Information Sheet on Ramsar Wetlands (RIS)

2009-2012 version

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.

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DD MM YY

Designation date | Site Reference Number

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2. Date this sheet was completed/updated:
March 30, 2012

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3. Country:
Republic of the Marshall Islands

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4. Name of the Ramsar site:
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.

Namdrik Atoll

5. Designation of new Ramsar site or update 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 Ramsar 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 ❑; or
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** ☐

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.

The boundary of the site follows the natural topography of the atoll and encompasses the lagoon, islets and coral reef flat to the drop-off at 10 metres.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):
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.

05°37'00"N 168°06'30"E approximate centre

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.

The site lies in the Ralik Chain of the Marshall Islands, 390 kilometres southwest of the capital city, Majuro. Jaluit Atoll, the previous capital, lies roughly halfway between Namdrik and Majuro.

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

Primarily sea level but some areas rise up to 3 meters.

11. Area: (in hectares)

1,119 ha (land = 277 ha, lagoon = 842 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.

Namdrik Atoll is an outstanding coral atoll in the Micronesian biogeographic region due to its large size and unlike many other atolls, there are no navigable passes into the central lagoon. It is also unique because unlike many other atolls in the region, it supports mangroves and mangrove depressions.

The atoll consists of two islands. Madmad is the smaller island and is situated to the northwest of the site and Namdrik, being the larger island, takes up the eastern and southern parts of the site. Between these two islands is an extensive reef flat where some large coral rocks are found. There are mangrove areas connected to the lagoon and some inland mangrove depressions, some which have permanent water and others which become dry at low tide. Under the two islands there is a subterranean Ghyben-Herzberg water lens which is replenished through rainfall.

The atoll supports breeding populations of the critically endangered Hawksbill Turtle *Eretmochelys imbricata* and the endangered Green Turtle *Chelonia mydas*, as well as the endangered Humphead Wrasse *Cheilinus undulatus*.

Its relative isolation has also contributed to the atoll being in a near pristine condition balanced with traditional, sustainable and continuous human development for at least 3,000 years.

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
☑	☑	☑	☑	❑	❑	☑	☑	❑

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).

Criterion 1: Namdrik Atoll is an outstanding coral atoll in Micronesian biogeographic region because of its large size and unlike many other atolls in the region, there are no navigable passes into the central lagoon. It is also one of the rare coral atolls that support mangroves and mangrove depressions. Its relative isolation has also contributed to the atoll being in a near pristine condition balanced with traditional, sustainable and continuous human development for at least 3,000 years.

Criterion 2: Namdrik Atoll supports the following threatened species.

English Name	Scientific Name	IUCN	CITES	CMS
Hawksbill Turtle	*Eretmochelys imbricata*	CR	I	I
Green Turtle	*Chelonia mydas*	EN	I	I
Napoleon Wrasse/ Humphead Wrasse	*Cheilinus undulatus*	EN	II	-
Bristle-thighed Curlew	*Numenius tahitiensis*	VU	-	II

Criterion 3: Namdrik Island supports a wide range of fish (see Criterion 7), coral, bird and plant species, both threatened (see Criterion 2) and more common, which are characteristic of the Micronesian biogeographic region.

In addition, a number of important endemic species have recently been recorded, such as the Tree-hole Mosquito (*Aedes marshallensis* Range: Marshalls, Kiribati, Caroline Atolls, Kosrae*)*, and the endemic Crane Fly (*Limonia beardsleyi* or *Limonia beardsley* Range: Namu, Kili, Namdrik*)* and Land Snail (*Assiminea nitida marshallensis* Range: Marshalls). These species are relatively unstudied hence their biological and environmental services are yet to be determined. But as they are found in the wetland environment, it is logical to assume that they play important roles.

Criterion 4: All the species listed in Criterion 2 are dependent on Namdrik's wetlands either as year-round habitat or as a migratory stop-over, including providing a wintering ground for the vulnerable Bristle-thighed Curlew (*Numenius tahitiensis).*

Criterion 7: Over 150 locally named fishes with a range of life-history stages are known from Namdrik Atoll, with almost all of these spending their entire life cycle in the wetlands. These were named by their local names during the 1997 Biodiversity Workshop on Namdrik and this listing became part of the more extensive listing of fishing for all of RMI in the National Biodiversity Report **(**NBTRMI 2000).

Criterion 8: The site is an important source of food, spawning ground, nursery and migratory route for some 150 species of fish, including the endangered Napoleon Wrasse "labbo," (*Cheilinus undulates)*, and the near-threatened Brown-marbled Grouper "kûro," (*Epinephelus fuscoguttatus*).

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: Micronesian Province, Oceanian Realm,

b) biogeographic regionalisation scheme (include reference citation): Udvardy 1975.

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 site has two well-vegetated islands – Madmad and Namdrik, joined together by a continuous reef, roughly as a trapezoid. Madmad is the smaller and is situated to the northwest of the site, whilst the larger Namdrik takes up the eastern and southern parts of the site.

There are a few sandbars and shoals on the connecting reefs which are exposed at low tide. There are also a number of coral boulders scattered over the same reefs, some supporting terrestrial vegetation on their upper surfaces.

There are no passes into the lagoon. At low tide, the water within the lagoon can be as much as two meters higher than that of the outside ocean.

There are mangrove areas connected to the lagoon and some inland mangrove depressions, some which have permanent water and others which become dry at low tide.

Soil type at the site has not been studied although being a coral atoll it would largely be made up of calcium carbonate (coralline). Due to the presence of extensive mangroves, the site also has mangrove peat and thus richer and more fertile soil than many other atolls.

Under the two islands there is a subterranean Ghyben-Herzberg water lens which is replenished through regular rainfall. Due to the fact that freshwater floats on saltwater and the porous nature of atolls and other factors, fresh rainwater seeps through and forms an underground reserve of water. The approximately 500 population who live on the atoll construct wells to tap this freshwater supply. Some wells have quite sweet water, while others can be brackish. Also, there is a mangrove wetland area of Ajelto and a few of those of the main inhabited part of Namdrik Island, Eoon-ene, with cracks in the bottom of the pools where water ebbs and flows according to the tide.

The climate is tropical and considered to be a "very wet" atoll with an annual rainfall of 3,000 to 3,800mm. It has had several severe typhoons in recorded history. The maritime tropical climate is hot and humid, with little seasonal temperature change. Diurnal variations generally range between 21° and 34°C. Trade winds from the northeast cool the high temperatures from December through March. Rainfall averages about 35–38 cm per month, with October and November the wettest and December to April the driest.

The annual range of surface water temperatures is 27–30°C and the tidal range is about 1.5 m. The northeast trade wind belt heavily influences the tropical climate of Namdrik. Trade winds prevail from December through April, periods of weaker winds and doldrums occur from May to November. The region is affected by storms and typhoons and by periods of drought and excessive rainfall associated with the "El Nino" (ENSO) phenomena.

17. Physical features of the catchment area:

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

Not applicable.

18. Hydrological values:

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

All mangrove swamps on Namdrik Atoll rely on tidal flushing to keep the mangroves healthy. Water exchange flushes out the ecosystem – taking away harmful products and bringing in needed nutrients and animals. Several animal species found in mangrove ecosystems, such as shrimp, rely on this tidal flushing to complete their reproductive lifecycles.

The southern and northern mangroves on the main island provide flood control for the homesteads surrounding them, and are noted for absorbing the impact of major storms, thereby protecting the local population.

The intertidal pools are used by the human population for treating and curing wood. The long term sustainability of the groundwater lens is critical to ensure the continued provision of freshwater supply to the community. In atoll nations, freshwater is finite and extremely scare where limited land space makes the provision of purpose built reservoirs a problematic development. Additionally, natural underwater groundwater lenses are also scarce and easily contaminated, making the protection and management of these resources essential. The lack of adequate water resource infrastructure results in a variety of serious issues such as pollution and contamination, wasting water resources and poor resource use.

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** • **B** • **C** • **D** • **E** • F • G • H • **I** • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • **Sp** • **Ss** • Tp • Ts • U • Va • Vt • W • Xf • **Xp** • Y • Zg • **Zk(b)**

Human-made: 1 • **2** • 3 • 4 • 5 • 6 • **7** • 8 • 9 • 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; C; I; Zk(b); Xp; Sp; Ss; E; B; D; 7; 2

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.

The entire encircling reef-flat around both islets and the areas connecting the two islands is not more than one or two meters deep and thus, the site would thus fall under the Ramsar definition of a wetland. There are many areas further from shore than the intertidal reefs. These would include the coral pinnacles and reef ridges which encircle the secondary lagoons, such as that just south of Ajelto and those off of Madmad.

The are extensive stands of mangroves, mainly *Sonneratia alba* and *Bruguiera gymnorrhiza*, with some *Rhizophora stylosa*, and *Pemphis acidula* in Madmad. This wetland system is one of most beautiful and significant in all of Namdrik. It is connected with traditional legend and navigational markers, and serves as a "pantry" for the inhabitants of the atoll. It appears to be in a remarkably healthy condition, not heavily impacted by foreign species nor suffering a great increase in exploitation.

On Eoon-ene, the ground rises several meters and the red-flowered Black Mangrove "kimeme" (*Lumnitzera littorea*) trees reach 18 meters or more. Their litter forms a boggy mat underneath, giving the area a spongy feel.

Inland are brackish pools that contain mangrove stands and such "mangrove depression" are said to commonly characterize atolls (Fosberg 1949, 1975; Mueller-Dombois & Fosberg 1998). These inland areas with no direct outlet to the sea are typical of atoll, unlike other areas where mangroves are usually coastal. The water in these depression pools rise and fall with the tidal flux but are rarely completely dry. The wetlands of Eoon-ene would fall into this category and the pools there often lose their standing water during ebb tides. The far end of Ajelto also has wetlands which for the most part periodically become dry, although interspersed with deeper hollows.

At the end of the two islets are sand spits extending out to intertidal reef. Drift material tends to concentrate here.Along the north facing intertidal reef between Madmad and Ajelto, there are prominent sand bars and shoals islets, apparently exposed except during the highest of tides.

Seagrass, tentatively identified as Serrated Ribbon Seagrass, **(***Cymodocea serrulata)*, is found in much of the shallow sandy areas of the lagoon and ocean sides of Namdrik Atoll, with some patches in the mangrove areas of Madmad.

There are a number of large rocks on the intertidal reef between the two main islands. Some of these rocks are large enough to have terrestrial vegetation and associated insects and other arthropods on top, making them reminiscent to the famed Rock Islands of Palau.

Scattered around the dwellings of Eoon-ene are excavated "iaraj" pits. The inhabitants of the Marshall Islands have since prehistoric times excavated pits for growing the important staple crop, Giant Swamp Taro "iaraj" (*Cyrtosperma chamissonis*).

Most households on Namdrik Atoll are equipped with private water catchment tanks. If left uncovered, water catchment tanks (which typically hold 500 to 1500 gallons) tend to attract aquatic insects. Mosquitoes almost immediately lay their eggs, as do also dragonflies. If unattended for long enough, other insects and invertebrates will find their way into these tanks, and cytobacteria, algae and other plants will grow in and around them.

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*.

The rare and regionally endemic herb *Ponapean peperomia*, which is listed as a potentially vulnerable species by the CEPF is probably the most important species known on Namdrik Atoll, because it is an endemic which had become "lost" to science for the last few decades.

The predominant species of mangrove in this area have been tentatively identified as *Bruguiera x rhynchopetala* and *Rhizophora stylosa*.

The tentatively identified Serrated Ribbon Seagrass (*Cymodocea serrulata*) is a first record for the Marshall Islands.

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*.

Based on word of mouth, Namdrik Atoll may be the only remaining habitat in the Marshall Islands for the White-browed Rail/ White-browed Crake (*Porzana cinerea*).

The known endemics, i.e. the Arno Skink (*Emoia arnoensis)*, the Marshalls' mosquito (*Aedes marshallensis*), a crane fly (*Limonia beardsleyi or Limonia Beardsley)*, Marshalls' land snail (*Assiminea*

nitida marshallensis), have yet to be considered by IUCN but are at least quite biogeographically important.

There is anecdotal evidence that the Mangrove crab (*Scylla serrata*) population was greater more than 20 years ago, but there is no quantitative evidence to support the claim. Sea cucumbers (*Holothuria atra*) are plentiful, and the local council is exploring potential for export to the Asian market.

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:

Wetlands have long been extremely important to the daily life of the people of Namdrik Atoll. If fact, it would have been nigh- impossible for anyone to survive in earlier times without the resources that were derived from the mangrove, seashore, reef, freshwater habitats, and the underground water lens. The basics of life – food, water, clothing, shelter – were all related to wetlands. But beyond those, canoe-building supplies, ornaments, beauty aids, medicines, ceremonial supplies, material for maintaining attractive homesteads and more came from resources found in wetlands.

Namdrik's wetlands are culturally important as shown by the majority of the traditional sites and navigational markers are often associated with wetlands. Legends are associated with reef rocks in Namdrik Atoll. At least the larger ones have names, with those on one side of Madmad being called "Ledik-nejin-Lijabkanira" (or 'daughters of Ms. Jabkanira') and those on the other side, "Ladik-nejin-Lijabkanira" (the sons of the same woman). These were all players in a story related to the formation of one of the matrilineal clan, Erebra. Three of the named boulders, "Lijinej, Lijonal, and Lijenmaloklok," are traditional navigation signs, said to have been women who came from Kosrae.

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 ☑ 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:

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

Wetland ponds are used for curing wood and other plant material to make traditional handicrafts and clothing. Resources from the wetlands include canoe-building supplies, ornaments, beauty aids, medicines, ceremonial supplies, material for maintaining attractive homesteads

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: Public land
Land tenure is consistent with the rest of the Republic, and follows Marshallese custom and traditional hierarchy of Iroij (Chief), Alab (landowners), and Dri-Jerbal (workers). Namdrik Atoll has a local government that consists of a Mayor and a Council that holds jurisdiction over the atoll including the land, lagoon and all waters up to 5 nautical miles offshore from the reefs. Each local government is based on the national government legislative system; however they have the power to introduce laws and regulations pertinent to their atoll's affairs (Marshall Island Government, 2000). Local councils have jurisdiction over the majority of coastal and marine management issues.

b) in the surrounding area: Public land
As mentioned above, the surrounding area up to 5 nautical miles offshore from the reefs is under the jurisdiction of the Namdrik Atoll local government.

25. Current land (including water) use:
a) within the Ramsar site:
Copra harvesting and processing; banana farming; residences; taro production.

b) in the surroundings/catchment:
Oceanic fishing; lagoon fishing; lagoon clam farming.

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:
Lifestyle changes and the desires for modern conveniences and perceived "necessities" and modern "aesthetics" that such typically brings, could easily have deleterious effects on Namdrik Atoll. An excessive increase or decrease in land clearing, the discarding of non-biodegradable material and the abandonment of traditional crops in favor of "modern" food plants could disrupt the ecology, of which humans are a part.

Pressure from a money economy could easily lead to over-harvesting of the crabs, fish, and lumber from the mangrove and other wetland areas, or over-cultivation.

Currently there are no four-wheeled motor vehicles on Namdrik Atoll, only a couple of motorcycles. Most people transport themselves around the atoll by walking, riding bicycles, or by outrigger canoes and a few motorboats. Walking allows the greatest access with the lowest impact into the wetlands, but even bicycles can go down many narrow trails without any great impact. If a large number of motorcycles, cars, or ATCs were to replace walking and bicycle riding, the wetlands would undoubtedly suffer.

If a boat channel was to be blasted in the reef, it would likely have "hydrodynamic implications for the lagoon." The actual results and ramifications would not be accurately known until after. Many of the effects could be irreversible even if the channel was subsequently filled. Some reasonable speculation as to what might happen would be that the removal of protection of lagoon species from open ocean species, which could result in mass extirpations and a major ecological disruption in the lagoon. Those could be so as dramatic to eventually change reef and land structure. It could produce dramatically increased tidal flux in the lagoon, which could cause household wells to become brackish or salty rather than fresh. The tidal flux could disrupt lagoon ecology and coral growth, perhaps eliminating unstudied systems or species. Turbidity and nutrient availability could be greatly altered, resulting in ecological and reef structure changes. Lagoon currents would likely be altered, potentially affecting marine life. High reef

flats that are not now exposed would likely face long periods of lower water than they have ever faced before, causing changes and damage to marine life. Inland wetland level changes would likely be disrupted, potentially altering insect breeding and other wetland functions, which may affect the inhabitants.

The arrival of ships into the lagoon could greatly accelerate the introduction of marine invasives. Ships and the related improved docking and loading and unloading of goods could rapidly accelerate the introduction of terrestrial transformer invasive species, such as many destructive and painful species of tramp ants, destructive termites, more toxic centipedes, invasive weeds, etc.It could also allow more allow the presence of heavy earth-moving equipment, which, if even present on a short-term, temporary basis, could have drastic impacts on the wetlands.

Climate change is probably the highest profile threat to atoll wetlands and there is reason for concern. But alien invasive species potentially pose an even greater threat, often coming in subtly, just one species at a time, and raising no alarm until it is too late.

b) in the surrounding area:

The above mentioned climate change could have adverse effects; also invasive species that have become established in nearby atolls could be inadvertently transported to Namdrik Atoll.

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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.

The local government is currently working with the Marshall Islands Marine Resource Authority (MIMRA) to establish community-managed Marine Protected Areas in the lagoon which are expected to be in place in 2010. In addition Madmad Island is considered a traditional 'Mo' or protected area, and although restrictions have become lax over the last few decades, the traditional leadership is interested in re-instating the original importance of the Mo to the community.

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

Ia ❑;Ib ❑; II ❑; III ❑; IV ❑; V ❑; VI ❑

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

No.

d) Describe any other current management practices:

The local government has established a Resource Conservation Committee.

The National Environmental Protection Act (1984), along with the Coastal Conservation Act (1988), charges the Marshall Islands Environmental Protection Authority with responsibility to "preserve and improve the quality of the environment". Amongst other measures, the Act makes provision for the preservation of important historical, cultural and natural aspects of the nation's heritage. The Office of Environmental Planning and Policy Coordination (OEPPC) Act 2003 provides for the establishment of the OEPPC as the focal point for the CBD, and coordinate the implementation of NBSAP. A number of Trust Territory regulations, covering such topics as water supply, pesticides and sewage disposal, remain in force but will be revised in due course.

There is currently no protected areas legislation, and the two protected areas established prior to independence are no longer recognized.

28. Conservation measures proposed but not yet implemented:
e.g. management plan in preparation; official proposal as a legally protected area, etc.

A conservation management plan is scheduled to be developed as the next phase in the current Ramsar grant for designation. This integrated community conservation management plan will be in effect in 2011. Once adopted by the local government, the plan will be enforced locally, with national support and protection of the Ramsar designation managed by the Environmental Protection Authority.

29. Current scientific research and facilities:
e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

There are no research facilities on the atoll, although the local government is interested in establishing an equipped visitor centre for researchers. Timeframe for implementation is dependent on obtaining grant funding for the project.

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.

Part of the current Ramsar grant to designate Namdrik Atoll as a Wetland of International Importance includes awareness and educational activities, both locally and nationally. These take the form of workshops, presentations and community gatherings to share the knowledge and information gathered through the project. The integrated coastal management plan will also include recommendations for sustainable communications and awareness to describe the long-term status of Namdrik conservation.

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

The site is not used for tourism or recreation at present.

32. Jurisdiction:
Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Namdrik Local Government (Municipal) shared with traditional leadership, which are represented at the national government and House of Iroij respectively.

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.

Mayor Clarence Luther
Namdrik Local Government

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34. Bibliographical references:
Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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