The Status of Sea Turtles under International Environmental Law and International Environmental Agreements

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I. Introduction

Despite years of concern for sea turtles and the threats to them, no rule of international law and no single international environmental agreement is capable of protecting sea turtles. Even taken in the aggregate, customary international law and treaty law fail to protect sea turtles throughout their range or regulate the threats to their well-being. The migratory nature of sea turtles is at the heart of law's failure to protect sea turtles. During the life cycle of the sea turtle, they will inhabit four different jurisdictions of customary international law. In none of these jurisdictions do strong conservation standards prevail over a State's right to exploit resources. In a coastal State's terrestrial territory, its territorial sea (12 miles from the coast), and its marine Exclusive Economic Zone (up to 200 miles from a State's coast), the use and conservation of sea turtles is governed by the principal of customary international law known as Permanent Sovereignty over Natural Resources.¹ Under this principle, a State has sovereign rights to use natural resources, including species, within its territory.² On the high seas, the converse is true: no State has sovereign rights, and thus, all State's have the right to exploit a species. Unless regulated by an international agreement, species on the high seas, the area outside the jurisdiction of any State, are considered res nullius - the property of no State.³ The rights of a State to exploit a resource is not without limitation, however. As a general rule, a State cannot use its territory in a manner that harms another State. Similarly, a State must use the resources of the high seas consistently with the interests of other States and must conserve the living resources of the high seas.⁴ But these conservation duties are weak, and fail to require a State to adopt strong measures to protect sea turtles.

In addition, various rules of international environmental agreements apply, depending on whether a State has consented to be bound by the provisions of a particular agreement. Although existing international environmental agreements do little to upset customary international law, they often establish new habitat conservation provisions or trade rules. For example, the Convention on

³See C yril de K lem m, Migratory Species in International Law, 29 N ATURAL R ES. J. 935, 938 (1989).

⁴1982 Law of the Sea Convention, *supra* note 2, at art. 56.

¹United Nations General Assembly, Resolution 1803 (X VII) (Dec. 14, 1962); see also Declaration of the Right to Development, United Nations General Assembly, Resolution 41/128 (Dec. 4, 1986). See also Convention on Biological Diversity, June 5, 1992, 31 I.L.M. 818 (1992) [hereinafter "Biodiversity Convention"]; Rio Declaration on Environment and Development, Principle 2, June 14, 1992, U.N. Doc. A/CONF.151/5/Rev.1 (1992), reprinted in 31 I.L.M. 876 (1992) [hereinafter "Rio Declaration"]; Declaration of the United Nations Conference on the Human Environment, Principle 21, June 16, 1972, U.N. Doc. A/CONF.48/14/Rev.1 (1972) [hereinafter "Stockholm Declaration"].

²This principle of custom ary international law has been codified in the Convention on the Law of the Sea. United Nations Law of the Sea, Dec. 2, 1982, art. 56, U.N. Doc. A/CONF. 62/122, reprinted in 21 I.L.M. 1261 [hereinafter "1982 Law of the Sea Convention"].

International Trade in Endangered Species (CITES)⁵ regulates international trade in sea turtles and their products, but does not protect habitat or control other threats to sea turtles, which are seen as domestic issues within the sovereign discretion of each State. The parties to the Convention on the Conservation of Migratory Species of Wild Animals (the CMS)⁶ jointly have listed two species of sea turtles as endangered and all seven as requiring international cooperation for their conservation. Yet, the parties have adopted no provisions to conserve them. The Protocol Concerning Specially Protected Areas and Wildlife is a regional agreement that requires parties to take aggressive conservation measures, but these measures do not apply to nesting beaches.⁷ Even a draft treaty related specifically to sea turtle protection fails to establish strict obligations that would overcome a State's sovereignty concerns. Some State's are contesting vigorously provisions to require the use of turtle excluder oppose any limitations on subsistence harvesting.⁸

Only the regulation of international trade in sea turtles and their parts under CITES is regulated effectively by the international community. No other threat is controlled. In particular, subsistence harvesting is not regulated and the use of turtle excluder devices, which allow turtles to escape fishing nets, are not required. Moreover, despite language in many treaties relating to habitat protection, no treaty requires a party to protect sea turtle nesting habitat or marine habitat.

The migratory nature of the sea turtle does not distinguish it from other species. No additional rules apply either within the territory or territorial waters of a State or on the high seas. Nonetheless, a principal of law is developing which might provide additional protection for sea turtles and other migratory species. Under the "shared resources" concept, a State is considered the temporary host of a migratory species.⁹ A State would be required to take conservation measures if necessary to achieve a certain result, such as maintenance or restoration of the species to a favorable conservation status.¹⁰ A State's sovereignty would be respected by not mandating specific conservation measures.¹¹

 $^{10}Id.$

 $^{11}Id.$

⁵C onvention on International Trade in Endangered Species of Wild Flora and Fauna, Mar. 3, 1973, 27 U.N.T.S. 243, 993 U.N.T.S. 243 [hereinafter CITES].

⁶C onvention on the Conservation of M igratory Species of W ild A nim als, June 3, 1979, *reprinted in* 19 I.L.M. 15 (Bonn, 1979, in force 1983) [hereinafter the CMS].

⁷Protocol Concerning Specially Protected A reas and W ildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Jan. 18, 1990 [hereinafter the SPAW Protocol]. The Convention for the Protection and Development of the Marine Environment of the Wider Caribbean, Mar. 24, 1983, *reprinted in* 22 I.L.M. 221 (1983) [hereinafter the Cartagena Convention].

⁸See Inter-American Convention for the Protection and Conservation of Sea Turtles, Sept. 3-5, 1996, [hereinafter Inter-American Sea Turtle Convention].

⁹de K lem m, *supra* note, at 949.

This paper reviews the status of sea turtles under international law and international environmental agreements to determine the need for a tripartite sea turtle agreement among Costa Rica, Nicaragua, and Panama. Section II provides an overview of the legal status of the sea turtle in international law and the codification of those principles under the 1982 Law of the Sea Convention. Section III reviews general principles of international environmental law which may constrain State's activities under current international law. Section IV assesses the provisions of international agreements which relate or could relate to sea turtle conservation. Section V reviews two agreements which hold great promise for sea turtles but are not yet in force. Section VI concludes that the Inter-American Sea Turtle Convention for sea turtles in Costa Rica, Nicaragua, and Panama. The Inter-American Sea Turtle Convention provides an excellent start to sea turtle conservation in Central America. Because of its weak habitat protection provisions, however, a separate agreement among Costa Rica, Nicaragua, and Panama may be necessary to protect, conserve and use sea turtles.

II. Customary International Law and the 1982 Law of the Sea Convention

During the life cycle of sea turtles, they emerge from and nest on beaches and swim the oceans. As they do so, they pass through four different legal regimes under customary international law. First, when emerging as hatchlings and when returning to beaches to nest, they are within the terrestrial territory of a sovereign State which possesses sovereign rights over the sea turtle. This right is limited by the State's duty not to cause harm to the environment of another State. Second, as the turtle begins its journey back to the sea, it enters a coastal State's the territorial sea, in which the State has absolute sovereign right to regulate resources subject to the duty not to cause harm to other States. Third, sea turtles swim into a coastal State's Exclusive Economic Zone (EEZ). Here, too, the coastal State has the sovereign right to use sea turtles, coupled with some conservation duties. Fourth, many sea turtles migrate to the high seas, the area 200 miles from the coast of any nation. Once on the high seas, sea turtles are offered very little protection. Although a person may not hunt sea turtles to extinction on the high seas, they are not required to take active conservation measures to protect them. The 1982 Law of the Sea Convention codified these rules of customary international law.

A. Nesting Beaches – Permanent Sovereignty over Natural Resources and State Responsibility

When sea turtles are nesting on beaches of a sovereign nation, international law is very clear: States have permanent sovereignty over their natural wealth and resources to be exercised in the interest of national development and the well-being of the people of the State concerned.¹² The concept of national sovereignty over natural resources is firmly embedded in international law.

¹²United Nations General Assembly, Resolution 1803 (XVII) (Dec. 14, 1962); see also Declaration of the Right to Development, United Nations General Assembly, Resolution 41/128 (Dec. 4, 1986).

Recent international environmental agreements, declarations, and resolutions, such as the Convention on Biological Diversity, affirm that "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to the own environmental policies."¹³

Nonetheless, the concept of permanent sovereignty over natural resources has its limitations. States have a corresponding general duty not to harm the interests of other States. The Biodiversity Convention and other international documents impose the on States the duty "to ensure that activities within their own jurisdiction or control do not cause damage to the environment of other States of areas beyond the limits of national jurisdiction."¹⁴

This duty and the corresponding liability for any breach of the duty, known as State Responsibility, also is customary international law.¹⁵ Application of the rule, and holding a State responsible for damage incurred, nonetheless, is difficult. First, the environmental damage must result from a violation of international law.¹⁶ In the case of nesting sea turtles, no specific treaty rules or other rules of customary international law seem to apply. Thus, a State will have great difficulty showing that the harm was caused by a violation of international law. Second, the damage must be significant.¹⁷ The damage to sea turtles must be more than a minor incident causing minimal damage.¹⁸ A State is likely to have great difficulty showing that harvesting practices or another threat is causing significant damage to sea turtles, because sea turtle species already are threatened or endangered. Moreover, state responsibility applies mainly to the harmful effects of transboundary pollution, not for the protection of a living resource, although more recent international agreements do not make this distinction.¹⁹

As the title of the doctrine suggests, only a State is liable for damage (and only a State can claim damage). Still, a State can be held responsible for the activities of private individuals and corporations within its jurisdiction if the State has failed to stop or control the activity in accordance

¹⁷See id. at § 6 0 1 (2)(b).

¹⁸See id. at §601, Comment C.

¹³Biodiversity Convention, *supra* note 1, at art. 3; *see also* R io Declaration, *supra* note 1, at Principle 2; Stockholm Declaration, *supra* note 1, at Principle 21.

¹⁴Biodiversity Convention, supra note 1, at art. 3; Rio Declaration; supra note 1, at art. 2; Stockholm Declaration; supra note 1, at art. 21.

¹⁵See e.g., Corfu Channel Case, (U.K. v. Albania) 1949 I.C.J. Reports 4; Lac Lanoux Arbitration, (Spain v. France) XII R.I.A.A. 281 (1957).

¹⁶See 2 Restatement of the Foreign Relations Law of the United States, §601(2)(a).

¹⁹See Biodiversity Convention, supra note 1, at art. 3; 1982 Law of the Sea Convention, supra note 2, at art. 193.

with rules of international law.²⁰ Thus, if the actions of a private entity in one State causes significant damage to sea turtles or the environment in another State, the State which has jurisdiction over the private entity could be liable for the damage if it has failed to implement or enforce conservation rules consistent with customary international law or treaty law.

Because of the many obstacles, the concept of state responsibility is not likely to protect sea turtles from exploitation on nesting beaches and the doctrine of permanent sovereignty over natural resources. This principle may be useful if one State significantly depends on sea turtles for tourism or other purposes and another State's activity significantly damages that use. The damage must be to the environment of the other country, but the lost revenue is an indicator that the environment has experienced significant damage. If the evidentiary problems are overcome, the State causing the damage could be required to cease the activity and compensate for the damage.

B. The Territorial Sea and the Exclusive Economic Zone

When sea turtles emerge as hatchlings or depart after nesting, they enter a coastal State's territorial sea. Although the turtle has migrated from a terrestrial existence to an aquatic one, the doctrines of permanent sovereignty over natural resources and state responsibility still apply to the use of sea turtles. Thus, a coastal state has absolute sovereignty, including the right to use sea turtles, within its territorial sea (generally, 12 nautical miles from its shore).²¹ This sovereignty is limited only by the responsibility not to use resources to the detriment of other States (state responsibility)²² and the right of innocent passage.²³

Beyond the territorial sea, sea turtles enter a legal jurisdiction with slightly different rules. In the area extending from the territorial sea to roughly 200 nautical miles from shore, sea turtles swim and eat within a coastal State's EEZ.²⁴ In the EEZ, coastal States have the sovereign right to exploit, conserve, and manage living and non-living natural resources.²⁵ This sovereign right is tempered by rules that are stricter that those of state responsibility. Within the EEZ, coastal States,

²²See supra Section II(A) (discussing the doctrine of state responsibility).

²³1982 Law of the Sea Convention, supra note 2, at arts. 17-19.

 24 The EEZ is defined as an area not to extend "beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured. *Id.* at art. 57. Thus, although EEZs often are referred to as "200-mile zones," they really are 188-mile zones, because they are measured from the landward edge of the 12-mile territorial sea.

²⁵*Id.* at art. 56(1)(a).

²⁰See 2 Restatement of the Foreign Relations Law of the United States, §601(3).

 $^{^{21}}$ T here are several ways to determ ine the exact boundaries of the territorial sea. Using the "norm al baseline" method, the "territorial sea" is an area not exceeding 12 nautical miles extending from "the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State." 1982 Law of the Sea Convention, *supra* note 2, at arts. 3, 4.

taking into account the best scientific evidence available, must ensure that "the maintenance of the living resources ... is not endangered by over-exploitation."²⁶ Unlike state responsibility, which applies in the territorial sea and on land, a coastal State must take conservation measures even if the consequences (endangerment due to over-exploitation) are wholly domestic.

In addition, if sea turtles are a harvested species, then the coastal State must take measures to maintain or restore populations at levels which can produce the maximum sustainable yield, taking into account environmental and economic factors.²⁷ Economic factors may include the needs of coastal fishing communities and the special requirements of developing States.²⁸

If sea turtles are not a targeted species, the coastal State must create conservation and management measures which "take into consideration" the effects on "species associated with or dependent upon harvested species."²⁹ These measures must be designed "with a view" to maintaining or restoring these species "above levels at which their reproduction may become seriously threatened."³⁰ A question remains whether sea turtles are "associated with" or "dependent upon" harvested species. The terms imply a biological or ecological relationship between the harvested species and the other species, such as a predator-prey relationship. If such a relationship is required, and sea turtles do not have such a relationship with a harvested species, then coastal States do not have an obligation to take measures with a view to maintaining or restoring populations to viable levels.

Under the rules regulating use of the EEZ, a coastal State could prohibit the taking of sea turtles or require gear modifications to ensure sea turtles survive when caught. At best, however, a coastal State only is *required* to ensure that sea turtle populations are not endangered by over-exploitation in the EEZ.³¹ Nonetheless, if a coastal State takes such measures, it has broad enforcement powers to ensure compliance with them. For example, a coastal State may board and inspect a vessel, and arrest crew members and initiate judicial proceedings against them.³²

C. High Seas

When sea turtles migrate to the area beyond any State's EEZ, they enter the high seas, yet

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<sup>27</sup>Id. at art. 61(3).
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 $^{28}Id.$

²⁹*Id.* at art. 61(4).

 $^{30}Id.$

³¹*Id.* at art. 61(2).

³²*Id.* at art. 73(1).

²⁶*Id.* at art. 61(2).

another legal jurisdiction. On the high seas, no State has jurisdiction.³³ Generally, nations have the right to fish and navigate on the high seas, lay submarine cables in the high seas, and fly airplanes over the high seas.³⁴ These freedoms historically were subject only to reasonable regard for the interests of others as they exercise their freedoms of the high seas.³⁵ The International Court of Justice, however, ruled that all States have the duty to take full account of necessary conservation measures in conducting its fishing operations.³⁶ Although it is not legally true that "anybody may exploit, over-exploit, or destroy [a] species" on the high seas,³⁷ no State has the authority to enforce a conservation obligation on the high seas.³⁸ States might have other recourse, such as judicial proceedings before the International Court of Justice.

The 1982 Law of the Sea Convention modifies these rules, although its effect is not likely to be significant. For example, States that exploit identical living resources must negotiate agreements to conserve them.³⁹ In addition, it includes conservation rules similar to those for the EEZ. That is, for targeted species, States must take measures, based on the best available science, to conserve harvested populations at levels which can support maximum sustainable yield.⁴⁰ If a species is "associated with or dependent upon harvested species," States must take measures designed to maintain or restore these species "above levels at which their reproduction may become seriously threatened."⁴¹

³⁵W illiam T. Burke, *Unregulated High Seas Fishing and Ocean Governance*, in FREEDOM FOR THE SEASIN THE21STC ENTURY: O CEANG OVERNANCEANDE NVIRONMENTAL H ARMONY 235, 242 (Jon M. Van Dyke et al. eds., 1993).

³⁶Fisheries Jurisdiction Case (United Kingdom v. Iceland), 1974 I.C.J. 3, 31, para. 72 (M erits). See also 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas, art. 2, U.N. Doc. A/CONF.13/L.53 (1958).

³⁷de Klemm, *supra* note 3, at 938.

³⁸E dw ard L. Miles & William T. Burke, *Pressures on the United Nations Convention on the Law of the Sea Arising from New Fisheries Conflicts: The Problem of Straddling Stocks*, 20 O CEAN D EV. & INT'LL. 343, 351 (1989).

³⁹1982 Law of the Sea Convention, *supra* note 2, at art. 118.

³³Louis Henkin, Law for the Changing Sea, in U SES OF THE SEA 69, 70-71 (Gullion ed. 1968).

³⁴C onvention on the High Seas, art. 2, April 29, 1958, 450 U.N.T.S. 82, 13 U.S.T. 2312, T.I.A.S. No. 5200 (entered into force, Sept. 30, 1962). The 1982 Law of the Sea Convention added two new freedoms, the freedom of scientific research and the freedom to construct artificial islands and other installations. 1982 Law of the Sea Convention, *supra* note 2, at art. 87.

 $^{^{40}}Id.$ at art. 119(1)(a). Such measures must take into account environmental and economic factors, including the special requirements of developing States, fishing patterns, the interdependence of stocks, and any generally recommended international minimum standards. *Id.*

⁴¹*Id.* at art. 119(1)(b).

D. Conclusion

The doctrine of permanent sovereignty over natural resources dominates the use and conservation of sea turtles on land and within a coastal State's territorial sea and EEZ. The only limitations imposed on this sovereign right carry high thresholds. For example, a state is responsible for damage caused in another State but the damage must be significant.⁴² In the EEZ, a State must ensure that it does not endanger a species due to over-exploitation.⁴³ A slightly lower threshold standard applies to species associated with or dependent upon a harvested species. Here, a State must ensure that the associated species is maintained above levels at which its reproduction is seriously threatened.⁴⁴ Or, if the species is a target species, then a State must ensure that the species is maintained at levels which can produce a maximum sustainable yield.⁴⁵ Similar standards persist on the high seas.⁴⁶ These rules could require a State to adopt gear modifications for fishing vessels, but only if the vague biological threshold is met. Nothing is customary international law suggests that a State must protect habitat.

Any greater protection requires States to consent voluntarily to restrictions on the exploitation of sea turtles in international waters or within one's own territory. These voluntary agreements or treaties do not change the international law principle of state sovereignty over resources or other norms of customary international law.⁴⁷ In other words, even though several treaties limit a state's sovereign rights over its resources, the fundamental legal status of the sea turtles and other species as property to be exploited by the individual states remains unchanged. Treaties do, however, suggest a trend towards international cooperation and conservation with regard to migratory species.⁴⁸

III. General Principles of International Law

Several concepts relating to species that are shared among States, such as migratory species, might constrain a State's exploitation of sea turtles. One particular concept, "straddling stocks," derives from the 1982 Law of the Sea Convention and already is considered part of international law. Whether the concept, which would require States to cooperate in the management of migratory species, applies to sea turtles is subject to an interpretation of the term "stock." In addition, general

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<sup>44</sup>Id. at 61(4).
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⁴⁵*Id.* at art. 61(3).

⁴⁶*Id.* at arts. 118, 119.

⁴⁸*Id*.

⁴²See supra Section II(A) (discussing the doctrine of state responsibility).

⁴³1982 Law of the Sea Convention, *supra* note 2, at art. 61(2).

⁴⁷de Klemm, *supra* note 3, at 939.

principles of international environmental law might help constrain a State's sovereign rights to exploit resources. General principles of international law represent one of the sources of public international law,⁴⁹ but debate often exists as to whether a new principle is emerging as international law or exists as international law.⁵⁰ The concept of shared resources offers particular opportunities for sea turtle protection, because, if found to be a general principle of international law, it would require countries to cooperate through consultation, notification and other means to protect sea turtles and other shared resources.

A. Straddling Stocks

The 1982 Law of the Sea Convention establishes rules for "straddling stocks," those "stock[s] or associated stocks" which occur within the EEZ of two or more coastal States or a coastal State and the high seas.⁵¹ For straddling stocks which occur within the EEZs of two or more States, these States must cooperate in the development of conservation and harvest measures for the management of these stocks.⁵² For straddling stocks which occur both within the EEZ and the high seas, the coastal State has primacy for the development of conservation and harvest measures in the area "adjacent to" the EEZ, but must seek conservation and management measures with States that fish for the stock.⁵³

These rules significantly modify customary international law relating to straddling stocks. For stocks occurring in more than one EEZ, a coastal State no longer has the sovereign right to the stock. Instead, it must seek agreement for the conservation and management of the species with other coastal States which share the stock. In addition, a coastal State now can exert some element of sovereignty over stocks that occur in an EEZ and the high seas. States no longer can fish for stocks on the high seas without seeking some agreement with the coastal State.

Whether the term "stock" refers to sea turtles, however, is unclear. The 1982 Law of the Sea Convention does not define stock, but the term historically has been used to define fisheries. This suggests that the negotiators intended the phrase to apply to fish species. But, the 1982 Law of the Sea Convention uses the terms "species," "stocks," and "fish" seemingly interchangeably. It refers

 $^{^{49}}$ Statute of the International Court of Justice, art. 38(1)(1945). The statute identifies four sources of public international law: international conventions, custom ary law, general principles of law recognized by "civilized" nations, and judicial decisions or the writings of the most qualified publicists. *Id.*

⁵⁰D avid Hunter et al, *Concepts and Principles of International Environmental Law: An Introduction* 3 (UNEP Environment and Trade Paper No. 2, 1994).

⁵¹1982 Law of the Sea Convention, supra note 2, at art. 63.

⁵²*Id.* at art. 63(1).

⁵³*Id.* at art. 63(2).

to shared or straddling "stocks,"⁵⁴ "highly migratory species,"⁵⁵ "anadromous stocks,"⁵⁶ "catadromous species,"⁵⁷ and "catadromous fish."⁵⁸ Moreover, a recently negotiated agreement to implement the 1982 Law of the Sea Convention's provisions relating to straddling stocks and highly migratory species specifically refers to straddling "fish stocks" and highly migratory "fish stocks."⁵⁹ The agreement specifically modifies stock with "fish," which suggests the Convention's use of "stock" is broader. Because of the interchangeable use of the terms stocks, species, and fish in the Convention, and because of the specific use of the terms straddling "fish stocks" and highly migratory "fish stocks" in a related agreement, the Convention's provisions on straddling stocks can be interpreted as applying to all species. If this is true, then States are required to seek agreement on conservation and management measures for sea turtles, because sea turtles commonly cross jurisdictional boundaries.

Moreover, coastal States might be able to assert greater sovereignty over sea turtles on the high seas. First, article 63(2) requires a State fishing for straddling stocks on the high seas to seek agreement with the coastal State to fish those stocks.⁶⁰ In addition, article 116 provides that the right to fish on the high seas is subject to the rights, duties, and interests of the coastal State, including those rights provided in article 63(2).⁶¹ Coastal States also possess the sovereign right over living resources of the EEZ.⁶² Thus, article 116 means that any high seas fishing is subject to the sovereign right to use the same stock within its EEZ. As a result, the 1982 Law of the Sea Convention could be interpreted "to provide that high seas fishing on stocks that also occur within a coastal State's EEZ is subject to the sovereign right of that coastal State."

⁵⁴*Id.* at art. 63.

⁵⁵Id. at art. 64.

⁵⁶*Id.* at art. 66.

⁵⁷*Id.* at art. 67(1)-(3).

⁵⁸*Id.* at art. 67(3).

⁵⁹A greement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly M igratory Fish Stocks, U.N. Doc. A/CONF.164/37 (Sept. 8, 1995).

⁶⁰1982 Law of the Sea Convention, *supra* note 2, at art. 63(2).

⁶¹*Id.* at art. 116(b).

⁶²*Id.* at art. 56.

⁶³Burke, *supra* note 35, at 247.

If true, a coastal State could exert its sovereignty over those resources on the high seas which are also found in its EEZ. As a practical matter, however, neither international law nor the Law of the Sea Convention grants enforcement authority to enforce national conservation measures on the high seas.⁶⁴ In addition, the practice of States has not established the right of a coastal state to enforce national measures on the high seas.⁶⁵

B. Rules Relating to Shared Resources

Shared resources refer to resources that do not fall wholly within the territorial jurisdiction of one state, but straddle political borders or migrate from one territory to another.⁶⁶ The concept of shared resources is similar to straddling stocks but is broader in scope, because it clearly applies to all species, rivers, mountains and other shared resources. The general obligation concerning shared resources is to use them equitably or harmoniously.⁶⁷ This requires cooperation, notification, and consultation between the States that use the shared resource.⁶⁸

The 1974 Charter of Economic Rights and Duties of States, which contains the first explicit recognition of this concept, provides that States must cooperate, exchange information, and consult each other regarding the use of shared resources.⁶⁹ The United Nations Environment Program (UNEP) later elaborated on these core themes, but States have not adopted UNEP's Principles for Shared Natural Resources.⁷⁰ Only one treaty has embraced the concept, the ASEAN Agreement on the Conservation of Nature and Natural Resources.⁷¹ The ASEAN Agreement adopts almost *verbatim* the cooperation, notification, consultation and environmental assessment provisions of the

⁶⁵See id. at 247-248.

⁶⁷ASEAN Agreement, *supra* note 66, at art. 19(1); Principles for Shared Natural Resources, *supra* note 66, at art. 1.

⁶⁸A SEAN A greement, *supra* note 66, at arts. 19(2)(d)-(g), 19(3); Principles for Shared N atural Resources, *supra* note 66, at Principles 5, 6, 8, 9.

⁶⁹C harter for Economic Rights and Duties, U.N. General Assembly Resolution 3281, C hapter II, art. 3 (Dec. 12, 1974).

⁷⁰See Principles for Shared Natural Resources, *supra* note 66.

⁷¹A SEAN A greement, supra note 66.

⁶⁴This may not be true for measures regarding anadromous fish or for measures regarding gear restrictions. *See id.* at 247 (discussing article 66 of the 1982 Law of the Sea Convention and customary international law).

⁶⁶See Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States UNEP Doc. IG. 12/2, reprinted in 4 ENVTL. POLY & L. 48 (1979) [hereinafter "Principles for Shared Natural Resources"]; Member States of the Association of South East Asian Nations, Agreement on the Conservation of Nature and Natural Resources, art. 19, July 9, 1985, reprinted in International Environmental Law-Multilateral Agreements (Eric Schmidt Verlag, ed.) at 985:51 [hereinafter "ASEAN A greement"].

Principles for Shared Resources.⁷² It also specifically adds provisions for parties to conserve, manage, and, where applicable, regulate the harvest of migratory species.⁷³

The concept of shared resources is still in its infancy and has been slow to develop. In time, though, it may emerge as a general principle which limits States' sovereignty to exploit resources. States would be required to engage in negotiations for the use and conservation of sea turtles as well as notify, cooperate, and consult with each other to avoid harm to sea turtles.

C. Common Heritage of Humankind

The common heritage of humankind provides rights to all States in certain resources, such as outer space and the non-living resources of the deep sea-bed. The common heritage doctrine is unique because it supplants the doctrine of permanent sovereignty. This concept proclaims that no nation may exercise sovereignty over the resource, because the rights to the resource are vested in humankind as a whole.⁷⁴ States must cooperate in the management and sustainable use of the resource and share any financial or economic benefits derived from exploitation of the resource shall be equitably shared.⁷⁵

The common heritage of humankind appears promising as a doctrine for protecting sea turtles, because all States, not only coastal and fishing States, would have rights and obligations. It would require all States to cooperate in any exploitation of sea turtles on the high seas, and perhaps elsewhere depending on the doctrine's application. State also would be required to share any economic benefit from that exploitation, which might encourage conservation and reduce the economic incentives to exploit sea turtles. Nonetheless, States have applied the doctrine only to

⁷²A SEAN Agreement, *supra* note 66, at arts. 19(2)(c)-(g), 19(3); Principles for Shared Natural Resources, *supra* note 66, at Principles 4, 5, 6, 8, 9.

⁷³A SEAN A greement, *supra* note 66, at art. 3(b).

 $^{^{74}}See, e.g., 1982$ Law of the Sea Convention, *supra* note 2, at art. 137 (proclaiming the legal status of the deep sea-bed and stating that "all rights in the resources of the [deep seabed] are vested in mankind as a whole).

⁷⁵Id. at art. 140. For an excellent overview of the common heritage of humankind, see N ico J. Schrijver, Permanent Sovereignty over Natural Resources Versus the Common Heritage of Mankind, in INTERNATIONAL L AW AND D EVELOPMENT 93-99 (1988).

outer space,⁷⁶ cultural and natural landmarks,⁷⁷ and the non-living resources of the deep sea-bed.⁷⁸ Also, States have not widely accepted it and its legal status remains uncertain.⁷⁹ Thus, its application to sea turtles can be considered only in the distant future.

IV. International Environmental Agreements

A. Convention on International Trade in Endangered Species

CITES regulates international trade in endangered and other species. It does not regulate domestic trade or require parties to protect habitat. Based on a combination of biological⁸⁰ and trade data,⁸¹ the parties assess a species' vulnerability and determine in which of three appendices to place the species.⁸² This placement determines the extent to which trade is permitted in the species. For example, CITES prohibits all trade for primarily commercial purposes in species in Appendix I,

 $^{78}1982$ Law of the Sea Convention, *supra* note 2, at art. 137. The 1982 Law of the Sea Convention states: "No state shall claim or exercise sovereignty over any part of the [deep sea-bed]" and "All rights in the resources of the [deep sea-bed] are vested in mankind as a whole." *Id*.

⁷⁹See Schrijver, supra note 75, at 98 (citing some scholars who believe the doctrine to be a peremptory norm and others who consider it a "dead" doctrine). See also Bradley Larschan & Bonnie Brennan, The Common Heritage of Mankind Principle in International Law, 21 C OLUM. J. T RANSNAT'L. L. 305, 306 (1983).

 80 The necessary biological information includes the species' population size and geographic range. CITES, *supra* note 5, at art. II (1), (2); CITES, *Resolution Conference* 9.24, *in* PROCEEDINGS OF THE N INTH M EETING OF THE C ONFERENCE OF THE PARTIES (1994).

⁸¹T o list a species on any of the A ppendices, trade inform ation is relevant, but proof that a species already is in trade is not required. The parties can list a species if it "may be" affected by trade. CITES, *supra* note 5, at art. II(1). The parties can list a species on A ppendix II if it will become threatened unless trade is restricted. *Id.* at art. II(2); *See also* CITES, *Resolution Conference* 9.24, para. (b), *in* PROCEEDINGS OF THE N INTH M EETING OF THE C ONFERENCEOF THE PARTIES (1994) (stating that a species "may be" affected by trade if "there is a *potential* international demand for specimens") (emphasis added).

⁸²CITES, *supra* note 5, at arts. II, XV, XVI. A "species" is defined to include geographically separate populations. Thus, vulnerable members of a species can be protected while trade in healthier populations is allowed. *Id.* at art. I(a).

⁷⁶A greement Governing the Activities of States on the Moon and Other Celestial Bodies, Jan. 27, 1967, 610 U.N.T.S. 205 (1967), *reprinted in* 6 I.L.M. 386 (1967) (the exploration and exploitation of the moon and other celestial bodies shall be carried out for the benefit and in the interests of all countries and that these areas shall be the province of all humankind).

⁷⁷UNESCO Convention for the Protection of World Cultural and Natural Heritage, Nov. 16, 1972, U.K.T.S. 2 (1985), 27 U.S.T. 37 (1972), *reprinted in* 11 I.L.M. 1358 (1972). This convention provides that "the deterioration or disappearance of any item of cultural or natural heritage constitutes a harm ful im poverishment of the heritage of all the nations of the world ... [and] parts of the cultural and natural heritage ... need to be preserved as part of the world heritage of mankind as a whole." *Id.* at Pream ble, paras. 2, 6.

which includes species that "are threatened with extinction and are or may be affected by trade."⁸³ Trade in Appendix II species, those species which may become threatened,⁸⁴ is permitted provided the trade will not be detrimental to the survival of the species.⁸⁵ Species are listed in Appendix III solely on the basis of a decision by the country of origin and carries only minor trade restrictions.⁸⁶

The parties, which now include, Costa Rica, Nicaragua, and Panama, listed all seven species of sea turtles in Appendix I at the first conference of the parties in 1975.⁸⁷ As a result, parties cannot trade sea turtles and "specimens" of sea turtles, which include live or dead animals as well as any readily recognizable parts and derivatives of species.⁸⁸ Nonetheless, CITES provides exceptions to these general rules. In particular, CITES permits trade in specific sea turtle populations from approved "ranching" operations which take eggs from the wild population and raise them in a controlled environment. To qualify for a ranching operation, a party must meet rigorous biological, enforcement, and reporting criteria, which are described below.⁸⁹

1. The Permit Requirements of CITES

CITES establishes a permit system to monitor and regulate trade in species that are or may be threatened with extinction.⁹⁰ The permit system is central to CITES' ability to prevent the loss of species due to commercial trade. The permit requirements for species depend on the appendix

⁸⁵C IT E S, *supra* note 5, at arts. IV (2)(a), IV (6)(a).

 $^{87}See\ 50\ C.F.R.\$ § 23.23 (providing a list of all species included in the Appendices to CITES and the date on which they were included).

⁸⁸C IT E S, supra note 5, at art. I(b).

⁸⁹See infra Section IV (A)(2) (discussing ranching guidelines).

 90 CITES, supra note 5, at arts. III, IV, V.

⁸³Id. at art. II(1). This list of approximately 800 species includes the African elephant, black rhino, orangutan, and monkey-puzzle tree. See 50 C.F.R. §23.23 (providing a list of all species included in the Appendices to CITES).

⁸⁴A ppendix II species are those that "although not necessarily now threatened with extinction, may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival." CITES, *supra* note 5, at art. II(2)(a). It also includes species that look like, or have parts that look like, other listed species or their parts. *Id.* at art. II(2)(b). A ppendix II contains about 35,000 species, including the pygmy hippopotamus, A merican alligator, and several hundred genera of orchids. *See* 50 C.F.R. §23.23 (providing a list of all species included in the Appendices to CITES).

⁸⁶A ppendix III lists species that a country has identified as "subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the cooperation of other parties in the control of trade." CITES, *supra* note 5, at arts. II(3), V. A recent resolution recommends that a party first ensure that it has adequate regulations to prevent or restrict exploitation of the species at issue and that its national enforcement measures are adequate to implement the regulations. CITES, *Resolution Conference* 9.25, *in* PROCEEDINGS OF THEN INTH M EETING OF THE C ONFERENCE OF THE PARTIES (1994).

in which they are listed. Generally, trade in Appendix I specimens is prohibited for commercial purposes and requires both an import and export permit.⁹¹ Trade in Appendix II species is prohibited if it will be "detrimental to the survival of the species" and requires only an export permit.⁹² Trade in Appendix III species requires a certificate of origin or similar document.⁹³

a. Import Permits for Appendix I Species

Trade in an Appendix I species requires an import permit or, if the species is caught on the high seas, an "introduction from the sea" certificate.⁹⁴ A trader must obtain the import permit from the country of import prior to exporting the species.⁹⁵ Likewise, a trader must obtain the introduction from the sea certificate prior to transporting the species into the jurisdiction of the state of introduction.⁹⁶ These provisions are intended to deter traders from killing wildlife, exporting it, and then shopping for a permit and a buyer. Because all sea turtles are in Appendix I, these import permit provisions apply to all sea turtles that are caught within a party's EEZ and on the high seas, as well as to adults, hatchlings, and eggs collected on beaches.

To obtain an import permit or an introduction from the sea certificate, the country of import or the state of introduction must determine that:

(1) the import is for purposes which are not detrimental to the survival of the species for which the permit is sought;

(2) the proposed recipient of a living specimen is suitably equipped to house and care for it; and

(3) the specimen is not to be used for primarily commercial purposes.⁹⁷

The "primarily commercial purposes" finding is the most important one for protecting Appendix I species. Because of the significant role that trade has played in driving species toward extinction, the parties have interpreted "primarily commercial purposes" very broadly to include "any

⁹³Id. at art. V.

⁹⁵*Id.* at art. III(2)(d).

⁹⁶*Id.* at art. III(5).

⁹⁷*Id.* at arts. III(3), III(5).

⁹¹*Id.* at art. III(3), III(5).

⁹²Id. at art. IV.

 $^{^{94}}$ " Introduction from the sea" means "transportation into a State of specimens of any species which were taken in the marine environment not under the jurisdiction of any State. *Id.* at art. I(e).

transaction that is not wholly non-commercial."⁹⁸ Because almost all proposed trade in sea turtles is for commercial purposes, this finding has stopped almost all legal trade in sea turtles.

b. Export Permits for Appendix I, II, and III Species

Each export of an Appendix I or Appendix II species must be accompanied by an export permit. Before granting an export permit, the country of export must determine that:

(1) the export will not be detrimental to the survival of the species;
(2) the specimen was not obtained in contravention of the laws of that state;
(3) any living specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment; and
(4) an import permit has been granted for an Appendix I species.⁹⁹

If an Appendix II species is caught in the marine environment outside the jurisdiction of any party, the State of Introduction must make only the first and third permit findings listed above.¹⁰⁰ The conditions for a re-export permit are the same as those for an export permit, except that the re-exporting country is not required to determine that the export will not be detrimental to the survival of the species.¹⁰¹ For an Appendix III species, the country of export need not make any findings related to the biological status of the species; it must ensure that the species was caught legally and will be shipped humanely.¹⁰²

2. Ranching

Despite the Appendix I listing for all seven species of sea turtles, many populations of sea turtles *could* enter trade through a CITES-approved ranching program. Under CITES, ranching means "the rearing in a controlled environment of specimens taken from the wild" and is dependent

¹⁰⁰*Id.* at art. IV (6).

 101 Id. at arts. III(4), IV(5). This provision was omitted because the "no detriment finding" was made when the specimen was originally exported. The parties assumed, perhaps incorrectly, that re-exports would cause no additional harm to a species.

 $^{^{98}}C$ ITES, Resolution Conference. 5.10, in P roceedings of the F ifth M eeting of the C onference of the P arties (1985).

 $^{^{99}}$ C IT E S, supra note 5, at arts. III(2), IV (2).

 $^{^{102}}$ Id. at art. V (2). If a specimen listed in A ppendix III originates from a country that has not itself listed the species, a "certificate of origin" is required. Id. at art. V (3). If an A ppendix III species is being re-exported, a "re-export certificate" stating that the specimen is being re-exported is required. Id. at art. V (4).

upon the wild population for each animal raised and entering trade.¹⁰³ Although special criteria have been established for sea turtles, the parties have rejected all proposals to ranch sea turtles.

To ranch a population of any species under CITES, the parties must transfer a species or a particular population to Appendix II in conjunction with a proposal to ranch the population. The proposal must show that the proposed ranching operation will be "primarily beneficial to the conservation of the local population" by contributing to the population's increase in the wild,¹⁰⁴ through reintroduction, or in other ways.¹⁰⁵ The proposal also must include, among other things, evidence that the taking from the wild will have no significant detrimental impact on wild populations.¹⁰⁶ In addition, the products of the operation must be adequately identified and documented to ensure that they can be readily distinguished from products of Appendix I populations.¹⁰⁷

The parties recognized that the biology of sea turtles makes sustainable use of sea turtles difficult, but also that "sustainable use may conserve marine turtles and their habitats."¹⁰⁸ As a result, they developed additional, stricter requirements for transferring sea turtle populations to Appendix II for ranching purposes. A proposal for ranching sea turtles must include information relating to resource management, trade controls, and the ranching operations.¹⁰⁹ Resource management information includes information relating to the population's distribution, reproduction, mortality, and population status and trends.¹¹⁰ It also includes information relating to the proposing country's "effective implementation of a national management plan" for marine turtles, such as monitoring capabilities, habitat protection, and harvest regulation.¹¹¹ Moreover, a party submitting a proposal must describe its efforts to manage sea turtles on a regional basis. The party "shall take the lead" in

¹⁰⁴C on f. 3.15, *supra* note 103, at para. (b).

¹⁰⁶*Id.* at para. (c).

¹⁰⁷*Id.* at para. (b).

¹⁰³C ITES, *Resolution Conference* 3.15, *in* T HEP ROCEEDINGS OF THE T HIRD M EETING OF THE C ONFERENCE OF THE P ARTIES (1981). Ranching is different from captive breeding. Captive breeding involves taking individuals from the wild and establishing captively-bred populations which are not dependent on taking additional individuals from the wild. *See* CITES, *supra* note 5, at art. V II(4); CITES, *Resolution Conference* 2.12, *in* T HEP ROCEEDINGS OF THE S ECOND M EETING OF THE C ONFERENCE OF THE P ARTIES (1979); CITES, *Resolution Conference* 8.15, *in* T HEP ROCEEDINGS OF THE E IGHTH M EETING OF THE C ONFERENCE OF THE P ARTIES (1992).

¹⁰⁵*Id.* at para. (c).

¹⁰⁸C IT E S, *Resolution Conference* 9.20, preamble, *in* T HE PROCEEDINGS OF THE N INTH M EETING OF THE C ONFERENCE OF THE P ARTIES (1994).

¹⁰⁹*Id.* at Annex, para. 1.

¹¹⁰Id. at Annex, para. 1(A).

¹¹¹Id. at Annex, para. 1 (B).

developing a regional management plan among range countries of the population.¹¹²

The parties use information relating to trade controls to determine the capacity of the proposing country to regulate trade. Specifically, the party proposing to ranch sea turtles "should ensure" that each importing country has effective laws to monitor trade and enforce laws governing trade in sea turtles.¹¹³ The party also must include information relating to the ranching operation's financial plan, physical characteristics, operating procedures, and record keeping plans.¹¹⁴ It also must provide a discussion of how local people will benefit from the ranching population.¹¹⁵ Finally, sea turtle ranching proposals must summarize the benefits of the ranching operation and the legal and enforcement mechanisms that will ensure that the ranching operation will not impact wild populations detrimentally.¹¹⁶

3. Marking and Monitoring of Ranched Products

Other resolutions establish uniform marking¹¹⁷ and monitoring and reporting¹¹⁸ requirements for ranching operations. These resolutions apply, but are not specific, to sea turtle ranching. These provisions are important because the existence of ranching operations increases opportunities for illegal trade. Moreover, parties were adopting different marking systems, which caused enforcement difficulties.¹¹⁹

The marking resolution requires the parties to adopt a uniform marking system the first time a species is approved for ranching.¹²⁰ Each subsequent approved ranching operation must conform to the existing marking system.¹²¹ The uniform marking system should identify the country of origin,

¹¹³Id. at Annex, para. 2.

¹¹⁴*Id.* at Annex, para. 3.

 $^{115}Id.$

¹¹⁶Id. at Annex, para. 4.

 ^{117}C IT E S , Resolution Conference 5.16 , in T he P roceedings of the F ifth M eeting of the C onference of the P arties (1985).

 ^{118}C IT E S , $\it Resolution \ Conference \ 6 . 2 \ 2$, $\it in \ T$ he P roceedings of the S ixth M eeting of the C onference of the P arties (1987).

¹¹⁹See D avid S. F Avre, International T rade in E ndangered S pecies: A G uide to C IT E S 208 (1989).

¹²⁰R es. Conf. 5.16, *supra* note 117, at para. (f).

¹²¹*Id.* at para. (g).

¹¹²Id. at Annex, para. 1(C).

a unique identification number, and the year of production.¹²² Enforcement of the marking system is aided by an inventory of:

- (1) the status of the wild population;
- (2) the number of species annually taken from the wild;
- (3) estimates of the percentage of total production of the ranched population;

(4) the annual number of ranched population reintroduced into the wild and subsequent survival rate estimates based on survey and tag programs;

- (5) mortality rates in the ranching operation;
- (6) production, sales, and export levels; and
- (7) updates on conservation studies of the population as a whole.¹²³

If a party fails to comply with any of the transfer proposals measures, the CITES Standing Committee can request the Depository Government (Switzerland) to prepare a proposal for transfer back of the ranched population to the wild and thus to Appendix I status.¹²⁴

4. Conclusion

The permit provisions of CITES and its prohibitions against trade in Appendix I species have succeeded in significantly reducing trade in sea turtles and sea turtle parts. Its provisions are important for any comprehensive approach to sea turtle conservation. Moreover, the parties are taking a precautionary approach to trade in sea turtles and their parts under ranching operations.

Nonetheless, CITES regulates only one threat to sea turtles. CITES does not regulate domestic trade, including subsistence uses. Nor does it protect habitat or regulate subsistence hunting for food. It regulates only international trade. Thus, despite the importance of CITES, other measures also are necessary to conserve sea turtles throughout their range and to protect them from all threats.

B. Convention of the Conservation of Migratory Species of Wild Animals (CMS)

Among international agreements, only the Convention of the Conservation of Migratory Species of Wild Animals (CMS)¹²⁵ focusses solely on the conservation of migratory species. The CMS also is unique because of its structure. It creates general conservation obligations to protect

¹²²*Id.* at para. (c).

¹²³Res. Conf. 6.22, *supra* note 118, at para. (a).

¹²⁴*Id.* at para. (c).

¹²⁵C M S, *supra* note 6.

endangered migratory species listed in Appendix I.¹²⁶ In addition, it establishes a process for creating specific AGREEMENTS for the conservation of species listed in Appendix II. Species in Appendix II either have an "unfavourable conservation status" which requires international conservation and management or have "a conservation status which could significantly benefit" from international cooperation.¹²⁷ Thus, unlike migratory species in Appendix I, Appendix II species do not need to be endangered or threatened with extinction before the parties implement conservation obligations. On the other hand, parties have no conservation obligations regarding Appendix II species until they conclude an AGREEMENT.¹²⁸

The parties (Panama is a party, but not Costa Rica or Nicaragua) have placed all species of sea turtle except the flatback on Appendix I and II. Thus, parties that are range states incur the strict conservation obligations *and* they must develop AGREEMENTS for sea turtles.

1. Appendix I Species and Conservation Obligations

Parties that are Range States must "endeavour" to conserve and, where feasible, restore essential habitat of Appendix I species.¹²⁹ The CMS defines "range state" as any State that exercises jurisdiction over any part of the range of a migratory species, or a State whose flag vessels engage in taking a migratory species outside that State's national jurisdictional limits.¹³⁰ This broad definition of "range states," which includes jurisdiction over flag vessels on the high seas, requires parties to regulate their vessels and citizens on the high seas, where sea turtles spend a portion of their lives.

In addition, range States also must endeavour to prevent or mitigate obstacles to the migration of the species,¹³¹ and "to the extent feasible," reduce factors leading to endangerment.¹³² Range States also "shall prohibit" the "taking," including the "capturing" and "harassing," of Appendix I species.¹³³ One author interprets this provision as prohibiting the capture of sea turtles

¹²⁹C M S, supra note 6, at art. III(4)(a).

¹³⁰*Id.* at art. I(1)(a).

¹³¹*Id.* at art. III(4)(b).

 132 Id. at art. III(4)(c).

¹³³Id. at art. IV (5). "Taking" is defined as "taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in any such conduct." Id. at art. I(4)(i).

¹²⁶Id. at arts. II, III.

¹²⁷*Id.* at art. III(1).

¹²⁸Simon Lyster, Convention on the Conservation of Migratory Species of Wild Animals, 29 NATURAL R ESOURCES J. 979, 982 (1989).

in shrimp trawlers that do not use turtle excluder devices, even if the capture is not deliberate.¹³⁴

Nonetheless, the parties can take Appendix I species, including sea turtles, for scientific purpose, enhancing the survival of species in the wild, traditional subsistence needs, and "extraordinary circumstances" are exempted.¹³⁵ Although the exceptions appear broad, they must be "precise as to content" and "limited in space and time."¹³⁶ These exemptions appear to allow for harvesting and ranching to enhance wild sea turtle populations, and allow for subsistence harvesting by indigenous and traditional communities. A party must identify which exceptions it permits.¹³⁷

2. Appendix II Species and AGREEMENTS

The CMS encourages a regional approach to conserve of Appendix II migratory species, because range states, as opposed to the parties as a whole, must "endeavour" to development AGREEMENTS for the conservation of Appendix II migratory species.¹³⁸ In addition, the parties can conclude AGREEMENTS for distinct population segments rather than the species as a whole.¹³⁹ The purpose of an AGREEMENT is "to restore the migratory species concerned to a favourable conservation status or to maintain it in such a status."¹⁴⁰ AGREEMENTS should cover the whole range of a migratory species,¹⁴¹ identify the species covered,¹⁴² describe the species' range and migration route,¹⁴³ require each party to designate a national authority to implement the

 $^{136}Id.$

¹³⁷*Id.* at art. III(7).

¹³⁸*Id.* at art. IV (3).

¹⁴¹*Id.* at art. V (2).

¹⁴²*Id.* at art. V (4)(a).

¹⁴³*Id.* at art. V (4)(b).

¹³⁴Lyster, *supra* note 128, at 988 (stating that "it is fair to conclude that article III(5) imposes a legal duty on parties that are Range States of the Atlantic Ridley [Kemp's ridley] to prohibit the use of shrimp trawls in areas where the turtle occurs unless the trawls are fitted with "Turtle Excluder Devices."

 $^{^{135}}$ C M S, supra note 6, at III(5).

 $^{^{139}}$ M igratory species is defined as "the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national boundaries." *Id.* at art. I(1)(a). The parties also are "encouraged" to conclude "A greements" for migratory species not listed on Appendix II. *Id.* at art. IV (4). The official text of the CM S, article IV (4) misprints "A greements" as "A G R E E M E N T S," an error which was acknowledged in Resolution of the C onference of the Parties, 2.2. *See* L yster, *supra* note 128, at 992, n. 42.

 $^{^{140}}$ C M S, supra note 6, at art. V(1).

AGREEMENT,¹⁴⁴ monitor the effectiveness of the AGREEMENT,¹⁴⁵ and establish procedures for dispute settlement.¹⁴⁶ "Where feasible," an AGREEMENT also "should" be based on sound ecological principles and include a periodic review of the species' conservation status, coordinated management plans, information exchange, and suitable habitat networks in relation to migration routes.¹⁴⁷

The CMS is contemplating the preparation of several AGREEMENTS for the protection of sea turtles. A lack of staff, however, has limited the effectiveness of the Convention generally and hindered the preparation of sea turtle AGREEMENTS specifically.¹⁴⁸ Moreover, the lack of mandatory language to conclude AGREEMENTS must be emphasized. Despite the inclusion of all sea turtle species on Appendix II, the parties have no clear obligation to conclude AGREEMENTS.

3. Conclusion

The CMS offers great potential to significantly protect sea turtles throughout their range from all threats. With all species of sea turtle native to Costa Rica, Nicaragua, and Panama listed in both Appendix I and II, the parties have positive conservation obligations and the duty to conclude an AGREEMENT for sea turtles. Unfortunately, the CMS is mostly potential presently. The parties have been slow to develop AGREEMENTS and any AGREEMENT for a sea turtle is at least two years away.¹⁴⁹ Moreover, even if the parties concluded an AGREEMENT, it would not include Costa Rica and Nicaragua, which are not parties.

C. Convention on Biological Diversity

The Convention on Biological Diversity (the Biodiversity Convention)¹⁵⁰ seeks to conserve and sustainably use biological diversity.¹⁵¹ Sea turtles certainly are elements of biological diversity, which is defined as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic systems ... and includes diversity within species and between

¹⁴⁴*Id.* at art. V (4)(c).

¹⁴⁵*Id.* at art. V (4)(c).

¹⁴⁶*Id.* at art. V (4)(e).

¹⁴⁷*Id.* at art. V (5).

¹⁴⁸Telephone Conversation with Doug Hykle, CMS Secretariat (Feb. 1996).

¹⁴⁹Telephone Conversation with Doug Hykle, CMS Secretariat (Feb. 1996).

¹⁵⁰Biodiversity Convention, *supra* note 1.

 $^{^{151}}$ Id. at art. 1. A third objective is to share equitably the benefits from the use of genetic resources. Id.

species and ecosystems."¹⁵² The Biodiversity Convention contains no provisions specific to the protection of sea turtles, but its articles do provide planning and habitat protection mechanisms to protect biological diversity on both a national and regional level. Nonetheless, other habitat and species protection treaties, such as CITES and the CMS, are much more specific. In fact, the Secretariat of the Biodiversity Convention is investigating a mechanism for linking other, more specific treaties to the Biodiversity Convention.¹⁵³ Costa Rica, Nicaragua, and Panama all are parties to the Biodiversity Convention, which now has 142 parties.

1. Planning Requirements

The Biodiversity Convention establishes planning and monitoring obligations for the protection of biological diversity. For example, parties must, "as far as possible and as appropriate," prepare national plans,¹⁵⁴ integrate of conservation and sustainable use into plans and policies,¹⁵⁵ and identify and monitor components of biological diversity important for conservation and sustainable use.¹⁵⁶ Parties also must prepare environmental impact assessments for projects that are likely to have a significant adverse impact on biological diversity.¹⁵⁷ These provisions could be used to support greater planning of fishing activities and sea turtle egg harvesting.

2. Habitat and Species Protection Requirements

The Biodiversity Convention also requires parties, "as far as possible and as appropriate," to protect ecosystems, habitat, and minimum viable populations of species in their natural surroundings.¹⁵⁸ This ecological standard is certainly better than that imposed by the 1982 Law of the Sea Convention, which seeks only to protect living resources from endangerment due to over-exploitation.¹⁵⁹ The Biodiversity Convention standard requires parties to keep populations above minimum viable populations (not merely a level above endangerment) and relates to all threats (not merely over-exploitation). On the other hand, the provision is heavily qualified. The parties have not elaborated on the terms "as far as possible" and "as appropriate." Thus, the extent of a party's

¹⁵⁵*Id.* at art. 6(b).

¹⁵⁶Id. at art. 7.

¹⁵⁷*Id.* at art. 14.

¹⁵⁸*Id.* at art. 8(d).

¹⁵²*Id.* at art. 2.

¹⁵³See Chris Wold, The Biodiversity Convention and Existing International Environmental Agreements: Opportunities for Synergy (describing potential institutional collaborations between the Biodiversity Convention and other agreements).

¹⁵⁴B iodiversity Convention, *supra* note 1, at art. 6(a).

¹⁵⁹1982 Law of the Sea Convention, *supra* note 2, at art. 61(2).

obligations is unclear.

Parties also are asked to establish protected areas to conserve biological diversity¹⁶⁰ and management guidelines for these areas.¹⁶¹ Parties also must manage biological resources¹⁶² within or outside protected areas to ensure their conservation and sustainable use.¹⁶³ Moreover, restore degraded ecosystems,¹⁶⁴ promote the recovery of threatened species,¹⁶⁵ and maintain legislation to protect threatened species.¹⁶⁶ Again, these obligations are qualified with troublesome language that makes the extent of the obligation ambiguous. Nonetheless, parties have *some* obligation to protect sea turtles as threatened species and as components of biological diversity.

The Biodiversity Convention specifically protects customary uses of biological resources in accordance with traditional cultural practices, provided that they are compatible with conservation and sustainable use principles.¹⁶⁷ In addition, parties must "respect, preserve and maintain" the practices of indigenous and local communities.¹⁶⁸ Thus, States must recognize these rights when developing measures to protect sea turtles. If for instance, eggs are taken en masse for subsistence living this must be respected, provided the harvest is consistent with principles of conservation and sustainable use.

The Biodiversity Convention is beginning to take an active role in marine conservation, although sea turtles are not now a priority. The parties adopted a decision to prepare guidelines and national and international actions in five areas: (1) marine and coastal protected areas; (2) sustainable use of coastal and marine living resources; (3) integrated area management; (4) alien species introductions; and (5) mariculture.¹⁶⁹

For sea turtles, several of these provisions could be relevant. In particular, parties should

¹⁶¹*Id.* at art. 8(b).

 $^{162}"$ Biological resources" include genetic resources, organisms, or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity. Id. at art. 2.

¹⁶⁴*Id.* at art. 8(f).

 $^{165}Id.$

¹⁶⁶*Id.* at art. 8(k).

¹⁶⁷*Id.* at art. 10(c).

¹⁶⁸*Id.* at art. 8(j).

¹⁶⁰Biodiversity Convention, *supra* note 1, at art. 8(a).

¹⁶³*Id.* at art. 8(c).

 $^{^{169}\}text{D}$ ecision, U N E P /C B D /C O P /2 /C W /L .2 1 /R ev .1 .

establish representative systems of marine and coastal protected areas and make management decisions using the precautionary principle.¹⁷⁰ In addition, the parties should identify constraints for conversion of fishing gear and for phase-out of fishing overcapacity, as well as the possibility of reducing subsidies for fisheries.¹⁷¹ Further, the parties should promote "integrated marine and coastal area management" for the development of the marine and coastal environment.¹⁷² The parties created an expert group to investigate these issues in more detail.¹⁷³

3. Cooperation

Parties also have an obligation to collaborate to protect migratory species, particularly sea turtles. Parties are required to cooperate on matters beyond the national jurisdiction of any country and other matters of "mutual interest."¹⁷⁴ Parties also must encourage the use of bilateral, regional, or multilateral agreements to control activities that are likely to have significant adverse impacts on biodiversity in another country's jurisdiction or on the high seas.¹⁷⁵ At a minimum, the migratory nature of sea turtles makes them a "matter of mutual interest" which requires cooperation among parties. Further, if a party's activities, such as shrimp trawling, might significantly effect sea turtles outside their own jurisdiction, then that party must initiate negotiations with affected States to resolve the issue.

4. Conclusion

At present, the Biodiversity Convention includes nothing that requires parties to protect sea turtles. Yet, the parties are preparing measures to protect the marine environment. While these measures are still far from completed, they represent an important step in developing specific conservation measures from the Convention's very vague, general provisions. At the same time, the developing provisions regarding the marine environment do not specifically address sea turtles and it is not clear that they will.

 $^{170}Id.$

 $^{171}Id.$

 ^{173}D ecision, U N E P /C B D /C O P /2 /C W /L .2 1 /R ev .1 .

¹⁷⁴Biodiversity Convention, supra note 1, at art. 5.

¹⁷⁵*Id.* at art. 14(c).

¹⁷²Integrated marine and coastal area management "is a participatory process for decision making to prevent, control, or mitigate adverse impacts from human activities in the marine and

coastal environment, and to contribute to the restoration of degraded coastal areas. it involves all stakeholders, including: decision makers in the public and private sectors; resource owners, managers, and users; nongovernmental organizations; and the general public. Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA), 1st Meeting, Sept. 1995, at 52.

D. Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere

Costa Rica, Nicaragua, and Panama all are parties to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (the Western Hemisphere Convention),¹⁷⁶ which asks parties to establish different types of protected areas. Like the Biodiversity Convention, however, the language of the Western Hemisphere Convention is filled with qualifiers. Thus, a party's obligations under it are minimal at best. Further, the Convention likely requires no more from a party than they must do already under the Biodiversity Convention or CITES. Nonetheless, the Western Hemisphere Convention is another possible mechanism for implementation of national and regional agreements to address sea turtle questions.

For example, the Preamble notes the need to preserve representatives of all species in their natural habitats in order to prevent their extinction due to human activity. One way the Convention seeks to protect biodiversity is through the creation of national parks, national reserves, nature monuments, or strict wilderness reserves.¹⁷⁷ Strict wilderness reserves are the most protected areas, and preclude commercial developments and even motorized transportation.¹⁷⁸ Parties must prohibit the exploitation of all resources (including species) in national parks, but also preserve them for the enjoyment of humans.¹⁷⁹ These provisions preclude subsistence uses in national parks and strict wilderness reserves. A national reserve permits "such uses as are consistent with the purposes for which the area is established."¹⁸⁰

Despite this classification of protected areas, parties are not necessarily required to create them. They only are required "to explore at once the possibility of establishing" them.¹⁸¹ Moreover, a party does not need to establish these protected areas if it is "impractical."¹⁸² Nonetheless, if a party does establish a national park or a strict wilderness reserve pursuant to the Western Hemisphere Convention, the party must prohibit the exploitation of that species and its habitat. In addition, parties must "agree to adopt, or propose such adoption" laws and regulations to manage these

¹⁷⁶The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, 161 U.N.T.S. 193, U.S.T.S. 981, 56 Stat. 1374 [hereinafter the Western Hemisphere Convention].

¹⁷⁷*Id.* at art. I.

¹⁷⁸*Id.* at arts. I(4), IV.

¹⁷⁹*Id.* at arts. I(1), III.

 $^{^{180}}Id.$ at arts. I(2), IV .

¹⁸¹*Id.* at art. II(1).

¹⁸²*Id.* at art. II(2).

areas.183

The Western Hemisphere Convention also obligates parties to protect those species which the parties place in the Annex, but it does not include criteria for listing species. Moreover, only the United States appears to have listed a sea turtle, the green turtle.¹⁸⁴ If the parties place species in the Annex, they must protect them "as completely as possible." Complete protection includes a prohibition on hunting, killing, capturing, or taking these species without proper governmental approval; approval should be granted only in "special circumstances."¹⁸⁵ Parties also must regulate through a permit process the import, export, and transit of domestically protected species, ¹⁸⁶ much of which is now done under CITES. These provisions allow parties to protect sea turtles, yet also allow regulated ranching or harvesting.

Finally, the parties agree to cooperate with each other to promote the objectives of the Convention,¹⁸⁷ a provision which grants the parties legal authority to create mechanisms or agreements to protect migratory species. Theoretically, Costa Rica, Nicaragua, and Panama could create a regional reserve that provides a protected corridor for sea turtle migration. Further, the three nations could develop cooperative enforcement mechanisms. But, because the Western Hemisphere has no administrative structure to bring parties together, the Convention remains largely unimplemented.¹⁸⁸ The U.S. Fish and Wildlife Service, however, provides technical and financial assistance to other parties and Peru has adopted protected areas legislation pursuant to the Convention.¹⁸⁹

V. International Environmental Agreements Not In Force

A. The SPAW Protocol to the Cartagena Convention

The Protocol Concerning Specially Protected Areas and Wildlife (the SPAW Protocol)¹⁹⁰ to

¹⁸⁶*Id*. at art. IX.

¹⁸⁷*Id.* at art. VI.

¹⁸⁹*Id*.

¹⁸³*Id.* at art. V.

¹⁸⁴The United States listed the green sea turtle by 1967 as "peripheral" without defining that term. Telephone Interview with Herb Raffaele, U.S. Fish and Wildlife Service, Western Hemisphere Program Officer (Mar. 6, 1996).

¹⁸⁵Western Hemisphere Convention, *supra* note 176, at art. VIII.

¹⁸⁸See Kathleen Rogers and Dr. James A. Moore, *Revitalizing the* Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere: *Might Awakening a Visionary but "Sleeping" Treaty Be the Key to Preserving Biodiversity and Threatened Areas in the Americas?*, 36 HARV. INT'L L. J. 465, 474-478 (1995) (describing the parties' implementation of, and implementation inconsistent with, the Western Hemisphere Convention).

¹⁹⁰SPAW Protocol, *supra* note 7.

the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean (the Cartagena Convention)¹⁹¹ contains a number of rules that would aid in the preservation of sea turtles. Panama and Costa Rica are parties to the Cartagena Convention, but neither country has ratified the SPAW Protocol, which has yet to enter into force.¹⁹²

The SPAW Protocol requires parties to implement national as well as cooperative measures for the protection of protected areas and several categories of species, including endangered species,¹⁹³ threatened species,¹⁹⁴ protected species,¹⁹⁵ and endemic species.¹⁹⁶ For example, parties have obligations to establish and manage protected areas unilaterally¹⁹⁷ and obligations to designate and manage protected areas collaboratively.¹⁹⁸ Likewise, parties have unilateral obligations to protect different endangered, threatened, protected, and endemic species,¹⁹⁹ as well as obligations to list these types of species in one of three annexes for cooperative conservation measures.²⁰⁰

Whichever obligations apply, they will apply only in the "Wider Caribbean Region," defined to include the marine environment of the Gulf of Mexico, the Caribbean Sea, and the exclusive economic zones in the Atlantic Ocean of the parties,²⁰¹ as well as salt water areas landward of the

¹⁹⁵"Protected species" are species or subspecies or their populations accorded protection pursuant to article 10 of the SPAW Protocol. *Id.* at art. 1(h).

¹⁹⁶"Endemic species" are species or subspecies or their populations "whose distribution is restricted to a limited geographic area." *Id.* at art. 1(i).

¹⁹⁷*Id.* at arts. 4, 5, 6.

¹⁹⁸*Id.* at art. 7.

¹⁹⁹*Id.* at art. 10.

 $^{200}Id.$ arts. 1(j)-(1), 11(1).

¹⁹¹Cartagena Convention, *supra* note 7.

¹⁹²As of February 28, 1996, only the Netherlands and St. Vincent and the Grenadines had ratified the SPAW Protocol. Telephone Interview with Alessandra Vanzella, Program Officer for the SPAW Protocol, United Nations Environment Program (Feb. 28, 1996).

¹⁹³"Endangered species" are species, subspecies or their populations that "are endanger of extinction throughout all or part of their range and whose survival is unlikely if the factors jeopardizing them continue to operate." SPAW Protocol, *supra* note 7, at art. 1(f).

¹⁹⁴"Threatened species" are species or subspecies or their populations that "are likely to become endangered within the foreseeable future throughout all or part of their range if the factors causing numerical decline or habitat degradation continue to operate" or that are naturally rare and "potentially and actually subject to decline and possible endangerment or extinction." *Id.* at art. 1(g).

 $^{^{201}}Id.$ at art. 2. The "Wider Caribbean Region" includes the "marine environment of the Gulf of Mexico, the Caribbean Sea, and the areas of the Atlantic Ocean adjacent thereto, south of 30 degrees north latitude and within 200 nautical miles of the Atlantic coasts" of the parties. The Cartagena Convention, *supra* note 7, at art. 1(c); *see* SPAW Protocol, *supra* note 7, at art. 1(c), (incorporating by reference the Cartagena Convention definition of "Wider Caribbean Region").

coast. It also includes terrestrial areas designated by a party having jurisdiction over that area.²⁰² Because all species of sea turtles are listed in Annex II, the parties, once the Protocol is in force, must undertake a number of measures to protect sea turtles in their marine environment. The parties are not obligated to protect nesting beaches, however, unless a party designates a beach within its jurisdiction as within the definition of the "Wider Caribbean Region."

1. National Obligations

a. General Obligations

Parties have general obligations "to protect, preserve, and maintain in a sustainable way" protected areas and threatened and endangered species within their jurisdiction, which includes the regulation of a country's flag vessels on the high seas.²⁰³ The parties also must regulate, and "where necessary," prohibit activities that would have an adverse affect on the species and protected areas.²⁰⁴ The Protocol does not suggest when prohibitions might be "necessary." The Protocol specifically reasserts each party's sovereignty by requiring that measures to protect protected areas and species must be consistent with international law, including the freedom of navigation.²⁰⁵ In addition, parties must manage wildlife, to the extent possible, in a manner which prevents other species from becoming endangered or threatened.²⁰⁶

b. Protected Areas

The parties also must, "when necessary," establish protected areas to sustain the natural resources of the Wider Caribbean Region,²⁰⁷ but the Protocol does not suggest when the establishment of protected areas might be "necessary." A party must design a protected area, if established, to conserve, maintain, and restore coastal and marine ecosystems that will maintain biological diversity, habitats and ecosystems "critical to the survival and recovery" of endangered or threatened species, and productivity of ecosystems that local inhabitants depend upon for economic benefit.²⁰⁸

Once a protected area is established, the parties are required to "take such measures as are

²⁰²SPAW Protocol, *supra* note 7, at art. 1(c)(ii).

²⁰³*Id.* at art. 3(1).

²⁰⁴*Id.* at art. 3(2).

²⁰⁵*Id.* at art 3(2).

²⁰⁶*Id*. at art 3(3).

²⁰⁷*Id.* at art. 4(1).

 $^{^{208}}$ *Id.* at art. 4(2)(a)-(d).

necessary and practicable to achieve the objectives for which the protected area was established."²⁰⁹ Although the parties have a binding obligation to take such measures, they have the discretion to choose the types of measures to employ. The SPAW Protocol provides an exhaustive, non-binding list of measures which the parties are not required to take.²¹⁰

Despite the non-binding nature of this list, the list includes several provisions that could help protect sea turtles, provided that a protected area is established. First, a party should regulate or prohibit ocean discharging or dumping of waste or other potentially harmful substances,²¹¹ as well as coastal discharges causing pollution.²¹² A party also should regulate or prohibit fishing, taking, harvesting, importing, and exporting of, and trade in, threatened or endangered species or their parts.²¹³ Moreover, parties should prohibit activities that result in the destruction of endangered and threatened species and regulate activities "likely to harm or disturb such species, their habitats or associated ecosystems."²¹⁴ Parties also should regulate development and tourist and recreational activities that are not compatible with the values of the protected areas or that might adversely affect threatened and endangered species.²¹⁵

These provisions grant parties broad authority to regulate activities that threaten sea turtles. Parties could develop water quality criteria and otherwise regulate or prohibit pollution into the marine habitats of sea turtles as well as terrestrial habitats if a party designates a terrestrial protected area. In addition, the habitat provisions permit parties to protect the migration routes of sea turtles. The provisions relating to fishing and trade in endangered and threatened species provide vast authority to control the taking and trade in sea turtles from any activity. And the provisions permitting the regulation of development allow authority to regulate the siting, construction, and design of facilities.

2. Planning and Management Regime for Protected Areas

If a party establishes a protected area, it must adopt and implement management and enforcement plans for areas protected pursuant to the SPAW Protocol.²¹⁶ In addition to identifying

²¹⁶*Id.* at art. 6(1).

²⁰⁹*Id.* at art. 5(1).

²¹⁰*Id.* at art. 5(2).

²¹¹*Id.* at art. 5, §2(a).

 $^{^{212}}Id.$ at art 5(2)(b).

²¹³*Id.* at art. 5(2)(d), 5(2)(j).

 $^{^{214}}Id.$ at art. 5(2)(e).

 $^{^{215}}Id.$ at art. 5(2)(k)-(l).

the appropriate legal, institutional, and management measures applicable to the protected area,²¹⁷ the parties also "should" permit the "active involvement of local communities" in the planning and management of the protected areas, and "assistance to and training of, local inhabitants who may be affected by the establishment of protected areas."²¹⁸

Based on these provisions, parties could offer, or local communities could demand, the participation of local people in the decisionmaking process. For communities dependent on the harvest of sea turtle eggs for cash or food, their inclusion in the decisionmaking process might influence greatly the types of management options discussed.

3. National Measures for Protection of Species

Parties also are required to identify any *threatened or endangered species* within their national territories,²¹⁹ and regulate or prohibit any activities that might adversely affect them or their habitats.²²⁰ In addition, parties must regulate and prohibit, where necessary, "all forms of destruction or disturbance", including picking, collecting, or commercial trade, of *protected species of plants* or their parts or products.²²¹ Parties also must regulate and prohibit, "where necessary," the taking (including incidental taking) and commercial trade in *protected species of animals*.²²² Parties also must protect *protected species of animals*.²²² Parties also must protect *protected species of animals* from disturbances, especially during periods of breeding or migration.²²³ Parties also are required to take additional measures, through bilateral or multilateral agreements, for the protection and recovery of migratory species that are considered protected species.²²⁴

4. **Cooperative Measures**

The SPAW Protocol also requires the parties to make joint decisions regarding protected areas and species protection. For example, the parties are required to prepare a list of protected areas

- ²¹⁹*Id.* at art. 10(1).
- ²²⁰*Id*. at art. 10(1).

²²⁴*Id.* at art. 10(5).

²¹⁷*Id.* at art. 6(b).

 $^{^{218}}Id.$ at art. 6(2)(e).

²²¹*Id.* at art. 10(2).

²²²*Id.* at art. 10(3)(a).

²²³*Id.* at art. 10(3)(b).

which will determine priority for scientific research and other forms of mutual assistance.²²⁵ The parties do not incur additional conservation obligations concerning these listed protected areas.

In addition, parties must adopt cooperative measures for the protection and recovery of species that the parties list in Annexes I, II, and III. The Protocol is unclear for which species the parties must adopt cooperative measures. According to the definitional section, Annexes I, II, and III include endangered, threatened, protected, and endemic species.²²⁶ The substantive provision requiring cooperative action, however, refers only to threatened and endangered species listed on the Annexes.²²⁷ The Annexes, themselves, do not distinguish among the different categories of species. This suggests that the negotiators likely intended the parties to protect *all* species in the Annexes.²²⁸

If this is true, the parties must adopt measures, similar to those for nationally-listed threatened and endangered species, to protect sea turtles, all of which are included in Annex II.²²⁹ For example, parties must ensure "total protection and recovery" of Annex II species by prohibiting the taking, killing and possession (including incidental taking, killing or possession) and commercial trade in Annex II species.²³⁰ Parties also must protect Annex II species from disturbances, especially during periods of breeding or migration.²³¹

Although these obligations are similar to those required for nationally protected species, these obligations are not qualified. For example, under national measures, the parties must "regulate, and where appropriate, prohibit" taking and killing of threatened and endangered species.²³² For Annex II animal species, however, parties *must* prohibit their taking and killing; they cannot merely regulate these activities.²³³ In addition, they cannot claim that the measures are not "appropriate," although they can adopt exemptions to the prohibitions, provided that the exemptions do not jeopardize the

²²⁷*Id.* at art. 11(1).

²³¹*Id.* at art. 11(1)(b)(ii).

²³²*Id.* at art. 10(3)(a)-(b).

²³³*Id.* at art. 11(1)(b).

²²⁵*Id.* at art. 7.

 $^{^{226}}See \ Id.$ at arts. 1(j)-(l) (referring to "the categories defined in Article 1," which includes endangered, threatened, protected, and endemic species).

²²⁸The Program Officer for the SPAW Protocol was unaware of this discrepancy. She believes that the Annexes likely will include endangered and threatened species of regional concern. Endemic species are of national concern, because they have very restricted ranges. Protected species are addressed in article 10, relating to national measures. Telephone Interview with Alessandra Vanzella, Program Officer of the SPAW Protocol, United Nations Environment Program (Feb. 28, 1996).

²²⁹SENATE TREATY DOC. No. 5, 103 Congress, 1st Session, at 42 (1993).

²³⁰SPAW Protocol, *supra* note 7, at art. 11(1)(b)(i).

species.²³⁴ The parties also must grant priority to species in the Annexes for research and mutual assistance.²³⁵

The signatories (as opposed to parties; the Protocol is not yet in force) have adopted management guidelines for sea turtles. The parties are expected to implement the recommendations within them, but the guidelines themselves are non-legally binding.²³⁶

5. Conclusion

Like the CMS, the SPAW Protocol has great potential for protecting sea turtles. Although not directed specifically to sea turtles, the SPAW Protocol provides the legal framework for powerful conservation measures. Unlike the Biodiversity Convention and the Western Hemisphere Convention, the obligations are much more specific. Moreover, the signatories are developing guidelines for sea turtles even in the absence of a protocol that has entered into force. Those actions suggest that the signatories are convinced that the habitat and species conservation measures of the SPAW Protocol are necessary for the protection of species in the Wider Caribbean Region.

B. Inter-American Convention for the Protection and Conservation of Sea Turtles

Countries of the Western Hemisphere recently drafted the Inter-American Convention for the Protection and Conservation of Sea Turtles (Inter-American Sea Turtle Convention)²³⁷, the first attempt to comprehensively protect sea turtles in the Western Hemisphere. Costa Rica, Nicaragua, and Panama all participated in the negotiations. The Inter-American Sea Turtle Convention, although not yet in force, takes several important steps to protect sea turtles. First, its area of application includes not only the terrestrial territory, but also the adjacent waters of the Gulf of Mexico, the Caribbean Sea, and the Atlantic and Pacific Oceans within the jurisdiction of each of the parties.²³⁸ The Convention also states that a party "shall take appropriate and necessary measures" to regulate vessels flying under its flag on the high seas.²³⁹ If a party must prohibit its flag vessels from disturbing or taking sea turtles on the high seas, the Inter-American Sea Turtle Convention Sea Turtle Convention for the rules of conduct for fishing vessels on the high seas.

Second, the Inter-American Sea Turtle Convention includes provisions to prohibit the

²³⁴*Id.* at art. 11(2).

²³⁵*Id.* at art. 11(3).

²³⁶The management guidelines for sea turtles did not arrive in time for inclusion in this report.

²³⁷Inter-American Sea Turtle Convention, *supra* note 8.

²³⁸*Id.* at art. III.

²³⁹*Id.* at art. IV(1)(b).

domestic trade in sea turtle and their products.²⁴⁰ It also includes general provisions to protect sea turtle habitat and prohibit the taking of sea turtles and their eggs.²⁴¹ The Convention allows each Party exceptions to the prohibitions against taking and domestic trade to satisfy the "economic subsistence needs of traditional communities," but a Party allowing an exception must establish a management program that limits the levels of intentional taking.²⁴² The Convention also requires the use of turtle excluder devices.²⁴³

1. Habitat Protection and the Regulation of Taking

The Inter-American Sea Turtle Convention requires parties to protect, conserve, and, if necessary, restore sea turtle habitat and nesting sites.²⁴⁴ The actual obligations of a country to protect habitat are not precisely clear. Although the Convention requires parties to protect and conserve sea turtle habitat, the terms "protection" and "conservation" are not defined. Annex II embellishes the "protection and conservation" obligations, but, while Article IV requires parties to protect and conserve sea turtles, Annex II requires parties to "consider" the adoption of measures to protect and conserve sea turtles.²⁴⁵ These measures may include assessments of the environmental impact of activities that may affect sea turtle habitats, management and regulation of beach activities, "to the establishment of protected areas.²⁴⁶ At a minimum, the parties must restrict human activities, "to the extent practicable," that could "seriously" affect sea turtles, especially during the periods of reproduction, nesting and migration.²⁴⁷ The qualifying language "to the extent practicable" casts doubt on the extent of the obligation, but the prohibition against disturbing sea turtles appears to be unique among treaties.

The Inter-American Sea Turtle Convention also requires a country to prohibit the "intentional capture, retention or killing of, and domestic trade in, sea turtles, their eggs, parts or products."²⁴⁸ The provisions prohibiting domestic trade are unique. Because these provisions caused intense

 $^{241}Id.$

²⁴²*Id.* at art. IV(3).

²⁴⁶Id.

²⁴⁷*Id*. at art. IV(2)(c).

²⁴⁸*Id.* at art. IV(2)(a).

²⁴⁰*Id.* at art. IV(2)(a).

²⁴³*Id.* at art. IV(2)(h) & Annex III.

²⁴⁴*Id.* at art. IV(2)(d).

²⁴⁵Id. at Annex II.

debate among the negotiators,²⁴⁹ the Convention includes exceptions. Each Party may determine unilaterally to allow the taking of, and domestic trade in, sea turtle eggs and their parts and products to satisfy the "economic subsistence needs of traditional communities."²⁵⁰ A Consultative Committee of the Convention, composed of representatives from the parties as well as three representatives from the scientific community, private industry, and non-governmental organizations,²⁵¹ will provide recommendations concerning the exception which the party must take into account.²⁵² Moreover, a Party allowing an exception must establish a management program that limits the levels of intentional taking and provide information relating to the management program.²⁵³

Parties also must regulate fishing activities to reduce "to the greatest extent practicable," the incidental capture or death of sea turtles through "appropriate regulation."²⁵⁴ The Convention also includes provisions relating to the development and use of turtle excluder devices (TEDs).²⁵⁵ The Parties must require vessels subject to their jurisdiction to use TEDs that are properly installed and functional and approved by the parties.²⁵⁶ The Convention includes exceptions to these requirements for shrimp trawl vessels whose nets are retrieved exclusively by manual means, for shrimp trawl vessels for which no TEDS have been developed, and for shrimp trawl vessels using gear that has been demonstrated not to pose a risk of incidental mortality of sea turtles or is operating under conditions for which there is little likelihood of interaction with sea turtles.²⁵⁷ A party that allows an exception to the TED requirement must provide scientific evidence to the Parties demonstrating the lack of risk to, or likelihood of interaction with, sea turtles.²⁵⁸ Exceptions also exist for shrimp trawl vessels conducting scientific research and in areas where the presence of algae, seaweed, or other special conditions make the use of TEDs impracticable.²⁵⁹

²⁵¹*Id.* at art. VII(1).

²⁵²*Id.* at art. IV(3)(a).

²⁴⁹Telephone Interview with Marydele Donnelly, Marine Turtle Specialist Group and member of U.S. delegation to the negotiations (Feb. 22, 1996).

²⁵⁰Inter-American Sea Turtle Convention, *supra* note 8, at art. IV(3)(a).

²⁵³*Id.* at art. IV(3)(b).

²⁵⁴*Id.* at art. IV(2)(h).

²⁵⁵*Id.* at art. IV(2)(h) & Annex III.

²⁵⁶*Id.* at Annex III(3), (7).

²⁵⁷*Id.* at Annex III(4)(a)-(b).

²⁵⁸*Id.* at Annex III(4).

²⁵⁹*Id.* at Annex III(4)(c)-(d).

The failure to include more specific habitat provisions in the text of the convention could severely hinder the effectiveness of the convention, because it grants a party sole jurisdiction to regulate sea turtles within that party's EEZ or on its territory.²⁶⁰ Thus, a party retains the authority to determine the measures for the protection and conservation of sea turtles. By failing to negotiate agreed upon conservation measures, parties have the discretion to implement measures that they deem appropriate.

2. Monitoring and Compliance

The Inter-American Sea Turtle Convention establishes fairly rigorous monitoring and compliance mechanisms. First, it establishes a conference of the parties for each of the first three years during which the Convention is in force.²⁶¹ Regularly scheduled meetings permit the parties to assess the level of implementation and enforcement of a convention's goals and mechanisms and to identify weaknesses in a convention. The Inter-American Sea Turtle Convention also creates a Consultative Committee²⁶² of governmental representatives and members of the scientific community, private industry, and non-governmental organizations to evaluate annual reports²⁶³ and reports relating to the environmental, socio-economic, and cultural impact on affected communities resulting from the Convention.²⁶⁴ The Convention also establishes a scientific Committee to evaluate the environmental impact on sea turtles and their habitats of activities such as fishing operations, coastal development, and pollution, as well as examine and, as appropriate, conduct studies on sea turtles covered by the Convention.²⁶⁵

Annual reports also are an effective means for achieving greater compliance with international obligations. The Inter-American Sea Turtle Convention requires parties to prepare annual reports.²⁶⁶ The annual report must include a general description of a party's program to protect and conserve sea turtles and their habitats, including any laws and regulations, and a summary of actions taken, and the results thereof, to implement measures for the conservation and protection of sea turtles and their habitats, such as education, scientific research, environmental

 $^{^{260}}$ The Inter-American Sea Turtle Convention states: "Each party shall take appropriate and necessary measures in accordance with international law and the best available scientific information, for the protection, conservation and recovery of sea turtle populations." *Id.* at art. IV(1).

²⁶¹*Id.* at art. V.

 $^{^{262}}Id.$ at art. VII.

²⁶³*Id.* at art. VII(2)(a).

 $^{^{264}}Id.$ at art. VII(2)(c).

²⁶⁵Id. at art. VIII.

²⁶⁶*Id.* at art. XI.

education and other activities.²⁶⁷ Parties must also include in the annual report a detailed report that describes any exceptions allowed, including monitoring and mitigation measures and the number of turtles, nests, and eggs, as well as sea turtle habitats, affected by the exceptions.²⁶⁸ Parties also are required to establish a program to ensure monitoring and observation of the conservation measures adopted pursuant to the Convention.²⁶⁹ This monitoring and observation program shall include, "where applicable," the participation of observers.²⁷⁰

3. Conclusion

The Inter-American Sea Turtle Convention is a promising first attempt to address the threats to sea turtles in a comprehensive manner. Domestic trade is prohibited and the geographic scope includes both terrestrial and marine habitats of sea turtles. The Convention also requires the use of TEDs on shrimp trawl vessels unless conditions warrant an exception. The Convention includes some weaknesses, specifically in the area of terrestrial and marine habitat conservation and the development of management plans for sea turtle protection and conservation. Although the Convention does not create specific habitat conservation obligations, it does permit a party to take any action it wishes to conserve habitat. The Convention suggests, but does not require, the development of regional management plans. Any action to protect and conserve sea turtles should focus on coordinated activities among countries that share sea turtle populations, especially relating to habitat conservation. The development of a regional management plan would appear to be essential to protect sea turtles in the Costa Rica, Nicaragua, and Costa Rica, because these three countries share many populations of sea turtles.

VI. Conclusion

Under current customary international law and international environmental agreements, sea turtles are not protected throughout their range. Presently, only CITES effectively controls any threat to sea turtles – international trade. But no law or agreement requires the protection of sea turtle habitat or regulates fishing activities in a manner that prevents or controls the incidental catch and death of sea turtles. Many treaties permit the creation of protected areas, such as the Biodiversity Convention,²⁷¹ the CMS,²⁷² and the Western Hemisphere Convention.²⁷³ But these treaties either

²⁶⁷*Id.* at Annex IV(a)-(c).

²⁶⁸Id. at Annex IV(e).

²⁶⁹*Id.* at art. IX.

²⁷⁰*Id.* at art. IX(2).

²⁷¹See supra Section IV(C)(2).

²⁷²See supra Section IV(B).

²⁷³See supra Section IV(D).

create general obligations to conserve biological diversity or species or the parties are failing to implement the treaty. In addition, many treaties permit the regulation of fishing gear, such as the Biodiversity Convention²⁷⁴ and the CMS.²⁷⁵ The usefulness of the CMS is limited, however, because Costa Rica is not a party.

The SPAW Protocol, which is not yet in force, and the Inter-American Sea Turtle Convention offer promising regional approaches to sea turtle protection. Both comprehensively address habitat protection and species protection.²⁷⁶ The SPAW Protocol, however, does not protect terrestrial habitat unless a party specifically agrees to regulate it.²⁷⁷ The Inter-American Sea Turtle Convention attempts to specifically address sea turtle concerns, but the Convention fails to impose meaningful habitat conservation obligations on parties. It does, on the other had, require parties to use TEDs. Despite the Inter-American Sea Turtle Convention, further action by Costa Rica, Nicaragua, and Panama likely is necessary because of these countries possess many shared sea turtle populations and because individuals and communities in each country appear to be using sea turtles in an unsustainable manner. A regional management plan or agreement is needed to bring the relevant stakeholders together to develop a plan for the conservation and sustainable use of sea turtles. Only in this way will individuals and communities in the region be able to rely on sea turtles in the future.

²⁷⁴See supra Section IV(C)(2).

²⁷⁵See supra Section IV(B).

²⁷⁶See supra Section V.

²⁷⁷See supra notes 200-202 and accompanying text.