



Ramsar Information Sheet

Published on 10 November 2023

Netherlands (Kingdom of the) (Aruba) South Coast



Designation date	10 November 2023
Site number	2526
Coordinates	12°28'45"N 70°00'14"W
Area	3 975,00 ha

RIS for Site no. 2526, South Coast, Netherlands (Kingdom of the) (Aruba)

Created by RSIS V.1.6 on - 10 November 2023

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 South Coast measures 3975 ha and covers a stretch of some 19 km long and 2 km wide along the southern leeward coast of Aruba. The site comprises the islands largest stand of mangrove forest, dense cover seagrass beds, coral reefs, beaches and the islands main chain of reef islets.

The beaches provide nesting habitat for Green, Hawksbill and Loggerhead turtles. The islets to the west of the site, under the flight path of the Queen Beatrix Airport, are an important breeding habitat for colonies of Cayenne Terns and Common Terns.

A 2019-study revealed that this Ramsar site is the most important coral recruitment area of Aruba. The shallow 0-4 m depth coastal zone has relatively large stands of Fire Coral and Elkhorn Coral. These complex structures provide critical nursery habitat for specific reef fish species, like juveniles of the Smallmouth grunt, Blue Tang and Ocean Surgeonfish which depend on these (hydro)coral habitats. Between 5-11 m depth grow small, patchy stony coral structures of threatened reef building Boulder Star Coral, Great Star Coral, Pillar coral and Yellow Pencil Coral. In deeper areas this zone can be characterized by dense, hard coral and rock structures, Lettuce Coral (Agaricidae), Pencil coral and gorgonian species. The drop-off zone between 12-18 m starts among others with an abundance of *Orbicella* spp., *Agaricia* spp., Brain corals (Mussidae) as well as Sea Whips and Sea Fans.

Towards the south the waters drop down to 40 meters. Here there can be stronger currents and more swell on the surface. Barracuda, Larger Jacks, Spotted Eagle Rays, Caribbean Reef Sharks and Tiger Sharks venture into these waters, but more study is needed to assess its biodiversity values. This is also the area where dolphins and whales can be observed. No less than twelve species have been assessed within this Ramsar site, six of which (all dolphin) seek refuge in the shallow waters between the reef islets and up to 2 m from the coast for birthing, nursing, resting or recovery from injuries. Fact that the Ramsar site extends 2 km into the Caribbean sea ensures that threats to sea mammals, among which disturbances from underwater noise, can be better managed.

Besides biodiversity values the site also provides significant ecosystem services to the Aruban economy, in terms of coastal protection, fish spawning and tourism (diving and snorkeling).

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	1997
To year	2023

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	South Coast
Unofficial name (optional)	Zuidkust

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 site runs from the southwestern tip of the island to commandeurs baai in the east. It includes the beaches like at Santo Largo, Isla di Oro, Bao Baranca and Mangel Halto. The site includes the marine area up to 2km offshore. The site borders Ramsar site Spanish Lagoon. Excluded from the site are Palm Island, Renaissance Island, the Cruiseship Terminal (Port of Oranjestad) and Oranjestad harbor.

2.2.2 - General location

a) In which large administrative region does the site lie?	The Caribbean Island Aruba, which is a constituent country of the Kingdom of the Netherlands
b) What is the nearest town or population centre?	Capital Oranjestad in the west and the village of San Nicolas in the east

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):	3975
Area, in hectares (ha) as calculated from GIS boundaries	3974.774

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Realm: Tropical Atlantic, Province: Tropical North-western Atlantic, Ecoregion: Southern Caribbean.

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 ecosystem services provided

The site may be considered the most biodiverse area of Aruba. It contains a chain of reef islets, sea grass beds, coral reefs and mangrove forests which ensures coastal protection of Aruba's southern coast. The sea grass beds, coral reefs and mangrove forests provide important nursery functions for Aruba's fisheries sector. These habitats are also important for the tourist sector mainly for scuba diving and/or snorkeling, while the white beaches provide important recreation and tourism services as well.

- Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

The combination of substantial areas of habitats like beaches, reef islets, mangroves, sea grass beds and coral reefs is unique for Aruba and has a reproduction, nursery and feeding function for many species groups. The conservation of this site is crucial for the conservation of these species at Aruba. Several globally threatened species can be observed at the site including endemic and several critically endangered ones.

- Criterion 3 : Biological diversity

Justification

The combination of substantial areas of mangroves, sea grass beds and coral reefs is unique for Aruba and provides crucial reproduction, nursery and foraging functions for multiple vertebrate and non-vertebrate species including tern colonies, three species of nesting sea turtles, twelve species of sea mammals, many species of soft and stony corals, fish, sponges etc.

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

Optional text box to provide further information

The combination of substantial areas of mangroves, sea grass beds, coral reefs, beaches and shallow marine area between a chain of reef islets and the coast is unique for Aruba. It provides crucial reproduction, nursery and foraging functions for multiple vertebrate and non-vertebrate species. The site is situated at the leeward site of Aruba and the area, especially between the chain of reef islets and the coast, provides refuge during adverse weather conditions. Among others, the site supports many migratory and breeding birds species among which tern colonies; nesting and feeding habitat for three sea turtle species; nursery habitat for sharks; refuge, nursery, feeding and birthing habitat for 12 sea mammal species (dolphins and whales). The site also represents the most important coral recruitment area of Aruba.

- Criterion 6 : >1% waterbird population

- Criterion 7 : Significant and representative fish

Justification

The diversity in shallow and deeper marine habitats results in a relatively high diversity of fish species. The biomass of herbivorous fish in the site is relatively high if compared to other Caribbean islands resulting in efficient grazing, lowering the growth of algae (Vermeij, 2019).

- Criterion 8 : Fish spawning grounds, etc.

Justification

The site comprises large stands of mangrove forest, several hectares of seagrass beds and coral reefs. All these habitats have an important fish spawning function. The shallow (0-4 m depth) coastal zone has large stands of Fire Coral (*Millepora complanata*) and Elkhorn Coral (*Acropora palmata*). These complex structures provide critical nursery habitat for specific reef fish species (Nagelkerken 1974), like juveniles of the Smallmouth grunt (*Haemulon chrysargyreum*), Blue tang (*Acanthurus coeruleus*) and Ocean surgeonfish (*Acanthurus bahianus*) which depend on these (hydro)coral habitats (Nagelkerken et al. 2000).

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Avicennia germinans</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Conocarpus erectus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function
TRACHEOPHYTA/ LILIOPSIDA	<i>Halodule wrightii</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function, foraging function sea turtles
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Laguncularia racemosa</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Rhizophora mangle</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function
TRACHEOPHYTA/ LILIOPSIDA	<i>Syringodium filiforme</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function, foraging function sea turtles
TRACHEOPHYTA/ LILIOPSIDA	<i>Thalassia testudinum</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LC	<input type="checkbox"/>	SPAW Annex 3	Fish spawning function, foraging function sea turtles

The seagrass beds are dominated by native species. The invasive *Halophila stipulacea* is also present though and might be increasing but this is not clear. Becking et al. (2014a) observed that *H. stipulacea* dominated seagrass beds had only half the number of fish compared to native seagrass beds. The Green Turtle (*Chelonia mydas*) however has also been observed to feed on *H. stipulacea* (Becking et al. 2014b).

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

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Others																	
CNIDARIA/ ANTHOZOA	<i>Acropora cervicornis</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"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	Spaw Annex II	Spawning, nursery function
CNIDARIA/ ANTHOZOA	<i>Acropora palmata</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"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	Spaw Annex II	Spawning, nursery function (Spalding 2004; Wouters, 2018)
CHORDATA/ MAMMALIA	<i>Balaenoptera acutorostrata</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 checked="" type="checkbox"/>	<input type="checkbox"/>	SPAW Annex II	Foraging
CHORDATA/ REPTILIA	<i>Caretta caretta</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"/>				VU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SPAW Annex II	Nesting, foraging
CHORDATA/ REPTILIA	<i>Chelonia mydas</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"/>				EN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SPAW Annex II	Nesting, foraging
CHORDATA/ MAMMALIA	<i>Delphinus capensis</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				DD	<input type="checkbox"/>	<input type="checkbox"/>	SPAW Annex II	Foraging

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								
CNIDARIA / ANTHOZOA	<i>Dendrogyra cylindrus</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"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	SPAW Annex III	(Spawning, nursery function (De Boer, 2010 ; Wouters, 2018)
CHORDATA / REPTILIA	<i>Eretmochelys imbricata</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"/>				CR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SPAW Annex II	Nesting, feeding
CHORDATA / MAMMALIA	<i>Globicephala macrorhynchus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	SPAW Annex II	Feeding
CHORDATA / MAMMALIA	<i>Grampus griseus</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"/>	SPAW Annex II	Feeding
CHORDATA / MAMMALIA	<i>Megaptera novaeangliae</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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SPAW Annex II	Wintering
CNIDARIA / HYDROZOA	<i>Millipora complanata</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"/>	SPAW Annex III	Spawning, nursery function (Wouters, 2018)
CNIDARIA / ANTHOZOA	<i>Orbicella annularis</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"/>	SPAW Annex III	Spawning, nursery function (Wouters, 2018)
CNIDARIA / ANTHOZOA	<i>Orbicella faveolata</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"/>	SPAW Annex III	Spawning, nursery function (Wouters, 2018)
CNIDARIA / ANTHOZOA	<i>Porites branneri</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"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	SPAW Annex III	Spawning, nursery function
CHORDATA / MAMMALIA	<i>Pseudorca crassidens</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"/>	SPAW Annex II	Indigenous; Feeding
CHORDATA / MAMMALIA	<i>Stenella attenuata</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"/>	SPAW Annex II	Indigenous on Aruba; refuge, birthing, feeding at the site
CHORDATA / MAMMALIA	<i>Stenella coeruleoalba</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"/>	SPAW Annex II	Nursery
CHORDATA / MAMMALIA	<i>Stenella frontalis</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"/>	SPAW Annex II	Refuge, birthing, nursery
CHORDATA / MAMMALIA	<i>Stenella longirostris</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"/>	SPAW Annex II	Nursery
CHORDATA / MAMMALIA	<i>Steno bredanensis</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"/>	SPAW Annex II	Refuge, birthing, nursery
CHORDATA / MAMMALIA	<i>Tursiops truncatus</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"/>	SPAW Annex II	Refuge, birthing, nursery
Fish, Mollusc and Crustacea																	
CHORDATA / ELASMOBRANCHII	<i>Aetobatus narinari</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"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>		Spalding, 2004
CHORDATA / ELASMOBRANCHII	<i>Carcharhinus perezi</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"/>		Feeding
CHORDATA / ELASMOBRANCHII	<i>Galeocerdo cuvier</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"/>		Feeding
Birds																	
CHORDATA / AVES	<i>Aratinga pertinax</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"/>	CITES app. II, endemic sub spp. to Aruba	Reproduction, foraging, refuge function (Del Newo pers. comm.)
CHORDATA / AVES	<i>Caracara cheriway</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"/>	SPAW Annex 2; Cites App. II	Reproduction, foraging, refuge function (Del Newo pers. comm.)
CHORDATA / AVES	<i>Caracara plancus</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"/>	Cites App. II	Reproduction, foraging, refuge function
CHORDATA / AVES	<i>Chlorostilbon mellisugus</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"/>	Cites App. II	Reproduction, foraging, refuge function (Del Newo pers. comm.)
CHORDATA / AVES	<i>Chrysolampis mosquitus</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"/>	Cites App. II	Reproduction, foraging, refuge function (Del Newo pers. comm.)
CHORDATA / AVES	<i>Falco peregrinus</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 checked="" type="checkbox"/>	<input type="checkbox"/>	SPAW II	foraging, refuge
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"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Cites App. II	Reproduction, foraging, refuge function

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>Pelecanus occidentalis</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"/>	SPAW II	Reproduction, foraging, refuge function
CHORDATA / AVES	<i>Sterna hirundo</i>	<input 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"/>	78	2007	5.2	LC	<input type="checkbox"/>	<input type="checkbox"/>	Birdlife A4i	Del nevo pers. comm.
CHORDATA / AVES	<i>Thalasseus acuffavidus eurygnatha</i>	<input 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"/>	2250	1999	6.3		<input type="checkbox"/>	<input type="checkbox"/>	Birdlife A4i	Del Nevo 2008

1) Percentage of the total biogeographic population at the site

The list of plant and animal species was compiled with support of Fundacion Parke Nacional Aruba (FPNA) in collaboration with local nature NGOs Turtugaruba (Save-the-Sea-Turtles Organization of Aruba), Aruba Marine Mammal Foundation (AMMF) and Aruba Birdlife Conservation (ABC).

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
Sea grass beds	<input checked="" type="checkbox"/>	Spawning and nursery function for fish etc.; feeding function for sea turtles etc.	Combination of fringing islets, coral reefs, sea grass beds and mangrove forests
Mangrove forests	<input checked="" type="checkbox"/>	Spawning and nursery function for fish and crustaceans among others. Breeding, feeding function for birds.	Combination of fringing islets, coral reefs, sea grass beds and mangrove forests
Coral Reef	<input checked="" type="checkbox"/>	Spawning and nursery function for fish among others.	Combination of fringing islets, coral reefs, sea grass beds and mangrove forests

Optional text box to provide further information

Ramsar site South Coast is the most diverse coastal area of Aruba. This site encompasses the islands largest area of mangrove forests, with all four mangrove species present (Black Rhizophora mangle, Red Avicennia nitida and White Mangrove Laguncularia racemose); several hectares of dense cover seagrass beds (including Thalassia testudinum, Halodule wrightii and the invasive Halophila stipulacae) and some of the best coral reefs of Aruba. The site also encompasses nesting beach for three sea turtles species and reef islets with tern colonies.

The shallow (0-4 m depth) coastal zone has large stands of Fire Coral (*Millepora complanata*) and some beautiful stands of Elkhorn Coral (*Acropora palmata*). These complex structures provide critical nursery habitat for specific reef fish species (Nagelkerken 1974), like juveniles of the Smallmouth grunt (*Haemulon chrysargyreum*), Blue tang (*Acanthurus coeruleus*) and Ocean surgeonfish (*Acanthurus bahianus*) which depend on these (hydro)coral habitats (Nagelkerken et al. 2000).

Between 5-11 m depth grow small, patchy stony coral structures of Boulder Star Coral (*Orbicella annularis*), Great Star Coral (*M. cavernosa*), Pillar coral (*Dendrogyra cylindrus*), and Yellow Pencil Coral (*Madracis auretenra*). In deeper areas this zone can be characterized by dense, hard coral and rock structures, lettuce coral (*Agaricidae*), Pencil coral and gorgonian species. The drop-off zone between 12-18 m starts with abundance of *Orbicella* spp., *Agaricia* spp. As well as Sea Whips and Sea Fans are present. Other species include Cactus Coral *Isophyllia sinuos*, Yellow Pencil Coral and Brain coral (*Mussidae*).

These marine habitats form breeding, feeding and nursery habitat for many terrestrial (e.g. birds) but especially marine species. Endangered Green Turtles (*Chelonia mydas*) feed on sea grasses, but most obvious is the high diversity, number and size of the fish species, like Blue tang (*Acanthurus coeruleus*), Doctorfish (*Acanthurus chirurgus*), Ocean surgeonfish (*A. bahianus*), Smallmouth grunt (*Haemulon chrysargyreum*), Bluestriped grunt (*Haemulon sciurus*), French Grunt (*H. flavolineatum*), Black Margate (*A. surinamensis*), Spotlight parrotfish (*S. viviride*), Queen Parrotfish (*S. vetula*), Banded butterflyfish (*C. striatus*), Four-eye butterflyfish (*C. capistratus*), Spotfin butterflyfish (*C. ocellatus*), Longsnout Butterflyfish (*P. aculeatus*), Schoolmaster Snapper (*Lutjanus apodus*), Yellowtail Snapper (*O. chrysurus*), Green moray eel (*Gymnothorax funebris*), Spotted moray eel (*Gymnothorax moringa*) and Nurse shark (*Ginglymostoma cirratum*). (Wouters, 2018).

Towards the south the waters drop down to 40 meters. Here there can be stronger currents and more swell on the surface. Barracuda and larger Jacks venture into these waters, and Spotted Eagle Rays (*Aetobatus narinari*) (Spalding, 2004). This is also the area where dolphins and whales can be observed. No less than 12 species have been assessed within this Ramsar site, six of which (all dolphin species: *Tursiops truncatus*, *Steno bredanensis*, *Stenella longirostris*, *Stenella frontalis*, *Stenella attenuata* and *Stenella coeruleoalba*) seek refuge in the shallow waters between the reef islets and up to 2 m from the coast for birthing, nursing, resting or recovery from injuries.

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

4.1 - Ecological character

Ramsar site South Coast is the most diverse coastal area of Aruba. This site encompasses the islands largest area of mangrove forests (78 ha), with all four mangrove species present (Black Rhizophora mangle, Red Avicennia nitida and White Mangrove Laguncularia racemose); several hectares of dense cover seagrass beds (including Thalassia testudinum, Halodule wrightii and the invasive Halophila stipulacea) and some of the best coral reefs of Aruba (seagrass beds and coral reefs both probably > 20 ha). The site also encompasses nesting beach for three sea turtles species and reef islets with tern colonies (>21 ha).

The shallow (0-4 m depth) coastal zone (roughly 700 ha) has large stands of Fire Coral (Millepora complanata) and some beautiful stands of Elkhorn Coral (Acropora palmata). These complex structures provide critical nursery habitat for specific reef fish species (Nagelkerken 1974), like juveniles of the Smallmouth grunt (Haemulon chrysargyreum), Blue tang (Acanthurus coeruleus) and Ocean surgeonfish (Acanthurus bahianus) which depend on these (hydro)coral habitats (Nagelkerken et al. 2000).

Between 5-11 m depth grow small, patchy stony coral structures of Boulder Star Coral (Orbicella annularis), Great Star Coral (M. cavernosa), Pillar coral (Dendrogyra cylindrus), and Yellow Pencil Coral (Madracis auretenra). In deeper areas this zone can be characterized by dense, hard coral and rock structures, lettuce coral (Agaricidae), Pencil coral and gorgonian species. The drop-off zone between 12-18 m starts with abundance of Orbicella spp., Agaricia spp. As well as Sea Whips and Sea Fans are present. Other species include Cactus Coral Isophyllia sinuos, Yellow Pencil Coral and Brain coral (Mussidae). (The deeper areas are estimated at > 3300 ha).

These marine habitats form breeding, feeding and nursery habitat for many terrestrial (e.g. birds) but especially marine species. Endangered Green Turtles (Chelonia mydas) feed on sea grasses, but most obvious is the high diversity, number and size of the fish species, like Blue tang (Acanthurus coeruleus), Doctorfish (Acanthurus chirurgus), Ocean surgeonfish (A. bahianus), Smallmouth grunt (Haemulon chrysargyreum), Bluestriped grunt (Haemulon sciurus), French Grunt (H. flavolineatum), Black Margate (A. surinamensis), Spotlight parrotfish (S. viviride), Queen Parrotfish (S. vetula), Banded butterflyfish (C. striatus), Four-eye butterflyfish (C. capistratus), Spotfin butterflyfish (C. ocellatus), Longsnout Butterflyfish (P. aculeatus), Schoolmaster Snapper (Lutjanus apodus), Yellowtail Snapper (O. chrysurus), Green moray eel (Gymnothorax funebris), Spotted moray eel (Gymnothorax moringa) and Nurse shark (Ginglymostoma cirratum). (Wouters, 2018).

Towards the south the waters drop down to 40 meters. Here there can be stronger currents and more swell on the surface. Barracuda and larger Jacks venture into these waters, and Spotted Eagle Rays (Aetobatus narinari) (Spalding, 2004). This is also the area where dolphins and whales can be observed. No less than 12 species have been assessed within this Ramsar site, six of which (all dolphin species: Tursiops truncatus, Steno bredanensis, Stenella longirostris, Stenella frontalis, Stenella attenuata and Stenella coeruleoalba) seek refuge in the shallow waters between the reef islets and up to 2 m from the coast for birthing, nursing, resting or recovery from injuries.

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
B: Marine subtidal aquatic beds (Underwater vegetation)		3		Representative
C: Coral reefs		2		Representative
E: Sand, shingle or pebble shores		0	20.73	Representative
I: Intertidal forested wetlands		4	78.29	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Non-shallow marine waters	

(ECD) Habitat connectivity

The Ramsar site South Coast is connected to Ramsar site Spanish Lagoon and only 1 km apart from Ramsar site East Point.

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTALILLOPSIDA	<i>Halophila stipulacea</i>	Actual (major impacts)

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/ACTINOPTERYGII	<i>Pterois volitans</i>	Actual (minor impacts)

Optional text box to provide further information

Lion Fish are being managed.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
B: Dry climate	BWh: Subtropical desert (Low-latitude desert)

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.

Southern Caribbean Sea

4.4.3 - Soil

- Mineral
- Organic
- No available information

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

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Marine water	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	
Marine	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	No change

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- Significant accretion or deposition of sediments occurs on the site
- Significant transportation of sediments occurs on or through the site
- Sediment regime is highly variable, either seasonally or inter-annually
- Sediment regime unknown

4.4.6 - Water pH

Acid (pH<5.5)

- Circumneutral (pH: 5.5-7.4)
- Alkaline (pH>7.4)
- Unknown

4.4.7 - Water salinity

- Fresh (<0.5 g/l)
- Mixohaline (brackish)/Mixosaline (0.5-30 g/l)
- Euhaline/Eusaline (30-40 g/l)
- Hyperhaline/Hypersaline (>40 g/l)
- Unknown

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

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

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

- Surrounding area has greater urbanisation or development
- Surrounding area has higher human population density
- Surrounding area has more intensive agricultural use
- Surrounding area has significantly different land cover or habitat types

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

The surrounding area is mainly terrestrial while the site itself is marine.

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

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Medium
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	Medium
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Water sports and activities	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	Medium

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	Medium
Nutrient cycling	Carbon storage/sequestration	Medium

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

Where economic studies or assessments of economic valuation have been undertaken at the site, it would be helpful to provide information on where the results of such studies may be located (e.g. website links, citation of published literature):

Aruba's government has set itself a goal to move towards Sustainable Development, which in its essence means balancing out three interconnected spheres; social welfare, economic responsibility and ecological resilience. In order to make sound decisions about the management of ecosystems, it is necessary to estimate the socio-economic value that these ecosystems provide to Aruba and incorporate Natural Capital in policy-making. In February 2016, the Aruban Government therefore commissioned a TEEB study (The Economics of Ecosystems and Biodiversity) to research the importance of nature for economic and social prosperity of Aruba. This is an important step towards the development of a Sustainable Island Economy on Aruba. This is an important step towards the development of a Sustainable Island Economy on Aruba. It was found that for ecosystem services related to tourism, culture, fishing and carbon, the value of Aruba's natural capital exceeded US\$ 287 million per year (Polaszek et al., 2018).

4.5.2 - Social and cultural values

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

<no data available>

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Public Entity of Aruba

5.1.2 - Management authority

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

FPNA - Fundacion Parke Nacional Aruba (National Park Foundation Aruba).

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

Tyson Lopez (CEO), Natasha Silva Chief Conservation Officer

Postal address:

San Fuego 70
Aruba

E-mail address:

info@arubanationalpark.org

5.2 - Ecological character threats and responses (Management)

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

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified/others	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	Medium impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	Low impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Garbage and solid waste	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unspecified	Low impact	High impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Temperature extremes	Low impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Storms and flooding	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Please describe any other threats (optional):

Wave action changes islet substrates. Excessive vegetative growth associated with increased levels of winter storms. Vegetation is attractive to Iguana that may swim across from the mainland, and predate on tern eggs. Increased vegetation growth enhances opportunities for increased visits from Iguana National ga. Garbage dump Parkietenbos impacts the site.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Marine National Park	MPA Oranjestad and MPA Mangel Halto	http://www.arubanationalpark.org/main/wp-content/uploads/2019/10/PNA_Management-Plan-REV1.pdf	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Oranjestad Reef islands	http://datazone.birdlife.org/site/factsheet/20857	whole
Other non-statutory designation	KBA Oranjestad Reef Islands	http://www.keybiodiversityareas.org/site/factsheet/20857	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	Partially implemented

Habitat

Measures	Status
Habitat manipulation/enhancement	Partially implemented

Species

Measures	Status
Control of invasive alien animals	Partially implemented
Control of invasive alien plants	Proposed

Human Activities

Measures	Status
Regulation/management of recreational activities	Proposed

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

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:

The management authority FPNA has a visitor centre at the entrance of the Aruba National Park (also known as Arikok National Park). FPNA also manages MPA Mangel Halto and MPA Oranjestad Reef Islands, which are part of the Ramsar site. The actual Ramsar site is much larger.

5.2.6 - Planning for restoration

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

Further information

Major restoration efforts have been carried out under the Turning the Tide project. See: <https://www.wur.nl/en/research-results/research-institutes/environmental-research/show-wenr/turning-the-tide.htm>

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Animal community	Implemented

The tern colonies at the islets are monitored (annually) using both ground counts and aerial photographs. A scientific assessment of the shallow water reefs has been carried out in 2019 (Vermeij 2019)

Coral reefs and mangrove restoration sites are being monitored under the Turning the Tide project.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

The Dutch Caribbean Biodiversity Database (www.dcbd.nl) provides the most complete overview of data, maps and documents on the Dutch Caribbean Islands, among which the Oranjestad Reef Islands.

References used to compile this RIS are:

- Becking, Leontine E., van Bussel, Tineke, Engel, M. Sabine, Christianen, Marjolijn J.A. and Adolphe O. Debrot, 2014a. Proximate response of fish, conch, and sea turtles to the presence of the invasive seagrass *Halophila stipulacea* in Bonaire. Imares, Wageningen UR. Report number C118/14. 35p.
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- Eckert, Karen L. and Adam E. Eckert. 2019. An Atlas of Sea Turtle Nesting Habitat for the Wider Caribbean Region. Revised Edition. WIDECASST Technical Report No. 19. Godfrey, Illinois. 232 pages, plus electronic Appendices.
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- Polaszek, Timothy, Lacle, Francielle, Beukering, Pieter van, and Esther Wolfs, 2018. The Economics of Ecosystems and Biodiversity, Aruba January 2018 Updated version. 129p.
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- Vermeij, Mark, Marhaver, Kristen, Estep, Andrew and Stuart Sandin, 2020. Coral Reefs Baseline Study for Aruba, 2019. Carmabi Foundation Curaçao. 48p.
- Voous, K. H. 1983. Birds of the Netherlands Antilles. Zutphen, De Walburg Pers.:
- Wetlands International. Waterbird Population Estimate 5 (WPE5). <http://wpe.wetlands.org>
- Wouters, Oriana, E., 2018. Parke Marino Aruba. Baseline survey. DNM and TNO Caribbean. 39p.

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

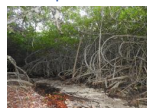
<1 file(s) uploaded>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



The tangle of mangrove trees and branches protects the coast from extreme weather events. (*René Henkens, 13-11-2019*)



One of the islets that is part of a chain of islands in front of the coast. (*René Henkens, 13-11-2019*)



Rules and regulations at the entrance of one of the site's beaches. (*René Henkens, 13-11-2019*)



The site encompasses Aruba's largest stand of mangrove forest. (*René Henkens, 13-11-2019*)



The Rough-toothed dolphin (*Steno bredanensis*) uses the site for refuge, birthing and nursery. (*Michael de Kooter, 09-01-2021*)



Elhorn coral (*Acropora palmata*) (*Giancarlo Nunes, 03-5-2020*)



The Atlantic spotted dolphin (*Stenella frontalis*) uses the site for refuge, birthing and nursery. (*Jolanda Luksenburg, 03-10-2010*)



False killer-whale (*Pseudorca crassidens*). (*Angiolina Henriquez, 13-10-2012*)



Honeycomb cowfish (*Acanthostracion polygonius*) in sea grass beds (*Thalassia testudinum* and *Zyngodium filiforme*). (*Giancarlo Nunes, 03-05-2020*)



Several dolphin species, like *Tursiops truncatus*, can be observed close to the coast. (*Angiolina Henriquez, 12-09-2011*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2023-11-10