WORKING DRAFT

Progressing the Conservation of Marine Turtles in the Pacific

An Options Paper for SPREP Member Countries

EXECUTIVE SUMMARY

The migratory nature of marine turtles and their dependence upon habitats in both the Eastern and Western Pacific Ocean makes broader, Pacific-wide cooperation a necessity to ensure that all critical habitats are covered and that marine turtles are protected throughout all of their life stages. For the last seven years, there has been an interest in creating a mechanism through which States around and across the Pacific could cooperate to promote the conservation and management of marine turtles. The members of the Secretariat of the Pacific Regional Environment Programme (SPREP), following the adoption of a comprehensive marine turtle action plan, have recently revitalized discussions regarding a proposed new Pacific-wide arrangement under the auspices of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). To determine the objectives of a new agreement, this options paper has been prepared. This paper presents information on existing agreements in the Pacific, as well as identifying and analyzing how these agreements address threats to sea turtle conservation and recovery.

In reviewing ongoing activities in the region it is clear that better coordination among existing agreements and initiatives is needed. Existing marine turtle arrangements and initiatives could provide the framework needed to address threats to marine turtles, if these agreements and initiatives were sufficiently resourced. However due to a lack of human and financial resources, the conservation measures, data collection provisions, and management priorities envisioned under these arrangements have not been fully realized and implemented. Moreover, without participation and cooperation among all States with habitats utilized by marine turtles, success of current and any future arrangements will be limited.

A new arrangement may therefore prove useful in acting as a coordinating body and elevating political interest in the conservation of Pacific marine turtles. However, negotiating a new Pacific-wide arrangement will be logistically and politically complicated and will require significant time and financial resources. It will also be necessary to overcome existing political, logistical and financial barriers that have prevented effective implementation of existing marine turtle arrangements to have any significant conservation impact.

Taking these challenges and ongoing work on marine turtles into consideration, this paper provides five options for progressing marine turtle conservation in the Pacific, as well as information needed to assess these options (see section IV). SPREP members are encouraged to discuss and provide input on the following questions when considering development of a new arrangement for marine turtles in the Pacific: (1) Is another arrangement needed ?; (2) What is an appropriate geographic scope for such an arrangement?; (3) Which species and habitats would be included in a new arrangement?; and (4) Should a new arrangement be legally binding or non-binding?

I. BACKGROUND

In the Pacific and worldwide, marine turtles face a variety of threats. These threats include their direct consumption at all life stages by humans and other predators, incidental capture (often resulting in death) in fishing gear, and loss and degradation of nesting and marine habitats. Threats vary by species and by geographic region and overall impacts of threats are in various stages of mitigation or understanding for some populations. However, there remains concern about the conservation status of marine turtle species in the Pacific Ocean.

Baseline information available on sea turtle biology, ecology, and threats to populations varies amongst species. While there are relatively more data or knowledge currently available on the status of leatherback and loggerhead turtles, there remains a paucity of available information for other species. However, there is conclusive evidence that marine turtles are highly migratory, and actions taken within one range state may impact (adversely or positively) turtle conservation throughout the region. Regional coordination between States in the Pacific is therefore critical for effective turtle conservation, management, and recovery.

Regional efforts to strengthen cooperation in the conservation of marine turtles have been initiated by States and organizations throughout the Pacific. These efforts began in 2002 with calls for greater regional cooperation on marine turtle conservation in the Pacific at the Convention on the Conservation of Migratory Species of Wild Animals (CMS) 7th Conference of Parties with Resolution 7.7. This resolution called on Parties to support the possible development of a conservation instrument for marine turtles in the Pacific. In 2003, Pacific Island Countries coordinated by the Secretariat of the Pacific Regional Environment Programme (SPREP), indicated their interest in the development of a similar instrument for marine turtles. At the 2nd Meeting of Signatory States to the Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia (IOSEA MoU) in 2004, the IOSEA Secretariat was directed to explore possible options expanding the geographic scope of the IOSEA. An exploratory paper on the possible extension of the IOSEA MoU was presented at the 3rd Meeting of Signatory States. The IOSEA Signatory States determined to evaluate the issue further and present an exploratory options paper to the 2005 SPREP meeting. In 2006 and 2007, SPREP members agreed to progress a regional agreement for marine turtles under the auspices of CMS. However, despite preliminary support for development of a regional conservation arrangement for marine turtles amongst Pacific Island Countries and other range states in the Pacific Rim, the issue has been suspended since 2006.

At a side-meeting of the February 2009 International Sea Turtle Symposium, SPREP members once again discussed the possibility of negotiating either a SPREP MoU for marine turtles or a Pacific-wide agreement. After a half-day discussion, delegates determined that each State needed to evaluate options internally before agreeing to a way forward. SPREP members will again discuss this issue at an informal meeting on 27 July 2009 in Auckland, New Zealand. This meeting will be held in conjunction with the Second Meeting of Signatories to the Memorandum of Understanding on the Conservation of Cetaceans and their Habitats in the Pacific Islands Region. This meeting will review existing turtle agreements, the need for a Pacific-wide agreement, and provide an opportunity for SPREP countries to discuss a way forward. In an

effort to facilitate the discussion at the July 2009 meeting, Australia and the United States have jointly prepared this options paper, which evaluates current agreements and initiatives for the Pacific region and identifies current gaps in conservation in the Pacific region.

The development of a Pacific-wide arrangement has the potential to contribute positively to management of marine turtles regionally and to increase resources available for marine turtle conservation and management throughout the Pacific region. At the February 2009 SPREP side meeting, members decided that, given the number of existing regional initiatives and agreements, a survey of these agreements was needed prior to developing, or considering development of, another initiative. This options paper, which includes a gap analysis was developed to address that need and seeks to answer the following questions:

1. What are the potential participating states for such an agreement?
2. What marine turtle conservation threats are not being addressed by current agreements and initiatives in the Pacific?
3. What could a Pacific-wide agreement within the CMS do to address identified gaps?
4. How could a Pacific-wide agreement outside of the CMS be developed and could it address identified gaps?
5. What are the anticipated operational costs of such an agreement?
6. Are there any alternate international collaborations (i.e., bilateral, multilateral level coordination) that might be more effective than an international agreement?
7. Would agreements designed specifically by species be more effective than one overarching Pacific agreement for all marine turtle species?

III. ANALYSIS

Question 1. What are the potential participating states for a Pacific Agreement?

Table 1. Possible State Participation in a Pacific Marine Turtle Agreement.

Eastern Tropical Pacific:	*Northern Pacific:*	*Western and Southern Pacific*
Chile *Colombia* *Costa Rica* *Ecuador* *El Salvador* *Guatemala* *Honduras* *Mexico* *Nicaragua* *Panama* *Peru*	*Canada* *China* *Chinese Taipei* *Japan* *Korea* *United States*	*Australia* *Brunei Darussalam* *Cambodia* *Cook Islands* *Fiji* *France*[1] *Indonesia* *Kiribati* *Malaysia* *Marshall Islands* *Micronesia – Federated States of* *Myanmar* *Nauru* *New Zealand* *Niue* *Palau* *Papua New Guinea* *Philippines* *Samoa* *Singapore* *Solomon Islands* *Thailand* *Timor Leste* *Tokelau* *Tonga* *Tuvalu* *Vanuatu* *Viet Nam* *United States*[2] *United Kingdom*[3]

[1] France includes: French Polynesia, New Caledonia and Wallis and Futuna

[2] United States includes: Territory of American Samoa, Commonwealth of the Northern Mariana Islands and Territory of Guam

[3] United Kingdom includes: Territory of Pitcairn Island

Question 2. What marine turtle conservation threats are not being addressed by the current agreements/initiatives in the Pacific?

Marine turtles face numerous direct and indirect threats including incidental capture in fisheries, pollution, egg harvesting, poaching of nesting females and foraging turtles, and nesting beach habitat alteration resulting from coastal development. Annex I, Gap Analysis Matrices, outlines agreements, initiatives and action plans that address marine turtle conservation and Pacific States that participate in these arrangements (Tab1) with IOSEA members included with a more Pacific Islands focus given in Tab 2. Tab3 provides details of regional arrangements including their objectives, infrastructure, geographic scope and other information that may be necessary to access relevant marine turtle related management or recovery efforts. There is a wide range of management activities within these agreements/initiatives ranging from binding resolutions within regional fisheries management organizations to non-binding agreements within conservation initiatives and these are further outlined in Appendix 1: Global Agreements (Tab4), Pacific Non Governmental Organizations (NGOs) (Tab5), Eastern Pacific Arrangements (Tab6) and Western, Central and South Pacific Arrangements (Tab7). These initiatives may focus specifically on marine turtles, address broad conservation issues, or focus on fishery interactions. A summary of the objectives of the relevant agreements/initiatives and progress to date of these arrangements is provided below.

<u>Agreements/Initiatives Overview (see Annex I for more details)</u>

Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC) seeks to promote protection, conservation and recovery of sea turtle populations and habitats on which they depend, based on best available scientific evidence, taking into account environmental, socioeconomic and cultural characteristics of the Parties. The IAC came into force in 2001 and currently has 13 Parties. The Convention Area includes the land territory in the Americas of each of the Parties, as well as the maritime areas of the Atlantic Ocean, the Caribbean Sea and the Pacific Ocean, with respect to which each of the Parties exercise sovereignty, sovereign rights or jurisdiction over living marine resources in accordance with international law, as reflected in the United Nations Convention of the Law of the Sea.
The IAC is the only binding treaty that focuses exclusively on marine turtles. The IAC prohibits intentional capture, retention or killing of, and domestic trade in, marine turtles, their eggs, parts or products. To date, the IAC parties have adopted one resolution on fisheries, which calls on Parties to incorporate the FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations into their fisheries management programs. Other resolutions of the IAC relate to MOU's with existing international agreements, species specific resolutions (i.e., Leatherback and Hawksbill resolutions) and most recently a resolution on climate change.

The Marine Corridor of the East Pacific (CMAR) is an agreement between Costa Rica, Ecuador, Colombia and Panama to protect marine biodiversity of the Eastern Tropical Pacific. Sea turtle conservation is one of many issues that CMAR addresses. CMAR does not have any binding resolutions which address sea turtles. In addition to CMAR, the Permanent Commission of the South Pacific (CPPS) focuses on one particular area of the Eastern Tropical Pacific – the coastal zones of the South-East Pacific within the 200-mile area of maritime sovereignty and jurisdiction of the Parties, and beyond that area, the high seas up to a distance within which pollution of the

high seas may affect that area. The aim of CPPS is to secure food supplies and provide the means of developing the CPPS economies through sustainable exploitation of marine resources. CPPS has developed a marine turtle action plan and established a scientific committee to aid in implementation of this action plan. In addition, CPPS and IAC have signed an MOU to cooperate on sea turtle conservation.

The Western Hemisphere Migratory Species Initiative (WHMSI) is a non-binding, initiative of all of the countries of the Americas to collaborate on conserving all migratory species. WHMSI has had three meetings, one of which had a special workshop on sea turtles. Moreover, WHMSI has an annual funding program and has selected marine turtle projects in the past.

The Inter-American Tropical Tuna Commission (IATTC) seeks to maintain the populations of yellowfin and skipjack tuna and of other kinds of fish taken by tuna fishing vessels in the eastern Pacific Ocean. While non-target species such as sea turtles are not the focus on the IATTC, the IATTC parties have adopted several resolutions to address sea turtles. IATTC requires vessels fishing for tuna and tuna-like species operating on the high seas to take steps to reduce the frequency and severity of fishing gear interacting with marine turtles in accordance with the FAO guidelines.

Like the IATTC, the Western and Central Pacific Fisheries Commission (WCPFC) seeks to ensure long-term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean. Also like the IATTC, the WCPFC has a similar measure, which goes one step further, as it requires shallow-set longline fisheries in the EEZs and on the high seas to use either large circle hooks, whole finfish bait, or other mitigation measures proven to reduce interaction with or increase survivorship of marine turtles. These Commissions also require their members and cooperating non-members to safely handle and release marine turtles they encounter and provide marine turtle data to their respective Secretariats.

The Pacific Islands Forum Fisheries Agency (FFA) has an Action Plan for Sea Turtle By-catch Mitigation that covers a range of collaborative activities to be carried out by members, relevant Pacific Island regional organizations, research agencies and other concerned parties. The FFA Action Plan assists members in meeting the obligations of the WCPFC Conservation and Management Measures.

Other fisheries organizations relevant to sea turtle protection are the Indian Ocean Tuna Commission (IOTC) and the Southeast Asian Fisheries Development Centre. The IOSEA passed a resolution at its August 2008 meeting to urge the IOTC and its member states to address marine turtle by-catch issues within the IOSEA region. Consequently, the IOTC, which includes member countries in the Western Pacific, passed Resolution 09/06 at its most recent meeting. This resolution requires members fishing for tuna and tuna-like species to implement the FAO Guidelines to reduce marine turtle mortality in fishing operations, as well as to safely handle and release entangled or bycaught marine turtles and to collect data on interactions with gillnets. In addition to the IOTC, SEAFDEC provides advice and training on sustainable management of fisheries resources in the Western Pacific.

In the Western Tropical Pacific and the Southern Pacific, in addition to Regional Fisheries Management Organizations there is also a regional environmental organization known as the South Pacific Regional Environment Programme (SPREP). SPREP has developed a Marine Turtle Action Plan 2008-2012, which sets out actions focusing on threats such as unsustainable harvesting, feral animal predation on nests, incidental capture in commercial fishing, degradation of habitat (coastal development, natural disasters), pollution, marine debris, pathogens, boat strikes, and climate change.

The Indian Ocean Southeast Asian Marine Turtle MOU (IOSEA) is a non-binding instrument under the Convention of Migratory Species. The IOSEA operates at a large regional scale in Southeast Asia and the Indian Ocean, as well as with some countries in the Pacific Region. The IOSEA management plan contains 24 programs and 105 specific activities for the conservation of marine turtles. In addition to the IOSEA, the Turtle Island Heritage Protection Area (TIHPA), Coral Triangle Initiative and the Trinational Partnership for Western Pacific Leatherback Turtle Conservation (Bismarck agreement) on Western Pacific Leatherback Turtles focus on a similar range of threats as SPREP and IOSEA, but at a more localized scale.

Many of the countries of the Pacific are also parties to global environmental agreements that address some aspect of marine turtle conservation (Annex I, Tab4). For instance, all of the Eastern Tropical Pacific (ETP) and Northern Pacific countries and some Western and Southern Pacific countries are members of the Convention on International Trade of Endangered Species (CITES), which prohibits all international commercial trade of marine turtles and marine turtle derived products. CITES has addressed illegal trade of hawksbill turtles in several occasions. In addition, some of these countries are Parties to RAMSAR Convention on Wetlands, which calls on countries to protect and conserve wetlands. There are RAMSAR sites in which marine turtle nesting regularly occurs throughout the ETP and the Northern Pacific. Article 8(f) of the Convention on Biological Diversity (CBD) calls on Parties to recover threatened species, including marine turtles. Finally, six ETP countries (Chile, Costa Rica, Ecuador, Honduras, Panama, and Peru) are party to the Convention on Migratory Species (CMS). In the Western and Southern Pacific, Australia, Cook Islands, New Zealand, Palau, Philippines, Samoa are also Party to CMS. Under CMS, marine turtles are listed under CMS Appendix I, which means that parties are obligated to prohibit capture, harassment of or killing of marine turtles and to endeavor to conserve marine turtles by restoring their habitats and removing or reducing threats, including invasive species and impediments to migration.

Progress to Date and Challenges

The IAC, in combination with these other instruments and arrangements, has the potential to address principal threats to marine turtles in the Eastern Pacific. Similarly, SPREP and other initiatives operating at more localized scales, have the potential to address principal threats to marine turtles in the Western Tropical Pacific and Southern Pacific. Unfortunately, not all of these agreements are fully developed, fully funded, and/or fully supported to allow for comprehensive protection of marine turtles across their habitats and life stages.

There are also concerns about the lack of participation in these agreements. For example, Nicaragua, Chile, Colombia and El Salvador include important terrestrial and marine turtle habitats, but are not Parties to the IAC and therefore are not bound by any of its measures.

Furthermore, not all range states are members or participate in the work of the IOSEA, IAC, or action plans that have been developed for Pacific marine turtles. These nations have important nesting and marine habitat for marine turtles and thereby represent a significant gap in Pacific participants. In addition to political will and overall participation, securing linkages between various agreements and initiatives is a challenge.

There are mechanisms to address direct threats to marine turtles; however, there are still significant needs that are unmet in both regions of the Pacific. The most compelling need is capacity (financial and human) in the region to carry out conservation work. This conservation work should expand nesting beach protection, outreach with fishing communities to identify and reduce marine turtle bycatch, community-based awareness programs and socio-economic interventions to effectively address directed take, greater involvement in coastal development planning, and many other conservation initiatives. Many of these actions are set out in Action Plans of the various agreements/initiatives (e.g., the SPREP Marine Turtle Action Plan 2008-2012). It is not clear whether a new marine turtle agreement would be able to overcome this lack of resources. With improved resource allocation by governments, NGOs and other stakeholders in the region, combined with increased academic involvement (and scholarships) to entice appropriately experienced and skilled personnel undertake work, there is potential to increase capacity to execute conservation.

Question 3. What could a Pacific-wide agreement within the CMS do to address identified gaps?

CMS provides an overarching framework within which species-specific Agreements can be formed among Range States. There are three different types of Agreements which can be legally binding or non-legally binding. Types of Agreements used may depend on whether a species is listed under CMS Appendix I (migratory species threatened with extinction) or CMS Appendix II (migratory species that have an unfavourable conservation status) of the Convention[4].

Features of CMS agreements include that they:

(a) are open for signature to all Range States even if they are not a Party to the Convention (Article V (2)),
(b) establish obligations for each State joining the Convention,
(c) promote action among the Range States of affected species,
(d) include integral Action Plans, providing for range-wide and State specific actions,
(e) attempt to restore migratory species concerned to a favourable conservation status or maintain its favourable conservation status. (Art. V(1)), and

[4] For migratory species listed in Appendix I of the Convention, States strive towards strictly protecting these animals, conserving or restoring habitats in which they live, mitigating obstacles to migration and controlling other factors that endanger them. For migratory species that have unfavourable conservation status or would benefit significantly from international co-operation organized by tailored agreements, listed in Appendix II, the Convention encourages Range States to conclude global or regional Agreements for conservation and management of individual species or, more often, of a group of species. Range States themselves decide on a tailored and structured action plan that includes organization of joint research, monitoring activities and harmonisation of legislation.

(f) cover the whole range of the migratory species concerned.

Of three types of CMS Agreements, two are treaties and one is a Memorandum of Understanding (MoU). Treaties are legally binding and provide for new substantive and financial obligations for parties and create institutions that oversee the Agreement's implementation. A State wishing to join a treaty must ratify or accede to it. A MoU is a non-legally binding international instrument. While, an MOU does not have the same force of law, it can facilitate more immediate conservation action, provided that sufficient resources are available.

Treaties under Article IV (3) are restricted to species listed in Appendix II of the Convention. The object is to restore migratory species concerned to a favourable conservation status or maintain status. They cover the whole range of the migratory species concerned. Regional Economic Integration Organizations can also become members. Examples of this type of Agreement include the Agreement on the Conservation of Albatrosses and Petrels (ACAP), African-Eurasian Migratory Waterbirds (AEWA) and Populations of European Bats (EUROBATS).

Treaties under Article IV (4) may be concluded for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdictional boundaries. Examples of this of Agreement include, Cetaceans of the Mediterranean Sea, Black Sea and Contiguous Atlantic Area (ACCOBAMS), Small Cetaceans of the Baltic and North Seas (ASCOBANS) and Seals in the Wadden Sea.

The other type of agreement is a legally non-binding Memorandum of Understanding (MOU). A MoU's primary objective is to initiate and coordinate short-term conservation measures for migratory species across a migratory range. Signatories may include government institutions of Range States at administrative and scientific levels and collaboration with NGOs. The aim of a MoU is not to impose new, additional, substantive or financial obligations to their signatories and can be more easily implemented. While there may not be mandatory financial contributions, an initiative or agreement is only as effective as the resources provided to it. Examples of this type of instrument include the MoU for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region, MoU on the conservation and Management of Dugongs (*Dugong dugon*) and their Habitats throughout their Range, and MoU on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia.

In the Pacific, a new CMS instrument could provide another layer of international protection to marine turtles by providing an overarching framework for linking initiatives among Range States. IOSEA for example, has demonstrated that non-binding agreements can be effective and are currently working to increase the amount of voluntary contributions received. If the agreement was to be Pacific-wide and legally binding, then some protection measures existing in the ETP could potentially be expanded to the Western, Central, Northern and South Pacific. However, as noted above, limiting factors would include (1) uncertainty relating to which States would become party; (2) length of time it would take for a binding agreement to enter into force; and (3) financial and human resource needs of countries involved to facilitate implementation.

Gaps in Effectiveness

In addition to lack of fiscal and human resources, a limiting factor to addressing threats is engaging participation and commitment of coastal States in this, or existing agreements. International agreements are only as strong as their member States and without participation of all relevant coastal States, marine turtles will not be protected throughout all of their life stages. It remains a significant question as to whether a broader CMS agreement would be able to attract participation of those States that are not currently participating in CMS or other regional marine turtle arrangements already in existence.

Question 4: How could a Pacific-wide agreement outside of the CMS be developed and could it address identified gaps?

A Pacific-wide non-CMS agreement would probably not be too different from CMS Pacific-wide agreement in terms of structure of the actual agreement. The difference would be in the operation of the agreement. A non-CMS agreement would not have the CMS Secretariat to coordinate the negotiating process of the agreement. Therefore, one of the interested countries or a contracted individual would be responsible for facilitating the negotiations.

Options depend on scope of issues to be addressed. If the issue is a lack of coordination across and around the Pacific, then a working group of Pacific marine turtle conservationists with links to national governments might be one way to address this. If a more formal arrangement is needed, such as a Memorandum of Understanding or another non-binding legal commitment, one could be developed. If one of the main concerns is a lack of consistent legal protection for marine turtles, then a binding arrangement would be required to obligate the rest of the Pacific to move toward a similar level of legal protection established under the IAC in the Eastern Tropical Pacific.

Question 5: How much would such an agreement cost to make operational?
Costs of the agreement would depend on the nature of the agreement, i.e., binding versus non-binding, as well the number of States involved. Negotiating a binding arrangement would likely take longer than a non-binding arrangement, requiring more resources to convene negotiating sessions. Using the IOSEA as an example, if the agreement was a Pacific-wide agreement, meetings alone could cost $200,000 per meeting. Furthermore, there would need for a coordinator or a Secretariat, which could potentially cost another $100,000 annually. Additionally, if there is to be a website, production of outreach materials, subsidiary body meetings, training, etc, another $200,000 for operational funds could be potentially needed. Thus, a conservative estimate would range from $300,000 to $500,000 annually. This cost would be in addition to current costs of pre-existing arrangements, unless one or more arrangements (Secretariats) were willing to expand its responsibilities, or dissolve in lieu of this new pan-Pacific arrangement.

Question 6: Are there any alternate international collaborations (i.e., bilateral, multilateral level coordination) that might be more effective than an international agreement?

Depending on scope of issues to be addressed, bilateral and multilateral discussions may achieve similar, or better, results in a shorter time. For instance, if South Pacific loggerheads are of concern, then a working group consisting of Australia, New Caledonia, New Zealand, the United

States, Chile and Peru might be the most effective way to improve conservation for this population. On the other hand, if the concern is the capacity of Pacific Island nations to address marine turtle conservation, then a meeting between the donors and recipients in the region to collaborate and consolidate funding activities might improve capacity of the Pacific Island nations to conserve marine turtles. This strategy is being employed for some species, such as the binational conservation effort for Kemp's ridley by the United States and Mexico. This collaboration has utilized concerted financial and human resources from Mexico and the United States for over three decades.

Question 7: Would agreements designed specifically by species be more effective than one overarching Pacific agreement for all marine turtle species?

If agreements were designed by species, the working groups established would likely vary in composition with some potential for significant overlap or duplication of member states. For instance, a working group on hawksbills would likely involve the ETP countries. However, a working group on loggerheads would encompass countries ranging from Australia to Chile. Similarly, a working group on leatherbacks would involve all the ETP countries, Southeast Asia nations, Australia, Pacific Island nations and the United States. In each instance, the countries involved would need to establish at the outset if they are embarking upon a formal agreement, a working group, a collaborative project, etc. Again, there would likely need to be close linkages or collaborations among working groups and associated country governments to ensure programs have both financial and institutional support to implement activities and that resources are not being dedicated to activities or projects in a duplicative or inefficient manner.

Success of species specific agreements has been very mixed. For instance, in the Western Pacific, the Bismarck agreement has not yet made significant strides in improving the conservation status of the Western Pacific leatherbacks. However, the United States/Mexico collaboration to recovery Kemp's ridley marine turtles has been successful over the last three decades. The more recent Bismarck agreement may not have achieved similar results due to lack of financial support and/or institutional capacity of relevant countries to implement priority activities. Additionally, it should not be discounted that positive species-based conservation benefits can be achieved within individual countries. Complicated, broad-scale international collaborations may not always be immediately necessary, depending on threats involved and scope of actions needed to address priority threats.

IV. OPTIONS

Progressing marine turtle conservation outcomes in the Pacific necessitates greater regional cooperation spanning the Pacific Ocean from the Americans to Western and Central Pacific to South Asia. Based on the Gap Analysis (Annex 1), there are five potential options for the SPREP countries to consider.

1. Developing a New CMS Pacific Regional Agreement

The first option is for a Pacific-wide agreement under the Convention on Migratory Species. This agreement would be binding in nature and be open to participation by all the States in and around the Pacific. The agreement could be based on the IOSEA MoU, IAC and the SPREP Marine Turtle Action Plan. There are two possible options for a CMS Pacific Regional Agreement which would encompass all the states in and around the Pacific.

(a) Treaties under Article IV (3) – This agreement would be legally binding in nature similar to the IAC
(b) Non-legally binding MoU – This agreement would not be legally binding similar to the IOSEA MoU.

ADVANTAGES

Such an Agreement would likely entail the creation of a dedicated Secretariat that would enable actions to be effectively coordinated across the Pacific region. Activities in the Americas and the South Pacific could be harmonized and sea turtle protection across the Pacific would become more uniform.

DISADVANTAGES

The main disadvantage of developing a new Pacific arrangement is that it could entail costs that potential Parties would be unwilling or unable to bear. Travel and meeting expenses would be higher since participants would be from all over the Pacific. Further, because, since there would be more potential Parties to the agreement, achieving agreement on the structure and objectives of the agreement could take several years. Even after negotiations are concluded, States would have to ratify the agreement before it could enter into force. Thus, a Pacific wide sea turtle agreement could take a decade before it was actually established.

2. Expanding the IOSEA MoU to Encompass the Pacific Region

The second option is to expand the IOSEA MOU to encompass the Pacific.

ADVANTAGES

The IOSEA MoU is an established, functioning arrangement with a developed Conservation and Management Plan and a number of Signatory States, some of whom also have territory in the Pacific. Expanding the IOSEA MoU to cover the Pacific region may be less complicated than developing an entirely new agreement. The IOSEA MoU's Conservation and Management Plan may be expanded to reflect the range of needs specific to the Pacific region. Expansion of the IOSEA MoU could be a more cost-effective solution to progress marine turtle conservation in the Pacific than the development of a new Pacific MoU.

DISADVANTAGES

The IOSEA has discussed expanding its agreement area on two occasions now. At both instances, signatory States did not endorse idea. Thus, there is not a lot of enthusiasm on the part

of the IOSEA Signatory States to expand the agreement at present. Further, the IOSEA at present is operating on a very tight budget and unless substantial increases in voluntary contributions are received it would be impossible for the IOSEA Secretariat to adequately administer the MoU if it were extended to the Pacific region.

3. Development of a CMS/SPREP Marine Turtle MoU

The third option would be to develop a CMS/SPREP Marine Turtle MoU. This agreement would be just for SPREP countries and would not include the entire Pacific. Since this would be an MoU, it would be non-binding in nature.

ADVANTAGES

By having a CMS/SPREP Marine Turtle MoU, the signatories would have a more formal, albeit non-binding commitment, than the current Marine Turtle Action Plan. This agreement could be used to leverage additional resources for sea turtle conservation.

DISADVANTAGES

It is not clear whether the additional time and expense of development a CMS/SPREP MOU on top of an existing Marine Turtle Action Plan would result in additional sea turtle conservation. In fact, such an effort could divert time and resources away from on the ground conservation of sea turtles in the short term.

4. Establish Dedicated Working Groups for Threat or Species-based Arrangements

Under this fourth option, the SPREP countries could decide to establish threat or species specific working groups which may also be extended to other parties outside the SPREP region addressing similar issues. These groups would be a way for conservation managers to collaborate on threats (for multi-species) or species specific needs.

ADVANTAGES

Dedicated threat or species-based working groups is one option or alternative to a Pacific-wide, multi-species arrangement. Since these arrangements do not require negotiating an agreement, it is possible to start collaborating on sea turtle protection right away. There are numerous examples of species-based programs that have achieved notable measures of conservation success that have contributed to recovery. The St. Croix leatherback nesting population that has been exhibiting increasing population trends over the past 20+ years due primarily to nesting beach management activities designed to address the primary threat to the nesting population. As a result, species-based plans may promote country (or local) ownership of conservation outcomes, ensuring acceptability and implementation.

Additionally, depending on the scope of the issues to be addressed, bilateral and multilateral discussions may also achieve similar, or better, results in a shorter time, such as the success that has been achieved via the binational conservation effort for Kemp's ridley by the United States and Mexico over the past three decades, and green turtle conservation and management between Malaysia and the Philippines (e.g., TIHP). There are activities underway to address species-specific impacts shared among countries. The United States has spearheaded this effort through conservation and management activities in international areas to address impacts to shared stocks of Western Pacific leatherbacks.

Threat-based working groups could address specific impacts or threats and include multi-species. Priorities could be based on existing management and conservation plans such as the SPREP Marine Turtle Action Plan or could be mutually agreed by a range of interested parties. For example, addressing incidental bycatch in artisanal and commercial fisheries, natural predation, outreach activities, establishing marine protected areas. This option also has the advantage of being able to link across different initiatives for example, the SPREP Marine Turtle Action Plan and the CTI.

This option takes into account increasing recognition by resource managers of the benefits of multinational efforts, and while formal arrangements are not in effect,

DISADVANTAGES
If formalized agreements were implemented by species or threats, the working groups established may vary in composition with some potential for significant overlap or duplication of member states, and the same member delegates potentially assigned to multiple species (for species working groups). Formalized threat or species-based arrangements may come at a considerable financial cost, although this requires greater analysis.

5. Delay Further Consideration
The fifth option is to continue the status quo. That is**,** the States of the Pacific would maintain the existing agreements/initiatives.

ADVANTAGES
Deferring further decision on creation of a new marine turtle arrangement will give the SPREP members time to thoughtfully consider options and alternatives to progress marine turtle conservation and better utilize financial and human resources. There are lessons that can be learned as SPREP members work to actualize the CMS Cetacean MoU and begin implementation of the SPREP marine turtle action plan.

Additional time and effort can also be applied to reviewing the existing CMS arrangements (e.g. ACAP, AEWA, ACCOBAMS, IOSEA MoU, etc.), to qualify effectiveness of these arrangements to help the decision making process. A review of other global or pan-Pacific species-based arrangements, not relating to turtles, may also be useful. Additional time will also permit the emerging CTI to develop thus providing greater insight as to effectiveness of yet another proposed arrangement.

DISADVANTAGES
Current arrangements continue in their existing capacity although with recognized inability to implement Pacific-wide management measures.

V. DISCUSSION - SCOPE OF ARRANGEMENT

This paper presents a brief overview of the existing marine turtle conservation agreements and initiatives in the Pacific. It is meant to inform SPREP members as they discuss the need for and details of a new Pacific-wide arrangement for marine turtles.

As detailed in this paper, there are a large number of initiatives addressing marine turtle conservation and management in the Pacific region. Although there are many programs, initiatives and conventions that strive to achieve conservation outcomes for marine turtles across the region, many lack capacity to effectively fulfill their aims. Specifically, the following gaps or impediments to effective implementation include: 1) current agreements are not fully developed or funded; 2) lack of member [States] participation; 3) lack of political will; and 4) lack of resources (financial and human resources) to carry out conservation work. Overall, there is a clear need to develop specific mechanisms to improve coordination among existing initiatives, particularly across relevant regional organizations, to most efficiently utilize available resources, avoid duplication of efforts and promote consistency, as well as to improve the ability of States to address threats.

In moving forward, there are four questions that the SPREP countries should seek guidance and provide input on:

A. THE NEED

Countries to agree on whether there is sufficient a need to start developing a new agreement or initiative or can existing agreements/initiatives over time address the core threats to sea turtles.

B. GEOGRAPHIC AREA

To develop any type of agreement, binding or non-binding, there first needs to be clear agreement on the geographic area in question. This options paper presents agreements/initiatives that are among just a few nations and others that are regional or global in scope. In terms of global arrangements, Annex I, Tab4 shows that the majority of the Pacific countries are members of CITES, CBD and RAMSAR. Fewer countries are members of CMS, but given that non-member countries can sign on to agreements or MOUs under CMS, a number of Pacific States can participate in CMS related agreements. Therefore, there are mechanisms in place to address international trade of sea turtles and to protect critical sea turtle habitat. Conservation measures to address bycatch in fisheries are also in place through RFMOs such as IOTC, IATTC and WCPFC.

Because of global and regional coverage for sea turtles in terms of trade, habitat protection and bycatch mitigation, a new agreement may want to focus on more localized threats and the ability of States to address those threats. The SPREP Marine Turtle Action Plan has already identified many threats and actions needed to address them. This options paper demonstrates that there are already numerous agreements and initiatives in the Pacific, but they are limited by the capacity and financial resources to fulfill those agreements. With increased resources and political will, as well as better coordination among States, identified threats could be addressed.

B. SPECIES AND HABITAT TYPES

Sea turtle conservation is a broad arena that may encompass marine and terrestrial habitats, a variety of species within those habitats, and a diversity of needs throughout their life cycles. For example, SPREP needs to determine if the new arrangement seeks to encompass both nesting and foraging habitats as well as high seas areas in the agreement. Conservation needs of sea turtles vary by species and consideration needs to be given as to whether a new arrangement should focus on those species whose populations are most threatened or if all species of marine turtles should be included.

C. LEGAL STATUS

The legal status of a new arrangement may determine the level of political will, financial resources needed, time it will take to negotiate a new arrangement, as well as the strength of conservation efforts and States' ability to enforce agreed measures. Determining whether or not the agreement will be a binding agreement or a non-binding agreement is important because the legal status of the agreement will affect the cooperation of States. A binding agreement would be a stronger political commitment to sea turtle conservation, but will also be more costly. Negotiations to develop a binding agreement could take years and would not necessarily guarantee cooperation of States within the affected geographical area because of financial or human resource constraints. On the other hand, a non-binding agreement would illustrate States' interest in sea turtle conservation, could provide the necessary coordinating body and may garner support of an increased number of states to relatively fewer legal obligations. Because of the non-binding nature, the agreement would most likely be easier to negotiate and would require less human and financial resources. A non-binding arrangement may face financing constraints if States do not commit financial resources to agreements or organizations because they are not obligated to do so. However, if an agreement is seen to be effective and successful, more range states may be more inclined contribute financial resources. For example, the IOSEA MoU which has a good reputation and track record, has recently received voluntary contributions from several Signatory States who have not previously made contributions.

SPREP countries must decide upon the geographical area, scope and legal status of an agreement before progressing with development. Answering these questions will help to determine the appropriate type of agreement for the Pacific, the other Pacific States to engage and whether a new arrangement is necessary or feasible. It is important for members to keep in mind all existing bilateral, regional and global arrangements for sea turtle conservation and not to replicate functions of those agreements. While many arrangements have not fully realized their objectives, they do have enabling mechanisms for sea turtle conservation. It is important to consider improving and fully enabling those mechanisms through financial and logistical support as well as the costs and benefits of developing an entirely new mechanism for conservation and management of marine turtles.