Appendix

Template for Submission of Scientific Information

to Describe Ecologically or Biologically Significant Marine Areas

*Note: Please **DO NOT** embed tables, graphs, figures, photos, or other artwork within the text manuscript, but please send these as separate files. Captions for figures should be included at the end of the text file, however.*

Title/Name of the area:

Watamu Marine Park and Reserve

Presented by (*names, affiliations, title, contact details)*

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Abstract (*in less than 150 words)*

Relatively little is known about marine mammal species in Kenyan waters. The scarce knowledge on these species is based on data collected during aerial surveys conducted between 1994 and 2001, and information from stranded animals. Since then, some of these species have been in constant decline in the Western Indian Ocean, facing real threats such as by-catch in fishing gears, loss of habitat, over fishing or whale/dolphin-watching activities.

To address this The Kenyan Marine Mammal Network was established in 2011 and is a partnership between Global Vision International, Watamu Marine Association, Kenya Wildlife Service, Kenya Association of Sea Anglers and Kenya Marine and Fisheries Research Institute to provide the first consistent data on occurrence and abundance of marine mammals along the Kenyan coast. This project will help to define areas of "High Importance" for marine mammals, which will improve our understanding of these species in this region and help develop national conservation and management strategies.

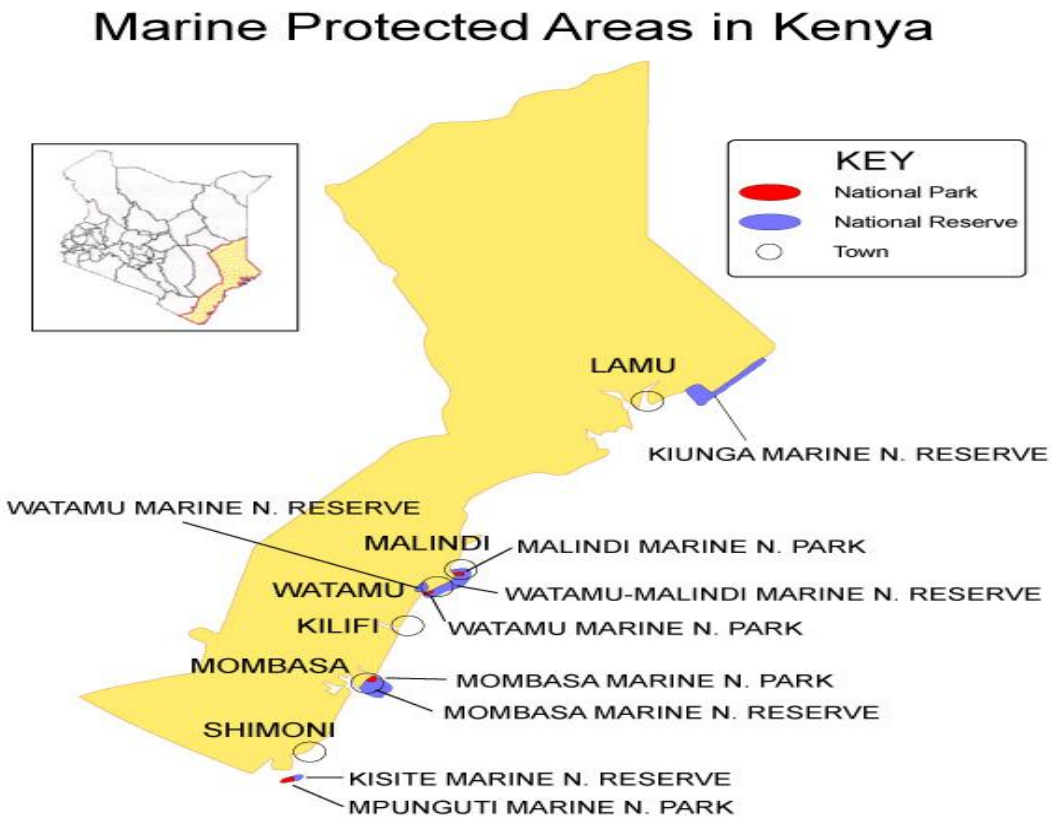
Introduction

(To include: feature type(s) presented, geographic description, depth range, oceanography, general information data reported, availability of models)

Location

(Indicate the geographic location of the area/feature. This should include a location map. It should state if the area is within or outside national jurisdiction, or straddling both. It should also state if the area is

wholly or partly in an area that is subject to a submission to the Commission on the Limits of the Continental Shelf)



The Watamu Marine Park and Reserve is within Kenyan national jurisdiction and is a gazetted Marine Protected Area.

Feature description of the proposed area

(This should include information about the characteristics of the feature to be proposed, e.g. in terms of physical description (water column feature, benthic feature, or both), biological communities, role in ecosystem function, and then refer to the data/information that is available to support the proposal and whether models are available in the absence of data. This needs to be supported where possible with maps, models, reference to analysis, or the level of research in the area)

The Malindi / Watamu National Marine Park and Reserves cover a total of 229km^2 and are a recognised UNESCO Biosphere Reserve due to its diverse ecosystems and habitats including coral reefs, sea grass

meadows, mangrove forests which support a rich biodiversity including sea turtles, whale sharks, dolphins and whales and over 600 coral reef fish species.

Map showing dolphin and whale common sighting areas in the Malindi and Watamu Marine Reserves

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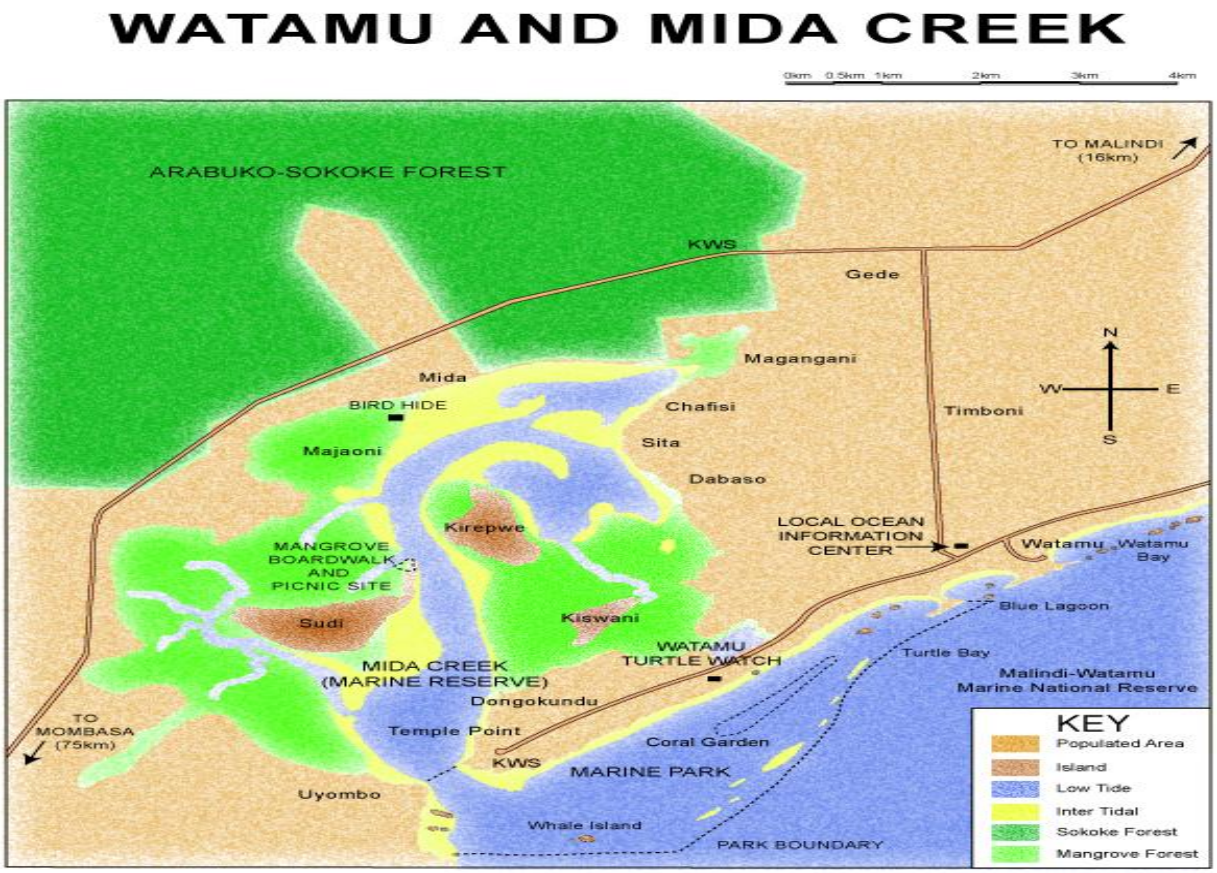

Map showing Watamu Marine Park boundary and Mida Creek Marine Reserve

Cetacean research on species populations and distribution has been carried out for 2 years since 2010 and is ongoing. 87 individual bottlenose dolphins have been identified in the Watamu sea area which is also a section of a migratory route for humpback whales.

(See the attached Kenyan Marine Mammal Network Newsletter Issue 1 May 2012)

Consistent research on sea turtle nesting, distribution, populations and bycatch have been ongoing in the area since 2000. 5 species of sea turtle are found in Watamu waters with 2 species using the Marine Park beaches for nesting. The Bycatch and Release Programme is the longest running in the world and has released more than 8,000 sea turtles from bycatch in fishing gears.

Feature condition and future outlook of the proposed area

(Description of the current condition of the area – is this static, declining, improving, what are the particular vulnerabilities? Any planned research/programmes/investigations?)

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Vulnerabilities and threats to the area include:

1. Over fishing
2. Beach erosion
3. Mangrove deforestation
4. Coastal development and habitat loss
5. Tourism related development
6. Solid waste pollution
7. Human population increase

Several programmes and research projects are ongoing related to species and environmental conservation management and welfare, namely:

General marine conservation

Sea turtle conservation

Marine mammal conservation

Mangrove conservation and research

Fisheries research

Coral reef research

Collaborative Actions for Sustainable Tourism

Solid Waste Management

Government bodies are responsible for the management and protection of the Marine Protected Areas.

Kenya Wildlife Service is the principal authority alongside Kenya Forest Service and Fisheries Department.

Assessment of the area against CBD EBSA Criteria

(Discuss the area in relation to each of the CBD criteria and relate the best available science. Note that a candidate EBSA may qualify on the basis of one or more of the criteria, and that the boundaries of the EBSA need not be defined with exact precision. And modeling may be used to estimate the presence of EBSA attributes. Please note where there are significant information gaps)

CBD EBSA Criteria (Annex I to decision	**Description** (Annex I to decision IX/20)	**Ranking of criterion relevance** (please mark one column with an X)			
		Don't Know	**Low**	**Some**	**High**

IX/20)					
Uniqueness or rarity	Area contains either (i) unique ("the only one of its kind"), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features.				**X**
Explanation for ranking Area contains distinct ecosystems including coral reefs, sea grass meadows and mangrove forests The Area is also an internationally recognised Important Bird Area (IBA) for migratory sea birds and wading birds					
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.				**X**
Explanation for ranking Hundreds of species of reef fish depend upon the above mentioned ecosystems for feeding, breeding etc The area provides important nesting beaches and foraging grounds for sea turtles The area provides foraging grounds for several species of cetaceans The area provides foraging grounds for whale sharks					
Importance for threatened, endangered or declining species and/or habitats	Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.				**X**
Explanation for ranking The area contains: 5 species of sea turtle with a status ranging from threatened to critically endangered Threatened and declining species of dolphin and whale Threatened coral reefs, sea grass meadows and mangrove forest Declining habitats include coral reef, sea grass meadows, mangrove forest, beach and riparian					
Vulnerability,	Areas that contain a relatively high proportion				**X**

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fragility, sensitivity, or slow recovery	of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.				
Explanation for ranking The above mentioned ecosystems are vulnerable **Feature condition and future outlook of the proposed area** above					
Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity.				**X**
Explanation for ranking The area includes coral reefs, sea grass meadow and mangrove forest ecosystems with high levels of biodiversity and/or biological productivity					
Biological diversity	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.				**X**
Explanation for ranking Coral reef biodiversity ranks as high					
Naturalness	Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.				**X**
Explanation for ranking The area is 1 of only 4 protected Marine National Parks in Kenya covering only a small sea area of Kenya's 500km coastline					

Sharing experiences and information applying other criteria (Optional)

Other Criteria	**Description**	**Ranking of criterion relevance** (please mark one column with an X)			
		Don't Know	**Low**	**Some**	**High**
Add relevant criteria					
Explanation for ranking					

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References

(e.g. relevant documents and publications, including URL where available; relevant data sets, including where these are located; information pertaining to relevant audio/visual material, video, models, etc.)

Watamu Marine Association – http://www.watamu.biz/
Watamu Turtle Watch – http://www.watamuturtles.com/

Maps and Figures

Rights and permissions

(Indicate if there are any known issues with giving permission to share or publish these data and what any conditions of publication might be; provide contact details for a contact person for this issue)

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