Designation date: 10/03/2013 Ramsar Site no. 2125

Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands.* Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

	1. Name and address of the compiler of this form:					
	Sharjah - UAE	FOR OFFICE USE ONLY.				
	Zina Abdullah	DD MM YY				
	EPAA Chairman Office					
	Phone: 0097165311501					
	Fax: 0097165311419	Designation date Site Reference Number				
	Mobile: 0097504688524					
	e-mail: zina@epaashj.ae					
_						
	2. Date this sheet was completed/updated:					
	1 st September, 2012					
		_				
	3. Country:					
	United Arab Emirates, (UAE)					
	4 N. Col. D. Col.	_				
	4. Name of the Ramsar site:	rea official languages (English Franch on Specials) of the Convention				
	The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.					
	Thermative manies, including in total language (s), should be given in patentileses after the precise manie.					
	Mangrove and Alhafeya Protected Area in Khor Kalba					
	لقرم والحفية بخور كلباء Name in local language	محمية أشجار اا				
	5. Designation of new Ramsar site or update	e of existing site:				
	This RIS is for (tick one box only):					
	a) Designation of a new Ramsar site ✓ or	. 🗖				
	b) Updated information on an existing Ram	sar site 🔟				

6. For RIS updates only, changes to the site since its designation or earlier update:					
a) Site boundary and area					
The Ramsar site boundary and site area are unchanged: □					
or If the site boundary has changed: i) the boundary has been delineated more accurately ; or ii) the boundary has been extended ; or iii) the boundary has been restricted**					
and/or					
If the site area has changed: i) the area has been measured more accurately ii) the area has been extended □; or iii) the area has been reduced** □					
** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.					
b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:					
7. Map of site: Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital maps.					
 a) A map of the site, with clearly delineated boundaries, is included as: i) a hard copy (required for inclusion of site in the Ramsar List): □; 					
ii) an electronic format (e.g. a JPEG or ArcView image); 🗹					
iii) a GIS file providing geo-referenced site boundary vectors and attribute tables \Box .					
b) Describe briefly the type of boundary delineation applied: e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.					
e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc. Khor Kalba Protected Area boundary is as follows: North: Kalba town.					
e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc. Khor Kalba Protected Area boundary is as follows:					
e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc. Khor Kalba Protected Area boundary is as follows: North: Kalba town. East: Gulf of Oman-up to 2 miles offshore are included in the protected area boundary.					

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Kalba is located in the far east of the United Arab Emirates on the boundary line between the UAE and Oman. The site is located to the south of Kalba town.

Kalba town is considered one of the most important cities of Sharjah and the most beautiful and tranquil, and has a population of about 45 thousand people, and characterized by a strategic location, tourist and political terms located on the eastern part of the UAE, overlooking the Gulf of Oman.

10. Elevation: (in metres: average and/or maximum & minimum)

Land from 0 to 448m sea from 0 to -23m

11. Area: (in hectares)

1494 hectares (Marine 148 ha, lagoon/estuary 500 ha, mangrove forests 846 ha)

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Located to the south of Kalba Town, Khor Kalba is composed of diverse habitats including coastal subtidal, intertidal (sand beach, mangroves, mud and tidal channels), supratidal sand, salt marsh and saline flats. Additionally, the ecological processes and wildlife that these habitats support make Khor Kalba rank as one of the country's premier wetland ecosystems and wildlife sites in terms of – biodiversity; naturalness; rarity; fragility; potential value; and intrinsic appeal.

The Ramsar Site includes Khor Kalba Mangrove and adjacent associated coastal (littoral) zone habitats of beach, halophytic scrubland and flats to the South of Kalba town and East of Kalba to Oman highway. The total catchment area of Wadi Rumh, the principal wadi flowing into the khor, albeit intermittently, covers an area of 100 km2, much of it being mountainous in character (part of the northern Hajar Mountain range). A narrow alluvial plain dominated by Acacia woodland lies between the arid stony mountains and the littoral zone.

The only mangroves found in Sharjah are the ones at Khor Kalba. These highly productive ecosystems are vital for their role in providing breeding, nursery and feeding grounds for several fish, invertebrate and plant species, besides protecting the coastline from storm damage and erosion while trapping sediments washed off the land. Kalba mangrove trees are the tallest and comprise the most extensive mature woodland found anywhere in the biogeographic region.

Apart from mangroves, the area is of great ornithological interest. It has several important birds, fish and plants, has high native biodiversity, and a major fish spawning and nursery area. 100% of land is government owned. Its location provides the potential for ecotourism projects (a place of scenic beauty with the blue waters of the sea, creeks, and dark green mangroves set against a backdrop of mountains. It is a site at which a wide variety of bird species breed, winter and visit on migration. It is characterized as being nationally and regionally important for the most natural and most mature stand of mangroves *Avicennia marina* (developed over centuries) in eastern

Arabia. Overall it is a biologically diverse, sheltered tidal wetland ecosystem with freshwater input from the adjoining mountains (Hajar Mountains).

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked

1 •	2 •	3 •	4 •	5 •	6 •	7	8 •	• 9
$\overline{\checkmark}$	$\overline{\mathbf{A}}$		$\overline{\mathbf{A}}$					

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criteria 1

Khor Kalba is the only mangrove-lined bay present on the Gulf of Oman coast of the UAE and supports some of the oldest mangrove trees in the Arabian Highland Woodlands and Shrublands ecoregion. Judging from historical accounts, mangroves are presumed to have been far more substantial along the coast in the past, and those now found at Kalba can be regarded as the last, relict, stand.

Criteria 2

Birds	IUCN	CITES	CMS
Socotra Cormorant (Phalacrocorax nigrogularis)	VU		II

Reptiles	IUCN	CITES	CMS
Green Turtle (<i>Chelonia mydas</i>)	EN	Appendix I	I/II
Hawksbill Turtle (Eretmochelys imbricata)	CR	Appendix I	I/II

Criteria 4

Khor Kalba is of global importance for two species of bird, namely the subspecies of the White-collared Kingfisher, *Todiramphus chloris kalbaensis* which breeds only here in the world, and visiting Sooty Gulls *Larus hemprichii*. Khor Kalba is one of just two breeding localities in Arabia for Sykes's warbler *Hippolais rama*. The Indian Pond Heron *Ardeola grayii* winters at the site.

A number of characteristically Middle Eastern breeding bird species are also present in the area of Acacia savannah in (Al Haffeah Area within the Ramsar Site) on the alluvial plain west of the Kalba-Oman highway. These include Yellow-throated Sparrow (*Petronia xanthocollis*), Blue Cheeked Bee-eater (*Merops persicus*), Arabian Babbler (*Turdoides squamiceps*) and Striated Scops Owl (*Otus brucei*). All occur here at densities higher than in almost any other location in the UAE (nor does any other single site support all four of these species at once). This site also appears in Important Bird Areas in the Middle East, which details those sites of particular national and regional significance for their breeding or visiting bird populations.

The endangered Hawksbill turtle (*Eretmochelys imbricate*), Green turtles (*Chelonia mydas*) and Loggerhead turtle (*Caretta caretta*) have been recorded breeding on the open beach of the khor.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Arabian Highland Woodlands and Shrublands

b) biogeographic regionalisation scheme (include reference citation):

WWF Ecoregions (terrestrial, marine and freshwater ecoregions) http://www.panda.org/about our earth/ecoregions/ecoregion list/

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

The Kalba mangrove system has two parts: the mangrove environment as such and the connected man-made pond. The pond is a rectangular stagnant water body that shows signs of excessive phytoplankton growth. Water is quite greenish and its clarity is only 2.4 m. Salinity is not higher than sea water values and suggests some flushing or/and fresh water input. Nutrient concentrations are high, confirming its "eutrophic" status and over-fertilization. The high phytoplankton (floating unicellular algae) concentration throughout the water column, as measured by Secchi disc, and resulting high nutrient values, are confirmed by high biological oxygen demand values and total organic carbon concentration. Water quality testing indicates that water in the mangrove forest is different from sea water. Sea water salinity near the beach of the Gulf of Oman ranges between 34-38ppt which are normal sea water values. These values may rise from 38ppt in the upper part of the mangrove (closets to the sea) to 44 ppt, as one penetrates deeper into the mangrove system. Temperatures also rise, changing from 27 to 31 degrees C.

The mangrove is inundated by tides coming in from the sea through the connecting channel. Nearby, Hajar Mountains and coastal plains expose the mangrove to intermittent fresh water input essential for maintaining system equilibrium. The principal tributary, Wadi Rhum, joins the mangrove area near the town of Kalba.

Temperatures rise, changing from 27 to 31 degrees C. Water stagnancy inside the mangrove may allow heating up and evaporation, resulting in higher concentrations of dissolved substances and salinity.

Forest is located just south of the town of Kalba and is connected at its northern extremity to the sea by a khor (creek), which will be referred to as the connecting channel. The Kalba Mangrove, consists of mudflats interspersed with salt marshes and sabkhas, creeks and channels, as well as the backdrop of Hajar Mountains and coastal plains, dominated by Acacia woodland. Mangrove cover is more important on the inland of the creek.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The total catchment area of Wadi Rumh, the principal wadi flowing into the khor, albeit intermittently, covers an area of 100 km2, much of it being mountainous in character (part of

the northern Hajar Mountain range) A narrow alluvial plain dominated by Acacia woodland lies between the arid stone mountains and the littoral zone. Another aspect is the role of a fairly extensive coastal plain between the "khor" and Hajar Mountains in development of mangroves in Khor Kalba. The plain consists of thorn scrub Acacia savannah that impedes the flow of storm water, which rushes from the mountains, carrying with it rocks and debris, following heavy rains. Had its erosive force not been curbed by the Acacia savannah plain, the mangroves would have been unable to survive and regenerate.

Climate in the catchment area is the same as in the site.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

The only mangroves found on the Eastern Coast of the United Arab Emirates are the ones at Khor Kalba. These highly productive ecosystems are vital for their role in providing breeding, nursery and feeding grounds for several fish, invertebrate and plant species, besides protecting the coastline from storm damage and erosion while trapping sediments washed off the land. Kalba mangrove trees are the tallest, oldest and comprise the most extensive mature woodland found anywhere in the UAE.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

Marine/coastal: $A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K \cdot Zk(a)$ Inland: $L \cdot M \cdot N \cdot O \cdot P \cdot Q \cdot R \cdot Sp \cdot Ss \cdot Tp$ Ts · U · Va · Vt · W · Xf · Xp · Y · Zg · Zk(b)

Human-made: $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 \cdot Zk(c)$

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

A-F-G-J-I-H-7-E-R

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Mangroves are growing along the tidal creek shores, where they are protected from wave action of the open sea by 200m wide sand pit or beach berm which runs from the mouth of the creek toward creek towards the Oman border, forming a continuous beach head towards the south. Mangrove cover is more important on the inland of the creek.

On the seaside of the creek, mangrove cover is less dense and the band of trees less wide, partly because the height of the sand bar prevents tidal inundation. Still, there are many mudflats on the creek side, which represent potential mangrove habitat.

Mangrove vegetation and their associated fauna are mutually interdependent. The complex structures of mangrove roots and pneumatophores provide protected nursery habitats for juvenile fish and shrimps, often of commercial species. Biological productivity is similarly high, with the area serving as a fish spawning ground and nursery. The area undoubtedly has a significant role as an important spawning and nursery, eight species, including the Arabian Killifish (*Aphanius dispar*), which is tolerant of both fresh and saline water and occurs in wadi systems. Other species doubtless occur, even if only as larval or juvenile stages.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

Mangroves Avicennia marina

These highly productive ecosystems are vital for their role in providing breeding, nursery and feeding grounds for several fish, invertebrate and plant species, besides protecting the coastline from storm damage and erosion while trapping sediments washed off the land. Kalba mangrove trees are the tallest and comprise the most extensive mature woodland found anywhere in the UAE.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

Khor Kalba is justly famous for the breeding populations of Arabian Collared Kingfisher and Sykes's Warbler, and the wintering population of Indian Pond Herons.

Rare birds recorded at the site include:

- Sooty Shearwaters
- Brown Booby
- Masked Booby
- Greater White-fronted Goose (07.11.2001)
- Sooty Falcon (26.06.1999 at the bridge at 19:20)
- Small Pratincole (02.12.1995 in the harbour)
- Red-necked Stint on the beach (03.06.2004) 5th UAE record
- Long-toed Stint
- White-eyed Gull (09.05.1994)
- Common Gull (several)
- Little Gull (several)
- Sabine's Gull (19.05.1995 at Kalba Corniche) 2nd UAE record
- Black-legged Kittiwake (17.04.1998. & 27.03.2001)
- Black Tern (08.04.1993 & 29.-30.01.1994, both at Kalba Corniche, & 27.07.1998)
- Pied Kingfisher (06.12.1999 25.02.2000)
- Eversmann's Redstart (16.11.2005 in the mangroves)

Most fish found in the area are juveniles, underlining one of the most important ecological functions of the mangrove, namely nursery ground for many open sea species, including several commercial or food fish. Many mangrove oysters colonize hard substrate such as rocks along the intertidal zone, now there is a marine study and research to update these species On the muddy shores of the creek, mud snail shells Giant Mud Creeper (*Terebralia palustris*), of up to 10 cm long, are found in large numbers. Many small crabs are found in the shallow water near the banks of the creeks, attracting not only fish, but birds as well. The Kalba mangrove forest is home to an endemic subspecies, *kalbaensis*, of the white-collared kingfisher (*Todirhamphus chloris*, or *Halcyon chloris*), which only breed there. With less than fifty pairs remaining, it is one of the rarest bird subspecies in the world.

The Kingfisher feeds, besides the occasional insect or small invertebrate, almost exclusively on crabs which are quite numerous. Its small population uses the mangroves for shelter and nesting, and its breeding success depends on the number of mature mangrove trees available, as it makes its nest in holes of old tree trunks. The beach is an important site for many sea birds, such as the Sooty gull (*Larus hemprichii*), and large flocks are regularly seen in this area. Up to 3% of the world's Sooty gull population can be found here during winter months. Adjacent salt flats are also an important roost site for sea birds, shore birds and migrant raptors.

The mangrove forest is an important habitat for Green turtles (*Chelonia mydas*), Hawksbill turtles (*Eretmochelys imbricate*) and Loggerhead turtle (*Caretta caretta*) which enter the mangrove creeks at high tide to feed on sea grasses and algae. They can often be observed from the bridge near the mouth of the mangrove's inlet, as they try to swim against the tide towards the sea.

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

The archaeology of the coastal hinterland includes number of significant historical and prehistoric sites, some of the latter dating back to 3rd Millennium BC, four to five thousand years before present. A number of structures, such as forts cairns and burial chambers, in different states of preservation, are present, as is a remarkable assemblage of artwork or petroglyphs, all of these are important component of the local heritage. The majority of archaeological sites are just few meters from the wetland close to the edge of the Hajar Mountains.

There is also an area for drying fish and this drying process is part of the heritage of the Emirati society.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box \square and describe this importance under one or more of the following categories:

- i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

- sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where 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:

24. Land tenure/ownership:

a) within the Ramsar site:

Site ownership is to Sharjah government

b) in the surrounding area:

The surrounding area is to Sharjah Government.

25. Current land (including water) use:

a) within the Ramsar site:

Tourism uses, fishing from sea, wildlife habit and environment for birds, fish, and turtle.

Conservation

Education

b) in the surroundings/catchment:

Commercial outside the Protected Area

Ecotourism inside and outside the Protected Area

Roads, Highways, Urban settlements.

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

In many parts, there are no more mangrove trees growing, the trees, except for a few stands here and there, having all but disappeared. Between the beach and the mangrove, a large sand strip with a hardened gravel surface runs along the sand strip like a road. Many tracks of cars can be seen on this road, and this traffic has destroyed part of the mangrove on this side of the creek and any stabilizing vegetation on the sand bar and beach, however now all this has been stopped and no more cars can enter the Protected Area.

b) in the surrounding area:

High way roads

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

This site has the status of a legally protected National Protected Area under the Amiri decree No. 27 which was issued by the Ruler of Sharjah Emirate in year 2012.

This site is also listed as an Important Bird Area.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia \square ; Ib \square ; II \square ; III \square ; IV \square ; VI \square

c) Does an officially approved management plan exist; and is it being implemented?

Yes there is management plan and it has been implemented as an EPAA branch was opened in Kalba to manage this protected area.

This above mentioned management plan serves as the first reference to the management and development of the Kalba Conservation Area (KCA) in its current and proposed future form and outlines the Environment and Protected Areas Authority (EPAA) management strategy for KCA; focusing on developing and managing towards a desired state, based on a mission, attributes, objectives and acceptable endpoints but is primarily focused around conservation of its unique biodiversity characteristics

d) Describe any other current management practices:

Parts of this protected area is fully protected due to their importance in breeding rare species of birds and turtles that have been mentioned previously.

EPAA prohibited the following in the wetland in order to preserve biological diversity:

- 1- Hunting, transporting, killing or harming wild creatures or undertaking activates leading to their eradication.
- 2- Damaging or destroying geological or geographical formation or areas considered natural habitat to animal and plant species as a result of increase or growth of such species.
- 3- Introducing foreign species into the reserve.
- 4- Polluting the soil, water or air of the reserve.
- 5- Cutting trees or eroding soil.
- 6- Amusements, recreation and sport functions which can kill or harm or have negative impact on natural life.
- 7- All that can disturb the natural balance of such reserves.

Also sensitizing local populations and their involvement in the protection and implementation of projects for the region took place by opening two environment protected areas branches in Kalba and Khor Fakkan., these Branches are managed by local environmental employees. Currently there are 8 permanent rangers at the site and this number will increase as management measures are progressively put in place.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The implementation of the management plan is ongoing and measures set in the plan are put in place step by step. Regular monitoring is envisaged for the area including fauna and flora regular surveys. Rangers are already present in the area and in the future their number will increase as the protected area and education centre become open to the public.

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Sharjah government and His Highness Dr. Sheikh Sultan bin Mohammed al Qassimi, the Ruler of Sharjah has given all the support for many new studies.

The area is also considered a research and studies area on the following subjects:

- 1- Flora and fauna (terrestrial).
- 2- Flora and fauna (Marine).
- 3- Water Quality & Sedimentation.
- 4- Hydrodynamics.
- 5- Climate.
- 6- Air quality.
- 7- Noise and vibration.
- 8- Landscape and visual Impact.
- 9- Archaeology and Cultural heritage.
- 10- Marine Ecology Surveys.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

A learning and research visitor centre and workshops will be established for the local exhibited animals (Kalba Wildlife Centre which will exhibit the Arabian Wolf, Mountain Gazelle, Reptiles, Gordon's Wildcat, Blanford's Fox, Eagle Owl, Brown Necked Raven and the Arabian Leopard), Also sensitizing local populations and their involvement in the protection and implementation of projects for the region will continue with the opening of two environment protected areas branches in Kalba and Khor Fakkan.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

The focus on environmental issues has become a key priority in any country. Today, the terms environment and development have become intrinsically intertwined and, hence, development must be based on principles compatible with the environment.

Believing in the importance of preserving and protecting the environment, H.H Dr. Sheikh Sultan bin Mohammed Al Qasimi, Member of the Supreme Council and Ruler of Sharjah, released on May 2012 (18 gazelles) of the endangered species known as "Damani" in the Al Hafiya natural reserve in Kalba.

The gazelles release marked the inauguration of the first phase of the "Kalba Eco-tourism Project".

We believe that the development of the Kalba Eco-tourism Project is part of its social responsibility and its strong conviction that preservation of environmental heritage that serves the nation and citizens is everyone's responsibility as an investment in a better future.

Kalba Eco-tourism project undertakes the aim of creating public consciousness and generating greater awareness about environmental issues, while identifying Sharjah's rich environmental tourist assets available for the public to enjoy within a conservative organizational framework.

The project will be implemented in three phases over a period of six years, the first of which will see the redevelopment of natural reserves in Kalba (Hafiya and Al Qurm natural reserves), the release of rare animals and birds, and the establishment of a centre within the reserve for visitors, as well as the restoration of numerous archaeological sites within the project' scope.

Phase 2 of the project will develop Kalba Creek (several shops and restaurants overlooking the creek). It will include the development of recreational spaces that will enable holidaymakers to enjoy the area's natural biodiversity, and the development of a number of islands in the creek.

The third phase has been designated for the development of tourism and will see the construction of a number of hotels and fantastically designed chalets overlooking the Gulf of Oman. This part of the project will feature more than 300 rooms including hotels and chalets, as well as a building designated for art activities and a centre for diving and marine hobbies. It will also offer trips to explore Khor Kalba and the mangroves.

This eco tourism project will not affect the protected area as it will be around the borders.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc. Environment & Protected Areas Authority, Government of Sharjah

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Environment and Protected Areas Authority, Government of Sharjah

Hana SAif Al Swaidi - Chairperson

P.O. Box Sharjah 2926 Phone: 0097165311501 Fax: 0097165311419 Mobile: 00971504543664 Email:Hana@epaashj.ae

Ahmed Al Ali -Protected Areas Manager

P.O. Box Sharjah 2926 Phone: 0097165311501 Fax: 0097165311419 Mobile: 0091508074440 Email:Ahmad@epaashj.ae

34. Bibliographical references:

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Please return to: Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org