



Ramsar Information Sheet

Published on 13 April 2023

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Iran (Islamic Republic of) Anzali Wetland



Designation date	23 June 1975
Site number	40
Coordinates	37°26'25"N 49°24'41"E
Area	19 500,00 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 Anzali Wetland, previously known as the Anzali Wetland Complex (when published in 1997) and the Pahlavi Mordab Complex (when designated in 1975) is located near the port city of Bandar Anzali in Gilan Province, north part of Iran along the southern coast of the Caspian Sea. The Site is one of the nearest wetlands from Ramsar city which is where the Ramsar Convention was formed. The Site is a large freshwater lagoon fed by several rivers from Talesh Mountains and separated from the Caspian Sea by a dune system; supports extensive reed bed, Lotus community, and abundant submerged and floating vegetation. The Site covers about 19,500 ha and expands about 33 km from east to west and about 11 km from north to south. The Site meets eight criteria to be listed as a Wetland of International Importance:

- 1) The Site is one of the representative wetlands along the south coast of the Caspian Sea.
- 2) Many threatened species are present such as Greater Spotted Eagle, Common Pochard, White-headed Duck, etc.
- 3) It supports populations of plant and animal species of the ecoregion (Kura-South Caspian Drainages under FEOW). At least 21 mammals, 243 birds, 10 reptiles, 3 amphibians, and 57 fish were recorded from 2015 to 2018.
- 4) The Site is important for migratory waterbirds and shorebirds providing vital habitats during migration and moulting.
- 5) Regularly more than 120,000 waterbird individuals were counted in mid-winter.
- 6) Recently more than 1% of the global population of Dalmatian Pelican and Pygmy Cormorant wintered and Whiskered Tern bred in the Site.
- 7) Anzali Wetland and its distributaries are the central part of the Caspian Kutum population which is an endemic fish of the Caspian Sea.
- 8) Various habitats of the Site provide spawning, nursery and feeding grounds to many semi-anadromous and non-migratory fish species. The Site has four national protected areas (Selke Wildlife Refuge, Sorkhankol WR, Chokum WR and Siahkeshim Protected Area). Other small areas are rented to groups of local people for sustainable fishing and hunting in winter. This Site was placed on the Montreux Record in 1993 due to degradation from excessive hunting, invasive alien species, water level fluctuation of the Caspian Sea, sedimentation, and water pollution. Several international cooperation projects such as Anzali Wetland Ecological Management Project in cooperation with JICA were implemented for the wetland conservation.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	Department of Environment
Postal address	P.O. box: 14155-7383 Pardisan Natural Park, Hakim Highway Department of Environment Tehran, I.R.Iran

National Ramsar Administrative Authority

Institution/agency	Department of International Environmental and Sustainable Development Affairs, Ministry of Foreign Affairs of the Islamic Republic of IRAN
Postal address	Ministry of Foreign Affairs of the Islamic Republic of IRAN, Bldg. 8 West, United Nations St, Imam Khomeini Ave, Tehran, Iran.

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

From year

To year

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Unofficial name (optional)

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 No

(Update) The boundary has been delineated more accurately

(Update) The boundary has been extended

(Update) The boundary has been restricted

(Update) B. Changes to Site area the area has increased

(Update) The Site area has been calculated more accurately

(Update) The Site has been delineated more accurately

(Update) The Site area has increased because of a boundary extension

(Update) The Site area has decreased because of a boundary restriction

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

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? Yes (likely)

(Update) Are the changes Positive Negative Positive & Negative

(Update) Positive %

(Update) Negative %

(Update) No information available

(Update) Optional text box to provide further information

Illegal hunting control is improved because of enhancement of protected areas and ranger station function. Recent 10 years, the number of wintering bird individuals has an increasing trend. Alien species, Water Hyacinth, was introduced in 2015, but it is now under control as of 2018. Another alien species, Azolla, was drastically and naturally decreased in summer 2017. Water quality has not changed significantly. Some sewage treatment plants have been established and are partially operational in Rasht and Anzali cities in the watershed. Based on sediment analyses and decreased water level of the Caspian Sea, the Water depth at the Site seems to have decreased.

(Update) Changes resulting from causes operating within the existing boundaries?

(Update) Changes resulting from causes operating beyond the site's boundaries?

(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?

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

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

From the recent scientific fish survey, the value of the Site is better understood. The Caspian Kutum (*Rutilus kutum*) is the endemic fish of Caspian Sea. Main distribution of Caspian Kutum is in the south of Caspian Sea while the Wetland and its tributaries are the central part of its distribution. In Anzali Wetland and its inflowing rivers, it has two populations. One is spring migration population which lays eggs on rocks and gravel of inflowing rivers of the wetland. The other one is autumn migration population which lays eggs on submerged plants in the Anzali Wetland. Autumn population is very rare and it mainly occurs in the Anzali Wetland. The Anzali Wetland and its inflowing river is very important habitat for the fish's spawning and nursery.

(Update) Is the change in ecological character negative, human-induced AND a significant change (above the limit of acceptable change) Yes

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps

Boundaries description

The Anzali Wetland is located near the port city of Bandar Anzali in Gilan Province, North part of Iran along the Southern coast of the Caspian Sea. The Wetland covers about 19,500 ha and the expanse of the area about 33 km from east to west and about 11 km from north to south at the maximum. It is spread among Anzali Shahrestan (Second order administrative divisions of Iran), Somesara Shahrestan and Rasht Shahrestan. Considering all the Convention's requirements and current situation of the wetland, the Site's includes these features within its boundary: 1- Actual water body and seasonal submerged land. 2- Aquatic plant vegetations 3- Island and isolated land in wetland 4- Protected Areas 5- Area to connect main wetland with eastern isolated wetland as ecological network.

2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

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
WWF Terrestrial Ecoregions	Temperate Broad leaf and Mixed Forests (Caspian Hyrcanian mixed forests)
Freshwater Ecoregions of the World (FEOW)	Kura-South Caspian Drainages

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

Hydrological services provided

The Anzali Wetland is a typical example of a lagoon along the south coast of the Caspian Sea. The Anzali Wetland Complex is located near the port city of Bandar Anzali in Gilan Province, in the northern part of Iran along the southern coast of the Caspian Sea. The Site is a complex of inland and coastal wetlands. Almost half of the Site (about 9,000 ha) is permanent freshwater marsh (Tp) while 2,200 ha are seasonal (from autumn to spring) freshwater marshes (Ts) mainly covered by Reed-beds. About 3,000 ha of the Site is a permanent freshwater lake (O). Coastal freshwater lagoon (K) make up about 2,000 ha which sometimes has salt water intrusion from Caspian Sea in summer. Finally permanent rivers/streams/creeks (M) make up 300 ha in total of the site. The main hydrological services of the Site are water purification, biodiversity support, water storage, flood control and prevention of salt water intrusion. The Site also influences the micro-climate during the dry season. Water supply for agriculture and aquaculture are also services of the Site. There are many pumping stations that abstract water from the Wetland.

Other ecosystem services provided

The Anzali Wetland is a very important spawning and nursery area for economically important species and associated fisheries in the Caspian Sea. In addition, limited hunting of coot, ducks and geese etc. are approved by DOE in winter season outside the national protected areas. Various touristic activities are also conducted in the Site.

- Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

The Site provides wintering habitat to endangered bird species such as: *Aquila clanga*, *A. heliaca*, *A. nipalensis*, *Aythya ferina*, *Falco cherrug*, *Oxyura leucocephala* and *Podiceps auritus*.

- Criterion 3 : Biological diversity

Justification

Anzali Wetlands supports an extremely diverse wetland flora and fauna of the Caspian Sea lowland. It supports typical fauna diverse of Palearctic such as mallard (*Anas platyrhynchos*), least weasel (*Mustela nivalis*), wild boar (*Sus scrofa*) etc. In addition, it supports populations of plant and animal species of the ecoregion (Kura-South Caspian Drainages under FEOW) including 21 mammal species, 57 fish species, 254 bird species, 3 amphibian species and 14 reptile species. The Kura bleak (*Alburnus filippii*) which is endemic species in the Kura-South Caspian Drainages occurs in the site,

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

The Anzali Wetland is an important Site for migratory waterbirds and shorebirds providing vitally important habitats during migration. The Wetland is located in the south west of Caspian Sea which is an important stopover Site in Afro-Eurasian Flyway and Central Asia Flyway. In the migratory season, the Wetland is filled and covered by huge number of migratory birds such as Cranes, Storks, Geese, Ducks, Sandpipers and Plovers. Especially, Mallard and Ferruginous duck are breeding and moulting after breeding in the site.

Optional text box to provide further information

Anzali Wetland is covered by huge Reed beds. Reed bed is one of the most important types of habitats in the Wetland for birds. For example, Marsh Harrier, Purple Heron, Purple Swampphen, Great Reed Warbler and Reed Bunting breed in the Reed beds. Jungle Cat utilize Reed beds for habitat as well. The size of various types of habitats found within the Site are significant in the littoral wetland of Caspian Sea and have the significance in maintaining the overall ecological value of the Site. Also there are other kinds of the habitats such as open static water, flowing water, Reed bed (emerged plant community), Lotus community (floating-leaf plant community), Water Chestnut community (floating-leaf plant community), Submerged plant communities, some kind of forests, grassland on seasonal wetland etc.

Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	140000
Start year	2022
End year	2022
Source of data:	DOE of Gilan

Optional text box to provide further information

Regularly more than 120,000 waterbird individuals were counted in mid-winter in the Site. However, it is very difficult to count all individuals because Anzali Wetland Complex is very huge and it is partially covered by dense vegetation. In fact, a greater number of waterbirds occur than counted in the Site. Documents for the bird census are attached in Section 6.2.1

Criterion 6 : >1% waterbird population

Optional text box to provide further information

The whiskered tern (*Chlidonias hybrida*) is breeding in the site. A study in the summer of 2015 counted 2,725 nests, which equates to more than 5,400 mature individuals. The 1% population threshold level of *Chlidonias hybrida*, in the Caspian population (breeding), is 1,000 (Wetlands International 2018). Therefore the current biogeographical population is 5.4 % therefore meeting the requirements of criterion 6. Further more, the global population is estimated to number c.300,000-1,500,000 individuals (Wetlands International 2015). Therefore, for the lower range of the estimates, it would meet the 1% of global population threshold. In addition, according to the recent results (2013-2017) of monitoring by Department of Environment based on a Mid-Winter Bird Count, seven other wintering waterbird species meet criterion 6 as listed below: The green-winged teal count was 35,502 individuals on average in the site. The 1% population threshold of crecca, Western Siberia/SW Asia & NE Africa is 7,000 (Wetland International 2018), therefore over 5% of the population wintered. The mallard population is 10,957 individuals on average. The 1% population threshold level of platyrhynchos, Western Siberia/South-west Asia is 8,000 (Wetland International 2018), therefore 1.4% of the population wintered here. The gadwall population was 26,114 on average. The 1% population threshold level of strepera, Western Siberia/South-west Asia is 1,100 (Wetland International 2018), therefore 23.8 % of the population wintered. The whooper swan population was 555 on average. The 1% population threshold level of the West & Central Siberia/Caspian is 200 (Wetland International 2018), therefore 2.8 % of the population wintered. Further more, the global population is estimated to number > c.180,000 individuals (Wetlands International 2015). Wintering individual numbers of whooper swan fluctuated greatly in the site. Once in 4-6 years, wintering number exceeded one thousand. Recently, 2,266 individuals were wintered in the site in 2013. It was more than 1% of global population. The pygmy cormorant population was 5,463 on average. The 1% population threshold level of South-west Asia is 1,000 (Wetland International 2018), therefore 5.5 % of the population wintered. Further more, the species has a large global population estimated to be 48,000-137,000 individuals (Wetlands International 2015). There are therefore between 4-11% of the global population in the site. The Dalmatian pelican population was 924 on average. The 1% population threshold level of South-west Asia & South Asia is 150, therefore 6.2% of the population wintered here. Further more, world population size is 22,050-26,800 (Wetlands International 2018). Therefore about 3-4 % of world population winters in the site. The great cormorant population was 6,185 on average. The 1% population threshold level of South-west Asia & South Asia is 1,400 (Wetland International 2018), Therefore about 4.4 % of the population wintered here.

Criterion 7 : Significant and representative fish

Justification

In 2017 57 species of fish were recorded in the Anzali Wetland. Caspian Kutum (*Rutilus kutum*) is the endemic fish of the Caspian Sea. The main distribution of Caspian Kutum is south of Caspian Sea. Anzali Wetland and its tributaries are the central part of its distribution. The Anzali Wetland and its inflowing rivers are also a very important habitats for more than 20 fish species as spawning grounds and nurseries. Of these some are included on the IUCN Red List of Threatened Species: Persian sturgeon (*Acipenser persicus* -CR), stellate sturgeon (*Acipenser stellatus* Pallas- CR), wild common carp (*Cyprinus carpio* - Vu). While the Caspian tyulka (*Clupeonella caspia*), common bream (*Abramis brama*), Caspian shemaya (*Alburnus chalcoides*), Caspian barbel (*Luciobarbus caspius*), vobla (*Rutilus caspicus*), kutum (*Rutilus kutum*), tench (*Tinca tinca*), Caspian vimba (*Vimba persa*), Wels catfish (*Silurus glanis*), Caspian trout (*Salmo caspius*), Brown trout (*Salmo trutta*), Perch (*Perca fluviatilis*) are significant in Iran.

Criterion 8 : Fish spawning grounds, etc.

Justification

In 2017 57 species of fish were recorded in the Anzali Wetland and its inflowing rivers. Anzali Wetland is a large complex of fresh water lagoons with extensive reed-beds, the other aquatic plant communities, and many inflowing rivers. These various habitats provide spawning, nursery and feeding grounds to many kind of semi-anadromous and non-migratory fish species. Especially Caspian Kutum (*Rutilus kutum*) is one of the most important economic fish in South of Caspian Sea in Iran and the Anzali Wetland is the one of the most important habitat as migration, spawning, nursery and feeding ground for this fish.

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

<no data available>

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																	
CHORDATA/ MAMMALIA	<i>Lutra lutra</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The survey found the species occurred in/around the site in 2015 – 2016.
Fish, Mollusc and Crustacea																	
CHORDATA/ ACTINOPTERYGII	<i>Acipenser stellatus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>		There is a record of this Sturgeon in the Anzali Wetland. However, the field survey did not find the fish in 2016-2017.
CHORDATA/ ACTINOPTERYGII	<i>Alburnus filippii</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"/>		The species is endemic to the Kura-South Caspian Drainages.
CHORDATA/ ACTINOPTERYGII	<i>Cyprinus carpio</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				WU	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ ACTINOPTERYGII	<i>Luciobarbus capito</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				WU	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ ACTINOPTERYGII	<i>Rutilus kutum</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		The Caspian Kutum is endemic in the Caspian Sea which that tributes from Volga bight to Miankale Creek Bay, Black Sea and Azov Sea and their rivers. The Kutum is one of the economically valuable species of Caspian Sea. The Anzali Wetland is a center of distribution area of the fish. Two different races of this fish exist in the Caspian Sea, the spring race and the autumn race. The spring race is main population which spawn in small rivers or streams with heavy current on gravel bottom in spring. The autumn race rarely spawns on submerged plant in wetland. The spring race is widely distributed including Anzali Wetland. On
Birds																	
CHORDATA/ AVES	<i>Anas crecca</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	35502	2013-2017	5.07	LC	<input type="checkbox"/>	<input type="checkbox"/>	Average number (2013-2017) of wintering Teal was 35,502 in the site. Population 1% level of crecca, Western Siberia/SW Asia & NE Africa is 7,000 (Wetland International 2018), 5.0 % of the population wintered to meet criterion 6. It also contributes about 25-38% of the total number of wintering waterbirds to meet criterion 5 in 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								
CHORDATA/AVES	<i>Anas platyrhynchos</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10957	2013-2017	1.4	LC	<input type="checkbox"/>	<input type="checkbox"/>		Average number (2013-2017) of wintering Mallard was 10,957. Population 1% level of platyrhynchos, Western Siberia/South-west Asia is 8,000 (Wetland International 2018), 1.4 % of the population wintered to meet criterion 6. It also contributes about 7-12% of the total number of wintering waterbirds to meet criterion 5 in the site. Some of Mallards are breeding in the site.
CHORDATA/AVES	<i>Anas strepera</i>	<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"/>	26144	2013-2017	23.8	LC	<input type="checkbox"/>	<input type="checkbox"/>		Average number (2013-2017) of wintering Gadwall was 26,114. Population 1% level of strepera, Western Siberia/South-west Asia is 1,100 (Wetland International 2018), 23.8 % of the population wintered to meet criterion 6. It also contributes about 17-27% of the total number of wintering waterbirds to meet criterion 5 in the site.
CHORDATA/AVES	<i>Aquila clanga</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14	2015		VU	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Aquila heliaca</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2015		WU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		A satellite tagged Imperial Eagle migrated to the Anzali Wetland from Tatarstan, Tatarska Dymskaya, Russia.
CHORDATA/AVES	<i>Aquila nipalensis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2015		EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Aythya ferina</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1044	2013-2017		WU	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Aythya nyroca</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13	2013-2017		NT	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Recently small numbers of Ferruginous Duck are found breeding in the Site.
CHORDATA/AVES	<i>Chlidonias hybrida</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5400	2015	5.4	LC	<input type="checkbox"/>	<input type="checkbox"/>		Whiskered Tern is breeds in the Site. (Some individuals winter.) 2,725 nests, which equates to more than 5,400 mature individuals, were counted in summer 2015, Population 1% level hybrida, Caspian (bre) is 1,000 (Wetlands International 2018) , 5.4 % of the population bred to meet criterion 6. Further more, the global population is estimated to number c.300,000-1,500,000 individuals (Wetlands International 2015). It was about 1% of global population.
CHORDATA/AVES	<i>Cygnus cygnus</i>	<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"/>	555	2013-2017	2.8	LC	<input type="checkbox"/>	<input type="checkbox"/>		Average number (2013-2017) of wintering Whooper Swan was 555. Population 1% level of West & Central Siberia/Caspiana is 200 (Wetland International 2018), 2.8 % of the population wintered to meet criterion 6. Further more, the global population is estimated to number > c.180,000 individuals (Wetlands International 2015). Wintering individual number of Whooper Swan was very fluctuated. Once in 4-6 years, wintering number exceeded one thousand. Recently, 2,266 individuals were wintered in Anzali Wetland in 2013. It was more than 1% of global population.
CHORDATA/AVES	<i>Falco cherrug</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2015		EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Falco naumanni</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2015		LC	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Falco pelegrinoides</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2015			<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Falco peregrinus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2015		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Fulica atra</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19503	2013-2017		LC	<input type="checkbox"/>	<input type="checkbox"/>		Average number (2013-2017) of wintering Coot was 19,503. This contributes about 7-24% of the total number of wintering waterbirds to meet criterion 5 in the site.
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	2015		LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		More than two pairs of the species breed in the Wetland. Also the Wetland is an important wintering area of this species.

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Microcarbo pygmeus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5463	2013-2017	5.5		<input type="checkbox"/>	<input type="checkbox"/>		Average number (2013-2017) of wintering Pygmy Cormorant was 5,463. Population 1% level of South-west Asia is 1,000 (Wetland International 2018), 5.5 % of the population wintered to meet criterion 6. Further more, the species has a large global population estimated to be 48,000-137,000 individuals (Wetlands International 2015). There are probably 4-11% individuals in Anzali Wetland. In addition, recently more than 150 pairs breed in the site.
CHORDATA/AVES	<i>Oxyura leucocephala</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2015		EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Pelecanus crispus</i>	<input checked="" 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"/>	924	2013-2017	6.2	NT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Average number (2013-2017) of wintering Dalmatian Pelican was 924. Population 1% level of South-west Asia & South Asia (win) is 150 (Wetland International 2018), 6.2 % of the population wintered to meet criterion 6. Further more, 22,050-26,800 is world population size (Wetlands International 2018). About 3-4 % of world population winters in the site. Four satellite tagged Dalmatian Pelicans migrated to Ghizil-Agaj State Reserve in Azerbaijan and Volga Delta in Russia from the Anzali Wetland.
CHORDATA/AVES	<i>Pelecanus onocrotalus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	2013-2017		LC	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Phalacrocorax carbo</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6185	2013-2017	4.4	LC	<input type="checkbox"/>	<input type="checkbox"/>		Average number (2013-2017) of wintering Great Cormorant was 6,185. Population 1% level of South-west Asia & South Asia (win) is 1,400 (Wetland International 2018), 4.4 % of the population wintered to meet criterion 6. Recently more than 100 pairs were found breeding in the Site.
CHORDATA/AVES	<i>Podiceps auritus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2015		VU	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Vanellus gregarius</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2015		CR	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

1) Percentage of the total biogeographic population at the site

In 2015, 21 mammal species and 243 bird species were recorded. While in 2018 9 reptile and 3 amphibian species were recorded. In 2017 57 fish species were recorded. The site provides a wintering habitat to bird species such as: *Anas crecca*, *A. platyrhynchos*, *A. strepera*, *A. heliaca*, *A. nipalensis*, *Aythya ferina*, *A. nyroca*, *Chlidonias hybrida*, *Cygnus cygnus*, *Falco cherrug*, *F. naumanni*, *F. pelegrinoides*, *F. peregrinus*, *F. atra*, *Haliaeetus albicilla*, *Microcarbo pygmaeus*, *Oxyura leucocephala*, *Podiceps auritus*, *Pelecanus crispus*, *P. onocrotalus*, *Phalacrocorax carbo*, *Streptopelia turtur* and breeding habitat to bird species such as: *Anas platyrhynchos*, *Aythya nyroca*, *Chlidonias hybrida*, *Chroicocephalus ridibundus*, *Haliaeetus albicilla*, *Phalacrocorax carbo*, *Microcarbo pygmeus*.

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

<no data available>

Optional text box to provide further information

Reed bed is the largest habitat of the many species in the Anzali Wetland. For example, Purple Swamphen, Purple Heron, Eurasian Marsh Harrier, Great Reed Warbler etc. are breeding in Reed bed.

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

4.1 - Ecological character

The abundant vegetation in the Anzali Wetland is *Ceratophyllum demersum*, *Typha latifolia* and *Phragmites*. However, the most dominant vegetation type throughout much of the Anzali Wetland consists of vast beds of *Phragmites australis* which in places grows to six meters' height. A rapid expansion in the extent of the *Phragmites* reeds began in the late 1960s, and by the early 1980s, almost the entire eastern and central portion of the main wetland were covered in reeds. The high density of *Phragmites* in the shallow-water (especially in central and the eastern part of the Wetland) provide the primary habitats of smaller fish. Threats to the Site exist due to the continuing fall in the level of the Caspian Sea, and accelerated eutrophication as a result of increased inflow of domestic sewage, fertilizers and other organic material. The situation had become so serious that by the end of the 1970s the Department of the Environment was investigating possible methods of control. The recent rapid rise in water level in the wetland changed the situation and led to the expansion of *Phragmites*. The open-water areas of the wetland support extensive beds of the water lily *Nelumbium (caspicum) maciferum* and very rich growth of other floating and submerged vegetation including: *Nymphoides indica*, *Nymphaea alba*, *Utricularia vulgaris*, *Salvinia natans*, *Hydrocharis morsus-ranae*, *Hydrocotyle vulgaris*, *Lemna minor*, *L. trisulca*, *L. polyrhiza*, *Trapa natans*, *Limnanthemum verticillatum*, *Polygonum spp.*, *Myriophyllum verticillatum*, *M. spicatum*, *Ceratophyllum submersum*, *Potamogeton pectinatus*, *P. crispus*, *Elodea nuttalli* and *Ranunculus divaricatus*. The marshes and flood meadows support a wide variety of emergents, including *Sparganium beglectum*, *Typha latifolia*, *Echinochloa crus-galli*, *Scirpus palustris*, *Cyperus longus*, *Juncus spp.*, *Sagittaria sagittifolia*, *Alisma plantago-aquatica*, *Butomus umbellatus* and *Equisetum spp.*. Patches of woodland with alders *Alnus glutinosus* and the willow *Salix sp.* occur in the high ground and along river levees. The wetland is bordered to the north by sand dunes with grassland and scrubby vegetation, and the south by cultivated land (mainly rice) and patches of woodland. The Wetland supports a large breeding colony of *Chlidonias hybridus*, small colonies of six species of *Ardeidae*, and a large resident population of *Porphyrio porphyrio*.

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
K: Coastal freshwater lagoons		4	2000	Representative

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		4	300	Representative
Fresh water > Lakes and pools >> Q: Permanent freshwater lakes		2	3000	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		1	9000	Representative
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3	2200	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Farm land and Residential	3000

(ECD) Habitat connectivity

Anzali wetland complex is almost connective as a wetland habitat. However the northeast of the wetland, which include a reedbed and pasture (seasonal wetland), are almost isolated and connected only by a canal.

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Alnus glutinosa glutinosa</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Butomus umbellatus</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ceratophyllum demersum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ceratophyllum submersum</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Cyperus longus</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Echinochloa crus-galli</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Elodea nuttallii</i>	
TRACHEOPHYTA/EQUISETOPSIDA	<i>Equisetum alsaticum</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Hydrocharis morsus-ranae</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Hydrocotyle vulgaris</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Juncus pelocarpus</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Lemna minor</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Lemna trisulca</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Myriophyllum spicatum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Nelumbo nucifera</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Nymphoides indica</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Phragmites australis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Polygonum oxyspermum oxyspermum</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Potamogeton crispus</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Potamogeton nodosus</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ranunculus circinatus</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Salix alba</i>	
TRACHEOPHYTAPOLYPODIOPSIDA	<i>Salvinia natans</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Schoenoplectus tabernaemontani</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Spirodela polyrhiza</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Stuckenia pectinata</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Trapa natans</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Typha latifolia</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Utricularia vulgaris</i>	

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTAPOLYPODIOPSIDA	<i>Azolla filiculoides</i>	Actual (major impacts)	decrease
TRACHEOPHYTA/LILIOPSIDA	<i>Eichhornia crassipes</i>	Actual (major impacts)	decrease
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Hydrocotyle ranunculoides</i>	Actual (minor impacts)	increase

Optional text box to provide further information

Recently a scientific flora survey of plants has not implemented, and the survey would be implemented in 2018. Therefore flora information should be updated then. Azolla is a widespread invasive alien species in the Anzali Wetland. Azolla was introduced into the Caspian wetlands by rice-farmers in the 1970s. This alien species covers much of the water surface and also lives within the reedbeds of the wetland as well as the fish ponds and paddy fields around the wetland. Surprisingly Azolla was dramatically decreased in the summer of 2017 without any removal measures. In only the Sangachin area, the western part of the Anzali Wetland, a very small amount of Azolla was found around the reed-bed. Survey teams found Azolla covered less than 1ha. Azolla covered more than 1000 ha of Anzali Wetland every summer until 2016. It means more than 99.9% of Azolla had disappeared in the Anzali Wetland. The reason was unknown though possibly the high temperatures contributed to Azolla decreasing because it simultaneously decreased in a wide area during the 2017 summer, which was the hottest at least recent 30 years. The species Water Hyacinth (WH) were found in the Anzali Wetland in July, 2015 and widespread in the west part of the wetland. DOE started to remove WH quickly and cleaned almost of the wetland until 2017. However, small individuals of WH are still remained in the summer of 2018.

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range / endemism / other
CHORDATA/AVES	<i>Acrocephalus arundinaceus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Acrocephalus melanopogon</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Acrocephalus scirpaceus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Aegithalos caudatus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Alcedo atthis</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Apus apus</i>				Breeding (2015 Survey)

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Ardea cinerea</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Ardea purpurea</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Ardeola ralloides</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Bubulcus ibis</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Cettia cetti</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Circus aeruginosus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Corvus cornix</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Cuculus canorus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Delichon urbicum</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Egretta garzetta</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Emberiza calandra</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Falco subbuteo</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Gallinula chloropus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Glareola pratincola</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Himantopus himantopus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Hirundo rustica</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Ixobrychus minutus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Larus ridibundus</i>				Breeding (2016-2018)
CHORDATA/AVES	<i>Locustella luscinioides</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Luscinia megarhynchos</i>				Breeding (2015 Survey)
CHORDATA/REPTILIA	<i>Mauremys caspica</i>				Endemic species of Caspian area.
CHORDATA/AVES	<i>Merops apiaster</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Merops persicus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Motacilla alba</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Nycticorax nycticorax</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Oriolus oriolus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Parus major</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Passer domesticus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Passer hispaniolensis</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Passer montanus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Phasianus colchicus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Pica pica</i>				Breeding (2015 Survey)
CHORDATA/MAMMALIA	<i>Pipistrellus nathusii</i>				Migratory species (2015 survey)
CHORDATA/AVES	<i>Podiceps cristatus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Porzana parva</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Rallus aquaticus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Riparia riparia</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Sterna hirundo</i>				Breeding (2015 Survey)

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Sternula albifrons</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Streptopelia decaocto</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Streptopelia senegalensis</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Sturnus vulgaris</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Upupa epops</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Vanellus vanellus</i>				Breeding (2015 Survey)
CHORDATA/AVES	<i>Porphyrio porphyrio</i>				Breeding (2015 Survey)

Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
ARTHROPODA/MALACOSTRACA	<i>Macrobrachium nipponense</i>	Potential	increase

Optional text box to provide further information

The Anzali Wetland supports populations of plant and animal species of the ecoregion (Kura-South Caspian Drainages under FEOU). Recently several scientific fauna surveys were conducted in cooperation with JICA. As a result of the surveys, 21 mammals, 243 birds, 10 reptiles, 3 amphibians, 57 fish were recorded in the site from 2015 to 2018.

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Csa: Mediterranean (Mild with dry, hot summer)

There is Caspian mild climate in this site. Anzali has the most humid climate of any city in Iran, having a climate with heavy autumn and early winter rainfall. It is classified as a Mediterranean climate (Köppen Csa). The average annual rainfall is 1900 mm, with rain falling throughout the year but mainly in winter. The lowest temperatures occur in February (mean around 6°C) and the highest in August (mean maximum nearly 25°C).

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.

Basin of Anzali wetland

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

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 precipitation	<input type="checkbox"/>	No change
Water inputs from surface water	<input checked="" type="checkbox"/>	No change
Marine water	<input type="checkbox"/>	decrease
Water inputs from groundwater	<input type="checkbox"/>	unknown

Water destination

Presence?	Changes at RIS update
Marine	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:

The water level of the Anzali Wetland, except Siahkesim Protected Area, is almost alike with the Caspian Sea Level (CSL). According to J. L. Chen et al (2017), a rapid CSL increase (about +12.74 cm/yr) in 1979–1995 and significant drop (–6.72 cm/yr) during 1996–2015 was observed. It means the water level and water depth of the site have recently decreased. After rainfall the water level of the site increased during several days as a reservoir and flow down smoothly.

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

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

Sediment regime unknown

Please provide further information on sediment (optional):

The monitoring of the water level and water depth of the wetland has recently started. Therefore, the accurate long-term trend of the water level and water depth is unknown. The amount of sediment is not monitored.

4.4.6 - Water pH

Alkaline (pH>7.4)

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

Unknown

Please provide further information on pH (optional):

The pH in the Caspian Sea is known to be as high as 8.5, and the result at the Anzali Port, 8.27, was consistent with this on 20th August, 2017. West lagoon was 7.59 and Sorkhankol was 8.72.

The reason for very high pH at Sorkhankol site may be partially explained by a combination of intrusion of the Caspian Sea water and extensive algal activity in summer, which raises pH by consuming carbonate in water.

4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

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

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

Unknown

Please provide further information on salinity (optional):

In summer, when the water level of the Caspian Sea is high, the sea water seems to intrude into the Anzali Wetland. Salinity monitoring was implemented in August 2017. This time, it was possible to capture a more pronounced intrusion, and the conductivity in Sorkhankol was as high as half (around 10 mS/cm) of the level in the outer sea (around 20 mS/cm). Also the saline water seemed to reach the West Lagoon. Water salinity measurement using the conductivity method (by the Digital Salt Meter ES-421).

(ECD) Dissolved gases in water

unknown

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

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

Dystrophic

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

Unknown

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

According to the March 2017 data, the ratio T-N/T-P of Anzali Wetland was around 17 or higher, and it has been assumed that the Anzali Wetland is phosphorous-limiting. T-P in August 2017 was near the Iranian Standard in Sorkhankol and exceeded the national standard in Pirbazar River and the Port. High T-P in Pirbazar River is most likely due to the inflow of domestic sewage from Rasht. Similarly, high T-P in the Port is largely due to inflow of domestic sewage from Rasht (via Pirbazar River) and Anzali (via channels in Anzali). NO2 and NH4 are toxic to many aquatic species. According to the results, concentrations of NH4 exceeded the Iranian standard in Pirbazar River and the Port. It is suspected that this is largely due to inflow of sewage from Rasht and Anzali.

(ECD) Dissolved organic carbon

BOD/COD (mg/l) on Aug 20, 2017, Port 19/43, Lagoon 11/33, Sorkhankol 14/54 Pirbazar Riv. 22/33, Khalkai Riv. 3/4.9

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 boundary of the Site is almost actual boundary of wetland (Water body, Reedbed etc). Surrounding areas are urban area, residential area, farmland such as paddy field, fish pond. Water level is recently decreasing because of Caspian Sea level change, therefore vegetation such as reedbed in marginal area of the wetland has a drying trend. There is great pressure of illegal land use of the wetland as farmland.

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)	High
Fresh water	Water for irrigated agriculture	High
Wetland non-food products	Livestock fodder	Low
Wetland non-food products	Reeds and fibre	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	High
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Erosion protection	Soil, sediment and nutrient retention	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium
Climate regulation	Local climate regulation/buffering of change	Medium
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	High
Recreation and tourism	Water sports and activities	Medium
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Aesthetic and sense of place values	High
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	
Scientific and educational	Major scientific study site	Low
Scientific and educational	Type location for a taxon	Low
Scientific and educational	Long-term monitoring site	Low
Scientific and educational	Educational activities and opportunities	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	High
Soil formation	Sediment retention	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Carbon storage/sequestration	Medium
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium

Optional text box to provide further information

The Anzali Wetland is a very important spawning and nursery area for economically important species in the Caspian Sea fishery as an ecosystem service. In addition, limited hunting of Coot, Ducks and Geese etc. are approved by DOE in winter season outside the national protected areas. Some tourism activities including ecotourism activity are conducting. Some local people take some kinds of herb as food from the wetland. Reed in the wetland is utilized as material of shed and crafts. Boat tourism in to enjoy the nature of the Anzali Wetland is important income for local people.

One of the local cultures that plays an important role in the conservation and wise use of the Anzali Wetland is the system of customary management practiced among the communities surrounding the wetland, known as "Abbandan-dari". "Abbandan" is water area in the Anzali Wetland for hunting and fishing. The customary Abbandan-dari system is practiced by a group of local people. Since 1971, Abbandan-dari practices have been undertaken under the supervision of the DOE. Areas are rented to groups of local people in winter, and conservation conditions are built in to the rental agreements. Kinds of waterbirds, number, days for hunting were limited based on the agreement.

Within the site: 10000s

Outside the site: 10000s

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

Description if applicable

One of the local culture that plays an important role in the conservation and wise use of the Anzali Wetland is the system of customary management practiced among the communities surrounding the wetland, known as "Abbandan-dari". An "Abbandan" is a type of shallow semi-natural water body found in the southern Caspian lowlands. There is 4700ha Abbandans with 90 blocks which range in size from about 8 to 155 ha in the Anzali Wetland. They are used for hunting and fishing. The customary Abbandan-dari system is practiced by a group of local people called "Abbandan-dar".

For hundreds of years, Abbandan-dari has been continued in the communities around Anzali. It is concerned with ensuring appropriate management of natural resources, acting as food for local people. In the past, monitoring of the customary fishing and hunting practices within the Abbandans was the responsibility of community elders. Each customary Abbandan area can be thought of as a kind of Indigenous Community Conserved Area (CCA). Since 1971, Abbandan-dari have been practiced in a new way, under the supervision of the DOE. Partial areas in the wetland outside national protected areas are rented to groups of local users for sustainable fishing and hunting in winter with strict rules. In addition, conservation conditions are built in to the rental agreements. For example, available day, bird species, number of bird to be hunted were strictly limited for sustainable use of the Anzali Wetland ecosystem. If the system will go well, it can play a key role in supporting biodiversity and the restoration of the ecosystem. However, the management by DOE is not enough, some illegal hunting and fishing are still existing in the Anzali Wetland. Monitoring and management by DOE and cooperation of local people should be enhanced. The Abbandan-dari system, in common with some other traditional systems elsewhere in the world, is capable of being the basis of a management institution which utilises both indigenous knowledge and the latest scientific methods.

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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

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

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

Private ownership

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

5.1.2 - Management authority

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

Gilan Provincial Office of the Department of the Environment, Resalat Street, PO Box 1433, Rasht, Iran

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

Head manager of Department of the Environment in Gilan.

Postal address:

Gilan Provincial Office of the Department of the Environment, Resalat Street, PO Box 1433, Rasht, Iran

E-mail address:

wetland.bureau@doe.ir

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Commercial and industrial areas	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	increase
Unspecified development	Low impact	Medium impact	<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown
Tourism and recreation areas	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	unknown
Housing and urban areas	Medium impact	Medium impact	<input type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Drainage	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Water abstraction	High impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Canalisation and river regulation	Medium impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Dredging	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input type="checkbox"/>	unknown

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Annual and perennial non-timber crops	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	increase
Wood and pulp plantations	Low impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Marine and freshwater aquaculture	Medium impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Livestock farming and ranching	Low impact	Medium impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	increase

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Medium impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Aircraft flight paths	Low impact	Low impact	<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	High impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Fishing and harvesting aquatic resources	High impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Gathering terrestrial plants	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Logging and wood harvesting	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	No change
(Para)military activities	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fire and fire suppression	Low impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input type="checkbox"/>	unknown
Dams and water management/use	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

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	Medium impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	unknown
Problematic native species	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified			<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Agricultural and forestry effluents	Medium impact	High impact	<input checked="" type="checkbox"/>	increase	<input type="checkbox"/>	increase
Household sewage, urban waste water	High impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Garbage and solid waste	High impact	High impact	<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Air-borne pollutants	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown
Industrial and military effluents	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Habitat shifting and alteration			<input type="checkbox"/>		<input checked="" type="checkbox"/>	

Please describe any other threats (optional):

The water level of the Anzali Wetland (except for the Siahkesim Protected Area) is almost alike with Caspian Sea Level (CSL). According to J. L. Chen et al (2017), rapid CSL increase (about +12.74 cm/yr) occurred between 1979–1995 and a significant drop (–6.72 cm/yr) between 1996–2015 was observed. It means the water level and water depth of the site has recently decreased. After rainfall the water level of the site increases during several following days as a reservoir allows smooth flow. Anzali Wetland Management Committee (AWMC) was established in 2011 under Gilan Provincial Governor's Office, aiming to construct, to formalize and to realize an integrated conservation management model of Anzali Wetland in cooperation with relevant organizations and technical sub-committees (SCs) by relevant sector for the Anzali Wetland conservation, which consist of the practitioner-level personnel of the concerned organizations for each sector, were established under approval of the AWMC to deal with threats whose impacts are increasing.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
protected area	Siahkesim Protected Area		whole
wildlife refuge	Chokum Wildlife Refuge		whole
wildlife refuge	Selkeh Wildlife Refuge		whole
wildlife refuge	Sorkhankol Wildlife Refuge		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Anzali Wetland Complex	www.birdlife.org	whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Partially implemented
Improvement of water quality	Partially implemented
Habitat manipulation/enhancement	Partially implemented
Hydrology management/restoration	Partially implemented
Land conversion controls	Partially implemented

Species

Measures	Status
Control of invasive alien plants	Partially implemented
Threatened/rare species management programmes	Proposed

Human Activities

Measures	Status
Regulation/management of wastes	Partially implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Partially implemented
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

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 Anzali Wetland Environmental Education Center was constructed beside Selke Wildlife Refuge as a wetland education center based on Ramsar concept in cooperation with JICA in 2004. The center has bird watching tower, bird hide, wooden path and other observation facility. Experience-based program such as bird watching program was developed specialised for the Anzali Wetland ecosystem. The programs are regularly conducting for local students and teachers. The center also has been opened for public every weekend in cooperation with trained NGO staff from January 2018. In addition, the Anzali Wetland Ecotourism Center was opened in Jirsar Bagher Khaleh Village in cooperation with JICA in 2017. It provide ecotourism program such as kyak tour for public visitors.

URL of site-related webpage (if relevant): <http://anzaliwetland.com/>

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

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

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Ashoori A. 2009. Endangered and Protected Birds of Guilan Province. Katebh Gil Publishing, Guilan, Iran. [In Persian]

Ashoori, A. & Abdoos, A. 2013. Important wetland habitats for the waterbirds of Gilan. Katibeh Gil, Iran [Farsi].

Ashoori, A. Khani, A. Ghasemi, M. Rabiee, K. Mansoori, M. Musavi, S.B. Hashemi, A & Eskandari, F. 2013. Recent records and status of Sociable Lapwing *Vanellus gregarius* in Iran. *Sandgrouse*:35:14-19.

Ashoori, A. Barati, A.2013. Breeding Success of Ardeids (Night Heron, Little Egret and Cattle Egret) in Southern Caspian Sea. *Italian Journal of Zoology*:80: 149-154.

Ashoori, A. Naderi, S. Barati, A.2012. Diet of Chicks of Grey Heron *Ardea cinerea* in Siahkeshim, Northern Iran. *Zoology in the Middle East*: 57:139-141.

Ashoori, A. Riaz, B. Kaboli, M. Dehdar, M. 2009. Breeding Ecology of Grey Heron *Ardea cinerea* in Siahkeshim Protected Area, Northern Iran, *Podoces*: 4(1):37-43.

Ashoori, A. and Watanabe, H. 2017. A breeding record of Black-headed Gull *Chroicocephalus ridibundus* at a Caspian coastal area, Iran, *Sandgrouse* 39

Carp, E. (1980). A Directory of Western Palearctic Wetlands. IUCN, Gland, Switzerland.

Evans, M.I. (1994). Important Bird Areas in the Middle East. BirdLife International, Cambridge, United Kingdom.

Firouz, E. (1971). The Wetlands and Waterfowl of Iran. Teheran, Game and Fish Department of Iran.

Mansoori, J. (1983). National Report on Iran's Wetlands of International Importance as Habitat for Waterfowl. Prepared for the Groningen Conference, Netherlands, in May 1984.

J. L. Chen T. Pekker C. R. Wilson B. D. Tapley A. G. Kostianoy J. - F. Cretaux E. S. Safarov. 2017, Long - term Caspian Sea level change, *Geophysical Research Letters*

Nippon Koei Co., Ltd. 2005. The Study on Integrated Management for Ecosystem Conservation of the Anzali Wetland in the Islamic Republic of Iran.

Nippon Koei Co., Ltd. 2015. Progress Report No.1 Anzali Wetland Ecological Management Project Phase II in the Islamic Republic of Iran.

Nippon Koei Co., Ltd. 2016. Progress Report No.2 Anzali Wetland Ecological Management Project Phase II in the Islamic Republic of Iran.

Nippon Koei Co., Ltd. 2017. Progress Report No.3 Anzali Wetland Ecological Management Project Phase II in the Islamic Republic of Iran.

Nippon Koei Co., Ltd. 2018. Progress Report No.4 Anzali Wetland Ecological Management Project Phase II in the Islamic Republic of Iran.

Scott, D.A. (1995). A Directory of Wetlands in the Middle East. IUCN, Gland, Switzerland and IWRB, Slimbridge, United Kingdom.

Scott, D.A. and Smart, M. (1992). Wetlands of the Seistan Basin, South Caspian and Fars, Islamic Republic of Iran. Ramsar Convention Monitoring Procedure Report no 26. Ramsar Convention Bureau, Gland, Switzerland.

Documents of DoE of Gilan. 2022

6.1.2 - Additional reports and documents

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

<5 file(s) uploaded>

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

<3 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:



Many wintering waterbirds in Sorkhankol Wildlife Refuge, the central of the wetland. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 12-02-2016)



South east area of Anzali Wetland, Keshurud River, pasture (seasonal wetland) and reed bed of Chokum Wildlife Refuge are seen. The building with red roof is Anzali Wetland Eco Tourism Center. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 17-11-2017)



Blooming Lotus community in west lagoon of the wetland. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 31-08-2017)



Sorkhankol and Sorkhankol Wildlife Refuge, Selke WR station, Anzali Wetland Education Center and attached observation facilities are seen. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 19-11-2017)



Many wintering waterbirds in Selke Wildlife Refuge (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 24-02-2017)



Many Purple Swamphens (Porphyrio porphyrio) in Selke Wildlife Refuge. Hundreds of PS can be sometimes seen in front of reedbed in Anzali Wetland. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 07-11-2014)



Whiskered Tern's (Chlidonias hybrida) nests on Water chestnuts leaves in Sorkhankol Wildlife Refuge (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 11-06-2017)



Whiskered Tern's (Chlidonias hybrida) nests on the submerged aquatic plant in west lagoon of Anzali Wetland (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 25-05-2018)



Group of Dalmatian Pelicans (Pelecanus crispus) in the north of Anzali Wetland. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 23-02-2018)



Colony of Black-headed Gull (Chroicocephalus ridibundus) and Common Tern (Sterna hirundo) in West Lagoon (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 25-05-2018)



Eurasian Marsh Frog (Pelophylax ridibundus) in West Lagoon. The biomass of the frog is very huge in the site which provides foods for other animals. (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 31-08-2017)



Experience-based education program in Selke Wildlife Refuge (JICA Expert team of Anzali Wetland Ecological Management Project Phase II, 26-11-2017)

6.1.4 - Designation letter and related data

Designation letter

<2 file(s) uploaded>

Date of Designation 1975-06-23