



Ramsar Information Sheet

Published on 15 May 2019

Update version, previously published on : 1 January 2002

Denmark (Greenland)

Aqajarua, Qaamassoq and Sullorsuaq



Designation date	27 January 1988
Site number	381
Coordinates	69°40'42"N 52°04'50"W
Area	26 440,00 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

The area consists of a large U-shaped valley (Sullorsuaq), a coastal foreland (Qaamassoq), a shallow marine bay (Aqajarua) and a delta with tidal mudflats. In the valley and on the foreland there are rivers, lakes, ponds and marshes. There are homeothermic springs along northern side of valley, although many are above the 200 m contour, i.e. outside the Ramsar-site.

The site is an important breeding, staging and moulting area for waterbirds. International important numbers (> 1% of world population) of Greenland White-fronted Goose (*Anser albifrons flavirostris*) occur in the area. The bay is an important fishing and hunting area for people from nearby towns.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	David Boertmann
Institution/agency	Aarhus University, Institute Bioscience
Postal address	Frederiksborgvej 399 DK-4000 Roskilde Denmark
E-mail	dmb@bios.au.dk
Phone	+45 2558 0687

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

From year	1990
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Aqajarua, Qaamassoq and Sullorsuaq
Unofficial name (optional)	Mudderbugten, Flakkerhuk and Kvandalen

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 checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	No
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2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps	0
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Boundaries description

The boundaries inland follow primarily the 200 m contour line. In the marine parts (except the bay), the boundary is approx. 1,3 km from the coast.

2.2.2 - General location

a) In which large administrative region does the site lie?	Kommune Qeqertalik
b) What is the nearest town or population centre?	Ilulissat 51 km, Qeqertarsuaq 73 km, Qasigiannnguit 88 km and Aasiaat 97 km all by boat

2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Low Arctic oceanic/continental
WWF Terrestrial Ecoregions	Kalaallit Nunaat low Arctic tundra

Other biogeographic regionalisation scheme

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

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

Other reasons: The extensive freshwater wetlands are rare in West Greenland, and the combination with a shallow marine bay and lagoons is unique. There are moreover a number of homeothermic springs along the northern boundary.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification: The region has a very high diversity of vascular plants and waterbirds. More than 130 species of vascular plants were recorded during a field study in 2015 (Wegeberg et al. 2016). Internationally important numbers of Greenland White-fronted Geese use the site as a moulting area in July-August (468-637 birds in 2001), there are also many breeding White-fronted Geese (34 pairs in 2001). In 2015, 317 moulting birds were counted (1.7% of total population). The white-fronted goose breeding in Greenland constitutes a separate and endemic subspecies (flavirostris), which is nationally red-listed as Endangered (EN). King eiders stage and moult in the area (1575 birds in 2001), but the numbers have been decreasing over the recent decades.

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

- Criterion 6 : >1% waterbird population

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
<i>Corallorhiza trifida</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		rare

More than 130 species of vascular plants were recorded during a field study in 2015 (Wegeberg et al. 2016). Three Greenland endemics occur in the site: *Antennaria affinis*, *Antennaria intermedia* and *Potentilla ranunculus*.

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

Phylum	Scientific name	Common 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								
Birds																		
CHORDATA/AVES	<i>Anas platyrhynchos boschas</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"/>	<input type="checkbox"/>	endemic subspecies	breeder
CHORDATA/AVES	<i>Anser albifrons flavirostris</i>	Greenland White-fronted Goose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	319	2015	1.7		<input type="checkbox"/>	<input type="checkbox"/>	Endangered (EN) on national red list. Endemic subspecies	breeding and moulting
CHORDATA/AVES	<i>Branta canadensis</i>	Canada Goose	<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"/>	317	2015		LC	<input type="checkbox"/>	<input type="checkbox"/>		breeding and moulting birds
CHORDATA/AVES	<i>Clangula hyemalis</i>	Oldsquaw; Long-tailed Duck	<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"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		breeder
CHORDATA/AVES	<i>Gavia stellata</i>	Red-throated Loon; Red-throated Diver	<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"/>	12	2001		LC	<input type="checkbox"/>	<input type="checkbox"/>		breeder
CHORDATA/AVES	<i>Phalaropus lobatus</i>	Red-necked Phalarope	<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"/>	48	2001		LC	<input type="checkbox"/>	<input type="checkbox"/>		breeder
CHORDATA/AVES	<i>Somateria spectabilis</i>	King Eider	<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"/>	1500	2001		LC	<input type="checkbox"/>	<input type="checkbox"/>		moulting
CHORDATA/AVES	<i>Stercorarius longicaudus</i>	Long-tailed Skua	<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"/>	2	2001		LC	<input type="checkbox"/>	<input type="checkbox"/>	rare breeder in West Greenland	breeder
CHORDATA/AVES	<i>Stercorarius parasiticus</i>	Arctic Skua	<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"/>		breeder
CHORDATA/AVES	<i>Sterna paradisaea</i>	Arctic Tern	<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"/>	NT on national red list	breeder
Fish, Mollusc and Crustacea																		
CHORDATA/ACTINOPTERYGII	<i>Salvelinus alpinus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		spawn in river

1) Percentage of the total biogeographic population at the site

Internationally important numbers of Greenland White-fronted Geese use the site as a moulting area in July-August (468-637 birds in 2001), there are also many breeding White-fronted Geese (34 pairs in 2001). In 2015, 317 moulting birds were counted (1.7% of total population). The white-fronted goose breeding in Greenland constitutes a separate and endemic subspecies (flavirostris), which is nationally red-listed as Endangered (EN). King eiders stage and moult in the area (1575 birds in 2001), but the numbers have been decreasing over the recent decades.

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

<no data available>

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

4.1 - Ecological character

There are extensive marshlands at the many ponds and small lakes in the valley and on the foreland. The river mouth is a wide delta with mud and sand flats exposed at low tide, and with salt marshes in the higher parts. At the coast of Qaamassoq there are barrier beaches, lagoons and salt marshes. In the drier parts, there are dwarf scrub heaths and fell fields. The vegetation on the low dunes and on the backside of the coastal barrier is very sparse, with scattered stands of a.o. Elymus, Honckenya, and Mertensia. On the lower parts of the salt marshes Puccinellia phryganodes, Carex subspathacea, C. ursina and Juncus articus are dominating often forming dense cover. In the higher parts of the salt marshes Carex rariflora becomes frequent. Carex stans is the most prominent Carex species in the marshes where it forms dense stands. Where the marshes become dry, they transform into grassland mainly with Carex bigelowii.

The vegetation in the valley of Sullorsuaq is dominated by dwarf scrub heath, mainly rather dry with Betula, Empetrum and lichens. Here and there, it is more hummocky and moist with Salix (at places up to 1 m tall) and mosses. In the valley floor Salix is dominant in the dryer areas on gravel banks and dried out riverbeds. Mosses and herbs such as Polygonum viviparum and Bartsia are numerous in these open Salix scrubs. In the marshes Carex stans and Eriohorum triste and E. scheuchzeri are dominating and often forming dense stands.

At some of the lakes, thick turf walls "palsas" have build up.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters		1		Representative
G: Intertidal mud, sand or salt flats		3		Representative
H: Intertidal marshes		4		Rare
J: Coastal brackish / saline lagoons		2		Rare

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		Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3		Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		2		Representative
Fresh, saline, brackish or alkaline water > Geothermal >> Zg: Geothermal wetlands		4		Unique

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Dwarf scrub heath, dunes, fell fields, abrasion flats	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Platanthera hyperborea		rare

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
ARTHROPODA/INSECTA	Glossiana chariclea					common
ARTHROPODA/INSECTA	Colias hecla	Northern Clouded Yellow;Greenland Sulphur;Hecla Orange				common
ARTHROPODA/INSECTA	Gynaephora groenlandica					here and there in the area
CHORDATA/AVES	Lagopus muta	Rock Ptarmigan	8	2001		

Optional text box to provide further information

The gastropod Lymnaea vahlii Möller (not in the pop-up list above) is common in the lakes.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
E: Polar climate with extremely cold winters and summers	ET: Tundra (Polar tundra, no true summer)

The climate types in the above field do not apply to this part of Greenland. The summers are not extremely cold and there is in fact a true summer.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

River basin: Sullorsuaq/Kvandalen. Sea/ocean: Disko Bay

4.4.3 - Soil

Mineral

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

Organic

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

No available information

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

Please provide further information on the soil (optional)

no information

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 rainfall / snowfall	<input type="checkbox"/>	No change
Marine water	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels 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 predominant water source is melt water from glaciers. Rainfall includes snow here.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

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

Significant accretion or deposition of sediments occurs on the site

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

Significant transportation of sediments occurs on or through the site

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

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

RIS for Site no. 381, Aqajaruua, Qaamassoq and Sullorsuaq, Denmark (Greenland)

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

Sediment regime unknown

Please provide further information on sediment (optional):

no information

4.4.6 - Water pH

Acid (pH<5.5)

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

Circumneutral (pH: 5.5-7.4)

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

Alkaline (pH>7.4)

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

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Mxohaline (brackish)/Mxosaline (0.5-30 g/l)

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

Euhaline/Eusaline (30-40 g/l)

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

Hyperhaline/Hypersaline (>40 g/l)

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

Unknown

(EOD) Dissolved gases in water

no information

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

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

Mesotrophic

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

Oligotrophic

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

Dystrophic

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

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ii) significantly different site itself:

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

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

The surrounding areas are generally high mountains or dry lowlands without significant wetlands.

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

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Low

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

Other ecosystem service(s) not included above:

The bay is a hunting area for local people (seabirds and seals) and Arctic char is fished with gill nets along the coasts. There are probably archaeological sites within this Ramsar site (cf. The National Museum of Greenland).

Within the site:

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

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

<no data available>

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Public land (unspecified)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5.1.2 - Management authority

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

Pinngortitamut Avatangiisinullu Naalakkersuisoqarfik
 Departementet for Natur og Miljø
 Ministry of Nature and Environment

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

Karen Motzfeldt, Head of Department for Nature, Climate and Research

Postal address:

Pinngortitamut Avatangiisinullu Naalakkersuisoqarfik
 Departementet for Natur og Miljø
 Ministry of Nature and Environment
 Postboks 1015
 3900 Nuuk

E-mail address:

pan@nanoq.gl

5.2 - Ecological character threats and responses (Management)

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

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

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Areas important to wildlife (Anon. 2000)		https://www.govmin.gl/images/stories/minerals/rules_for_fieldwork.pdf	whole
Ramsar site	Aqajarua (Mudderbugten), Qaamassoq (Flakkerhuk) and Sullorsuaq (Kvandalen)	http://lovgivning.gl/lov?rid={15 CBC689-E3AD-470D-B32A-947A250D70 62}	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	GL025 Aqarajua-Siullorsuaq	http://datazone.birdlife.org/site/factsheet/69	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

Human Activities

Measures	Status
Fisheries management/regulation	Implemented

Other:

Sailing and low level flying is regulated in and above the site. Greenland Government Order no. 12 of June 1st on protection of the internationally designated wetlands in Greenland and protection of certain waterfowl.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal community	Proposed

Monitoring proposed by Egevang & Boertmann 2001a (See Egevang & Boertmann 2001a, 2001b).

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Anonymous 2000. Rules for fieldwork and reporting regarding mineral resources (excluding hydrocarbons) in Greenland. – Government of Greenland, Bureau of Minerals and Petroleum.

Bay, C. 1997. Floristic division and vegetation zonation of Greenland in relevance to a circumpolar arctic vegetation map: 27-31. In: Proceedings of the second circumpolar arctic vegetation mapping workshop, Arendal, Norway, 19.-24. May 1996. Walker, S. & A.C. Lillie, eds.). – Occasional Paper No. 52, 1997. Institute of Arctic and Alpine Research, University of Colorado.

Boertmann, D. & Petersen, I.K. 2016. Aerial surveys of geese, seaducks and other wildlife in the Disko Bay area, West Greenland, July 2015. – DCE Technical Report, 78, 25 pp.

Egevang, C. & Boertmann, D. 2001a. The Greenland Ramsar Sites, a status report. – National Environmental Research Institute (NERI), Technical Report No. 346, 96 pp.

Egevang, C. & Boertmann, D. 2001b. The Ramsar sites of Disko, West Greenland. A survey in July 2001. – National Environmental Research Institute (NERI), Technical Report No. 368, 68 pp.

Fox, A.D. & Glahder, C.M. 2010. Post-moult distribution and abundance of white-fronted geese and Canada geese in West Greenland in 2007. – Polar Research 29: 413-420.

Greenland Red List 2007. (Boertmann, D., 2008). Rødtliste 2007 over planter og dyr i Grønland. – Danmarks Miljøundersøgelser, Grønlands Hjemmestyre. 266.

Mosbech, A. & D. Boertmann 1999. Distribution, abundance and reaction to aerial surveys of post-breeding king eiders (*Somateria spectabilis*) in western Greenland. – Arctic 52: 188-203.

Wegeberg, S. & Boertmann, D. (eds) 2016. Disko Island and Nuussuaq Peninsula, West Greenland. A strategic environmental impact assessment of petroleum exploration and exploitation. – Scientific report from DCE, Aarhus University 199.

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

<1 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<3 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



The outer reaches of the Sullorsuaq valley and the shallow bay. (David Boertmann, 15-08-2015)



The bay seen from south and a coastal lagoon in front. (David Boertmann, 14-08-2015)



The dunes of Qaamassoq, with coastal lagoon to the right. (David Boertmann, 14-08-2015)



The tidal mudflats in the bay. (David Boertmann, 14-08-2015)



Aqajarua/Mudderbugt seen from south. (David Boertmann, 4-07-2001)



Salt marsh of Qaamassoq/Flakkerhuk. (David Boertmann, 03-07-2001)



Coastal lagoon on south side of Aqajarua/Mudderbigten. (David Boertmann, 04-07-2001)



The central part of Sullorsuaq/Kvandalen. (David Boertmann, 04-07-2001)



Tall Salix-scrub in Sullorsuaq/Kvandalen (David Boertmann, 04-07-2001)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation