



Indian Ocean – South-East Asian Marine Turtle Memorandum of Understanding



United States GENERAL INFORMATION

Agency or institution primarily responsible for the preparation of this report:

National Marine Fisheries Service

Other agencies, institutions, or NGOs that have provided input:

U.S. Fish & Wildlife Service

U.S. Department of State

Department of Agriculture, Division of Aquatic and Wildlife Resources, Guam

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OBJECTIVE I. REDUCE DIRECT AND INDIRECT CAUSES OF MARINE TURTLE MORTALITY

1.1 Introduction to marine turtle populations and habitats, challenges and conservation efforts. [INF]

Territory of Guam

1. Urunao Point to Ritidian Beach
2. Cocos Island (Government Beach)
3. Ipan: Togcha to Asanite Bay
4. Cetti/Sella Bay
5. Orote bay/Sasa Bay (Apra harbor)
6. Inarajan, Nomna and Asiga Bays
7. Nimitz Beach to Facpi Point
8. Ritidian Beach to Tarague Beach Territory of American Samoa pending Commonwealth of the Northern Mariana Islands pending

1.2.1 Describe any protocol or approaches practiced in your country, which you consider exemplary, for minimising threats to marine turtle populations and their habitats, which may be suitable for adaptation and adoption elsewhere. [BPR]

U.S. facilitated development of standardized hawksbill nesting population and foraging population monitoring protocols for index sites which were developed by a working group established at the CITES Wider Caribbean Hawksbill Dialogue Meeting. Available at CITES website or by contacting Earl_Possardt@fws.gov

U.S. has established population monitoring protocols for loggerhead and green turtle nesting populations for index sites on southeast U.S. which may be useful with adaptation to other regions. Additional information on these monitoring protocols can be obtained through Dr. Blair Witherington, Florida Fish & Wildlife Conservation Commission at witherington@cfl.r.com

Lighting ordinances at the statewide and local community level are in place throughout the southeastern U.S. Model ordinances can be obtained through Dr. Blair Witherington as noted above.

Nest protection programs in southeastern U.S. are guided by the principle of the least manipulative approach to ensure nest/hatchling success with least likelihood of interference with natural behaviors or mechanisms such as imprinting, hatchling orientation and hatchling frenzy.

Poaching is not a significant threat on southeastern nesting beaches and with this in mind and where possible nests are left in situ. Nests threatened with tidal inundation may be relocated to sites higher on the beach in some cases. Predator control and self release screens are used on some beaches. Beach hatcheries are rare and a last resort where beach erosion, highly developed beaches, beach driving prevent less manipulative approaches. In these cases hatchlings are released the night of emergence.

In September 2007, the U.S. National Marine Fisheries Service (NMFS) held an internal workshop to synthesize and review longline bycatch reduction activities, to evaluate current efforts and look towards future longline bycatch reduction efforts and to discuss approaches to garner greater international support for the use of circle hooks and other identified bycatch reduction measures, such as bait type, abroad. In addition to sea turtles, the workshop reviewed the state of our knowledge of longline bycatch reduction efforts for marine mammals, seabirds, and billfish. The workshop will enable NMFS to continue moving forward on developing approaches to reduce the incidental capture and mortality of non-target species in longline fisheries.

Since the last report, the United States has released two recovery plans. On January 16, 2009 a revised Recovery Plan for Northwest Atlantic Loggerheads was released. This plan can be found at <http://www.nmfs.noaa.gov/pr/species/turtles/loggerhead.htm>.

On September 22, 2011, the United States and Mexico released the updated Kemp's Ridley Recovery Plan. This plan can be found at <http://www.nmfs.noaa.gov/pr/species/turtles/kempstridley.htm>.

In addition to these recovery plans, the United States recently designated nine distinct population segments for Loggerhead sea turtles. In doing so, the protection status for the North Pacific loggerhead was changed from threatened to endangered. More information can be found at <http://www.nmfs.noaa.gov/pr/species/turtles/loggerhead.htm>.

1.3.1 Describe any socio-economic studies or activities that have been conducted among communities that interact with marine turtles and their habitats. [BPR, INF]

The Southwest Fisheries Science Center conducted research from 2004-2008 on the economics of Pacific leatherback conservation. This included assessing the costs and benefits and community incentives of nesting beach conservation projects in Malaysia, Indonesia, Papua New Guinea, the Solomon Islands, and Vanuatu. Interviews were conducted with project staff from all the above countries and community household surveys were conducted in Papua, Indonesia. In addition, the SWFSC collaborated with the WorldFish Center, World Wildlife Fund, and Department of Fisheries (DOF) Malaysia, to conduct surveys with fishermen in Malaysia to assess sea turtle bycatch and costs and earnings from fishing. The following publications resulted from these efforts:

Ferraro, P. J. and H. Gjertsen. 2009. A Global Review of Incentive Payments for Sea Turtle Conservation. *Chelonian Conservation and Biology*. (In press.)

Gjertsen, H. 2009. Can We Improve our Conservation Bang for the Buck - Cost Effectiveness of Alternative Leatherback Turtle Conservation Strategies. In *Conservation of Pacific Sea Turtles*. Dutton, P. H., D. Squires, and M. Ahmed (Eds.) University of Hawaii Press (In press).

Gjertsen, H. and T. Stevenson. 2009. Direct Incentive Approaches for Leatherback Turtle Conservation. In *Conservation of Pacific Sea Turtles*. Dutton, P. H., D. Squires, and M. Ahmed (Eds.) University of Hawaii Press (In press).

Yeo, B., D. Squires, K. Ibrahim, H. Gjertsen, S. Kamil, R. Zulkifli, T. Groves, M. Hong, and C. Tan. 2009. Sea Turtle-Fisheries Interactions in Coastal Fisheries: A Case Study of the East Coast of Peninsular Malaysia. In *Conservation of Pacific Sea Turtles*. Dutton, P. H., D. Squires, and M. Ahmed (Eds.) University of Hawaii Press (In press).

Yeo, B.H., D. Squires, K. Ibrahim, H. Gjertsen, S. K. Syed Mohd Kamil, R. Zulkifli, T. Groves, M. C. Hong, and C.H. Tan. 2009. Can Coastal Fisheries Bear the Cost of Sea Turtle Conservation - Evidence from the East Coast of Peninsular

Malaysia. In Conservation of Pacific Sea Turtles. Dutton, P. H., D. Squires, and M. Ahmed (Eds.) University of Hawaii Press (In press).

Gjertsen, H., P. H. Dutton, and D. Squires. 2009. Conservation of the Leatherback Sea Turtle in the Pacific. In Handbook of Marine Fisheries Conservation and Management. Grafton, Q. and D. Squires (Eds.) Oxford University Press (In press).

Steering Committee, Bellagio Sea Turtle Conservation Initiative. 2008. Strategic Planning for Long-term Financing of Pacific Leatherback Conservation and Recovery: Proceedings of the Bellagio Sea Turtle Conservation Initiative, Terengganu, Malaysia; July 2007. WorldFish Center Conference Proceedings 1805, The WorldFish Center, Penang, Malaysia. 79 p.

Yeo, B.H., D. Squires, K. Ibrahim, H. Gjertsen, S.K. Syed Mohd. Kamil, R. Zulkifli, T. Groves, M.C. Hong and C.H. Tan. 2007. Fisher profiles and perceptions of sea turtle-fishery interactions: case study of East Coast Peninsular Malaysia. The WorldFish Center Discussion Series 6, 69 p. The WorldFish Center, Penang, Malaysia.

Gjertsen, H. and C. Hitipeuw. 2006. Using Socioeconomic Surveys to Design Community Incentives for Conservation. In Book of Abstracts from 26th Annual Symposium on Sea Turtle Biology and Conservation. Frick, M., A. Panagopoulou, A. F. Rees, and K. Williams (Eds.) International Sea Turtle Society, Athens, Greece, p. 346.

1.3.2 Which of these adverse economic incentives are underlying threats to marine turtles in your country? [TSH]

- High prices earned from turtle products relative to other commodities
- Lack of affordable alternatives to turtle products
- Ease of access to the turtle resource (eg. by virtue of proximity or ease of land/water access)
- Low cost of land near nesting beaches
- Low penalties against illegal harvesting
- Other1:
- Other2:
- Other3:
- None of the above or Not Applicable

1.3.3 Has your country has taken any measures to try to correct these adverse economic incentives? [BPR]

YES NO NOT APPLICABLE (no adverse economic incentives exist)

A regulatory approach has been taken rather than a "re-incentive" approach.

1.4.1 Indicate, and describe in more detail, the main fisheries occurring in the waters of your country, as well as any high seas fisheries in which flag vessels of your country participate, that could possibly interact with marine turtles. [INF]

a) *Shrimp trawls*: YES NO

Shrimp trawls operate in much of the Gulf of Mexico and South Atlantic. The United States has regulations in place requiring the use of Turtle Excluder Devices in otter trawls. The current Turtle Excluder Device regulations can be found at <http://www.nmfs.noaa.gov/pr/pdfs/fr/fr69-31035.pdf>. The US National Marine Fisheries Service announced in the summer of 2011 that they considering taking additional measures to regulate sea turtle bycatch in skimmer trawls. More information can be found at <http://www.nmfs.noaa.gov/pr/species/turtles/regulations.htm>. Through the Sea Turtle Observer Requirement regulation, known as the Annual Determination, NMFS has identified several trawl fisheries as needing additional fisheries observer information. Please see <http://www.nmfs.noaa.gov/pr/species/turtles/observers.htm> for more information.

b) *Set gill nets*: YES NO

Through the Sea Turtle Observer Requirement regulation, known as the Annual Determination, NMFS has identified several gillnet fisheries as needing additional fisheries observer information. Please see <http://www.nmfs.noaa.gov/pr/species/turtles/observers.htm> for more information.

c) Anchored Fish Aggregating Devices (FADs): YES NO

Anchored FADs are found primarily in the State waters of Hawaii. U.S. Fishermen also fish on FADs in the IATTC waters of the Eastern Tropical Pacific, but those generally are not anchored FADs.

d) Purse seine (with or without FADs): YES NO

Many of the U.S. Fishermen operating in the tuna fisheries of the InterAmerican Tropical Tuna Convention use purse seines with and without FADs. In the Gulf of Mexico, the menhaden boats also use purse seine. NMFS has recently placed observers on some of these boats, due to concerns about sea turtle and dolphin interactions.

Through the Sea Turtle Observer Requirement regulation, known as the Annual Determination, NMFS has identified purse seine fisheries as needing additional fisheries observer information. Please see <http://www.nmfs.noaa.gov/pr/species/turtles/observers.htm> for more information.

e) Longline (shallow or deepset): YES NO

Shallow set and deepset long lining occurs in the Atlantic, the Gulf of Mexico and the Pacific. In the Northeast Distant fishery in the Atlantic NMFS requires fishermen to use 18/0 circle hooks. In the Gulf of Mexico and other parts of the Atlantic fishermen in the highly migratory species fishery (principally tuna and swordfish) must use 16/0 non-offset or greater than 16/0 non-offset circle hooks or 18/0 with a 10 degrees offset or greater. Further in the Northeast Distant, U.S. fishermen are required to use whole mackerel or squid. Elsewhere in the Atlantic and the Gulf of Mexico, whole finfish or squid is used. In the Gulf of Mexico, live bait is prohibited. In the Atlantic fisheries, fishermen are also required to take a course on safe handling and release of sea turtles and receive a certificate. Dehooking and release gear is required to be on board. In the Pacific shallow-set fishery, U.S. fishermen are required to use 18/0 circle hooks with a 10 degree offset north of the equator. Pacific U.S. fishermen are also required to use mackerel type bait north of the equator. Fishermen also are not allowed to use lightsticks and must attend a protected species workshop and receive a certificate. Dehooking and release gear is required to be on board. There is also 100% observer coverage and if the Pacific Highly Migratory Species fishery interacts with a certain number of Leatherback and Loggerhead sea turtles it is closed down for the year. This has only occurred twice, since these regulations went into place -- 2006 and 2011.

For more information on these regulations please see --
<http://www.nmfs.noaa.gov/pr/pdfs/fr/fr69-40734.pdf> and <http://www.nmfs.noaa.gov/pr/pdfs/fr/fr69-17329.pdf> .

f) Driftnet: YES NO

Driftnet gills are fished off the West Coast of the United States.

Through the Sea Turtle Observer Requirement regulation, known as the Annual Determination, NMFS has identified drift gillnet fisheries as needing additional fisheries observer information. Please see <http://www.nmfs.noaa.gov/pr/species/turtles/observers.htm> for more information.

g) Other1:

In several of the Atlantic fisheries, fishermen use trawls to catch. There are currently regulations in development that will require the use of Turtle Excluder Devices in these fisheries. The Advanced Notice of Proposed Rulemaking can be found at <http://www.nmfs.noaa.gov/pr/pdfs/fr/fr72-7382.pdf>.

h) Other2:

There are several other gear types that NMFS believes there are likely sea turtle interactions with. Additional information can be found at <http://www.nmfs.noaa.gov/pr/species/turtles/observers.htm>.

None of the above

1.4.2 Please indicate the relative level of **fishing effort** and **perceived impact** of each of the above fisheries on marine turtles (e.g. in terms of by-catch). [TSH]

a) Shrimp trawls

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: Now under the 2007 Magnuson-Stevens Fishery Conservation Act, there is mandatory observer coverage. See amendment 13 which required mandatory observer coverage.

b) Set gill nets

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: Based on observed fisheries, NMFS has documented sea turtle bycatch in all gill net fisheries.

c) Anchored Fish Aggregating Devices (FADs)

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source:

d) Purse seine (with or without FADs)

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source:

e) Longline (shallow or deepset)

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source:

f) Driftnet

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: NMFS is answering this question based on our drift gillnet fisheries.

g) Other1 (from 1.4.1): traps and pots**Fishing effort:**

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: The interactions are rare relative to observer effort, but leatherbacks and loggerheads have been documented to entangled and sometimes killed in the buoy lines.

h) Other2 (from 1.4.1): non-shrimp trawl**Fishing effort:**

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: If no turtle excluder devices are on the nets, turtle bycatch and mortality can be very high. NMFS has a regulation under development to address turtle bycatch in non-shrimp trawl fisheries.

1.4.3 Describe any illegal fishing that is known to occur in or around the waters of your country that may impact marine turtles. Describe the measures being taken to deal with this problem and any difficulties encountered in this regard. [TSH]

Under the amendments made to the High Seas Driftnet Fisheries Moratorium Protection Act in the Magnuson-Stevens Fishery Conservation and Management Act of 2007, the Secretary of Commerce must certify to the United States Congress every two years a list of nations whose vessels have been identified under Section 609 on Illegal, Unreported, or Unregulated fishing. If countries are certified to be engaged in IUU fishing, the provisions of the High Sea Driftnet Fisheries Moratorium Protection Act can come into force. These provisions include the denial of port privileges. The most recent report to Congress can be found at <http://www.nmfs.noaa.gov/msa2007/intlprovisions.html>.

1.4.4 Which of the following methods are used by your country to minimise incidental capture/mortality of marine turtles in fishing activities? [IND]

a) **Appropriate handling** of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)

YES NO NOT APPLICABLE

NMFS requires protected species training which includes safe-handling and release training in our longline fisheries and purse seine fisheries. Please see the final rules for the Atlantic and Pacific longline fisheries for further detail -- <http://www.nmfs.noaa.gov/pr/species/turtles/regulations.htm>.

b) **Devices that allow the escape of marine turtles** (e.g. turtle excluder devices (TEDs) or other measures that are comparable in effectiveness)

YES NO NOT APPLICABLE

c) **Measures to avoid encirclement** of marine turtles in purse seine fisheries

YES NO NOT APPLICABLE

Note, there are regulations under the Marine Mammal Protection Act to avoid encirclement of dolphins in purse seine fisheries but these regulations are not specific to sea turtles. However, the United States has been a strong proponent in several Regional Fisheries Management Organizations for resolutions that urge/require countries to avoid encircling turtles in FADs.

d) **Appropriate combinations** of hook design, type of bait, depth, gear specifications and fishing practices

YES NO NOT APPLICABLE

See <http://www.nmfs.noaa.gov/pr/species/turtles/regulations.htm> for me details.

e) **Monitoring and recovery of fish aggregating devices** (FADs)

YES NO NOT APPLICABLE

Under the InterAmerican Tropical Tuna Convention, sea turtle resolution (C-07-03) all purse seine vessels are to avoid encircling sea turtles in FADs. This applies to the US boats fishing in the IATTC area as well.

f) **Net retention and recycling schemes**

YES NO NOT APPLICABLE

g) **Spatial and temporal control of fishing** (e.g. seasonal closures of fishing activities)

YES NO NOT APPLICABLE

As mentioned above, the Hawaii longline fishery closes if a certain number of Loggerhead/Leatherback turtles are taken. See <http://www.nmfs.noaa.gov/pr/species/turtles/regulations.htm> for more details.

h) **Effort management control**

YES NO NOT APPLICABLE

Other (list and explain):

None of the above

1.4.5 Which of the following programmes has your country developed - in consultation with the fishing industry and fisheries management organisations - to promote implementation of measures to minimise incidental capture and mortality of turtles in national waters and in the high seas? [IND]

Onboard observer programmes

YES NO NOT APPLICABLE

NMFS currently has over 40 observer programs operating. More details on NMFS' observer program can be found at <http://www.st.nmfs.noaa.gov/st4/nop/index.html>.

Vessel monitoring systems

YES NO NOT APPLICABLE

More than 5,000 vessels in the U.S. fleet are required to use Vessel Monitoring Systems. More information can be found at <http://www.nmfs.noaa.gov/ole/vms.html>.

Inspections (i.e. at sea, in port, at landing sites)

YES NO NOT APPLICABLE

Training programmes / workshops to educate fishers

YES NO NOT APPLICABLE

Informative videos, brochures, printed guidelines etc.

YES NO NOT APPLICABLE

Below are links for several NMFS training materials related to sea turtles and release from fishing gear.

<http://www.nmfs.noaa.gov/sfa/hms/workshops/#AreThereWorkshopMaterials> <http://www.sefsc.noaa.gov/species/turtles/observers.htm>

Other (list and explain):

YES NO NOT APPLICABLE

None of the above

1.4.6 Are the mitigation measures described in 1.4.4 and 1.4.5, periodically reviewed and evaluated for their efficacy? [SAP]

YES NO UNSURE

NMFS reviews sea turtle mitigation measures whenever there are changes in the Fishery Management Plans and Endangered Species Act review is needed.

1.4.7 In your country, what types of data collection, research and development have been undertaken to support the reduction of marine turtle incidental catch (while taking into consideration the impact of various mitigation measures on other species)? [SAP]

NMFS has a few programs that contribute to the research and development of bycatch reduction devices for sea turtles. The first is the Bycatch Reduction Engineering Program. More information on this program can be found at http://www.nmfs.noaa.gov/by_catch/bycatch_BREP.htm. The second program is the Atlantic Strategy program. More information can be found at <http://www.nmfs.noaa.gov/pr/species/turtles/strategy.htm>.

1.4.8 Has your country exchanged information and provided technical assistance (formally or informally) to other Signatory States to promote the activities described in 1.4.4, 1.4.5 and 1.4.7 above? [SAP]

YES NO UNSURE

U.S. has an active program to exchange technical information related to Turtle Excluder Devices, circle hook technology and more recently modified gillnets with interested countries. A summary of these efforts can be found at <http://www.nmfs.noaa.gov/msa2007/intlprovisions.html> (see the 2011 Report to Congress).

1.4.9 What legislative and practical measures has your country taken in support of UN General Assembly Resolution 46/215 concerning the moratorium on the use of large-scale driftnets? [SAP]

U.S. implementation includes active enforcement patrols.

1.5.1 Does your country have legislation to prohibit direct harvest and domestic trade in marine turtles, their eggs, parts and products; and to protect important turtle habitats? [IND]

YES NO UNSURE

Sea turtles are completely protected under the Federal Endangered Species Act and various state laws. Turtles, eggs or their parts cannot be taken except with permits for scientific or educational purposes.

1.5.2 Which, among the following list, are economic uses and cultural values of marine turtles in your country? Please rate the relative prevalence / importance of each consumptive or non-consumptive use. [INF]

**USES /
VALUES**

**RELATIVE PREVALENCE /
IMPORTANCE**

Meat consumption

YES NO

HIGH MODERATE LOW UNKNOWN

Egg consumption

YES NO

HIGH MODERATE LOW UNKNOWN

Shell products

YES NO

HIGH MODERATE LOW UNKNOWN

Fat consumption

YES NO

HIGH MODERATE LOW UNKNOWN

Traditional medicine

YES NO

HIGH MODERATE LOW UNKNOWN

Eco-tourism programmes

YES NO

HIGH MODERATE LOW UNKNOWN

Cultural / traditional significance

YES NO

HIGH MODERATE LOW UNKNOWN

Other

1.5.3 Please indicate the relative level and impact of traditional harvest on marine turtles and their eggs.
[\[IND, TSH\]](#)

Level of harvest:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Impact of harvest:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source of information:

1.5.4 Have any [domestic](#) management programmes been established to limit the levels of intentional harvest? [\[SAP\]](#)

YES NO UNKNOWN

1.5.5 Describe any management agreements negotiated [between your country and other States](#) in relation to sustainable levels of traditional harvest, to ensure that such harvest does not undermine conservation efforts. [\[BPR\]](#)

N/A

1.6.1 First, [select one of the options at left](#) to indicate whether or not your country has any of the following measures in place to minimise the mortality of eggs, hatchlings and nesting females. [If yes, then estimate the relative effectiveness](#) of these measures. [\[IND, SAP\]](#)

MEASURES	RELATIVE EFFECTIVENESS
Monitoring/protection programmes	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Territory of Guam: Regular patrolling of important green turtle nesting beaches between April and August.	
Education/awareness programmes	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Egg relocation/hatcheries	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Predator control	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN

Vehicle / access restrictions

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Removal of debris / clean-up

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Re-vegetation of frontal dunes

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Major efforts are underway to restore Northwestern Hawaiian Islands to original condition (re-vegetate frontal dunes at nesting beaches) after military use.

Building location/design regulations

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Light pollution reduction

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Other (list and rate them)

YES NO N/A

1.6.2 Has your country undertaken any evaluation of its nest and beach management programmes?

[SAP]

YES NO NOT APPLICABLE

Programs are continuously reviewed through scientific and permit review process.

OBJECTIVE II. PROTECT, CONSERVE AND REHABILITATE MARINE TURTLE HABITATS

2.1.1 What is being done to protect critical habitats *outside* of established protected areas? (NB: It is assumed that legislation relating to established protected areas will have been described in Section 1.5.1) [BPR, SAP]

In the United States critical habitat is defined as "specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation." In recent years, NMFS and FWS have been asked to designate more and more critical habitat. Currently, NMFS is the process of finalizing the designation of critical habitat for Pacific Leatherbacks. More information on this designation and others can be found at <http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>, as well as <http://www.nmfs.noaa.gov/pr/species/turtles/regulations.htm>.

2.1.2 Are assessments routinely made of the environmental impact of marine and coastal development on marine turtles and their habitats? [IND, SAP]

YES NO NOT APPLICABLE

Federal Endangered Species Act requires federal agencies that carry out any action or permit or fund any action that may affect federal listed endangered species (all sea turtles except flatback) must consult with National Marine Fisheries Service or U.S. Fish and Wildlife Service to ensure these actions do not jeopardize the continued existence of listed species. In instances where an action does not jeopardize a species but will still result in the taking of individual animals, the Services must establish a permitted incidental take level after required reasonable and prudent measures are in place to minimize incidental or accidental take. Also Environment assessments or impact statements required for most government projects or government permitted projects.

2.1.3 Is marine water quality (including marine debris) monitored near turtle habitats? If yes, describe the nature of this monitoring and any remedial measures that may have been taken. [SAP]

YES NO NOT APPLICABLE

Federal and state statutes address water quality protection.

2.1.4 Are measures in place to prohibit the use of poisonous chemicals and explosives? [SAP]

YES NO NOT APPLICABLE

Measures being implemented.

2.2.1 Are efforts being made to recover degraded coral reefs? If yes, give details (location, duration, effectiveness, lessons learned, future plans etc). [IND, SAP]

YES NO NOT APPLICABLE (no degraded coral reefs)

Reef protection focuses on reducing threats not active rebuilding.

2.2.2 Are efforts being made to recover degraded mangrove habitats that are important for turtles? If yes, give details (location, duration, effectiveness, lessons learned, future plans etc.) [IND, SAP]

YES NO NOT APPLICABLE (no mangrove habitats important for turtles)

Mangrove and seagrass protection focuses on reducing threats rather than active restoration of particular sites.

2.2.3 Are efforts being made to recover degraded sea grass habitats? If yes, give details (location, duration, effectiveness, lessons learned, future plans etc.). [IND, SAP]

YES NO NOT APPLICABLE (no degraded sea grass habitats)

Mangrove and seagrass protection focuses on reducing threats rather than active restoration of particular sites.

OBJECTIVE III. IMPROVE UNDERSTANDING OF MARINE TURTLE ECOLOGY AND POPULATIONS THROUGH RESEARCH, MONITORING AND INFORMATION EXCHANGE

3.1.1 Give a list of available literature that includes baseline information from studies carried out in your country on marine turtle populations and their habitats. [INF]

See 1.2.1 for monitoring of nesting populations.

<http://www.sefsc.noaa.gov/species/turtles/publications.htm>

<http://swfsc.noaa.gov/index.aspx?id=1221&Division=PRD&ParentMenuId=147>

<http://www.pifsc.noaa.gov/psd/mtrp/>

<http://www.nefsc.noaa.gov/psb/turtles/>

3.1.2 Have [long-term](#) monitoring programmes (i.e. of at least 10 years duration) been initiated or planned for priority marine turtle populations frequenting the territory of your country? [\[IND, BPR\]](#)

YES NO UNSURE

See 1.2.1

3.1.3 Has the genetic identity of marine turtle populations in your country been characterised? [\[INF, PRI\]](#)

YES NO UNSURE

National Sea Turtle Genetics Center established at NMFS Research Center, La Jolla, California has active program to collect and analyse tissue samples to characterize genetics structure of nesting and foraging populations within and outside the United States.

<http://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=212&id=1331>

3.1.4 Which of the following methods have been or are being used to try to identify migration routes of turtles? Use the text boxes to provide additional details. [\[INF, PRI\]](#)

Tagging YES NO

<http://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=212&id=12682>

See links above to each out Center's sea turtle research programs. Each of the Centers use tagging as methodology.

Satellite tracking YES NO

Nesting green turtle instrumented with satellite transmitter in Guam 2/22/04 . Turtle and transmitter recovered several months later in Philippines and transmitter returned by Philippine government.

Other

None of the above

3.1.5 Have studies been carried out on marine turtle population dynamics and survival rates (e.g. including studies into the survival rates of incidentally caught and released turtles)? [\[INF, PRI\]](#)

YES NO UNSURE

www.sefsc.noaa.gov/turtles/TM_NMFS_OPR_29_Ryder_etal.pdf

<http://www.nefsc.noaa.gov/psb/AMAPPS/>

3.1.6 Has research been conducted on the frequency and pathology of diseases in marine turtles? [\[INF, PRI\]](#)

YES NO UNSURE

NMFS Honolulu Lab is a centre for coordinating priority green turtle fibropapilloma research with U.S. academic institutions.

3.1.7 Is the use of traditional ecological knowledge in research studies being promoted? [\[BPR, PRI\]](#)

YES NO UNSURE

Interview and cooperation with local peoples is encouraged in research.

3.2.1 List any regional or sub-regional action plans in which your country is already participating, which may serve the purpose of identifying priority research and monitoring needs. [INF]

NMFS Pacific Islands Region participates in the SPREP Marine Turtle Action Plan discussions and assists with implementation where possible.

NMFS and USFWS jointly work to implement the US Recovery Plans for sea turtles.
<http://www.nmfs.noaa.gov/pr/recovery/plans.htm#turtles>

3.2.2 On which of the following themes have collaborative studies and monitoring been conducted? Use the text boxes to describe the nature of this international collaboration or to clarify your response. Answer 'NO' if the studies/monitoring undertaken do not involve international collaboration. [INF, PRI]

a) Genetic Identity YES NO NOT APPLICABLE

See <http://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=212&id=1331>.

b) Conservation status YES NO NOT APPLICABLE

More details about collaborative studies in the Pacific can be found at http://www.fpir.noaa.gov/PRD/prd_intl_sea_turtles_index.html or <http://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=212&id=1226>.

c) Migrations YES NO NOT APPLICABLE

See links above from all the NMFS Science Center activities.

d) Other biological and ecological aspects YES NO NOT APPLICABLE

See links above.

Other

3.3.1 List, in order of priority, the marine turtle populations in your country in need of conservation actions, and indicate their population trends. [PRI]

NMFS and US FWS are obliged to recovery all sea turtle populations listed under the U.S. Endangered Species Act. Per the act, a regular status review is conducted. The most recent status reviews can be found at <http://www.nmfs.noaa.gov/pr/species/statusreviews.htm>.

3.3.2 Are research and monitoring activities, such as those described above in Section 3.1 periodically reviewed and evaluated for their efficacy? [SAP]

YES NO UNSURE

3.3.3 Describe how research results are being applied to improve management practices and mitigation of threats (in relation to the priority populations identified in 3.3.1, among others). [SAP]

NMFS and USFWS research results, as well as those from the academic community, are regularly used in Biological Opinions for any Federal action that may occur and that will impact sea turtles. In addition, the best available science is required to be used for all status reviews, recovery plans and listing decisions. All gear modification regulations also rely on the best available science.

3.4.1 Has your country undertaken any initiatives (nationally or through collaboration with other Range States) to standardise methods and levels of data collection? [BPR, INF]

YES NO UNSURE

see 1.2.1

3.4.2 To what extent does your country exchange scientific and technical information and expertise with other Range States? [SAP, IND]

OFTEN (SYSTEMATICALLY) OCCASIONALLY RARELY NEVER

3.4.3 If your country shares scientific and technical information and expertise with other Range States, what mechanisms have commonly been used for this purpose? Comment on any positive benefits/outcomes achieved through these interactions. [INF]

All of the above. NMFS and FWS scientists often publish their data in peer-reviewed journals and government technical memorandums. They present at the International Sea Turtle Symposium, and regional workshops.

3.4.4 Does your country compile and make available to other countries data on marine turtle populations of a regional interest? [INF]

YES NO UNSURE

Our scientists are regularly collaborating with scientists from the IOSEA region on genetics, telemetry, bycatch reduction, etc and share information with their collaborators.

OBJECTIVE IV. INCREASE PUBLIC AWARENESS OF THE THREATS TO MARINE TURTLES AND THEIR HABITATS, AND ENHANCE PUBLIC PARTICIPATION IN CONSERVATION ACTIVITIES

4.1.1 Describe the educational materials, including mass media information programmes that your country has collected, developed and/or disseminated. [INF, PRI]

Numerous materials between federal, state governments and NGOs such as WIDECAS and The Ocean Conservancy.

U.S. Fish & Wildlife Service and National Marine Fisheries Service have websites with information on marine turtles as well as for all recovery plans under revision (Kemp's ridley and loggerhead). seaturtle.org and cccturtle.org are just a couple of the NGO sites featuring marine turtle information.

NMFS recently developed an online game for kids called "Quest to Nest." The game can be found at <http://www.nmfs.noaa.gov/pr/education/>. We also recently produced a Kids' Times publications for sea turtles. This information can also be found at <http://www.nmfs.noaa.gov/pr/education/turtles.htm>.

The United States can contribute to the development of a web-based information resource for marine turtle conservation by providing data on marine turtle populations, nesting data, migration data and information on projects.

4.1.2 Which of the following groups have been the targets of these focused education and awareness programmes described in above in Section 4.1.1? [PRI, INF]

- Policy makers
- Fishing industry**
- Local/Fishing communities**
- Indigenous groups
- Tourists
- Media
- Teachers**
- Students**
- Military, Navy, Police
- Scientists
- Other:
- None of the above

4.1.3 Have any community learning / information centres been established in your country? [BPR, SAP]

YES **NO**

Community learning centers exist in many of the coastal states of the United States.

4.2 Alternative livelihood opportunities [IND, BPR] Describe initiatives already undertaken or planned to identify and facilitate alternative livelihoods (including income-generating activities) for local communities.

N/A

4.3.1 Describe initiatives already undertaken or planned by your country to involve local communities, in particular, in the planning and implementation of marine turtle conservation programmes. Please include details of any incentives that have been used to encourage public participation, and indicate their efficacy. [BPR, IND]

As part of creating a new regulation the United States government is required to notify the public. The public is notified via the Federal Register, the NMFS website, press releases, and emails to constituent list-servs. There are often public meetings held to get input and there is always a public comment period on the proposed regulation.

4.3.2 Describe initiatives already undertaken or planned to involve and encourage the cooperation of Government institutions, NGOs and the private sector in marine turtle conservation programmes. [IND, BPR]

Development and revision of recovery plans as a practice involve state and Federal government representatives, NGO and key academics in the recovery plan with conservation/research tasks assigned to specific entities. The public reviews and comments on these plans.

OBJECTIVE V. ENHANCE NATIONAL, REGIONAL AND INTERNATIONAL COOPERATION

5.1.1 Has your country undertaken a national review of its compliance with Convention on International Trade in Endangered Species (CITES) obligations in relation to marine turtles? [SAP]

YES **NO** **NOT APPLICABLE**

We have consulted with the US CITES Management Authority. They have informed us we are not under any obligation to undertake a national review of our CITES compliance in relation to marine turtles. We implement the treaty for marine turtles according to their status as Appendix-I species under CITES. This means that permits are required for both import and export (except for specimens that meet the specific exemptions of the treaty), and trade for commercial purposes is prohibited. U.S. implementation of CITES for these species has never been the subject of a review by the CITES Secretariat or the CITES Animals or Standing Committees.

5.1.2 Does your country have, or participate/cooperate in, CITES training programmes for relevant authorities? [SAP]

YES NO NOT APPLICABLE

The United States often provides funding and or personnel for CITES training programmes.

5.1.3 Does your country have in place mechanisms to identify **international illegal trade routes (for marine turtle products etc.)? Please use the text box to elaborate on how your country is cooperating with other States to prevent/deter/eliminate illegal trade. [SAP]**

YES NO NOT APPLICABLE

Yes we are an active member of CITES.

5.1.4 Which international compliance and trade issues related to marine turtles has your country raised for discussion (e.g. through the IOSEA MoU Secretariat, at meetings of Signatory States etc.)? [INF]

none, we have bilateral trade agreements or fisheries bilaterals where we directly raise issues with countries.

5.1.5 Describe measures in place to prevent, deter and eliminate **domestic illegal trade in marine turtle products, particularly with a view to enforcing the legislation identified in Section 1.5.1. [INF]**

Active monitoring programs and all important nesting beaches, routine law enforcement investigation of rare poaching reports.

5.2.1 Has your country already developed a national **action plan or a set of **key management measures** that could eventually serve as a basis for a more specific action plan at a national level? [IND]**

YES NO

Yes, we have recovery plans for each of the listed sea turtle species in the United States.
<http://www.nmfs.noaa.gov/pr/recovery/plans.htm#turtles>

5.2.2 From your country's perspective, which **conservation and management activities, and/or which particular **sites or locations**, ought to be among the highest priorities for action? [PRI]**

Under consideration among NMFS, USFWS and DOS agencies.

5.2.3 Please indicate, from your country's standpoint, the extent to which the following **local management issues require **international** cooperation in order to to achieve progress. [PRI]**

Illegal fishing in territorial waters	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Incidental capture by foreign fleets	<input checked="" type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Enforcement/patrolling of territorial waters	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Hunting/harvest by neighboring countries	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Poaching, illegal trade in turtle projects	<input checked="" type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Development of gear technology	<input checked="" type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL

Oil spills, pollution, marine debris	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Training / capacity-building	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Alternative livelihood development	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Identification of turtle populations	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Identification of migration routes	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Tagging / satellite tracking	<input type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input checked="" type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Habitat studies	<input type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input checked="" type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Genetics studies	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL

5.3.1 Identify existing frameworks/organisations that are, or could be, useful mechanisms for cooperating in marine turtle conservation at the sub-regional level. Please comment on the strengths of these instruments, their capacity to take on a broader coordinating role, and any efforts your country has made to enhance their role in turtle conservation. [INF, BPR]

International Sea Turtle Society and its symposiums which are partially supported by U.S. government, and U.S. based foundations, NGOs and organizations as well as others outside the United States.

APEC could also be helpful body for promoting regional cooperation.

5.3.2 Has your country developed, or is it participating in, any networks for cooperative management of shared turtle populations? [BPR, INF]

YES NO NOT APPLICABLE

5.3.3 What steps has your country taken to encourage Regional Fishery Bodies (RFBs) to adopt marine turtle conservation measures within Exclusive Economic Zones (EEZs) and on the high seas? [SAP]

The United States has promoted sea turtle conservation measures at the InterAmerican Tropical Tuna Convention (IATTC), the Western and Central Pacific Fishery Management Commission (WCPFC), the International Convention for the Conservation of Atlantic Tuna (ICCAT), the North Atlantic Fisheries Organization (NAFO) and throughout the Kobe Process.

5.4.1 Describe your country's needs, in terms of human resources, knowledge and facilities, in order to build capacity to strengthen marine turtle conservation measures. [PRI]

The United States has a large sea turtle conservation program composed of personnel at the Federal level from the USFWS and NMFS. In addition, many of the states have their own sea turtle program. The greatest challenge to all of these programs is and will continue to be consistent levels of funding.

5.4.2 Describe any training provided in marine turtle conservation and management techniques (e.g. workshops held, training manuals produced etc.), and indicate your plans for the coming year. [PRI, INF]

The United States has run the International TEDS program for almost twenty years. This program provides training on the use of Turtle Excluder Devices. In addition, the United States has been actively working with several countries to test circle hook technology in longline gear and modification of gillnets and pound nets to reduce sea turtle bycatch.

5.4.3 Specifically in relation to capacity-building, describe any partnerships developed or planned with universities, research institutions, training bodies and other relevant organisations. [BPR]

The United States has worked with World Wildlife Fund in the past in the Philippines, Indonesia and more recently in Vietnam on the promotion of circle hook technology. The United States also works in Papua Barat on nesting beach conservation, satellite tracking and genetic sampling. And as already mentioned we work with several Pacific Islands nations. More information can be found at http://www.fpir.noaa.gov/PRD/prd_intl_sea_turtles_index.html.

5.5.1 National policies and laws concerning the conservation of marine turtles and their habitats will have been described in Section 1.5.1. Please indicate their effectiveness, in terms of their practical application and enforcement. [SAP, TSH]

The Endangered Species Act is the main statute to protect sea turtles in the United States. <http://www.nmfs.noaa.gov/pr/laws/esa/> This statute has generally been very effective in protecting sea turtles.

5.5.2 Has your country conducted a review of policies and laws to address any gaps, inconsistencies or impediments in relation to marine turtle conservation? If not, indicate any obstacles encountered in this regard and when this review is expected to be done. [SAP]

YES NO UNSURE

5.5.3 From the standpoint of law enforcement, has your country experienced any difficulties achieving cooperation to ensure compatible application of laws across and between jurisdictions? [TSH]

YES NO UNSURE

At times the United States Federal government, has had inter-agency coordination issues on enforcement issues as well as coordination issues with state partners. In general though, these issues are resolved quickly.

OBJECTIVE VI. PROMOTE IMPLEMENTATION OF THE MoU INCLUDING THE CONSERVATION AND MANAGEMENT PLAN

6.1.1 What has your country already done, or will it do, to encourage other States to sign the IOSEA MoU? [INF]

The United States has actively encouraged some countries to consider joining the IOSEA. The United States is happy to assist the Secretariat in any outreach.

6.1.2 Is your country **currently favourable, in principle, to amending the MoU to make it a legally binding instrument? [INF]**

YES NO NO VIEW

6.1.3 Would your country be favourable, over a **longer time horizon, to amending the MoU to make it a legally-binding instrument? [INF]**

YES NO NO VIEW

6.2 Secretariat and Advisory Committee

6.2.1 What efforts has your country made, or can it make, to secure funding to support the core operations of the IOSEA MoU (Secretariat and Advisory Committee, and related activities)? [IND]

The Department of State, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service have consistently provided funding to the IOSEA. Depending on budget allocations, they will make every effort to try and do so in the future.

6.3.1 What funding has your country mobilised for domestic implementation of marine turtle conservation activities related to the IOSEA Marine Turtle MoU? Where possible, indicate the specific monetary values attached to these activities/programmes, as well as future plans. [IND]

The United States government's sea turtle conservation funding is authorized under the implementation of the Endangered Species Act. By carrying out our Endangered Species Act obligations, we are able to fulfill our IOSEA obligations.

6.3.2 Has your country tried to solicit funds from, or seek partnerships with, other Governments, major donor organisations, industry, private sector, foundations or NGOs for marine turtle conservation activities? [IND]

YES NO

The United States Fish and Wildlife Service runs a matching grant program called the Marine Turtle Conservation Act.

6.3.3 Describe any initiatives made to explore the use of economic instruments for the conservation of marine turtles and their habitats. [BPR]

N/A

6.4.1 Has your country designated a lead agency responsible for coordinating national marine turtle conservation and management policy? If not, when is this information expected to be communicated to the IOSEA MoU Secretariat? [IND]

YES NO

National Marine Fisheries Service and U.S. Fish & Wildlife Service share national authority for the conservation of marine turtles. NMFS in the marine environment and USFWS on nesting beaches.

6.4.2 Are the roles and responsibilities of all government agencies related to the conservation and management of marine turtles and their habitats clearly defined? [IND]

YES NO UNSURE

6.4.3 Has your country ever conducted a review of agency roles and responsibilities? If so, when, and what was the general outcome? If not, is such a review planned and when? [SAP],

YES NO UNSURE

The Endangered Species Act outlines what the statutory roles of NMFS and FWS are.

Comments/suggestions to improve the present reporting format:

Additional information not covered above: