

MANAGING AREAS BEYOND NATIONAL JURISDICTION IN THE GULF OF MEXICO: CURRENT AND DEVELOPING INTERNATIONAL LEGAL AUTHORITY AND FUTURE CHALLENGES

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I. INTRODUCTION

The Gulf of Mexico (GOM) is the ninth largest body of water in the world with a shoreline that stretches 3,540 miles along the nations of the United States, Mexico, and Cuba.³ It possesses extraordinary natural resources, ecological complexity, and cultural richness. A number of key economic sectors in all three nations are concentrated in the GOM including offshore energy, refining, commercial and recreational fishing, marine transportation, and tourism. Much of this economic activity is dependent on or related to the unique mix of natural resources located in the Gulf and its position at the crossroads of international maritime commerce.

Ocean currents are an important feature of the GOM, transporting marine organisms, nutrients, and pollutants across the entire Gulf and affecting weather patterns. These currents are complex, but generally enter the GOM through the Yucatan Strait and exit through the Florida Strait. This is known as the Loop Current, which eventually becomes the famous Gulf Stream of the Atlantic Ocean. Smaller currents, termed eddies, are separate from the Loop Current and are regionally important.⁴ Important marine habitat features like hard and soft banks, coral reefs, and even man-made structures such as oil and gas platforms and associated infrastructure create biological connectivity within the GOM and

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³ See, e.g., *EPA's Work in the Gulf of Mexico*, EPA, <https://www.epa.gov/gulfofmexico> (last visited June 29, 2018). The Gulf of Mexico borders five U.S. states to the north, Mexico's eastern shoreline and the Yucatan Peninsula to the south, and to the east, it is bordered by the island of Cuba.

⁴ Harriet L. Nash & Richard J. McLaughlin, *Opportunities for Trilateral Governance of Ecologically Connected Habitat Sites in the Gulf of Mexico*, 4 KOREAN MAR. INST. INT'L J. MAR. AFF. & FISHERIES 1, 7-8, (2012).

Wider-Caribbean Region.⁵ The interchange between currents and a whole host of natural and physical processes are essential to the overall health of the GOM as well as human populations that gain beneficial uses from it.

Hydrocarbon development is a predominant activity in the GOM. More than 3,500 structures and 33,000 miles of offshore pipelines make the GOM the most extensively developed offshore production area in the world.⁶ While much of this commercial production has historically taken place in the shallower parts of the GOM, discoveries of hydrocarbon resources in ultra-deep waters (below 5,000 feet depth) is accelerating rapidly.⁷ These discoveries are moving the energy industry, its associated infrastructure and potential for environmental degradation, into the deepest parts of the GOM near the maritime boundaries with Mexico and Cuba. This offshore hydrocarbon activity will likely intensify in the coming decade as a result of significant energy reforms in Mexico, which opened vast offshore oil and gas reserves that had been closed to foreign investment for over 75 years.⁸ Many other activities such as commercial and recreational fishing, maritime navigation, laying of underwater cables and pipelines, and marine scientific research also are taking place, with greater frequency, in even the most remote portions of the GOM.

The two most remote areas in the GOM are the areas of high seas that fall beyond the sovereignty of any of the three nations that surround the Gulf. The first is known as the Western Gap, which is slightly smaller in size than the State of New Jersey. It is located approximately halfway between the Yucatan Peninsula and the coast of Texas. The northern portion contains the edge of the U.S. continental shelf known as the Sigsbee Escarpment. Seaward of this

⁵ *Id.* See also R.K. COWEN, *Oceanographic Influences on Larval Dispersion and Retention and Their Consequences for Population Connectivity*, in CORAL REEF FISHES: DYNAMICS AND DIVERSITY IN A COMPLEX ECOSYSTEM 149 (P.F. Sale ed., 2002) (for the theory that there can be genetic connectivity based on “temporal stepping stones” over a large spatial scale or “geographic stepping stones” over a long temporal scale).

⁶ Mark J. Kaiser, *The Louisiana Artificial Reef Program*, 30 MARINE POL’Y 605, 605 (2006).

⁷ Geologic studies have shown that the deepwater (greater than 1,000 feet depth) and ultra-deepwater (greater than 5,000 feet depth) portions of the GOM contain huge quantities of hydrocarbons estimated as high as 50 billion barrels of crude oil equivalent (BOE). John C. Roper, *Deep Seas Hold Key to Oil’s Future*, HOUSTON CHRONICLE, May 1, 2005, <http://www.chron.com/business/energy/article/Deep-seas-hold-the-key-to-oil-s-future-1498393.php> (last visited June 29, 2018).

⁸ See Diana Villiers Negroponte, *Mexico’s Energy Reforms Become Law*, BROOKINGS INST., Aug. 14, 2014, <http://www.brookings.edu/research/articles/2014/08/14-mexico-energy-law-negroponte> (last visited June 29, 2018).

escarpment, the bathymetry drops precipitously to the deep seabed of the Sigsbee Abyssal Plain, which has a water depth of between 3,000-4,000 meters.⁹ Geological surveys suggest that many portions of the Western Gap region are favorable for commercial quantities of oil and gas resources.¹⁰ The potential future hydrocarbon development area is co-located with highly productive deep-water chemosynthetic communities¹¹ and globally important spawning habitat for migratory species such as Western Atlantic Bluefin Tuna,¹² among other environmentally sensitive attributes. The United States and Mexico delimited the maritime boundary in the Western Gap by treaty in 2000.¹³

The second remote area, known as the Eastern Gap, is slightly larger than the Western Gap.¹⁴ Historical political tensions between the United States and Cuba have delayed negotiations on demarcating the boundaries of the Eastern Gap. As part of the Obama Administration's opening of relations with Cuba, on January 18, 2017, the two nations signed a bilateral treaty to delimit their maritime boundary in the Eastern Gap.¹⁵ However, the treaty has not been ratified by the U.S. Senate, and its precise legal status is currently unclear. This area falls within the Florida Abyssal Plain and has a fairly uniform depth of over 3,000 meters.¹⁶ The loop current is a dominant feature in this portion of the GOM and its surface, sub-surface circulation and the behavior of eddy-shedding events has been, and continues to be studied.¹⁷ In contrast, the Eastern Gap's hydrocarbon potential and environmental characteristics seem to be less well understood (see Figure 1 for a map of the areas).

⁹ Jia Y. Liu & William R. Bryant, *Seafloor Relief of Northern Gulf of Mexico Deep Water*, TAMU-Sea Grant-00-603 (2000).

¹⁰ R.Q. Foote et al., *Oil and Gas Potential of the Maritime Boundary Region in the Central Gulf of Mexico*, 67 AM. ASS'N OF PETROLEUM GEOLOGISTS BULL. 1047, 1063 (1983).

¹¹ H. Roberts et al., *Alvin Explores the Deep Northern Gulf of Mexico Slope*, 88 EOS 341-342, (2007).

¹² See *infra* notes 92-98 and accompanying text.

¹³ See *infra* note 78 and accompanying text.

¹⁴ The Western Gap is approximately 17,467 sq. km (6,744 sq. mi) and the Eastern Gap is approximately 20,000 sq. km (7,720 sq. mi). See Javier H. Estrada, *Reservoirs That Cross Country Lines Need Special Agreements*, OFFSHORE (2009), <http://www.offshore-mag.com/articles/print/volume-69/issue-7/latin-america/reservoirs-that-cross.html> (last visited June 29, 2018).

¹⁵ See *United States and Cuba Sign Maritime Boundary Treaty*, U.S. DEP'T OF STATE, <https://2009-2017.state.gov/r/pa/prs/ps/2017/01/267117.htm> (last visited June 29, 2018).

¹⁶ *Gulf of Mexico Data Atlas*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., <http://www.ncddc.noaa.gov/website/DataAtlas/atlas.htm> (last visited June 29, 2018).

¹⁷ Alexis Lugo-Fernández & Rebecca E. Green, *Mapping the Intricacies of the Gulf of Mexico's Circulation*, 92 EOS 21-22 (2011).

Globally, areas beyond national jurisdiction (ABNJ), such as the Western and Eastern Gaps, constitute about 60% of the ocean. Yet these areas fall within an uncertain and confused legal and policy regime. Unlike areas that are located within a single nation’s jurisdiction, areas like the Western and Eastern Gaps have a hybrid quality in which the legal rules change depending on the kind of use that occurs there. Before looking at these unique legal rules and how they may apply to ABNJ in the GOM, it will be useful to examine, more generally, the international laws and policies that govern the ocean and environmental protection, as well as how the “principles of good neighborliness,” as customary international law, are meant to protect the global commons against degradation and transboundary harm.

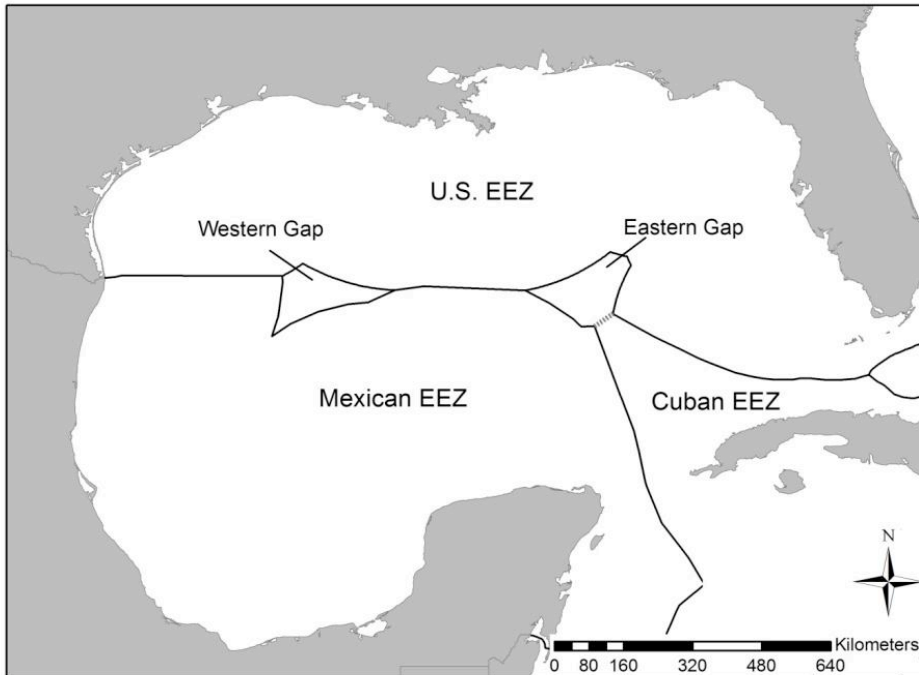


Figure 1: Map of Gulf of Mexico Areas Beyond National Jurisdiction¹⁸

¹⁸ Note: The boundary between Cuba’s EEZ and the Eastern Gap has not yet been agreed upon formally. Map adapted from Harriet L. Nash & Richard J. McLaughlin, *A Policy Approach to Establish an International Network of Marine Protected Areas in the Gulf of Mexico Region*, 6 AUSTRAL. J. MAR. & OCEAN AFF. 1 (2014).

II. THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA UNDERLIES ALL OCEAN ACTIVITIES

The conduct of ocean activities and their associated impacts are guided and controlled by a broad set of domestic and international laws and regulations. A nation's territorial sovereignty is not restricted to its land mass and internal waters. It also has varying degrees of legal authority over adjacent offshore areas including its 12-mile territorial sea, 24-mile contiguous sea, 200-mile Exclusive Economic Zone (EEZ), and extended continental shelf.¹⁹

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) is the most important multilateral treaty that establishes the rights and obligations of coastal nations over the maritime zones adjacent to their coasts.²⁰ UNCLOS creates a series of maritime juridical zones extending from shore into the deep ocean. Entering into force in November of 1994, this treaty has been ratified by 168 parties and signed by an additional fourteen nations. Those nations that have not ratified the agreement, including the United States, have expressed the view that many of its provisions are binding as a statement of customary international law.²¹

UNCLOS provides expansive legal authority to coastal nations in ocean areas close to their coastlines and less legal authority farther out into the deepest parts of the ocean.²² Closest to shore is the maritime legal zone known as the 12-mile territorial sea. In this zone, coastal nations are entitled to exercise "complete" and exclusive sovereignty, similar to what can be exercised on land, extending to the air space over it as well as the seabed.²³ Foreign nations have a right of

¹⁹ For a good overview of the international law of the sea, see YOSHIFUMI TANAKA, *THE INTERNATIONAL LAW OF THE SEA* (Cambridge Univ. Press, 2012); see also L. Sohn et al., *THE LAW OF THE SEA IN A NUTSHELL* (West Acad., 2d ed. 2010).

²⁰ United Nations Convention on the Law of the Sea, Dec. 10, 1982, 21 I.L.M. 1261 [hereinafter UNCLOS].

²¹ *Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements*, UNITED NATIONS DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm [hereinafter NDOALOS] (last visited July 2, 2018). For a discussion of the U.S. position on UNCLOS, see *infra* notes 70-73 and accompanying text.

²² See generally G.J. Garcia Sanchez & R.J. McLaughlin, *The 2012 Agreement on the Exploitation of Transboundary Hydrocarbon Resources in the Gulf of Mexico: Confirmation of the Rule of Emergence of a New Practice?*, 36 HOUSTON J. INT'L L. 681, 697-699 (2005).

²³ UNCLOS, *supra* note 20, at arts. 2-3.

innocent passage of vessels in the territorial sea, but otherwise coastal nations have complete sovereignty in this zone.²⁴

Seaward of the territorial sea is a maritime legal zone known as the contiguous zone that is located twelve to twenty-four miles from shore. This zone is also subject to the right of innocent passage of vessels, and is intended to provide coastal nations with more limited prescriptive authority over customs, fiscal, immigration, and sanitation matters only.²⁵

Seaward to 200 nautical miles is the EEZ, which provides coastal nations with the sovereign rights to explore and develop, conserve and manage all natural resources, whether living or non-living, found in the waters, on the ocean floor, and in the subsoil.²⁶ As long as there is no direct effect on natural resources, foreign ships and aircraft have the same rights of free navigation in the EEZ as they would have in and above the high seas.²⁷

The final juridical zone is the extended continental shelf. Within the 200-mile EEZ, the continental shelf is subsumed by the sovereign rights over natural resources provided in the EEZ. However, in cases where the continental shelf extends further than 200 miles, nations have the authority to claim jurisdiction up to 350 miles from the baseline or 100 miles from the 2,500-meter isobaths, depending on certain criteria such as distance from the foot of the continental slope or the thickness of the sedimentary rock.²⁸ On the extended continental shelf, coastal nations are entitled to exercise exclusive jurisdiction “for the purpose of exploring [the shelf] and exploiting its natural resources.”²⁹ Importantly, and in distinction to areas within the 200-mile EEZ, the natural resources that may be exploited are limited to:

...mineral and other non-living resources of the sea-bed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the sea-bed or are unable to move

²⁴ *Id.* at arts. 17, 19.

²⁵ *Id.* at art. 33.

²⁶ *Id.* at art. 56.

²⁷ *Id.* at arts. 58, 87.

²⁸ *Id.* at art. 76(4)-(5).

²⁹ *Id.* at art. 77(1).

except in constant physical contact with the sea-bed or the subsoil.³⁰

Consequently, activities such as fishing, most types of marine scientific research, and navigation that take place in the water column above the extended continental shelf may not be restricted by the coastal nation. Nations that claim an extended continental shelf must contribute a percentage of the revenue derived from the exploitation of mineral resources in the area beyond 200 miles to the International Seabed Authority.³¹

Areas that lie beyond the 200-mile EEZ and extended continental shelf are part of the high seas, also known as the ABNJ.³² All mineral resources, including hydrocarbons, located in high seas areas fall within the “common heritage of mankind” and are vested in mankind as a whole.³³ Freedom of navigation, fishing, scientific research, and other high seas freedoms apply in these areas.³⁴

III. THE INTERNATIONAL LEGAL FRAMEWORK FOR ENVIRONMENTAL PROTECTION IN AREAS BEYOND NATIONAL JURISDICTION

For much of its history, the law of the sea has focused on uses of the ocean rather than its stewardship and protection.³⁵ Customary international law provides some relatively general rules regarding environmental protection in maritime areas, while more specific laws and policies are contained in regional and global treaties and agreements. The rights and obligations imposed depend to a great extent on which maritime areas are involved. For example, customary international law provides the general rule that no State has the right to use or permit the use of its territory in such a manner as to cause injury in or to the territory of another State. This is a key tenant of the “principles of good neighborliness and the duty to cooperate” (referred to below as “the principles”), which hold that international law does not allow States to conduct or permit activities within their territories, or in common spaces (including ABNJ), without regard for the rights of other states or for the protection of the environment. The principles include that:

³⁰ *Id.* at art. 77(4).

³¹ *Id.* at art. 82.

³² *Id.* at art. 86.

³³ *Id.* at arts. 136, 137.

³⁴ *Id.* at art. 87.

³⁵ TANAKA, *supra* note 19, at 260.

- States have a duty to prevent, reduce, and control pollution and environmental harm;
- States have a duty to cooperate in mitigating environmental risks and emergencies, through notification, consultation, negotiation, and in appropriate cases, environmental impact assessment.³⁶

These principles imply that States have an obligation to ensure their activities do not have negative effects on the rights of other States, including the right to a clean environment. The emergence of these principles evolved over the last century, most encouraged at first by the creation of the League of Nations in 1919, the purpose of which was “to promote international co-operation and to achieve international peace and security”.³⁷ With the dissolution of the League and the evolution of international law following World War II, these concepts were formalized as general principles in the international arena. This is significant, as a general principle may serve as a stopgap in international law because an international judge can deduce an *apropos* rule that has evolved in national legal systems when deciding a case. The Permanent Court of International Justice and the International Court of Justice (ICJ) have affirmed this source of law as both established and pragmatic.³⁸

A. Hard Law Sources

The principles of good neighborliness and the duty to cooperate have predominantly evolved through mores or customs in international law, but may also be found in so-called hard-law documents, such as treaties and judicial decisions.

i. Judicial Decisions

The most often cited international case demonstrating the principles is the Trail Smelter dispute.³⁹ The arbitration arose from claims involving transfrontier air pollution by a smelter factory located in Trail, Province of British Columbia. Extreme amounts of air pollution from the factory were causing damage to

³⁶ P. BIRNIE & A. BOYLE, *INTERNATIONAL LAW & THE ENVIRONMENT* (2d ed. 2002).

³⁷ G.V. GLAHN, *LAW AMONG NATIONS: AN INTRODUCTION TO PUBLIC INTERNATIONAL LAW* 63 (1996).

³⁸ *Id.* at 508

³⁹ Trail Smelter Case (U.S. v. Can.), 3 R.I.A.A 1905 (1939, 1941), http://legal.un.org/riaa/cases/vol_III/1905-1982.pdf (last visited July 2, 2018).

privately owned agricultural and forest lands in Washington State. In 1938, the Arbitral Tribunal found that under the principles of international law, as well as the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory, properties, or persons of another, when the case is of serious consequence and the injury is established by clear and convincing evidence. The United States was awarded \$78,000 in compensation for damage that the Trail Smelter had done to the State of Washington from 1932 to 1937.⁴⁰

More recently, the ICJ reasserted the principles in the *Advisory Opinion Concerning Legality of the Threat or Use of Nuclear Weapons* of 1996, which acknowledged “the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control.”⁴¹ However, it is important to point out that while the general parameters of the principles are well established, their application is not always useful. In both judicial decisions the principles applied only *after* damage was caused to another State’s territory, but did not obligate the taking of preventative measures.⁴² Additionally, although the principles may be used to impose liability between nations, it is unclear whether they may be used to find liability for environmental damage to ABNJ.⁴³

ii. *International Organizations*

The principles further evolved in 1945 with the creation of the United Nations. Article 1.3 in the Charter of the United Nations (Purposes of the United Nations) holds that an objective of the organization is to achieve international cooperation in solving international problems.⁴⁴ Though not a primary objective at the time of its inception, the mitigation of transboundary environmental problems, as well as the degradation of the global commons, would take on greater importance in the decades to come.

iii. *International Law Commission*

⁴⁰ WILLIAM SLOMANSON, *FUNDAMENTAL PERSPECTIVES ON INTERNATIONAL LAW* 596 (2002).

⁴¹ *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, at 241-242, ¶ 29 (July 8).

⁴² TANAKA, *supra* note 19, at 260-261.

⁴³ *Id.*

⁴⁴ U.N Charter art. 1.3.

The “duty to cooperate” regarding transboundary injury also surfaced within the International Law Commission (ILC, formalized in 1947). In 1978, it was found that States had Liability for Injurious Consequences of Acts not Prohibited by International Law.⁴⁵ However, it was not until 1996 that a set of twenty-two draft articles and commentary were proposed by a Commission Working Group, for the first time allowing a more realistic view of the law. There were three elements contained in this draft: prevention; cooperation; and strict liability for damage. Of note, the Commission decided to divide the topic into two parts to deal with prevention and liability separately, and in the end liability proved too controversial to agree upon set terms.⁴⁶ The text was adopted by the ILC in 2001 and recommended to the United Nations General Assembly (UNGA) to form the basis of a convention. Though the elaboration of a fully-fledged convention is still pending, States are encouraged to continue to be guided by the articles, which provide that “[h]arm is ‘significant’ if it is ‘more than detectable’, but it need not be ‘serious’ or ‘substantial’; what is significant depends on the circumstances and may vary over time.”⁴⁷ Further, the articles are concerned with preventing or minimizing the occurrence of transboundary harm, but are not exclusively environmental. For example, they incorporate exploding nuclear power plants. The articles also provide:

- All appropriate measures must be taken to prevent or minimize the risk of transboundary harm and to minimize its effects;
- States must cooperate to this end;
- No such activity may be undertaken without prior impact assessment and authorization by the State in which it is to be conducted;
- States likely to be affected must be notified and consulted with a view to agreeing measures to minimize or prevent the risk of harm.⁴⁸

⁴⁵ SLOMANSON, *supra* note 40.

⁴⁶ BIRNIE & BOYLE, *supra* note 36.

⁴⁷ *Id.*

⁴⁸ *Id.*

iv. *Bilateral Treaties*

The principles have been further adopted through bilateral agreements. For example, on July 16, 2001 the People's Republic of China and the Russian Federation adopted a Treaty of Good-Neighborliness and Friendly Cooperation Between. Article 19 of this treaty states that "the contracting parties shall carry out cooperation in the protection and improvement of the environment, prevention of cross-border pollution...make joint efforts in protecting rare floras, faunas and the natural ecosystem, and conduct cooperation in preventing the outbreak of major accidents arising from natural disasters or due to technical reasons and eliminating their after-effects."⁴⁹ Implicit in these terms is the idea that neither party shall allow its activities to bring harm to the environment of the other's. Each has a duty to prevent or minimize the risk of transboundary harm and to minimize its effects.

v. *Multilateral Treaties*

Perhaps the most influential treaty pertaining to cooperation to protect against transboundary harm, as well as for the conservation of the global commons, is UNCLOS,⁵⁰ which provided new universal legal controls for the management of marine natural resources and the control of pollution. Article 150 provides that activities on the seabed and ocean floor beyond the limits of national jurisdiction should promote international cooperation for the over-all development of all countries.⁵¹ While recognizing that States have the sovereign right to exploit their natural resources, Article 194(2) addresses transboundary harm, including that:

States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights.⁵²

⁴⁹ Treaty of Good-Neighborliness and Friendly Cooperation, China-Russia, July 16, 2001, http://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/t15771.shtml (last visited July 2, 2018).

⁵⁰ For a more detailed discussion of relevant provisions, see *supra* notes 19-34 and accompanying text.

⁵¹ R.R. CHURCHILL & A.V. LOWE, *THE LAW OF THE SEA* (3d. ed. 1999).

⁵² *Id.*

UNCLOS also requires States promote international cooperation for activities beyond the limits of national jurisdiction.

B. Soft Law Sources

i. United Nations Conference on the Human Environment, 1972

The first major UN Conference on the environment occurred in Stockholm in 1972. The resulting product contains twenty-six principles, calling on States and international organizations to “play a co-ordinated, efficient and dynamic role for the protection and improvement of the environment.”⁵³ Key provisions found within Principles 21 and 22 contain the principles of prevention from transboundary harm and the duty to cooperate:

- Principle 21: 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 their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.
- Principle 22: States shall cooperate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such States to areas beyond their jurisdiction.⁵⁴

These principles further the idea that nations have a general duty not to permit any use of their territory, or areas in their control (e.g., vessels flying their flag on the high seas), that harms another State’s interests. While only a set of principles (i.e., non-binding), Principle 21 has been applied in subsequent law-making, recognizing the duty of States to take suitable preventive measures to protect the environment.

⁵³ SLOMANSON, *supra* note 40.

⁵⁴ *Id.*

ii. *Earth Summit, 1992*

In 1992, nearly 180 States gathered in Rio de Janeiro, Brazil, for the second UN Conference on Environment and Development (the Earth Summit). The fundamental idea that emerged from this conference was that a State may be held liable for its conduct or omission that is a “transboundary environmental interference.”⁵⁵ The resulting Rio Declaration on Environment and Development included among its twenty-seven principles Principle 2, which comments on the general duty of a State not to knowingly permit any use of its territory, or of common spaces, that harms another State’s interests. While differentiating between the responsibilities of developed and other countries, Principle 7 provides that “States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth’s ecosystem.”⁵⁶ Furthering this concept, Principle 18 requires States to notify emergencies likely to affect the environment of other States, and Principle 19 requires prior notification and consultation in good faith before undertaking activities that may have significant adverse transboundary environmental effects.⁵⁷

The Rio Declaration, while approved by the governments present at the conference, is nonetheless a soft-law document, i.e., a non-binding treaty. However, the principles contained therein have furthered the evolution of “good neighborliness” as a general principle. Principle 2 also has been influential in the development of international law, found in both the 1993 Nuuk Declaration of Environment and Development in the Arctic and the 1994 Convention to Combat Desertification.⁵⁸

The Earth Summit further produced a Framework Convention on Climate Change, which entered into force in March 1994. Portions of this framework echo the Stockholm principles, specifically, the preamble, which acknowledges 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 their own environmental

⁵⁵ M.K. TOLBA, GLOBAL ENVIRONMENTAL DIPLOMACY: NEGOTIATING ENVIRONMENTAL AGREEMENTS FOR THE WORLD, 1973-1992 (1998).

⁵⁶ SLOMANSON, *supra* note 40.

⁵⁷ BIRNIE & BOYLE, *supra* note 36.

⁵⁸ UNITED NATIONS ENVIRONMENTAL PROGRAMME, GLOBAL ENVIRONMENTAL OUTLOOK 3 (2002), https://wedocs.unep.org/bitstream/handle/20.500.11822/8609/GEO-3%20REPORT_English.pdf?sequence=7&isAllowed=y (last visited July 2, 2018).

and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction...⁵⁹

IV. CRITIQUE AND APPLICATION TO AREAS BEYOND NATIONAL JURISDICTION

The “principles of good neighborliness” are not always adhered to, and transboundary harm will continue to provoke international disputes. Most States may agree, in principle, that they have a duty to prevent, reduce, and control pollution and environmental harm. Yet, States are often unwilling to alter practices they view as necessary for their advancement, and are even less willing to be held accountable.⁶⁰

Under this concept, a State cannot cause transboundary environmental harm to its neighbors or in areas of the global commons, including ABNJ. If a State is found to have caused such harm that State may be held liable, and thus States must be aware of the consequences of their actions. The principles of good neighborliness found in hard and soft law provide incentives for States to enter into agreements protecting the environment, serving as a means for compensation for inequitable acts of cross-border pollution. The principles also act as a deterrent from initially producing environmental harm.

However, the principles are seen as weakening States’ national authority and their ability to act freely to determine their own economic development. In developing nations, many of which lack capacity to implement environmental controls, this can have serious consequences. Implementing these measures may have a serious effect on the standard of living of the peoples of those States, as protecting against transboundary harm takes great financial resources, arguably taking resources away from citizen welfare. International assistance mechanisms need strengthening to ensure development proceeds in these nations without serious consequences to the environment.

⁵⁹ United Nations Framework Convention on Climate Change, May 9, 1992, <https://unfccc.int/sites/default/files/conveng.pdf> (last visited July 2, 2018).

⁶⁰ In order for the ICJ to hold jurisdiction, States involved in a dispute must first consent to being sued in the international tribunal. See SLOMANSON, *supra* note 40.

⁶⁰ *Id.*

Further, the methods for finding liability under these principles are not secure. In order for the ICJ or other international tribunals to gain jurisdiction, States involved in a dispute must first consent to being sued in the international tribunal. States are largely unwilling to submit to this type of scrutiny. Also, many developing nations cannot afford formal arbitration or adjudication proceedings. Smaller States' access to formal dispute settlement fora also is not a priority of larger states, creating a discrepancy as to which cases of transboundary harm are arbitrated and equitably corrected.

There also is a question as to how far these principles reach. If there is a certain duty to cooperate in mitigating transboundary harm, can this concept be applied to the effects of climate change? Should the developed nations of the world be held accountable for the warming of the planet?

Application of the principles to ABNJ is obscure, the complexity of which may be illustrated through a hypothetical. Consider that a nation abutting ABNJ causes harm to an undemarcated zone, like the Eastern Gap in the Gulf, for example, through an oil spill. To whom is that adjacent nation liable? Are penalties due to the International Seabed Authority or also to those States that abut the Gap and risk harm to their national territories? The precedent is not clear. But the answer is also not clear for demarcated areas, as demarcation does not give any nation sovereign rights to all the resources therein.

V. MARINE BIODIVERSITY IN AREAS BEYOND NATIONAL JURISDICTION

Living marine resources in ABNJ are of significant importance to global, regional, and national economies, including the fishing industry, which is a source of livelihood for 10-12% of the global population.⁶¹ Also, high seas biodiversity plays an important role in the functioning of marine ecosystems and may offer significant opportunities for scientific discovery and development of products, as organisms found in these isolated ecosystems have evolved under extreme conditions and have unique, potentially valuable properties.

Much of ABNJ is thought to hold a high level of biodiversity at their depths. In particular, seamounts, hydrothermal vents and natural oil seeps, are recognized as areas with significant biodiversity, with untold value for medicine, pharmaceuticals and bioprospecting. In fact, evidence is mounting that marine

⁶¹ FOOD AND AGRIC. ORG. OF THE UNITED NATIONS, THE STATE OF WORLD FISHERIES AND AQUACULTURE 6 (2014), <http://www.fao.org/3/a-i3720e.pdf> (last visited July 2, 2018).

invertebrates produce more substances for antibiotic, anti-cancer and anti-inflammatory purposes than terrestrial organisms.⁶² These areas are also hotspots for commercially important pelagic fish such as tuna schools.⁶³ Even in ABNJ where such features may not exist, other marine genetic resources (MGRs) may be present, again with high potential value for bioprospecting.

It is important to recognize that governing bodies do exist for specific issues in ABNJ. Numerous international bodies, such as the International Maritime Organization (IMO) and a number of regional fisheries management organizations (RFMOs), have a role in high seas management, e.g., RFMOs for highly migratory species, the IMO for pollution and dumping by ships on the high seas, and even Regional Seas Programmes coordinated under the United Nations Environment Programme (UNEP) to address regionally specific challenges. More targeted progress also has been made in recent years, including in the Convention on Biological Diversity Conference of Parties IX/20 Decision.⁶⁴ Annex I of that decision addresses establishing scientific criteria for ABNJ areas,⁶⁵ while Annex II gives guidance for choosing marine protected areas.⁶⁶ Separately, the Food and Agriculture Organization (FAO) International Guidelines for the Management of Deep-Sea Fisheries in the High Seas provides criteria to identify Vulnerable Marine Ecosystems (VMEs) and to identify what constitutes “significant adverse impact.”⁶⁷ However, a more comprehensive management regime for biodiversity beyond national jurisdiction (referred to as BBNJ) is still lacking.

VI. DEVELOPING A LEGAL INSTRUMENT FOR BIODIVERSITY BEYOND NATIONAL JURISDICTION

⁶² *Do Medicines Come from the Sea?*, NAT’L OCEANIC AND ATMOSPHERIC ADMIN. OCEAN EXPLORER, <http://oceanexplorer.noaa.gov/facts/medicinesfromsea.html> (last visited July 2, 2018); See also Richard. J. McLaughlin, *Foreign Access to Shared Marine Genetic Materials: Management Options for a Quasi-Fugacious Resource*, 34 OCEAN DEV. & INT’L L. 297, 301-303 (2003).

⁶³ L. Dubroca et al., *Seamounts and Tuna Fisheries: Tuna Hotspots or Fishermen Habits?* 69 COLLECT 2087 (2013).

⁶⁴ United Nations Convention on Biological Diversity, Conference of the Parties, 1998 9 Decision IX /20 (May 19-30), <https://www.cbd.int/decision/cop/?id=11663> (last visited July 2, 2018).

⁶⁵ *Id.* at Annex I.

⁶⁶ *Id.* at Annex II.

⁶⁷ FOOD AND AGRIC. ORG. OF THE UNITED NATIONS, INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS (2009), <http://www.fao.org/in-action/globefish/publications/details-publication/en/c/346096/> (last visited July 2, 2018).

An ad hoc open-ended informal working group to study issues relating to BBNJ conservation and sustainable use was established by the United Nations. It called upon states and international organizations to take action urgently to address, in accordance with international law, destructive practices that have adverse impacts on marine biodiversity and ecosystems in ABNJ. The Working Group met between 2006 and 2015.⁶⁸ Ultimately, in resolution 69/292, the UNGA decided to develop an international legally binding instrument (ILBI) under UNCLOS on BBNJ conservation and sustainable use, establishing a Preparatory Committee to present a draft text of the ILBI to the UNGA by 2017. Significantly, the UNGA decided at its 72nd session to convene an intergovernmental conference to refine and finalize the text of an agreement.⁶⁹ In resolution 72/249, the UNGA established an intergovernmental conference to negotiate the new treaty for BBNJ through a series of negotiating sessions, the first of which will occur in September 2018. Negotiations will continue through the first half of 2020, as governments explore and negotiate legally binding text on the range of options and detailed proposals for the conservation and sustainable use of marine biological diversity of ABNJ.

This undertaking is not without controversy. For example, regarding oil pollution, preparatory work has included text on the polluter pays principle, requirements for rehabilitation and a contingency fund, as well as provisions on state liability. Whether and how these elements make it into a final implementing agreement, however, remains to be seen.⁷⁰ Perhaps more significantly, after the decades of negotiations to establish UNCLOS, some parties view this new process as potentially opening up issues that have been addressed through UNCLOS or its two implementing agreements developed to specify requirements on fishing and

⁶⁸ U.N. Secretary-General, Letter dated Feb. 13, 2005 from the Co-Chairs of the Ad Hoc Open-ended Informal Working Group to the President of the General Assembly, U.N. Doc. A/69/780 (Mar. 10, 2015), http://www.un.org/ga/search/view_doc.asp?symbol=A/69/780 (last visited July 2, 2018).

⁶⁹ Chair of the Preparatory Committee Established by General Assembly Resolution 69/292, *Chair's Overview of the First Session of the Preparatory Committee* (2016), http://www.un.org/depts/los/biodiversity/prepcom_files/PrepCom_1_Chair's_Overview.pdf (last visited July 2, 2018).

⁷⁰ Chair of the Preparatory Committee Established by General Assembly Resolution 69/292, *Chair's Streamlined Non-paper on Elements of a Draft Text* (2017), http://www.un.org/depts/los/biodiversity/prepcom_files/Chairs_streamlined_non-paper_to_delegations.pdf (last visited July 2, 2018).

on seabed mining, but which were finalized over twenty years ago.⁷¹ Others, including the United States, have argued that a new international regime may inhibit research that could provide valuable benefits.⁷² Notably, opening up UNCLOS through an implementing agreement to address BBNJ also could further exacerbate getting the treaty ratified in the United States and elsewhere (many reports note that it was Part XI that ultimately sunk U.S. ratification, pointing to the fact that the United States accepted all but Part XI of the Convention as customary international law.)⁷³

Moving forward, the most challenging issues are likely to be threefold: understanding how a new ILBI adds to, but does not undermine, existing agreements, as well as the roles of existing regional bodies in a new agreement; understanding and harmonizing the use of area-based management tools, including MPAs as well as the use of criteria on ecologically or significant marine areas and VMEs; and, perhaps the most divisive issue, addressing the divergence of views on MGRs, and especially on devising an access and benefit-sharing regime for MGRs in ABNJ. While the G-77/China continue to argue that the “common heritage of mankind” applies to MGRs in the Area, some developed countries rather argue for freedom of the high seas.⁷⁴ Interestingly, some delegates also point out that “access” could include access to digital genetic information, rather than physical access to the resource itself.⁷⁵

VII. IMPLICATIONS OF UNCLOS FOR AREAS BEYOND NATIONAL JURISDICTION IN THE GULF OF MEXICO

While the United States is not a State Party to UNCLOS, most of the rights and obligations in the Convention are viewed as reflecting customary international law, which is interpreted as binding nations independently from their treaty obligations. According to James Malone, Assistant Secretary of State for

⁷¹ *Summary of the Ninth Meeting of the Working Group on Marine Biodiversity Beyond Areas of National Jurisdiction*, EARTH NEGOTIATIONS BULLETIN, <http://www.iisd.ca/vol25/enb2594e.html> (last visited July 2, 2018).

⁷² Elisa Morgera, *Policy Update #8: Do We Need a New Treaty to Protect Biodiversity in the Deep Seas?*, IISD, <http://nr.iisd.org/policy-updates/do-we-need-a-new-treaty-to-protect-biodiversity-in-the-deep-seas/> (last visited July 2, 2018).

⁷³ See, e.g., MARJORIE ANN BROWNE, CONG. RESEARCH SERV., *THE LAW OF THE SEA CONVENTION AND U.S. POLICY* (2006), http://www.gc.noaa.gov/documents/gcil_crs_2006_report.pdf (last visited July 2, 2018).

⁷⁴ *Id.*

⁷⁵ *PrepCom 1 Highlights: Friday, April 1, 2016*, EARTH NEGOTIATIONS BULLETIN, <http://www.iisd.ca/vol25/enb25101e.html> (last visited July 2, 2018).

Oceans and International Environmental and Scientific Affairs during the Reagan Administration:

The United States believes that most of the provisions of the Treaty, apart from the seabed mining text in Part XI, [which has since been renegotiated]⁷⁶ fairly balance the interests of all states and are fully consistent with norms of customary international law. Hence, it is prepared to accept and act in accordance with these provisions on a reciprocal basis.⁷⁷

However, the fact that the United States is not a party creates a complex and unsettled legal situation in the Eastern and Western Gaps of the Gulf. Under most circumstances an ocean area such as the Western Gap that lies beyond the 200-mile EEZ would be considered part of the high seas under the Convention and its seabed resources would be controlled by the international community under the common heritage principle. However, in order to exploit potential hydrocarbon resources themselves, Mexico and the United States entered a treaty in 2000 asserting that all of the seabed and subsoil of the Western Gap is an extension of each nation's continental shelf as described in Article 76 of the Convention. The Delimitation Treaty gives Mexico access to about 62 percent of the Western Gap and the United States about 38 percent.⁷⁸ Since the Delimitation Treaty was enacted, nearly 40 exploratory oil and gas lease tracts have been acquired by a variety of United States and international energy companies on the U.S. side of the Western Gap boundary.⁷⁹

UNCLOS requires parties exploiting seabed resources on their extended continental shelves to make a submission to the Commission on the Limits of the Continental Shelf (CLCS).⁸⁰ Mexico has already made a successful submission on its portion of the Western Gap to the CLCS, which was adopted by the body on

⁷⁶ Comment inserted by authors.

⁷⁷ James Malone, *Freedom and Opportunity: The Foundation for a Dynamic National Oceans Policy*, in 41 DEVELOPING ORDER OF THE OCEANS (Kruger & Riesenfeld, eds. 1985).

⁷⁸ Delimitation of Continental Shelf, U.S.-Mex., June 9, 2000, S. Exec. Doc. 106-39, Annex 1.

⁷⁹ Richard J. McLaughlin, *Hydrocarbon Development in the Ultra-Deepwater Boundary Region of the Gulf of Mexico: Time to Reexamine a Comprehensive U.S.-Mexico Cooperation Agreement*, 39 OCEAN DEV. & INT'L L. 1, 8 (2008).

⁸⁰ UNCLOS, *supra* note 20, at art. 76(8). The CLCS provides guidance to submitting coastal nations to assist them in properly complying with legal and scientific requirements and reassures other nations that proposed extended continental shelf boundaries are legitimate.

March 31, 2009.⁸¹ In contrast, the United States cannot make a submission because it is not a party to UNCLOS. The Convention and international law clearly provide that it is ultimately up to each coastal nation to establish the outer boundary of its continental shelf. Nevertheless, submitting a claim to the CLCS serves the important purpose of assuring the international community that a nation's claim complies with international law as well as removing the threat that the claim will be legally or politically challenged as illegitimate.

Because the United States cannot receive the imprimatur of the CLCS and the international legitimacy that it would confer, it is unlikely that energy companies will make the huge long-term investments necessary to commercialize the Western Gap. As long as the U.S. refuses to join the Convention, energy companies will be unable to obtain financing and insurance coverage due to the potential risk of litigation or political challenge.

Similar issues exist in the Eastern Gap. Mexico and Cuba have both filed submissions to the CLCS claiming the Eastern Gap as extended continental shelf. Unlike Mexico's Western Gap submission, which occurred early in the CLCS review process, those relating to the Eastern Gap were submitted later and may take many years to complete because of a CLCS backlog.⁸² If the U.S. accedes to UNCLOS, it will be last in line at the CLCS to submit its extended continental shelf claims for the Western and Eastern Gap areas.

VIII. IMPLICATIONS FOR FISHERIES MANAGEMENT AND MARINE SCIENTIFIC RESEARCH IN THE GULF OF MEXICO AREAS BEYOND NATIONAL JURISDICTION

The vast majority of living marine resources that are fished commercially or recreationally in the GOM are located within the three surrounding nations' EEZs. Within 200 nautical miles from shore, the three nations have control over fisheries-related and other varieties of marine scientific research (MSR). UNCLOS provides that within each nation's 12-mile territorial sea, it has the exclusive right to regulate, authorize, and conduct MSR, but that foreign research

⁸¹ Access to the CLCS recommendation may be found at: http://www.un.org/depts/los/clcs_new/commission_submissions.htm. For an analysis of Mexico's submission, see Suzette v. Suarez, *Commission on the Limits of the Continental Shelf*, in 2010 Y.B. INT'L L. 131, 164, (A. von Bogdandy & R. Wolfrum, eds., 2010), http://www.mpil.de/files/pdf3/mpunyb_04_suarez_14.pdf (last visited July 2, 2018).

⁸² *Id.* The "CLCS estimated that it would finish consideration of the first 51 submissions only in the year 2030." *Id.* at 138.

or surveys may only take place with the “express consent of and under the conditions set forth by the coastal State.”⁸³ Within the 200-mile EEZ and on the Continental Shelf, UNCLOS similarly provides that foreign nations request consent from the coastal state prior to engaging in MSR, but that “coastal States shall, in normal circumstances, grant their consent.”⁸⁴ Under certain circumstances, consent for MSR may be withheld. Most importantly, consent need not be granted if the MSR “is of direct significance for the exploration and exploitation of natural resources, whether living or non-living.”⁸⁵ This allows coastal nations to prevent foreign researchers from acquiring scientific information that may provide insights into commercial fish stocks or resource-related oceanographic characteristics without their permission and participation.

Different legal regimes exist in the two ABNJ areas of the GOM.⁸⁶ They are part of the high seas and generally open to fisheries exploitation and MSR by foreign vessels.⁸⁷ In the water column above the sea floors of the Western and Eastern Gaps, the international community has the legal right to exploit fisheries resources subject only to any treaty obligations that they have agreed upon. Foreign exploration and exploitation on the sea floor is more complex. For example, in the Western Gap, any fisheries exploitation on Mexico’s claimed continental shelf would be prohibited absent Mexico’s permission.⁸⁸ In contrast, despite the United States’ status as a Non-State Party to UNCLOS, it is highly unlikely that a foreign nation would attempt to exploit seabed resources on the U.S. portion given the United States’ public assertion that the area falls within its extended continental shelf.

Exploitation of living resources on the sea floor of the Eastern Gap presents an even greater cause for legal concern because the boundaries of this area have not been formally demarcated and none of the three nations’ claims to extended continental shelf have been formally reviewed by the CLCS. Accordingly, it is unclear exactly which nation has sovereign authority over the seabed resources in specific portions of the Eastern Gap. In theory, even the

⁸³ UNCLOS, *supra* note 20, at art. 245.

⁸⁴ *Id.* at arts. 246(3), 246(1).

⁸⁵ *Id.* at art. 246(5)(a).

⁸⁶ For a detailed discussion of the legal rights to living resources of the High Seas, see Richard J. McLaughlin, *UNCLOS and the Demise of the United States’ Use of Trade Sanctions to Protect Dolphins, Sea Turtles, Whales, and Other International Living Resources*, 21 *ECOLOGY LAW QUARTERLY* 1, 32-38 (1994).

⁸⁷ UNCLOS, *supra* note 20, at art. 87.

⁸⁸ *Id.* at art. 77(1). This would be subject to these organisms being sedentary species or in constant contact with the seabed. *Id.* at art. 77(4).

International Seabed Authority may have some rights in this area if the claims of extended continental shelf prove to not be justified.

Legal rules relating to MSR in the Western and Eastern Gaps are also problematic. As noted, coastal States have jurisdiction over MSR on the extended continental shelf.⁸⁹ Conversely, UNCLOS also provides that all States have the freedom to engage in MSR in the superjacent waters above the continental shelf.⁹⁰ A literal interpretation of these provisions seems to require coastal State consent only for research that physically takes place on the sea floor. However, one commentator has posited that this literal interpretation ignores the fact that MSR is carried out from the superjacent waters or airspace above the continental shelf and “it appears to be naïve to consider that coastal States will not exercise their jurisdiction to regulate marine scientific research there.”⁹¹

Currently, very little commercial or recreational fishing occurs in the Western or Eastern Gaps, primarily due to their water depth and geographical remoteness. However, studies have determined that the maritime boundary region of the GOM is a globally important nursery area for Western Atlantic Bluefin Tuna.⁹² As discussed throughout this article, managing and conserving tuna is more difficult in ABNJ than within the U.S. EEZ because individual states only have a limited ability to address problems outside of their national jurisdictions. In the case of tuna fishing in the Western and Eastern Gaps, two treaties provide the international framework that allows for managing tuna in ABNJ. First, the International Commission for the Conservation of Atlantic Tuna (ICCAT) was established for the cooperative study and management of highly migratory stocks of Atlantic Tuna.⁹³ The second treaty is the 1995 UNFSA (which also is the second implementing agreement of UNCLOS), to ensure the long-term

⁸⁹ *Id.* at art. 246(1).

⁹⁰ *Id.* at art. 257.

⁹¹ TANAKA, *supra* note 19, at 145.

⁹² Barbara Block et al, *Electronic Tagging and the Population Structure of Atlantic Bluefin Tuna*, 434 NATURE 1121 (2005). See also NAT'L MARINE FISHERIES SERV., STATUS REVIEW REPORT OF ATLANTIC BLUEFIN TUNA (THUNNUS THYNNUS) (2011), <http://www.nmfs.noaa.gov/pr/pdfs/statusreviews/bluefintuna.pdf> (last visited July 3, 2018). For an excellent map of bluefin tuna feeding and spawning areas, see *Gulf of Mexico Data Atlas, Suitable Feeding and Spawning Habitats-Atlantic Bluefin Tuna*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN., <https://www.ncddc.noaa.gov/website/DataAtlas/atlas.htm?plate=Suitable%20Habitat%20-%20Bluefin%20Tuna> (last visited July 3, 2018).

⁹³ ICCAT *Basic Texts*, INT'L COMM'N FOR THE CONSERVATION OF ATL. TUNA, <https://www.iccat.int/en/organization.html> (last visited July 3, 2018).

conservation and sustainable use of global straddling and highly migratory fish stocks.⁹⁴

Neither of these international agreements has been particularly successful and highlight the difficulties in managing fisheries in ABNJ.⁹⁵ For example, compared to the enforcement tools available within the U.S. EEZ,⁹⁶ the ABNJ offers few enforcement options, largely because the consent by other nations is required for effective implementation of management options. Managing tuna in the Western and Eastern Gaps is especially problematic because while the United States is a party to both ICCAT and UNFSA, neither Mexico nor Cuba is a party to the UNFSA,⁹⁷ and only Mexico is a party to ICCAT.⁹⁸ While ICCAT and UNFSA have provisions that require its members to prohibit imports of fish taken from the region by non-members, the fact that neighboring and distant water nations are not subject to common standards and practices makes managing resources in ABNJ challenging.

IX. IMPLICATIONS FOR BIOPROSPECTING IN GULF OF MEXICO AREAS BEYOND NATIONAL JURISDICTION

There is similar ambiguity with potential bioprospecting and access to MGRs in ABNJ in the GOM. For one thing, few detailed studies exist of the seafloor characteristics of the Western and Eastern Gaps despite evidence of

⁹⁴ United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, July 24-August 4, 1995, *Agreement 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 Migratory Fish Stocks*, U.N. Doc. A/CONF:164/37 (Sept. 8, 1995), <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N95/274/67/PDF/N9527467.pdf?OpenElement> (last visited July 3, 2018).

⁹⁵ See generally Cassandra M. Brooks, et al. *Challenging the Right to Fish in a Fast-Changing Ocean*, 33 STAN. ENVTL. L.J. 289 (2014).

⁹⁶ Two primary federal statutes exist in the U.S. to fulfill its requirements under ICCAT within the 200-mile EEZ. In 1977, the United States passed the Atlantic Tuna Conservation Act to codify these responsibilities. 16 U.S.C. § 971. The Magnuson-Stevens Fishery Conservation and Management Act more broadly provides a regulatory framework to manage tuna and other fisheries stocks. 16 U.S.C. § 1801.

⁹⁷ *Table Recapitulating the Status of the Convention and of the Related Agreements*, UNITED NATIONS DIV. FOR OCEAN AFFAIRS & THE LAW OF THE SEA, http://www.un.org/depts/los/reference_files/status2018.pdf (last visited July 3, 2018).

⁹⁸ *Contracting Parties*, INT'L COMM'N FOR THE CONSERVATION OF ATL. BLUEFIN TUNA, <https://www.iccat.int/en/contracting.html> (last visited July 3, 2018).

highly productive deep-water chemosynthetic communities.⁹⁹ Should important MGRs be found in these areas, this could hold significant value for commercial uses.¹⁰⁰ Because the ABNJ lies outside countries' jurisdictions, it is not clear where the rights to these resources would lie. Again, the lack of U.S. ratification of UNCLOS and its inability to pursue its claim in the Western Gap leaves in question whether any MGRs found outside of Mexico's demarcated zone would fall under the rights of the United States or whether they would be the "common heritage of mankind." In the Eastern Gap, the lack of any approved claim presents the same challenge. Further, many Parties reject the idea that minerals and MGRs can be treated in the same way, and that because UNCLOS does not refer to genetic resources, UNCLOS founders never intended this application. Thus, even if both Gaps were demarcated, the developing ILBI will ultimately play a large part in determining the rights to potential resources, including any benefit sharing, capacity building, and/or technology transfer requirements.

Finally, it should be considered that many existing regional and international bodies already struggle to fulfill their current mandates, due to financial and other capacity constraints. To manage ABNJ, the international community will need to seriously address the need for expanded capacity and enforcement to meet any expanded mandates.

X. CONCLUSION

All of these considerations should be taken into account when considering a legal regime to manage the Eastern and Western Gaps in the GOM, particularly considering the very real likelihood of future hydrocarbon development on Mexico's extended continental shelf in the Western Gap, Mexico and Cuba's potential future development on any approved portion of the shelves in the Eastern Gap, as well as any potential successful submissions by the United States should it accede to UNCLOS. With hydrocarbon development comes increased risk of an accident or spill. Thus, bi- or multilateral agreements will need to address the principles of good neighborliness and the duty to cooperate in the event of a spill that affects the Gaps.¹⁰¹ This also is true of any potential harm or

⁹⁹ Roberts et al., *supra* note 11.

¹⁰⁰ Richard McLaughlin, *Foreign Access to Shared Marine Genetic Materials: Management Options for a Quasi-Fugacious Resource*, 34 OCEAN DEV. & INTL. L. 297 (2003).

¹⁰¹ The U.S. and Mexico have cooperated on oil spill response in the GOM since the Mexican transboundary spill incident at Ixtoc in 1979. This event led to the MEXUS Agreement which entered into force on March 30, 1981. While this agreement and the more recent Agreement Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico, U.S.-Mex. Feb. 20,

destruction resulting from mining that may take place in the Gaps, should other valuable substances be found.

Similar considerations of the unique legal characteristics of ABNJ in the GOM need to be addressed in developing management strategies for other ocean uses such as biodiversity, fisheries management, MSR, MGR bioprospecting, and other potential activities. While some of these issues may be discussed and clarified as part of the UNGA effort to develop an ILBI under UNCLOS on marine biodiversity conservation and sustainable use in ABNJ,¹⁰² it is unclear what these negotiations will ultimately produce, or whether the nations surrounding the GOM each will become Parties.

Instead, immediate focus should be placed on increased government-to-government collaboration with the objective of identifying innovative new efforts to provide a framework for a more sustained and systematic approach to managing the resources and activities taking place in ABNJ in the GOM. This process of improved collaboration will take on added urgency given the major energy reforms that are currently taking place in Mexico that will open to foreign investment the development of the deepest and most remote offshore deposits of the GOM.¹⁰³ The on again off again opening of diplomatic and economic relations between the United States and Cuba will also require increased cooperation and coordinated management approaches in the GOM, including the Eastern Gap. It will be a test for the leaders of the three nations to recognize the complex and unsettled legal and policy regime governing ABNJ in the GOM and to begin to strengthen collaborative management options that best conserve and sustainably utilize these unique ocean areas.

2012, TIAS. No. 14-718, contain provisions that guide or encourage cooperative response strategies, these agreements do not clarify the responsibility and liability issues in ABNJ.

¹⁰² See *supra* notes 68-69 and accompanying text.

¹⁰³ Garcia Sanchez & McLaughlin, *supra* note 22, at 687. See also Negroponte, *supra* note 8.