus	Pink-footed Goose				4500	2013	6.5	LC Si Sign				Criterion 4: The site is an important staging site for this species, especially in spring when hundreds may be present. Criterion 6: Flocks of between 3000-6000 (max 5200 ind 3.4.2012 ) Biogeographic region: Svalbard/North-west Europe
CHORDATA/ AVES	Anser fabalis	Bean Goose							LC			National Red List: Considered as VU	Criterion 4: Staging area for this species.
CHORDATA/ AVES	Asio flammeus	Short-eared Owl			مام				LC ●数 ●翻			Annex II, Bern Convention	Criterion 4: This typical upland species is an occasional breeder in the site.
CHORDATA/ AVES	Aythya fuligula	Tufted Duck			000				LC				Criterion 4: The site is a staging area for this species in spring, summer and autumn.
CHORDATA/ AVES	Aythya marila	Greater Scaup	<b>7</b> 70						LC			National Red List: VU	Criterion 4: Staging area for this species.
CHORDATA/ AVES	Bucephala clangula	Common Goldeneye							LC Sign				(max100 ind observed in 2017) Criterion 4: The site is a staging area for this species in spring, summer and autumn.
CHORDATA/ AVES	SCL	Black-headed Gull			000							National Red List: Considered as VU	Criterion 4: Important staging and breeding site for this species.
CHORDATA/ AVES	Circus aeruginosus	Western Marsh Harrier				1			LC Str			National Red List: Considered as VU	(1 pair in 2000) Criterion 4: Feeding area for the species, as well as one breeding couple.
CHORDATA/ AVES	Circus cyaneus	Northern Harrier							LC			National Red List: Considered as EN	Criterion 4: Feeding area for this species.
CHORDATA/ AVES	Cygnus cygnus	Whooper Swan			مام				LC Star				(1 pair bred in the site in 2000) Criterion 4: The site is a staging area for this species before the area ices up in autumn.
CHORDATA/ AVES	Gallinago media	Great Snipe							NT ©			Annex II, Bern Convention	Occur in small numbers as a staging species.

Phylum	Scientific name	Common name	Species qualifies under criterio 2 4 6	s cor	pecies ntributes under riterion	Size	Period of pop. Est. occurrence		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Grus grus	Common Crane	<b>7</b> 20			75		LC OSS			Annex II, Bern Convention	(50-100 individuals) Criterion 4: The site is a staging area for this species both during spring and autumn.
CHORDATA/ AVES	Melanitta fusca	White-winged Scoter; Velvet Scoter	<b>2</b> 00					VU Sign			National Red List: Considered as VU	Staging site for the species, occurs in small numbers.
CHORDATA/ AVES	Mergellus albellus	Smew						LC Star			National Red List: Considered as VU	
CHORDATA/ AVES	Pandion haliaetus	Osprey, Western Osprey						LC Star				Criterion 4: Several pairs of Osprey Pandion haliaetus (NT) hunt in the area (these nest on nearby slopes).
CHORDATA/ AVES	Phalacrocorax carbo	Great Cormorant				]		LC St OTH				Criterion 4: Staging site for this species.
CHORDATA/ AVES	Philomachus pugnax	Ruff	<b>9</b> 90								National Red List: Considered as EN	Criterion 4: Staging area for this species.
CHORDATA/ AVES	Podiceps auritus	Horned Grebe						VU ●# ●#			National Red List: Considered as VU	Criterion 4: Staging site for this species.
CHORDATA/ AVES	Podiceps cristatus	Great Crested Grebe				7		LC om			National Red List: Considered as NT	(6-7 pairs) Criterion 4: This uncommon species breeds in the site.
CHORDATA/ AVES	Tringa glareola	Wood Sandpiper						LC Star			Annex II Bern Convention	Criterion 4: Staging site for this species.
CHORDATA/ AVES	Tringa nebularia	Common Greenshank						LC OTH				Criterion 4: Important staging site for this species. Can be observed in large flocks.
CHORDATA/ AVES	Tringa ochropus	Green Sandpiper						LC ©®			Annex II, Bern Convention	Criterion 4: Staging area for this species.
CHORDATA/ AVES	Tringa totanus	Common Redshank						LC OM				Criterion 4: Staging and breeding site for this species.
Fish, Mollusc	and Crustacea											
CHORDATA/ ACTINOPTERYG						9		LC OTH				Criterion 8: This fish-species spawns further upstream and migrate through the site.
CHORDATA/ ACTINOPTERYG		Snake				9		LC				Criterion 8: This fish-species spawns at the site.
CHORDATA/ ACTINOPTERYG		Stickleback	000			9		LC • iiii				Criterion 8: This fish-species is regularly observed at the site, and most likely spawns here.
CHORDATA/ ACTINOPTERYG		Sea smelt	000			9		LC Sir				Criterion 8: This fish-species spawns at the site in large numbers, important as prey for other fish species.
CHORDATA/ ACTINOPTERYG						9		LC ©SS				Criterion 8: This fish-species is regularly observed at the site.
CHORDATA/ ACTINOPTERYG	Phoxinus phoxinus	Common minnow; Common minnow	000			9		LC Sit OTER				Criterion 8: This fish-species lives and spawns at the site, prefers shallow waters.

Phylum	Scientific name	Common name	Species qualifies under criterion	Species contribute under criterion 3 5 7	Pop Size	Period of pop. Est. occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ ACTINOPTERYGII	Pungitius pungitius	Nine-spined stickleback; Nine- spined stickleback; Nine- spined stikleback; Ninespine stickleback; Ninespine stickleback; Ninespine stickleback; Ninespine stickleback			<b>2</b>		LC •\$ •\$				Criterion 8: This fish-species is regularly observed at the site, and most likely spawns here.
CHORDATA/ ACTINOPTERYGII	Salmo trutta	Herling			<b>√</b>		LC Sin				Criterion 8: The Trout Salmo trutta population in Randsfjorden spawns in Dokka/Etna and wanders through the site in large numbers.
CHORDATA/ ACTINOPTERYGII	Salvelinus alpinus	Arctic Char	0000		1		LC other				Criterion 8: This fish-species is observed at the site.
Others											
	Alces alces	Moose					LC Sign				Criterion 4: Important feeding area for this species.
CHORDAIA/	Eptesicus nilssonii	Northern Bat					LC ©#				Crterion 4: The site supports a good population of this species.
CHORDATA/ MAMMALIA	Lutra lutra	European Otter	<b>2</b> 000				NT ●# ●®	✓		National Red List: Considered as VU	Observed on the site

<sup>1)</sup> Percentage of the total biogeographic population at the site

0
Status is given according to National Red List 2015.
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# 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	
Semi-natural grassland	Ø	Species-rich meadows.	Species-rich meadows that require some management in form of grazing or mowing. Listed as VU on National Red List.	
Underwater vegetation		Diverse water vegetation, with species such as Potamogeton ssp. and Persicaria amphibia	Rich vegetation like this supports both bird and fish populations.	
Mud- and sandflats		Exposed mud- and sandflats with rich invertebrate fauna	Highly important food source for birds.	

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

# 4.1 - Ecological character

The site is a large inland delta, formed where the two rivers Dokka and Etna join together in Randsfjorden. The delta has a large variety of wetland types, such as waterside meadows with distinct zonation, islands in a state of succession (formerly managed) and deciduous woodland and willow scrub along the rivers and channels. Rich belts of floating vegetation occur in open water with Potamogeton natans, Persicaria amphibia, Nuphar lutea and N. pumila. The outer terrestrial vegetation composes large areas of Equisetum fluvialtile. Within is a zone of either Carex acuta or C. rostrata. This graduates into damp meadows dominated by Calamagrostis canescens and C. purpurea and characteristic species such as Filidpendula arundinacea and Lysimachia vulgaris. The higher riverbanks are dominated by Phalaris arundinacea. The woodland belt along the rivers and channels is mainly alder/bird-cherry, with Salix myrsinifolia and S. cinerea in the zone between woodland and meadow. The rich and varied delta landscape supports a high diversity of bird species.

The invertebrate fauna in the delta is well documented, and the mudbanks have a high biomass comprising Oligochaeta and other benthic creatures. The area is rich in fish, and the delta is an important spawning and rearing area for the whitefish Coregonus lavaretus or the pike Esox lucius.

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

#### Inland wetlands

il ilai la Wollai las				
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 >> L: Permanent inland deltas		1		
Fresh water > Flowing water >> M Permanent rivers/ streams/ creeks		3		
Fresh water > Lakes and pools  >> O: Permanent freshwater lakes		2		Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4		Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils				

#### Human-made wetlands

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

#### 4.3 - Biological components

### 4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Astragalus alpinus		Occurrence of this regionally rare species.
Crepidotus epibryus		Interesting species that has been found in the alder/bird-cherry woods
Hammarbya paludosa		Occurrence of this regionally rare species.
Myrica gale		Occurrence of this regionally rare species.
Pedicularis sceptrum- carolinum		Occurrence of this regionally rare species.

#### 4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Limicola falcinellus	Broad-billed Sandpiper				
ANNELIDA/CLITELLATA	Glossiphonia verrucata					First found in the delta in 1987 (as a new species for Norway).
CHORDATA/AMPHIBIA	Lissotriton vulgaris	Smooth newt				
CHORDATAMAMMALIA	Myotis brandtii	Brandt's Myotis				Unconfirmed record of this species.
CHORDATAMAMMALIA	Myotis mystacinus mystacinus					National Red List: Considered as LC, Unconfirmed record of this species.
CHORDATA/AMPHIBIA	Rana temporaria	European frog				

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
CHORDATAAVES	Branta canadensis	Canada Goose	Potentially	No change
CHORDATAMAMMALIA	Neovison vison	American Mnk	Potentially	No change

# 4.4 - Physical components

#### 4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

The area has a slightly continental climate, with relatively warm summers and cold winters and moderate annual precipitation (715 mm p.a.).

441	2 - Ge	omorn	hic	setting

a) Minimum elevation above sea level (in metres)	131	
a) Maximum elevation above sea level (in metres)	135	
		Entire rive

er basin 🗆

Upper part of river basin  $\square$ Middle part of river basin  $\Box$ 

Lower part of river basin More than one river basin  $\hfill\Box$ 

Not in river basin  $\square$ 

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.

Etna and Dokka

# 4.4.3 - Soil



Please provide further information on the soil (optional)

The outer delta platform is made up of fine-grained material (silt and sand) whereas farther in, there is mainly sand and coarser material. A build-up of organic material has formed into peat in damp areas in the inner delta.

#### 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			

riator documentor:		
	Presence?	Changes at RIS update
	To downstream catchment	No change

#### Stability of water regime

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

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

A large part of the area is shallow (0.5 - 3 m deep) under normal summer water levels, and there are deep channels in the outer northern part which go down to 10 m. Randsfjorden has a regulation regime of 3.2 m, and during winter large areas of the delta are dry land. The river Etna is unregulated, whereas the river Dokka was regulated for production of hydroelectricity in 1988.

#### 4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site  $\ensuremath{\overline{\omega}}$ 

(Update) Changes at RIS update No change 

● Increase O Decrease O Unknown O

Sediment regime unknown  $\square$ 

Please provide further information on sediment (optional):

The transport of sediment from the large rivers Etna and Dokka are responsible for the building up of the delta and for the changing mudbanks in the delta. The area functions as a sediment trap and is important for fixing of nutrients (in particular those containing phosphor and nitrogen).

#### 4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4)

 $^{ ext{(Update)}}$  Changes at RIS update No change ullet Increase O Decrease O Unknown O

Unknown

Please provide further information on pH (optional):

The water quality in Dokka is good, with a pH of between 6.8 and 7.1.

#### 4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change 

● Increase 

O Decrease 

O Unknown 

O

Unknown

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

Oligotrophic 🗹

(Update) Changes at RIS update No change 

☐ Increase ☐ Decrease ☐ Unknown ☐

Unknown

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

Randsfjorden is poor in nutrients and plant plankton.

#### 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  $\square$ 

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types  $\hfill\Box$ 

Please describe other ways in which the surrounding area is different:

Randsfjorden and Dokka river are regulated in connection with production of hydroelectricity. The reserve is surrounded by agricultural areas and extensively exploited woodlands. The town of Dokka with around 2000 inhabitants is situated beside the river Dokka and lies about 4 km north-west of the reserve.

# 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	Water for irrigated agriculture	Low

#### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	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	Medium
Scientific and educational	Educational activities and opportunities	Medium

#### Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium

#### Other ecosystem service(s) not included above:

The area functions as a sediment trap and is important for fixing of nutrients (in particular those containing phosphor and nitrogen). The large watershed makes the rivers important in alleviating floods, but extensive drainage of mires in the lower reaches have resulted in more frequent flooding, especially in spring.

The waterside meadows and grassy meadows in the delta were formerly cut for hay, and there are remains of several hay barns in the area. Management by cutting and burning in order to recreate former meadows has been started. The delta is regularly used by school classes from the district. Fishing was formerly an extra source of income for local farmers.

The area is used for birdwatching and recreational activities by local residents, mainly for fishing and bathing (in the recreational area in the south-west).

See additional material for further information.

Have studies or assessments been made of the economic valuation of	Von I	Voc O No O I Inkno	Linknown	
acceptom conicae provided by this Pamear Sito?	162		OTKHOWIT	_

#### 4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland	
ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland	
iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples	
iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland	

<no data available>

# 4.6 - Ecological processes

<no data available>

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

# 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<b>2</b>	<b>2</b>

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

within the Ramsar site: Private
in the surrounding area: Private

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:	
Provide the name and title of the person or people with responsibility for the wetland:	No particular person
Postal address:	Statens Hus P.O. 987, N-2626 Lillehammer
E-mail address:	fmoppost@fylkesmannen.no

# 5.2 - Ecological character threats and responses (Management)

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

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	Medium impact	Medium impact	✓	No change		No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Low impact	Medium impact	✓	No change	✓	No change

#### Please describe any other threats (optional):

#### Within the Ramsar site:

Dokka river is regulated for hydroelectric power production, and this is reducing the water transport through the delta compared to former state, since some of the water from Dokka is channelled through the power station at Odnes and pumped out in Randsfjord outside the reserve. This is potentially causing a decrease in sedimentation, which again can decrease density of bottom-dwelling organisms. However, this has been the case since the site was registered as a Ramsar site, due to the fact that despite these factors the delta is still of very high importance to waterbirds. There has not been any changes in this situation in the past years.

Cessation of grazing and hay cutting on many of the larger islands in the inner part of the delta has allowed rapid vegetation succession. This has resulted in several plants and birds (such as the yellow wagtail Motacilla flava and the Eurasian curlew Numenius arquata) having either disappeared or become scarcer. There are now initiated actions to restore these areas by reinstating some traditional agriculture methods, according to the management plan.

# 5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve	Dokkadelta		whole

### 5.2.3 - IUCN protected areas categories (2008)

la 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
M Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

#### 5.2.4 - Key conservation measures

#### Legal protection

20ga: p. 0.000.0.	
Measures	Status
Legal protection	Implemented

#### Habitat

Measures	Status
Habitat manipulation/enhancement	Partially 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 site has a national Wetland Visitors Center, which performs a range of tasks, such as education of school children, guiding, management and monitoring of natural values such as the bird populations and flora.

URL of site-related webpage (if relevant): https://dokkadeltaet.no/

#### 5.2.6 - Planning for restoration

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

# Further information

No, but restoration of semi-natural grassland is planned and done according to the management plan for the site.

# 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

Recording of breeding and staging birds is carried out as part of wardening of the site.

# 6 - Additional material

# 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

#### artskart.no

County Governor of Oppland. 2013. Dokkadeltaet naturreservat - forvaltningsplan med forvaltningsmål. (Management plan for Dokkadeltaet Nature Reserve - With management goals).

County Governor of Oppland. 2004. Flora og vegetasjon i Dokkadeltaet med forslag til skjøtseltiltak i naturreservatet. (Flora and vegetation in Dokkadelta - With management suggestions in the reserve).

Gederaas, L., Moen, T.L., Skjelseth, S. & Larsen, L.-K. (eds.). Alien species in Norway – with the Norwegian Black List 2012. The Norwegian Biodiversity Information Centre, Norway.

Henriksen S and Hilmo O. 2015. Norwegian Red List of Species 2015.

Norwegian Ornithological Society. Rapport 5-2015. Important Bird and Biodiversity Areas (IBAer) i Norge.

#### 6.1.2 - Additional reports and documents

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

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

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

iv. relevant Article 3.2 reports

v. site management plan

<1 file(s) uploaded>

vi. other published literature

<2 file(s) uploaded>

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

Please provide at least one photograph of the site:



Aerial photo of the site. ( Norwegian Environment Agency, 08-11-2017 )



Whooper Swans in the Dokkadelta ( Ole Knut Steinset, Norwegian Environment Agency, 30-10-



Whooper Swans in the Dokkadelta ( Ole Knut Steinset, Norwegian Environment Agency, 01-11-



Great Cormorants in the Dokkadelta ( Ole Knut Steinset, Norwegian Environment Agency, 01-11-2013 )

# 6.1.4 - Designation letter and related data

# Designation letter

<1 file(s) uploaded>

Date of Designation 2002-08-06