Ocean Responsibilities Established by International Conventions and the Duties of Developed Countries to Assist Developing Countries

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Introduction

The acceptance by the negotiators at the United Nations Convention on the Law of the Sea[1] of the simple direct and elegant language of Article 192 marked a turning point in the human stewardship of the ocean: "States have the obligation to protect and preserve the marine environment."[2] Each word has importance and power. The operative word "obligation" makes it clear that countries have positive duties and responsibilities and must take action. The verbs "protect" and "preserve" reinforce each other, to emphasize that countries must respect the natural processes of the ocean and must act in a manner that understands these processes and ensures that they continue for future generations. The "marine environment" is a purposively comprehensive concept covering all aspects of the ocean world – the water itself, its resources, the air above, and the seabed below – and it covers all jurisdictional zones – internal waters, territorial seas, contiguous zones, exclusive economic zone, continental shelves, archipelagic

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[1] United Nations Convention on the Law of the Sea, Dec. 10, 1982, U.N. Doc. A/CONF.62/122, *reprinted in* 21 I.L.M. 1261 (1982) *and The Law of the Sea: Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index*, UN Sales No. E.83.V.5 (1983).

[2] *See generally* Jon M. Van Dyke, *International Governance and Stewardship of the High Seas and Its Resources,* in FREEDOM FOR THE SEAS IN THE 21ST CENTURY: OCEAN GOVERNANCE AND ENVIRONMENTAL HARMONY 13-22 (Jon M. Van Dyke, Durwood Zaelke, and Grant Hewison, eds., 1993); Jon M. Van Dyke, *Sharing Ocean Resources in a Time of Scarcity and Selfishness,* in THE LAW OF THE SEA: INHERITED DOCTRINE AND A REGIME FOR THE COMMON HERITAGE 3-36 (Harry Scheiber ed. 2000).

waters, and high seas. Article 192 thus recognizes the profound responsibility that all countries have to govern the oceans in a manner that respects the marine creatures that inhabit them. The marine environment must thus be preserved for the benefit of those who will come later to exploit its resources, to study its mysteries, and to enjoy the many pleasures that the oceans offer us.

The 1982 United Nations Law of the Sea Convention

In addition to the over-arching obligation identified in Article 192, the Law of the Sea Convention contains numerous specific duties that nations must fulfill. Article 56 recognizes coastal state sovereignty over the living resources in the 200-nautical-mile exclusive economic zone (EEZ), but Articles 61, 62, 69, and 70 require the coastal state (a) to cooperate with international organizations to ensure that species are not endangered by over-exploitation, (b) to manage species in a manner that protects "associated or dependent species" from over-exploitation, ©) to exchange data with international organizations and other nations that fish in its EEZ, and (d) to allow other states (particularly developing, land-locked, and geographically disadvantaged states) to harvest the surplus stocks in its EEZ. Article 63 addresses stocks (or stocks of associated species) that "straddle" adjacent EEZs, or an EEZ and an adjacent high seas area, and requires the states concerned to agree (either directly or through an organization) on the measures necessary to ensure the conservation of such stocks. Article 64 requires coastal states and distant-water fishing states that harvest highly migratory stocks such as tuna to cooperate (either directly or through an organization) to ensure the conservation and optimum utilization of such stocks. Article 65 contains strong language requiring nations to "work through the appropriate international organization" to conserve, manage, and study whales and dolphins.

Article 66 gives the states of origin primary responsibility for anadromous stocks (*e.g.*, salmon and sturgeon), but requires the states of origin to cooperate with other states whose nationals have traditionally harvested such stocks and states whose waters these fish migrate through.

On the high seas, Articles 118 and 119 require states to cooperate with other states whose nationals exploit identical or associated species. Article 118 is mandatory in stating that nations "***shall enter into negotiations*** with a view to taking the measures necessary for the conservation of the living resources concerned" (emphasis added), and suggests creating regional fisheries organizations, as appropriate. Article 120 states that the provisions of Article 65 on marine mammals also apply on the high seas.

The duty to avoid causing injury to others (*sic utere tuo ut alienum non laedas*), which a basic norm of international law,[3] is reflected n Article 194(2) of the Law of the Sea Convention, which requires states "to 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." Another form of this principle can be found in Article 87(2) of the Convention, which says--after the freedoms of the high seas are listed--that "[t]hese freedoms shall be exercised by all States with due regard for the interests of other States in their exercise of the freedoms of the high seas ..." The principle of "responsibility and liability" found in Article 235(1) also reaffirms and reinforces this duty.

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[3] Principle 21 of the 1972 Stockholm Declaration of the Human Environment, *Report of the UN Conference on the Human* Environment, UN Document A/CONF/48/14/Rev. 1 (1972); Principle 2 of the Rio Declaration on Environment and Development, UN Document A/CONF.151/5/Rev.1 (1992); *see generally* Jon M. Van Dyke, *Sea Shipment of Japanese Plutonium under International Law*, 24 OCEAN DEVELOPMENT AND INTERNATIONAL LAW 399, 400, 412-17 (1993).

Another important obligation is to prepare environmental impact assessments in appropriate cases.[4] Article 206 of the Law of the Sea Convention requires states undertaking "activities under their jurisdiction or control [that] may cause substantial pollution of or significant and harmful changes to the marine environment [to], as far as practicable, assess the potential effects of such activities on the marine environment and...communicate reports of the results of such assessments" to nations that may be affected by the project.

The Straddling and Migratory Stocks Agreement

On December 4, 1995, the nations of the world settled on the text of an important document with the cumbersome title of "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."[5]

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[4] *See* Van Dyke, *Sea Shipment, supra* note 3, at 402-07.

[5] 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, 8 September 1995, 34 I.L.M. 1542 (1995). *See generally* Jameson E. Colburn, Comment, *Turbot Wars: Straddling Stocks, Regime Theory, and a New U.N. Agreement*, 6 J. TRANSNAT'L LAW & POLICY 323 (1997); Derrick M. Kedziora, *Gunboat Diplomacy in the Northwest Atlantic: The 1995 Canada-EU Fishing Dispute and the United Nations Agreement on Straddling and Migratory Fish Stocks*, 17 NORTHWESTERN J. OF INT'L LAW AND BUSINESS 1132 (1996-97); Moritaka Hayashi, *The 1995 Agreement on the Conservation and Management of Straddling and Highly Migratory Fish Stocks: Significance for the Law of the Sea Convention*, 29 OCEAN AND COASTAL MANAGEMENT 51 (1996); Moritaka Hayashi, *Enforcement by Non-Flag States on the High Seas Under the 1995 Agreement on Straddling and Highly Migratory Fish Stocks*, 9 GEORGETOWN INT'L ENVIRONMENTAL LAW REVIEW 1 (1996); David A. Balton, *Strengthening the Law of the Sea: The New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks*, 27 OCEAN DEVELOPMENT & INT'L LAW 125 (1996); Julie R. Mack, Comment, *International Fisheries Management: How the U.S. Conference on Straddling and Highly Migratory Fish Stocks Changes the Law of Fishing on the High Seas*, 26 CALIFORNIA WESTERN INT'L LAW J. 313 (1996); Mark Christopherson, Note, *Toward a Rational Harvest: The United Nations Agreement on Straddling Fish Stocks and Highly Migratory Species*, 5 MINNESOTA J. OF

The goal of this agreement was to stop the dramatic overfishing that has decimated fish populations in many parts of the world.[6] It builds on existing provisions in the 1982 United Nations Law of the Sea Convention described above,[7] but it also introduces a number of new strategies and obligations that have been requiring fishers to alter their operations in a number of significant ways. In addition to strengthening the role of regional organizations, as explained below, it also promotes peaceful dispute resolution by applying the dispute-resolution procedures of the Law of the Sea Convention to disputes involving straddling and migratory stocks.

The Duty to Cooperate. The guiding principle that governs the 1995 Agreement is the duty to cooperate. This core concept is given specific new meaning, and the coastal nations and distant-water fishing nations of each region are now required to share data and manage the straddling fisheries together. Article 7(2) requires that "[c]onservation and management measures established for the high seas and those adopted for areas under national jurisdiction *shall be compatible* in order to ensure conservation and management of the straddling fish stocks and highly migratory fish stocks in their entirety" (emphasis added). This duty gives the coastal

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GLOBAL TRADE 357 (1996); Jon M. Van Dyke, *The Straddling and Migratory Stocks Agreement and the Pacific*, 11 INTERNATIONAL JOURNAL OF MARINE AND COASTAL LAW 406-15 (1996).

[6] David E. Pitt, *Despite Gaps, Data Leave Little Doubt that Fish Are in Peril*, N.Y. Times, Aug. 3, 1993, at C4, col. 1 (nat'l ed.). *See generally* FREEDOM FOR THE SEAS IN THE 21ST CENTURY, *supra* note 2. Among the stocks that are now seriously depleted are Atlantic halibut, New Zealand orange roughy, bluefin tuna, rockfish, herring, shrimp, sturgeon, oysters, shark, Atlantic and some Pacific Northwest salmon, American shad, Newfoundland cod, and haddock and yellowtail flounder off of New England. Associated Press, *Steps Must Be Taken to Counter Overfishing, U.S. Panel Warns*, Honolulu Star-Bulletin, Oct. 23, 1998, at A-19, col 2 (quoting from a study led by Stanford biologist Harold Mooney and funded by the National Research Council, an arm of the National Academy of Sciences.).

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state a leadership role in determining the allowable catch to be taken from a stock that is found both within and outside its exclusive economic zone, as evidenced by the requirement in Article 7(2)(a) that contracting parties "take into account" the conservation measures established by the coastal state under Article 61 of the Law of the Sea Convention for its EEZ "and ensure that measures established in respect of such stocks for the high seas do not undermine the effectiveness of such measures." This polite diplomatic language indicates clearly that catch rates outside a 200-nautical-mile exclusive economic zone cannot differ significantly from those within the EEZ.

The Duty to Work Through an Existing or New Fisheries Organization. The 1995 Agreement requires coastal and island nations to work together with distant-water fishing nations in an organization or arrangement to manage shared fisheries. Article 8(3) addresses this issue, and it is quoted in full here because its somewhat ambiguous language requires close examination:

> Where a subregional or regional fisheries management organization or arrangement has the competence to establish conservation and management measures for particular straddling fish stocks or highly migratory fish stocks, ***States fishing for the stocks on the high seas and relevant coastal States shall give effect to their duty to cooperate*** by becoming a member of such an organization or a participant in such an arrangement, or by agreeing to apply the conservation and management measures established by such an organization or arrangement. ***States having a real interest in the fisheries concerned may become members of such organizations or participants in such arrangement. The terms of participation of such organizations or arrangements shall not preclude such States from membership or participation***; nor shall they be applied in a manner which discriminates against any State or group of States having a real interest in the fisheries concerned. (Emphasis added.)

It is hard to read this language without concluding that the coastal and island nations must cooperate with the distant-water fishing nations fishing in adjacent high seas areas either by

allowing them into an existing fishery management organization or by creating a new one that all can join. All states "having a real interest" in the shared fishery stock must be allowed into the organization. Only those states that join a regional organization or agree to observe its management regulations can fish in a regional fishery (Article 8(4); and see Article 17(1)). Article 13 requires existing fisheries management organizations to "improve their effectiveness in establishing and implementing conservation and management measures...."

Article 11 addresses the difficult question whether ***new*** distant-water fishing nations must be allowed into such an organization once established. Do the nations that have established fishing activities in the region have to allow new entrants? The language of Article 11 does not give a clear answer to this question, but it seems to indicate that some new entrants could be excluded if the current fishing nations have developed a dependency on the shared fish stock in question. Furthermore, developing nations from the region would appear to have a greater right to enter the fishery than would developed nations from outside the region.

The Precautionary Approach.[8] Article 5(c) lists the "precautionary approach" among the principles that govern conservation and management of shared fish stocks, and Article 6 elaborates on this requirement in some detail, focusing on data collection and monitoring. Then, in Annex II, the Agreement identifies a specific procedure that must be used to control exploitation and monitor the effects of the management plan. For each harvested species, a "conservation" or "limit" reference point as well as a "management" or "target" reference must be determined. If stock populations go below the agreed-upon conservation/limit reference point,

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[8] *See generally* Jon M. Van Dyke, *The Evolution and International Acceptance of the Precautionary Principle,* in BRINGING NEW LAW TO OCEAN WATERS 357-79 (David D. Caron and Harry N. Scheiber eds. 2004).

then "conservation and management action should be initiated to facilitate stock recovery" (Annex II(5)). Overfished stocks must be managed to ensure that they can recover to the level at which they can produce the maximum sustainable yield (Annex II(7)). The continued use of the maximum sustainable yield approach indicates that the Agreement has not broken free from the approaches that have led to the rapid decline in the world's fisheries,[9] but the hope is that the conservation/limit reference points will lead to early warnings of trouble that will be taken more seriously.

The Duty to Assess and to Collect and Share Data. Article 5(d) reaffirms the duty to "assess the impacts of fishing, other human activities and environmental factors" of stocks, and Articles 14 and 18(3)(e) explain the data collection requirements necessary to facilitate such assessments. Article 14 requires contracting parties to require fishing vessels flying their flags to collect data "in sufficient detail to facilitate effective stock assessment" (Article 14(1)(b)). Annex I then explains the specific information that must be collected, which includes the amount of fish caught by species, the amount of fish discarded, the types of fishing methods used, and the locations of the fishing vessels (Annex I, art. 3(1)). In order to permit stock assessment, each nation must also provide to the regional fishery organization data on the size, weight, length, age, and distribution of its catch, plus "other relevant research, including surveys of abundance, biomass surveys, hydro-acoustic surveys, research on environmental factors affecting stock abundance, and oceanographic and ecological studies" (Annex I, art. 3(2)). These requirements, if taken seriously, will revolutionize the fishing industry, where the competitive nature of the

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[9] Fishing to attain the maximum sustainable yield inevitably means reducing the abundance of a stock, sometimes by one-half or two-thirds. This reduction can threaten the stock in unforeseeable ways and also will impact on other species in the ecosystem.

quest for fish has encouraged each nation to hide its activities from others to the extent possible. The data collected "must be shared with other flag States and relevant coastal States through appropriate subregional or regional fisheries management organizations or arrangements" in a "timely manner," although the "confidentiality of nonaggregated data" should be maintained (Annex I, art. 7). Decisionmaking at regional fishery organizations must now be "transparent" under Article 12, and international and nongovernmental organizations must be allowed to participate in meetings and to observe the basis for decisions.

The Methods of Enforcement. Article 18 further requires contracting parties to establish "national inspection schemes," "national observer programmes," and "vessel monitoring systems, including, as appropriate, satellite transmitter systems" to manage their flag fishing vessels with some rigor. Article 21(1) gives these requirements teeth by authorizing the ships of a nation that is party to a regional fisheries agreement to board and inspect on the high seas any ship flying the flag of any other nation that is a party to the same agreement.[10] If the boarded vessel is found to have committed a "serious violation," it can be brought into the "nearest appropriate port" for further inspection (Article 21(8)). The term "serious violation" is defined in Article 21(11) to include using prohibited fishing gear, having improper markings or identification, fishing without a license or in violation of an established quota, and failing to maintain accurate records or tampering with evidence needed for an investigation.

Dispute-Resolution. Part VIII of the Agreement requires contracting parties to settle

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[10] Nations already have the power to board, inspect, and arrest vessels violating laws established to "control and manage the living resources in the exclusive economic zone." Law of the Sea Convention, *supra* note 1, art. 73(1).

their disputes peacefully, and extends the dispute-resolution mechanisms of the Law of the Sea Convention to disputes arising under this new Agreement. These procedures are complicated and somewhat untested, but should provide flexible and sophisticated mechanisms to allow nations to resolve their differences in an orderly fashion.

Marine Protected Areas

Article 194(5) of the Law of the Sea Convention requires countries to take measures "to protect and preserve rare or fragile ecosystems as well as the habitat of depleted threatened or endangered species and other forms of marine life." This key responsibility requires countries to establish marine protected areas and to establish management regimes in these areas that honor and protect the marine life in them. These marine sanctuaries are taking many forms including in some circumstances "no take" zones that are similar to wilderness areas on land.

Perhaps the most dramatic example of a marine protected area was established recently by the State of Hawaii in the three-mile zone it controls around the Northwest Hawaiian islands. On September 29, 2005, Gov. Linda Lingle signed new state rules creating the Northwestern Hawaiian Islands State Marine Refuge, banning fishing and limiting public access in state waters extending three miles from the shores of the islands which are home to delicate coral reefs, scores of fish species, and endangered Hawaiian monk seals and sea turtles. Peter Young, director of Hawaii's Department of Land and Natural Resources, said the state will be asking the federal government to extend ths ban on fishing another 47 miles offshore to create a 50 mile no-take area. The federal waters include 132,000 square miles of ocean that were designated the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve in late 2000. This reserve is in the process of being designated a National Marine Sanctuary, after which regulations for the area

will be developed.

International Convention for the Prevention of Pollution of Ships 1973 as amended by the Protocol of 1978 (MARPOL)[11]

This convention and its protocol stipulate the standards that international shipping has to meet with regard to pollution from ships.[12] It builds on Article 211 of the Law of the Sea Convention, which requires countries to regulate vessel-source pollution, and it establishes mandatory discharge standards; rules on construction, design, equipment and staffing of vessels; and navigation restrictions that limit navigation in ecologically sensitive areas. Its most important innovation was to ensure compliance through explicit documentation requirements governing record books, oil discharge data, and operating certificates.

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter London 1972.

The transformation of the London Dumping Convention is certainly one of the most intriguing environmental stories of the past 15 years. This Convention was drafted shortly after the 1972 Stockholm meeting which launched international environmental consciousness.[13] As originally written, it contained a "black list" of materials (such as high-level radioactive wastes) that could never be dumped into the ocean and a "grey list" of items (such as low-level

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[11] International Convention for the Prevention of Pollution from Ships, 1973, 12 I.L.M. 1219 (1973), as amended by the Protocol of 1978, 17 I.L.M. 546 (1978).

[12] *See generally* DAVID HUNTER, JAMES SALZMAN, AND DURWOOD ZAELKE, INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 707-24 (2d ed. 2002).

[13] The London Dumping Convention has the formal name of The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, and is reprinted in 11 I.L.M. 129 (1973) and can be found at <http://www.londonconvention.org> (site visited Nov. 27, 2005).

radioactive wastes) that could be dumped in appropriate locations if proper governmental permits were obtained. This treaty was a step forward, but it still permitted a substantial amount of dumping, and efforts were made at annual London meetings of its contracting parties to tighten its provisions, so that no radioactive materials whatsoever could be dumped[14] and that the dumping of other hazardous materials would similarly be prohibited. Although some developed nations resisted restrictions on their ability to dump low-level radioactive wastes,[15] after many debates and many preliminary meetings, a new Protocol was adopted in 1996[16] that "virtually re-writes the London Convention."[17] In fact, the name of this treaty was even changed, because the contracting parties did not want the public to think that it authorized dumping, and it is now titled simply "London Convention, 1972."

Under the new Protocol, the presumptions are reversed, and the dumping of all wastes are

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[14] *See, e.g.,* Jon M. Van Dyke, *Ocean Disposal of Nuclear Wastes,* 12 Marine Policy 82 (1988); W. Jackson Davis and Jon M. Van Dyke, *Dumping of Decommissioned Nuclear Submarines at Sea: a Technical and Legal Analysis*, 14 Marine Policy 467 (1990).

[15] During the Seventh Consultative Meeting in 1983, the contracting parties passed a resolution imposing a moratorium on the dumping of all low-level radioactive wastes, but the Soviet Union, China, Belgium, France, the United Kingdom, and the United States voted against the resolution and a number of other industrialized nations abstained. The dissenting nations did not feel that they were bound by this resolution, and the British government sought to continue its dumping program. But the British unions refused to load the low-level wastes on the the British ship in 1985, and thus the British were forced to adhere to the moratorium by their own people. Van Dyke, *Ocean Disposal of Nuclear Wastes, id.* at 82.

[16] 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972.

[17] HUNTER, SALZMAN, AND ZAELKE, *supra* note 12, at 733.

prohibited unless the item to be dumped is explicitly listed in Annex I.[18] Even these Annex I materials, which include dredged material, sewage sludge, vessels, and ocean platforms,[19] cannot be dumped without a permit.[20] Permits can be granted only after assessments are undertaken that evaluate options and describe the potential effects of the dumping.[21] Incineration at sea[22] and the dumping of industrial wastes are completely prohibited. This new Protocol is thus based on the precautionary approach[23] as well as the polluter-pays principle.[24] The burden has thus shifted "from (1) dumping unless it were proven harmful to (2) no dumping unless it is shown there are no alternatives."[25] The Protocol also contains a number of provisions to assist developing

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[18] 1996 Protocol to the London Convention, 1972, art. 4(1), <http://www.londonconvention.org> (site visited Nov. 27, 2005).

[19] *Id.*, Annex I.

[20] *Id.*, art. 4(2).

[21] *Id.*, Annex II.

[22] *Id.*, art. 5.

[23] *Id.*, art 3(1):
In implementing this Protocol, Contracting Parties shall apply a precautionary approach to environmental protection from dumping of wastes or other matter whereby appropriate preventative measures are taken when there is reason to believe that wastes or other matter introduced into the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects.

[24] *Id.*, art. 3(2):
Taking into account the approach that the polluter should, in principle, bear the cost of pollution, each Contracting Party shall endeavor to promote practices whereby those it has authorized to engage in dumping or incineration at sea bear the cost of meeting the pollution prevention and control requirements for the authorized activities, having due regard to the public interest.

[25] HUNTER, SALZMAN, AND ZAELKE, *supra* note 12, at 735.

countries in dealing with their wastes and to encourage them to become parties. It establishes a Technical Cooperation and Assistance Program to assist countries in relying upon the oceans for the dumping of wastes, and seven programs were established by the International Maritime Organization in 1997-98.[26]

This remarkable makeover of the London Convention illustrates the "greening" of the international community and the new spirit of shared responsibility for the common areas of the planet. As of June 2005, 81 countries had become contracting parties to the London Convention and 21 countries had ratified the 1996 Protocol (which will come into force when 26 countries have ratified it).[27] Under Article 210(6) of the Law of the Sea Convention, parties to the Law of the Sea Convention are bound by the requirements of the London Convention even if they are not parties to that treaty.[28]

The Convention on Biodiversity 1992[29]

This convention established that the conservation of biological diversity is a "common concern of humankind,[30] although it also recognizes that countries have right to the sustainable

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[26] *Id.* at 735-36.

[27] London Convention 1972, <http://www.londonconvention.org> (site visited Nov. 27, 2005). Article 25(1) of the 1996 Protocol requires 26 ratifications before it comes into effect.

[28] *See* Brennan van Dyke, *The London Convention, 1972*, in Housman *et al., The Use of Trade Measures in Selected Multilateral Environmental Agreements* 256-57 (UNEP, 1995) (citing a communication to the contracting parties of the London Convention issued by the Division for Ocean Affairs of the United Nations Office of Legal Affairs).

[29] Convention on Biological Diversity, U.N. Doc. DPI/130/7, June 2, 1992, *reprinted in* 31 I.L.M. 818 (1992).

[30] *Id.*, Preamble, clause 3.

use of their biological resources.[31] The convention encourages countries to develop plans to manage their resources, including establishing protected marine areas and addressing threats to coral reefs.[32]

Article 8(c) of this treaty requires contracting parties to "[r]egulate or manage biological resources important for the conservation of biological diversity...with a view to ensuring their conservation and sustainable use." Article 10(b) reinforces this obligation by requiring contracting parties to "[a]dopt measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity."

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[33]

This convention prohibits commercial trade across national boundaries of some 830 species listed in its Appendix I. This list includes all sea turtles and all of the great whales covered by the moratorium established by the International Whaling Convention. The trade of another 25,000 species (including, for instance, polar bears and narwhals) listed in Appendix II are regulated to ensure species survival.[34]

Climate Change

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[31] *Id.,* Preamble, clauses 4 and 5.

[32] *See* HUNTER, SALZMAN, AND ZAELKE, *supra* note 12, at 932-41.

[33] Convention on International Trade in Endangered Species of Wild Flora and Fauna, 27 U.S.T. 1087, T.I.A.S. No. 8249 (1973).

[34] *See* HUNTER, SALZMAN, AND ZAELKE, *supra* note 12, at 1005-22.

The United Nations Framework Climate Change Convention and the Kyoto Protocol[35] give prominence to coastal zone management. These management responsibilities include imposing set backs for coastal development, moving inland and planning for sea level rise. These documents require countries to anticipate disasters and prepare for them. Because the petroleum and fishing industries both contribute to emissions of greenhouse gases, they must thus be part of the strategy developed to control these emissions.

Cetaceans

Article 65 of the U.N. Law of the Sea Convention is explicit in requiring states to "work through the appropriate international organizations for [the] conservation, management and study" of cetaceans (whales and dolphins). The International Whaling Commission (IWC)[36] -- established in 1946 – is presently the "appropriate international organization" and it has maintained a moratorium on all harvesting of whales since 1986, except for limited kills allocated to indigenous people, mostly in the Arctic region.[37]

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[35] United Nations Framework Convention on Climate Change, 31 I.L.M. 849 (1992). All documents related to the Framework Convention and the Kyoto Protocol can be found on the official website: <http://www.unfccc.int>.

[36] The International Whaling Commission (IWC) was created by the International Convention for the Regulation of Whaling, Dec. 2, 1946, 161 U.N.T.S. 72.

[37] Because they wished to continue harvesting whales, Norway, Iceland, the Faroe Islands (Denmark), and Greenland (Denmark) created the North Atlantic Marine Mammal Commission (NAMMCO) in 1992. Norway has consistently objected to the moratorium established by the IWC and has been harvesting minke whales in the North Atlantic under the blessing of NAMMCO. *See generally* Harry N. Scheiber, *Historical Memory, Cultural Claims, and Environmental Ethics in the Jurisprudence of Whaling Regulation*, 38 OCEAN & COASTAL MANAGEMENT 5 (1998), and in LAW OF THE SEA: THE COMMON HERITAGE AND EMERGING CHALLENGES 127 (Harry N. Scheiber ed., 2000) ; David D. Caron, *The International Whaling Commission and the North Atlantic Marine Mammal Commission: The Institutional Risks of Coercion in Consensual Structures,* 89 AM. J. INT'L L. 154 (1995); Trond Bjorndal and Jon M.

Since 1986, the IWC has established a moratorium prohibiting whaling for commercial purposes pursuant to Paragraph 10(e) of the schedule adopted that year, which stated that: "Catch limits for the killing for commercial purposes of whales from all stock for the 1986 coastal and 1985/86 pelagic seasons and thereafter shall be zero." This moratorium was adopted because of the gross overharvesting of whales that occurred during the previous century and was still occurring, and because of a new appreciation of the importance of cetaceans in the marine environment. The relentless slaughter of whales resulted in the severe depletion of all species, and virtually all of the species, including the blue whale, the right whale, and the West Pacific Gray whale, have never recovered and remain critically endangered.[38] The status of the

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Conrad, *A Report on the Norwegian Minke Whale Hunt*," 22 MARINE POLICY 161 (1998).

Canada, which is not a member of either the IWC or NAMMCO but sends observers to meetings of both organizations, has authorized its Inuit natives to harvest limited numbers of bowhead whales *See generally* Ted L. McDorman, *Canada and Whaling: An Analysis of Article 65 of the Law of the Sea Convention*, 29 OCEAN DEVELOPMENT AND INTERNATIONAL LAW 179 (1998). McDorman notes at 181 that "there is a degree of inconsistency" in Canada's permitting whaling but remaining outside the IWC while at the same time complaining bitterly about the nations that fish outside Canada's East Coast EEZ without joining NAFO.

[38] Among the many documented abuses is the report that the Soviet Union harvested 48,477 humpback whales from 1948 to 1973, instead of the 2,710 it officially reported to the International Whaling Commission, and the discovery that whales recently harvested by Japan, ostensibly pursuant to its "scientific" whaling for Antarctic Minke whales, included Humpback whales, Fin whales, and Arctic Minke. Caron, *supra* note 37, at 171 -73 (citing Natalie Angier, *DNA Tests Find Meat of Endangered Whales for Sale in Japan,* N.Y. TIMES, Sept. 13, 1994, at C4, and Michael Szabo, *DNA Test Traps Whale Tenders*, NEW SCIENTIST, May 28, 1994, at 4). Professor Caron has explained that this sad history supports the position "that, regardless of population size, the notion that a common resource such as whales can be sustainably managed is illusory," not only because of the difficulties of attaining scientific certainty, but also because the historical record indicates that "some of the users may act in bad faith and the capacity of the resource manager to police such users is insubstantial." *Id.* at 171. *See also* Scheiber, *supra* note 37, in LAW OF THE SEA, at 155 ("Within the IWC, moreover, these nations collectively failed entirely to halt or ameliorate the slaughter even when it was obvious to all that some of the stocks were going to crash and species be endangered with possible extinction.").

populations of many species is largely unknown. Even with a moratorium, whales face grave threats from other sources, such as global and seawater warming (which can reduce the abundance of krill and change the polar environment necessary for certain whales), marine pollution, noise pollution in the ocean from military and seismic sonar, overfishing of the whales' food sources, entanglement in fish gear, and ship strikes.

The smaller cetaceans have also been dramatically overfished and are in a difficult situation in many parts of the world. To give just one example, between 1870 and 1983, a fishery existed in the Black Sea for the bottlenose dolphin, the harbor porpoise, and the common dolphin, using harpoons and later purse seining, for food and oil. The four countries involved in this fishery -- Turkey, Romania, Bulgaria, and Russia/USSR – harvested about 200,000 dolphins each year, an extraordinary 20% of the population! Between 1931 and 1941, the USSR took 110,000-130,000 dolphins per year, but in later years, its harvests dropped to 75,000 per year because of the population losses, and in 1966, the fishery operations in all countries except Turkey stopped, because of a collapse of the population. The present population of dolphins in the Black Sea is 500,000, half its previous level, and they still suffer from accidental killings, gill net fishing, destruction of coastal ecosystems, and pollution. The World Wide Fund for Nature has estimated that – worldwide – some 300,000 cetaceans are killed inadvertently each year, including those trapped in nets or caught on lines intended for other species.[39] The 1996 Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) prohibits the deliberate taking of any cetaceans and

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[39] Otto Pohl, *World Panel Will Now Act to Conserve the Whale Population,* N.Y. TIMES, June 17, 2003, at A11.

requires contracting parties to "co-operate to create and maintain a network of specially protected areas to conserve cetaceans,"[40] but two of the major Black Sea countries – Russia and Turkey – have not yet ratified this treaty.

The precarious status of the cetaceans have been further threatened by the "scientific whaling" that has been expanding and by efforts to lift the IWC moratorium and resume commercial whaling. These efforts appear to violate the obligation to preserve and protect the marine environment. Scientific whaling can be undertaken only if it is truly "scientific," *i.e.*, if it has passed peer review from other neutral scientists and leads to scientific publications made available for all to review. The impact of proposed scientific whaling programs on endangered species calls out for a full environmental impact assessment under Article 204-06 of the Law of the Sea Convention. A lifting of the moratorium on commercial whaling at the present time, when the number of whales remains at a small fraction of their previous population, would be irresponsible.

The Common but Differentiated Responsibilities Imposed upon Countries to Implement the 1982 United Nations Law of the Sea Convention

The notion that countries have common but differentiated responsibilities to act under international treaties has developed from the principle of equity (or justice) in international law. It has been recognized that the formal equality of states does not inevitably mean that all states have the same duties, because some have better means to protect the global environment and to

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[40] Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), art. 2(1), <http://www.accobams.org/> (site visited Nov. 27, 2005).

assist other states. This idea was identified in Principle 23 of the 1972 Stockholm Declaration,[41] which explained that "it will be essential in all cases to consider .. the extent of applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for developing countries." Principle 7 of the 1992 Rio Declaration[42] went on to say more directly that: "In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities."

The Law of the Sea Convention recognizes these different responsibilities in several articles, including, for instance, Article 207 on land-based pollution, which refers to the economic capabilities of developing states when articulating the responsibility to deal with this problem.[43] Other provisions in the Law of the Sea Convention providing special preferences for developing and otherwise disadvantaged countries include:

* Article 62(2) & (3) – granting developing countries preferential rights to the surplus stocks in the EEZs of other coastal states in their region.

* Articles 69 & 70 – giving developing landlocked and geographically disadvantaged states preferential rights to the surplus stocks in EEZs of coastal states in their region.

* Article 82 – exempting developing states from making payments from continental shelf

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[41] Stockholm Declaration, *supra* note 3.

[42] Rio Declaration, *supra* note 3.

[43] Law of the Sea Convention, *supra* note 1, art. 207(4) (emphasis added):
States, acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from land-based sources, ***taking into account*** characteristic regional features, ***the economic capacity of developing States and their need for economic development....***

resources beyond 200 nautical miles and have preferential rights to payments made by other states.

* Article 119 – apparently giving developing countries some preferential rights to the living resources of the high seas.

* Article 194(1) – stating states must prevent, reduce, and control pollution of the marine environment "using for this purpose the best practicable means at their disposal and ***in accordance with their capabilities***" (emphasis added).

* Article 199 – requiring states to develop contingency plans for responding to pollution incidents "***in accordance with their capabilities***" (emphasis added).

* Articles 202-03 – stating that developing states are entitled to training, equipment, and financial assistance from developed states and international organizations with regard to the prevention, reduction, and control of marine pollution.

* Article 206 – explaining that the duty to assess environmental impacts of planned activities extends "***as far as practicable***" (emphasis added).

* Articles 266-69 – stating that developing countries are entitled to receive "marine science and marine technology on fair and reasonable terms and conditions."

The 1995 Straddling and Migratory Fish Stocks Agreement[44] also contains a number of provisions recognizing the special rights of developing countries:

* The Preamble recognizes "the need for specific assistance, including financial, scientific and technological assistance, in order that developing States can participate effectively in the conservation, management and sustainable use of straddling fish stocks and highly

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[44] Straddling and Migratory Fish Stocks Agreement, *supra* note 5.

migratory fish stocks..."

* Article 3(3) says that "States shall give due consideration to ***the respective capacities of developing States*** to apply articles 5, 6 and 7 within areas under national jurisdiction and their need for assistance as provided for in this Agreement" (emphasis added).

* Article 11(f) gives developing states a preference to enter into a fishery and into a fishery organization as a new member.

* Article 24 addresses the financial needs of developing countries:

> 1. States shall give full recognition to ***the special requirements of developing States*** in relation to conservation and management of straddling fish stocks and highly migratory fish stocks and development of fisheries for such stocks. To this end, ***States shall***, either directly or through the United Nations Development Programme, the Food and Agriculture Organization of the United Nations and other specialized agencies, the Global Environment Facility, the Commission on Sustainable Development and other appropriate international and regional organizations and bodies, ***provide assistance to developing States***.... (emphasis added).

* Article 25 provides some more specific language regarding these obligations:

> 1. States shall cooperate, either directly or through subregional, regional or global organizations:
>
> (a) to ***enhance the ability of developing States, in particular the least-developed among them and small island developing States***, to conserve and manage straddling fish stocks and highly migratory fish stocks and to develop their own fisheries for such stocks;
>
> (b) to assist developing States, ***in particular the least-developed among them and small island developing States***, to enable them to participate in high seas fisheries for such stocks, including ***facilitating access to such fisheries*** subject to articles 5 and 11; and
>
> ©) to facilitate the participation of developing States in subregional and regional fisheries management organizations and arrangements.... (Emphasis added.)

* Funding is addressed in Article 26:

> 1. States shall cooperate to ***establish special funds to assist developing***

> ***States*** in the implementation of this Agreement, including assisting developing States to meet the costs involved in any proceedings for the settlement of disputes to which they may be parties.
>
> 2. States and international organizations ***should assist developing States in establishing new subregional or regional fisheries management organizations or arrangements***, or in strengthening existing organizations or arrangements, for the conservation and management of straddling fish stocks and highly migratory fish stocks. (Emphasis added.)

Other treaties use contextual norms, *i.e.*, by requiring a certain conduct "as far as possible" or "according to their abilities." Some agreements have adopted the idea of calling upon the developed countries to provide financial support for developing countries to comply with international agreements. These two elements (asymmetry of obligations and financial support for developing countries) are thus the prominent features of the principle of "common but differentiated responsibility."

The Framework Convention on Climate Change[45] implements this principle by imposing specific additional obligations in countries that are put into Annex I (all OECD nations and some former Soviet Union countries) and Annex II (comprised only of OECD countries). Article 3(1) of this Convention states that: "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with ***their common but differentiated responsibilities*** and ***respective capabilities***. Accordingly, ***the developed country Parties should take the lead*** in combating climate change and the adverse effects thereof." (Emphasis added.) This formula thus distributes responsibility in relation to ***economic development and status of development.***

In addition, Article 4(9) of the Framework Convention recognizes "least developed

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[45] Climate Change Convention, *supra* note 35.

states" and Article 4(6) recognizes countries with economies in "transition to a market economy" (which are represented in Annex I but receive a somewhat more flexible treatment). Financial support for developing countries is provided for in Article 4(3-4) and (9). The Annexes thus differentiate between countries according to higher per capita greenhouse gas emissions and historically high emissions into the atmosphere.

Technological Advances Threatening the Marine Environment

Linked to this norm that countries have common but differentiated responsibilities are a series of technological advances that create substantial new threats to the marine environment. Because it is the developed countries that have developed the technology that creates these threats, they have the special responsibility to take the necessary actions to protect the marine environment. This responsibility comes from the polluter-pays principle and the no-harm rule, which are widely accepted as norms of customary international law governing shared resources. The global-warming/sea-level rise problem is a prime example of such a threat, but other examples are also looming, including trawling of high-seas seamounts, the use of low- and mid-frequency sonar,[46] floating nuclear power plants, and shipments of ultrahazardous nuclear cargoes.[47] The world community has made significant progress in developing norms to govern the marine environment, but technological advances continue to pose threats and challenge

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[46] *See* Jon M. Van Dyke, Emily A. Gardner, and Joseph R. Morgan, *Whales, Submarines, and Active Sonar,* 18 OCEAN YEARBOOK 330-63 (2004).

[47] *See* Jon M. Van Dyke, *The Legal Regime Governing Sea Transport of Ultrahazardous Radioactive Materials*, 33 Ocean Development and International Law 77-108 (2002); Duncan E.J. Currie and Jon M. Van Dyke, *Recent Developments in the International Law Governing Shipments of Nuclear Materials and Wastes and Their Implications for SIDS,* 14:2 REVIEW OF EUROPEAN COMMUNITY & INTERNATIONAL ENVIRONMENTAL LAW (RECIEL) 117 (2005).

policy-makers to determine who the norms should be applied to new problems.