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## IUCN as Catalyst for a Law of the Biosphere: Acting Globally and Locally

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# ESSAYS

## IUCN AS CATALYST FOR A LAW OF THE BIOSPHERE: ACTING GLOBALLY AND LOCALLY

BY

NICHOLAS A. ROBINSON\*

*Unique among international organizations, the International Union for the Conservation of Nature and Natural Resources (IUCN) operates at the global, regional, and national levels to build governmental capacity to protect the environment. With a membership of over 75 sovereign states and 800 nongovernmental organizations, IUCN functions as an intergovernmental organization at the transnational level while operationally embodying the maxim "think globally, act locally." IUCN acts as a consortium of environmental scientists and professionals, including environmental lawyers who have proposed and secured adoption of significant environmental treaties such as the Convention on the International Trade in Endangered Species (CITES) and their implementing legislation. This Essay sets forth for the first time IUCN's unusual constitution in terms of international law and explains the techniques that IUCN employs—significantly, the use of comparative law—to build capacity in environmental law worldwide.*

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## I. INTRODUCTION

René Dubos, the French microbiologist who popularized the maxim "think globally, act locally"<sup>1</sup> in connection with the 1972 Stockholm Conference on the Human Environment convened by the United Nations (U.N.), came to view the relationship of "humankind and Earth" as "a diversity of systems of symbiosis that constantly undergo adaptive changes and thus contribute to a continuous evolution process of creation."<sup>2</sup> His view of the future of the biosphere is an optimistic one. He posits that nature and humanity will interact and adapt, and that human creativity is an essential sustaining force whereby civilizations learn to make the most of the natural environments on Earth.

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<sup>1</sup> Dubos coined the phrase "think globally, act locally" while serving as chairman of a committee of 152 scientists from 58 countries commissioned by the U.N. Secretary-General to prepare a background study for the Stockholm Conference on the Human Environment. See RENÉ DUBOS & BARBARA WARD, *ONLY ONE EARTH* (1972) (presenting the thoughts and findings of the Stockholm committee scientists); see also *Declaration of the UN Conference on the Human Environment*, U.N. Doc. A/CONF. 48/14/Rev.1 (1973) (outlining the plan adopted by the U.N. at the Stockholm conference to address environmental degradation) [hereinafter *Stockholm Declaration*], reprinted in 11 I.L.M. 1416 (1972).

<sup>2</sup> RENÉ DUBOS, *THE WOOLING OF EARTH* 148 (1980).

Dubos's concepts provided a philosophical and scientific vision to inspire the 1972 Stockholm negotiations that created the U.N. Environment Programme (UNEP) and ushered in the processes establishing environmental law at both national and international levels. Since then, the enormity of the current changes that humans are causing around the Earth has made his vision ever more relevant; the pace and scale of global change poses challenges for societies across all parts of the biosphere.<sup>3</sup> Two decades after the U.N. Conference on the Human Environment in Stockholm, nations took stock of the deteriorating environmental trends when 8,000 governmental delegates and 116 heads of state from 172 nations assembled at the 1992 U.N. Conference on Environment and Development (the Rio Conference). This "Earth Summit" in Rio de Janeiro starkly concluded that "[h]umanity stands at a defining point in history."<sup>4</sup>

Despite well-considered recommendations that the Earth Summit set forth in its thoughtful action plan, "Agenda 21,"<sup>5</sup> the Rio Conference has stimulated rather modest reforms, inadequate to stem the accelerating deterioration in global environmental problems across the world.<sup>6</sup> In response to alarm about signs of further environmental degradation and chronic poverty experienced by billions of persons, the U.N. World Summit on Sustainable Development convened in 2002 and endorsed the "Johannesburg Plan of Implementation" to spur nations on to action.<sup>7</sup> Since then, there remains scant evidence of enhanced work to abate worldwide

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<sup>3</sup> For detailed studies concerning global warming, see the reports of the Intergovernmental Panel on Climate Change (IPCC), available at <http://www.ipcc.ch>. As an indication of the rapid change in scientific understanding of Earth's environmental problems, René Dubos compiled a list of the major environmental threats to the planet in 1980, observing, "I am aware of the possibility of disastrous climatic changes, both natural and of human origin. But I have not listed this danger because there is not sufficient knowledge to evaluate the likelihood of its occurrence." DUBOS, *supra* note 2, at 160. The IPCC reports now provide that knowledge. See, e.g., WORKING GROUP I, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS (2001) [hereinafter CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS], [http://www.grida.no/climate/ipcc\\_tar/wg1/index.htm](http://www.grida.no/climate/ipcc_tar/wg1/index.htm); WORKING GROUP II, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2001: IMPACTS, ADAPTATION, AND VULNERABILITY (2001) [hereinafter CLIMATE CHANGE 2001: IMPACTS, ADAPTATION, AND VULNERABILITY], [http://www.grida.no/climate/ipcc\\_tar/wg2/index.htm](http://www.grida.no/climate/ipcc_tar/wg2/index.htm).

<sup>4</sup> *Report of the United Nations Conference on Environment and Development*, U.N. GAOR, 46th Sess., Annex II, Agenda Item 21, ¶ 1.1, U.N. Doc. A/CONF. 151/26 (1992) [hereinafter *Agenda 21*], reprinted in *AGENDA 21: EARTH'S ACTION PLAN ANNOTATED 1* (Nicholas A. Robinson ed., 1993). The complete text of Agenda 21 along with its extensive legislative history is also published in the six-volume *AGENDA 21 AND THE UNCED PROCEEDINGS 1* (Nicholas A. Robinson et al. eds., 1992).

<sup>5</sup> *Agenda 21*, *supra* note 4.

<sup>6</sup> The World Watch Institute's "State of the World" annual reports (1984–2004) document these trends. See, e.g., *STATE OF THE WORLD 2003: A WORLD WATCH INSTITUTE REPORT ON PROGRESS TOWARD A SUSTAINABLE SOCIETY* (Linda Starke ed., 2003); *STATE OF THE WORLD 2004: A WORLD WATCH INSTITUTE REPORT ON PROGRESS TOWARD A SUSTAINABLE SOCIETY* (Linda Starke ed., 2004).

<sup>7</sup> *Plan of Implementation of World Summit on Sustainable Development*, U.N. Doc. No. A/CONF. 199L-6 Rev.2 (2002) [hereinafter *Johannesburg Plan of Implementation*], reprinted in *STRATEGIES TOWARD SUSTAINABLE DEVELOPMENT: IMPLEMENTING AGENDA 21* at 765–838 (Nicholas A. Robinson ed., 2004).

environmental degradation. Large intergovernmental conferences may be necessary, but are not by themselves sufficient to force implementation of environmental reforms.

If the trends in environmental degradation are to be reversed and more sustainable patterns of human interactions with natural systems established, it will be necessary to identify how recommendations can be leveraged into action. It is the thesis of this Essay that human "creativity" can induce governments to take the effective actions that are promised but as yet unrealized. Such creativity can be stimulated by innovative governmental or intergovernmental programs or by persons acting individually or gathered into nongovernmental organizations (NGOs). There are ample examples of this creativity at work.<sup>8</sup> If harm to the environment is to be corrected, it will be important to understand how these creative instances can be identified and emulated.

One little-appreciated record of such creativity is found in the work of the International Union for the Conservation of Nature and Natural Resources (IUCN or the Union). In 1948, 18 governments, 124 national agencies and nongovernmental organizations, and a collective of individual scientists and lawyers met in France to create IUCN, or the Union for the "Protection" of Nature as its original name provided, to help the nations of the world address emerging threats to the environment.<sup>9</sup> Since then IUCN has consistently worked on nature conservation issues across local, national, and international levels, earning a unique status among international organizations.<sup>10</sup> Because knowledge about Earth's environmental problems is becoming more widespread, the demands on IUCN are ever greater.<sup>11</sup> In order to understand the past significance and future potential of IUCN, it is important to evaluate its *sui generis* character status under international law.

IUCN works with governments at all levels. IUCN's Commission on Environmental Law has stimulated a wide range of international lawmaking activities.<sup>12</sup> When environmental problems manifest themselves, state and local authorities are motivated toward enacting and implementing environmental laws at a remarkably fast pace, often with IUCN's assistance. For the past three decades, IUCN has also been involved with environmental lawmaking at the national level in all regions of the Earth.<sup>13</sup> These lawmaking phenomena are hard to perceive because public comment

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<sup>8</sup> See *infra* Part IV.

<sup>9</sup> MARTIN HOLDGATE, THE GREEN WEB—A UNION FOR WORLD CONSERVATION 33 (1999).

<sup>10</sup> IUCN works across a number of environmental disciplines. Some of the themes addressed by IUCN include biodiversity policy, climate change, ecosystems management, forest conservation, sustainable use, and wetlands protection. Much information about IUCN's work can be found on its website at <http://www.iucn.org> (last visited Apr. 10, 2005).

<sup>11</sup> IUCN's World Conservation Congress, in November 2004 in Bangkok, Thailand, drew more than 4,000 delegates, making it the largest conservation meeting ever held. See IUCN, *World Conservation Congress News Archive*, at <http://www.iucn.org/congress/index.cfm> (last visited Apr. 9, 2005) (describing the 2004 meeting of the World Conservation Congress).

<sup>12</sup> See *infra* Part IV.

<sup>13</sup> *Id.*

focuses on the final legislative product, rather than on the processes that produce new treaties or statutes. In its programs to facilitate lawmaking, IUCN concentrates on providing the expertise needed for the success of the process. IUCN's endeavors in building the web of national, local, and international environmental law deserves to be emulated more widely in order to resolve environmental problems more effectively.

This Essay describes the quiet and creative role that IUCN has undertaken in building the field of environmental law. In evaluating IUCN's environmental law programs, it becomes clear that greater study and teaching of comparative environmental law is essential. As is discussed below,<sup>14</sup> comparative law analysis permits a fuller understanding of creative innovations in national and local environmental laws. That understanding, in turn, can show the way to replicate creative legal innovations, which if multiplied could do much to abate environmental problems worldwide. Environmental lawmaking is a powerful way to realize sustainability values and leverage implementation of recommended solutions to abate pollution, reverse desertification, supply potable water, or conserve biodiversity.

Recognition of the numerous local environmental lawmaking actions, many of them reflecting global thinking, has been masked because the UN, the media, and even the academic world devote their attention to the failures of nations to agree internationally on new treaties, implementation of Agenda 21, or establishment of new international environmental intergovernmental organizations.<sup>15</sup> There is a growing literature about the need to strengthen UNEP or to set up a new environmental agency to counter other bodies such as the World Trade Organization.<sup>16</sup> These debates about building new institutions tend to divert attention from the accomplishments of existing institutions, in particular the local environmental law innovations. They bemoan the lack of universal action to sustain Earth's natural systems without acknowledging what has been accomplished, and *how*. Rather than pursue this formalistic insistence on building a new international intergovernmental body, much more study should be devoted to seeking and studying the locally effective, creative innovations.

To learn from the many national or local environmental success stories and replicate this sort of action more rapidly, legal practitioners, government officials, and scholars alike must devote attention to the subject of comparative legal studies. Because this sort of study and analysis cannot proceed without comparative law, such studies are likely to develop.<sup>17</sup> Just

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<sup>14</sup> See *infra* Part VI.

<sup>15</sup> See, e.g., Nicholas A. Robinson, *Befogged Vision: International Environmental Governance a Decade After Rio*, 27 WM. & MARY ENVTL. L. & POL'Y REV. 299 (2002) (assessing implementation of Agenda 21).

<sup>16</sup> *Id.* at 337-39. The Republic of France has sponsored inclusion of an agenda item for debate in the 2005 Session of the United Nations General Assembly on this theme.

<sup>17</sup> Audio-video conferencing and the Internet afford new technological means for teaching comparative environmental law across continents. For nearly a decade, the National University of Singapore Faculty of Law and the Pace University School of Law have taught comparative environmental law in a combined seminar that convenes in "real time" on Mondays in New York

as the field of environmental law itself has emerged in less than one generation, these comparative law studies will grow enormously in the next generation. In turn, students of comparative environmental law will help develop the adaptable legal framework necessary to reverse environmental degradation.

## II. ENVIRONMENTAL LAW: MEDIATING BETWEEN NATURE AND HUMANS

René Dubos's vision of creativity stimulating adaptive responses to environmental conditions in the evolving symbiotic relationship of humans and nature is illustrated by the emergence of the field of environmental law. Before 1972, no one would have posited that any such legal discipline existed.<sup>18</sup> Yet between 1972 and the adoption of the U.N. World Charter for Nature in 1982,<sup>19</sup> the field of environmental law had emerged.<sup>20</sup> In the Charter for Nature, drafted by IUCN and endorsed by UNEP,<sup>21</sup> the U.N. General Assembly codified and restated many of the basic norms of current environmental laws.<sup>22</sup> The Charter for Nature is a forceful international "soft law" instrument. Also during this period, legal education in environmental law began and law reviews such as *Environmental Law* at Lewis & Clark Law School rigorously defined and critiqued the young field.<sup>23</sup> Human creativity was at work fashioning new bodies of law and legal institutions

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at 8–10 P.M., which is Tuesdays in Singapore at 9–11 P.M. Such collaboration needs to become a standard practice internationally to build capacity among lawyers to employ comparative environmental law tools.

<sup>18</sup> When IUCN was founded in 1948, its purposes called for stronger laws to protect nature. In 1963, when IUCN established its first expert body to address these purposes, IUCN's Council called this body its "Commission on Legislation and Administration." It was in 1965 that IUCN first used the term "environmental law" in establishing its Environmental Law Centre, in Bonn, Germany. The Commission became one on "Environmental Law, Administration and Policy" and eventually evolved into what it is today, the "Commission on Environmental Law." See HOLDGATE, *supra* note 9, at 92, 145.

<sup>19</sup> *World Charter for Nature*, G.A. Res. 37/7, U.N. GAOR, 37th Sess., Supp. No. 51, at 17, U.N. Doc. A/37/51 (1983), *reprinted in* 22 I.L.M. 455 (1983). IUCN's law commission prepared the study drafts of this Resolution and presented it to the UNEP Governing Council, which recommended it to the U.N. General Assembly for adoption.

<sup>20</sup> Domestic examples of environmental laws created between 1972 and 1982 include the Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2000) (creating a legal framework to protect species most at risk of extinction); the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601–9675 (2000) (establishing a scheme to remediate hazardous waste sites); and the Federal Land Policy and Management Act of 1976, 43 U.S.C. §§ 1701–1782 (2000) (providing guidelines for the management and protection of federal public lands). See also S. ERCMAN, *EUROPEAN ENVIRONMENTAL LAW: LEGAL AND ECONOMIC APPRAISAL* (1977) (documenting European environmental laws developed in the 1970s).

<sup>21</sup> The legislative history for the World Charter for Nature was published in Wolfgang E. Burhenne & Will A. Irwin, *Part I: Legislative History*, in *THE WORLD CHARTER FOR NATURE* (2d ed. 1986).

<sup>22</sup> See generally *World Charter for Nature*, *supra* note 19.

<sup>23</sup> *Environmental Law* was first published in 1970. See Bill L. Williamson, *The First Years of Environmental Law*, 20 ENVTL. L. 1 (1990) (detailing the history and origins of *Environmental Law*).

across the United States<sup>24</sup> and in many other nations<sup>25</sup> to cope with widespread pollution, depletion of natural resources, extinction of species, and deteriorating public health conditions for humans.

Environmental law gradually came to embody the norms and means by which organized human society in each nation seeks to sustain the yield of renewable natural resources, abate water pollution, avert adverse unintended environmental effects of development through techniques such as environmental impact assessments, and protect the habitats of species threatened with extinction. While none of these tasks is complete and many of the other responsibilities assigned to environmental law remain to be implemented fully, further challenges are being assigned to environmental law as new problems emerge, such as climate change, sea-level rise, the use of bio-engineered crops, or the spread of zoonotic disease vectors causing avian flu or Severe Acute Respiratory Syndrome (SARS).<sup>26</sup>

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<sup>24</sup> See generally RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* (2004) (detailing the growth of environmental law in the United States from 1970 through 2004).

<sup>25</sup> See generally *COMPARATIVE ENVIRONMENTAL LAW & REGULATION* (Nicholas A. Robinson ed., 1996) (analyzing environmental laws and regulations of 39 nations).

<sup>26</sup> SARS is emblematic of the challenges that environmental law will need to address in the rather near future. The societal management of diseases that are shared between animals and humans today is a serious, growing, and neglected problem. In the wild, an epidemic of Ebola virus currently is killing great apes in Central Africa and infecting human communities as well. In agrarian human settlements throughout Asia, avian flu (type A-H5N1) is killing poultry and wild birds, as well as infecting and killing some mammal species including rare tigers in the Bangkok zoo and humans. The Ebola virus spreads rapidly from human to human, killing individuals within days. Cases of avian flu infections between humans are now documented in Thailand and Vietnam. There is no longer any justification for the traditional divisions, in which public health focused on humans, wildlife conservation focused on wild animals, and veterinarians focused on domesticated animals. A cross-disciplinary approach is required to cope with zoonotic diseases.

There is an urgency to delineate the methodologies, legal and administrative systems, and opportunities for collaborative management with respect to zoonotic diseases. In 2003, the epidemic of SARS, which was a previously unknown zoonotic virus, challenged public health systems in Hong Kong and other Chinese cities; Singapore; Vietnam; Toronto, Canada; and elsewhere. Apart from significant loss of life, the economic impact was substantial; education, commercial, and other social activities were suspended in many locations, civil liberties were curbed, and measures were taken without any scientific foundation to cull wildlife and some domestic animals. Comparable challenges arise from the spread of viruses to humans from monkey pox, mad cow disease, and West Nile virus. Currently, there is virtually no collaboration among the professionals in public health, wildlife conservation, and animal husbandry in coping with these zoonotic diseases. For general information on SARS, avian influenza, and other infectious diseases, see World Health Org., *Avian Influenza*, at [http://www.who.int/mediacentre/factsheets/avian\\_influenza/en](http://www.who.int/mediacentre/factsheets/avian_influenza/en) (last visited Apr. 10, 2005) (describing avian influenza and the history of its documented human infections); CTRS. FOR DISEASE CONTROL AND PREVENTION, *SEVERE ACUTE RESPIRATORY SYNDROME FACT SHEET: BASIC INFORMATION ABOUT SARS* (Jan. 13, 2004) (describing SARS and its recent worldwide outbreak), <http://www.cdc.gov/ncidod/sars/pdf/factsheet.pdf> (last visited Apr. 10, 2005).

At the international level, while great expertise exists within specialized international intergovernmental organizations, there is very little work among them. The World Health Organization (WHO, for human health) has called for collaboration regarding avian flu, the U.N. Food and Agricultural Organization (FAO, for domesticated animals) has addressed farming conditions, and IUCN, through its Commission on Species Survival Veterinary Specialist Group and its Commission on Environmental Law, has studied measures for protecting wild animals.



Most governments still view environmental law prosaically, as an approach to “restore” clean water and air,<sup>27</sup> “conserve” parklands and species,<sup>28</sup> or “preserve” natural resources.<sup>29</sup> Important as these traditional and continuing missions may be, the field of environmental law must take on new responsibilities such as addressing the spread of infectious diseases. It also must strive toward an ecosystemic scope to its application and not function in segments or in isolated sectors. Moreover, because environmental laws invariably must reflect nature and natural systems, decision makers turn to environmental law as they confront the awesome and unpredictable tasks of refashioning laws and legal institutions to cope with global change. Eventually, environmental law will need to become an integrated set of laws for the biosphere, a body of “Earth law.”<sup>30</sup>

The Earth is changing, and societies worldwide need to focus on how to manage that change. Melting of Arctic ice and mountain glaciers,<sup>31</sup> shifting

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Nonetheless, while each group has acknowledged that the problems exist, there is no joint blueprint for how governments and the public can work together to prevent outbreaks of zoonotic diseases. At the national level, wildlife and park managers have virtually no links to public health officials or to agricultural officials. While veterinary science and human medicine share a common body of scientific knowledge, the institutional organization of society poses many obstacles to cooperation on the common problems of zoonotic diseases.

Environmental law does not yet effectively recognize zoonosis as a concern. As it comes to do so, it will need to synthesize the international law and national law systems, just as it needs to build collaboration among the disciplines of conservation biology, veterinary science, and public health.

<sup>27</sup> See, e.g., Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1376, 1251(a) (2000) (providing a plan for identifying actions necessary “to restore and maintain . . . the Nation’s waters”).

<sup>28</sup> See, e.g., National Park Service Organic Act, 16 U.S.C. §§ 1–4, 1 (2000) (outlining a regulatory scheme to “conserve” scenery, natural areas, and wildlife).

<sup>29</sup> See, e.g., Taylor Grazing Act, 43 U.S.C. §§ 315–315o-1, 315(a) (2000) (detailing a legal framework to “preserve” America’s rangelands).

<sup>30</sup> Individuals such as David Brower understood this, and on his urging the *Earth Law Journal* (Nicholas A. Robinson ed.) was published by the Dutch publisher Sijthoff in the Netherlands from 1975 to 1977. Ahead of its time, the publisher discontinued it, and its niche was filled by nationally based university journals such as *Environmental Law* at Lewis & Clark. Eventually, Oxford University Press undertook publishing a similar journal, *Journal of Environmental Law* (Richard Macrory ed.). Such reviews all need to build a greater comparative environmental law component into their analysis. It remains to be seen whether these law reviews will synthesize international and comparative environmental law, focusing on an Earth law.

<sup>31</sup> Satellite photographs show that the western area of the Arctic ice pack has lost one-third of its ice cover. A vast river of icy, melted fresh water flows into the Atlantic between Greenland and Norway, past Iceland. Photographs of the diminishing ice pack can be viewed at GEsources World Guide, *Dwindling Arctic Sea Ice*, at [http://www.gesources.ac.uk/worldguide/html/image\\_1938.html](http://www.gesources.ac.uk/worldguide/html/image_1938.html) (last visited Apr. 10, 2005). See also Visible Earth, *Thirty Years of Arctic Warming*, at [http://visibleearth.nasa.gov/images/841/winter\\_arctic\\_temps.gif](http://visibleearth.nasa.gov/images/841/winter_arctic_temps.gif) (last visited Apr. 10, 2005) (documenting Arctic temperature trends). Similar developments are reported of Antarctic glaciers. See Andrew C. Revkin, *Antarctic Glaciers Quicken Pace to Sea: Warming is Cited*, N.Y. TIMES, Sept. 24, 2004, at A23, available at 2004 WLNR 5574768.

weather patterns,<sup>32</sup> rising sea levels,<sup>33</sup> loss of habitats,<sup>34</sup> and other changes in the natural order will force human societies across the globe to adapt to changed conditions. The law will either facilitate this adaptation or be rendered inadequate because of it. Although the Earth is changing measurably, the consequences are but dimly perceived. Human communities and their laws have grown accustomed to stable conditions and the vested economic interests that rely upon those conditions. When a society does not yet perceive any environmental change, its leaders will see little need for changing the laws. For many, it is counterintuitive that any change will be required, and the politics of inertia reaffirm the current regime.

Much environmental degradation remains hard for leaders or the public to comprehend. In daily life around the world, most take for granted that the sun will rise and set and nature will sustain human life as it always has. Others are so caught up in the turmoil of civil strife, poverty, or political and social causes that deflect all attention from environmental change that none perceive the need to plan for adaptation. Since the citizens in most nations hardly discern such changes in the Earth, it is easy to forget about these gradual threats when considering issues of terrorism, public health crises such as SARS, or lesser political events surrounding national elections or debates over taxes and current economic difficulties.

Environmental law will need to help induce reforms to accommodate adaptations, and provide for education and procedures to cope with the resistance to change.<sup>35</sup> Adaptations will be easier and more effective if the creative and successful innovations in one locality are understood and emulated elsewhere.

### III. CHANGE AS THE "DEFAULT" LEGAL ASSUMPTION

Notwithstanding the difficulties that many may have in perceiving global change and the consequent need to change laws and human institutions, there are parts of the world that live with such change already and have for some time. Communities that live near volcanoes, on seismic fault lines, or in the paths of hurricanes or typhoons know that change must be anticipated and prepared for. Along many seacoasts, communities have been adapting to change for years. For instance, on Cape Cod in

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<sup>32</sup> See Andrew C. Revkin, *Global Warming is Expected to Raise Hurricane Intensity*, N.Y. TIMES, Sept. 30, 2004, at A20, available at 2004 WLNR 5611841 (discussing changes in weather patterns attributable to global warming).

<sup>33</sup> See Larry Rohter, *Antarctica, Warming, Looks Ever More Vulnerable*, N.Y. TIMES, Jan. 25, 2005, at F1, available at 2005 WLNR 1014673 (detailing worldwide sea-level rise).

<sup>34</sup> See William K. Stevens, *The "Hot Spot" Approach to Saving Species*, N.Y. TIMES, Mar. 14, 2000, at F3, available at 2000 WLNR 3234239 (recognizing habit loss due to changing global conditions).

<sup>35</sup> Environmental law has often served this purpose. The "technology-forcing" provisions of the domestic Clean Air Act (CAA), 42 U.S.C. §§ 7401-7661 (2000), are one example. See *Union Elec. Co. v. EPA*, 427 U.S. 246, 257 (1976) (determining that CAA compliance requirements are of a "technology-forcing character" . . . and are expressly designed to force regulated sources to develop pollution control devices that might at the time appear to be economically or technologically infeasible").

Massachusetts, communities live amidst rapidly evolving geological time. The Atlantic Ocean reshapes parts of Cape Cod each year, all year. Cape Cod is the easternmost part of the United States; Henry David Thoreau concluded his book, *Cape Cod*, by declaiming: "A man may stand there and put all of America behind him."<sup>36</sup> Thoreau hiked across Cape Cod repeatedly, closely observed its geology and flora and fauna, and thoughtfully interpreted what he found.<sup>37</sup> Thoreau wrote at a time well before our contemporary understanding of how the Laurentian Ice Sheet advanced 21,000 years ago into New England, leaving in its wake a vast moraine of rocks and sand. The Atlantic Ocean level was 400 feet lower than it is today, and as it rose with the melting of the glaciers 6,000 years ago, the sea embraced these glacial deposits, forming Cape Cod.<sup>38</sup> Long before the Pilgrims arrived, the sea had begun an active geologic sculpting of Cape Cod's shores. The Pilgrims and their progeny did not perceive these changes; it took three centuries for humans to come to perceive geological change on Cape Cod.

"Perhaps what the ocean takes from one part of the Cape," Thoreau speculated, "it gives to another—robs Peter to pay Paul."<sup>39</sup> Thoreau saw how the Atlantic eats into the Great Outer Beach. In the Town of Wellfleet,<sup>40</sup> the Great Outer Beach has a sea cliff 100 to 150 feet high, and this Beach runs for 15 miles along the Atlantic. In 1999, the Highland Light was moved some 300 feet inland from the cliff; the site where it was first erected will soon be lost to the sea. The Atlantic Ocean already has consumed all the signal towers in Wellfleet that Marconi built above the cliffs to send the first wireless message across any ocean from President Theodore Roosevelt to King George in England. Each winter the Atlantic Ocean takes over 40 feet of the shore beach and pushes the cliffs of the Great Outer Beach further inland. The sands taken from Wellfleet are then washed up north around the tip of Cape Cod to fill in the inlets and coves inside Cape Cod Bay or are pushed south against the vast Nauset Marsh, now a part of the Cape Cod National Seashore.<sup>41</sup> Indeed, one of the arguments for Congress taking the

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<sup>36</sup> HENRY DAVID THOREAU, *CAPE COD* 215 (Joseph J. Moldenhauer ed., Princeton Univ. Press 1988) (1865). Thoreau visited Cape Cod in 1849, 1850, 1855, and 1857—long before tourists ever came. His book is one of the first to describe the Cape to those who had never seen it. He died three years before the book's publication. His sister Sophia and friend William Ellery Channing edited the book and arranged its publication in 1865.

<sup>37</sup> See *id.* at 3 (describing Thoreau's route).

<sup>38</sup> See U.S. Geological Survey, *Geologic History of Cape Cod*, at <http://pubs.usgs.gov/gip/capecod/glacial.html> (last visited Apr. 10, 2005) (discussing glacial influences on the geology of Cape Cod). For a short discussion of recent changes to Cape Cod, see Bill Sargent, *Surf Uncovers Tracks Laid in the 1700s*, BOSTON GLOBE, Dec. 14, 2004, at B13, available at 2004 WLNR 13967948.

<sup>39</sup> THOREAU, *supra* note 36, at 120.

<sup>40</sup> Professor Robinson has been a summer inhabitant of Wellfleet, Massachusetts, for many years, and the following observations concerning the New England town are his own.

<sup>41</sup> Congress and President John F. Kennedy established the Cape Cod National Seashore on August 7, 1961. An Act to Provide for the Establishment of Cape Cod National Seashore, Pub. L. No. 87-126, 75 Stat. 284 (1961) (codified as amended at 16 U.S.C. §§ 459b-459b-6 (2000)). Much of the 27,000 acres of dedicated land is within the Town of Wellfleet, including all of Wellfleet's Great Beach.

lands to establish the Cape Cod National Seashore as public domain over much of the Great Beach was to make space for humans to let these natural forces play out without encountering the problems of catastrophic loss of property, tort claims, federal flood insurance, disaster relief, and the like.<sup>42</sup> When Congress established the National Seashore, it was not establishing a static site such as park, but rather enacting a creative law capable of accommodating human activity to change in nature.

Each year Cape Cod experiences dramatic change. In the Great Blizzard of 1978, waves 14 feet high swept away Henry Beston's "Outermost House"<sup>43</sup> from the Great Beach at Nauset. One of the few designated National Wilderness Areas in the eastern United States, Monomoy Island,<sup>44</sup> a critical part of the national system of wildlife refuges, was cut in half by the storm. Cape Cod is perpetually changing. The ecology and economy of life on the Cape has altered greatly since European settlement. Flux and change are the order of the day, and the local and state governments and their citizens have come to accept such dramatic change as a part of the established order.

Thoreau knew nature was dynamic. Others, like Thoreau's contemporary, George Perkins Marsh—a lawyer, congressman, and later Fish Commissioner of Vermont—made similar observations. While abroad, Marsh studied how the hand of man had gradually altered the landscape. As America's Ambassador in Turkey, and later the newly-united Italy, Marsh traveled throughout Italy, Greece, and Egypt. He observed how years of grazing goats and sheep had denuded the hills of grasses and how erosion had washed away the soils across the entire Mediterranean region.<sup>45</sup> On his return to New England, Marsh described what he had seen in his 1864 book *Man and Nature*.<sup>46</sup> Marsh wrote,

Apart from the hostile influence of man, the organic and the inorganic world are, as I have remarked, bound together by such mutual relations and adaptations as secure, if not absolute permanence and equilibrium of both, a long continuance of the established conditions of each at any given time and place, or at least a very slow and gradual succession of changes in those

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<sup>42</sup> See, e.g., S. REP. NO. 87-428, at 2215 (1961) (describing the unpredictable geology of Cape Cod).

<sup>43</sup> HENRY BESTON, *THE OUTERMOST HOUSE* (1928).

<sup>44</sup> Monomoy Island became a National Wildlife Refuge in 1944. See U.S. Fish & Wildlife Serv., *Monomoy National Wildlife Refuge*, at <http://monomoy.fws.gov> (last visited Apr. 10, 2005). Congress designated it as wilderness in 1970. Designation of Wilderness Areas Within National Wildlife Refuges, Pub. L. No. 91-504, § 1(g), 84 Stat. 1105 (1970). For detailed information concerning the island, see the Monomoy National Wildlife Refuge website at <http://monomoy.fws.gov>.

<sup>45</sup> See JANE CURTIS ET AL., *THE WORLD OF GEORGE PERKINS MARSH* 98 (1982) (describing Marsh's extensive travels abroad).

<sup>46</sup> GEORGE PERKINS MARSH, *MAN AND NATURE* (David Lowenthal ed., Harvard Univ. Press 1965) (1864). Gifford Pinchot called Marsh's work "epoch-making." GIFFORD PINCHOT, *BREAKING NEW GROUND* xix (Island Press 1998) (1947).

conditions. But man is everywhere a disturbing agent. Wherever he plants his foot the harmonies of nature are turned to discords.<sup>47</sup>

Marsh concluded, "The earth is fast becoming an unfit home for its noblest inhabitant."<sup>48</sup>

Also during this period, Charles Darwin published his *Origin of Species*.<sup>49</sup> Darwin posited a new worldview of evolution in all life. Life, through the evolution of species, was all about change.<sup>50</sup> This view came to revolutionize the study of biology and open a new social concept of nature. When Ernst Haeckel used the word "ecology" in 1866 to describe the relationships of living organisms with their surrounding environment, he launched a new field for scientific inquiry.<sup>51</sup> Nature would henceforth be seen by science as dynamic and changing, rather than static.

Thoreau and Marsh described the natural world as intrinsically mutable, explaining that humans can inadvertently be agents that harm nature. Darwin, Haeckel, and others studied and described change in nature without human intervention. Yet these intellectual insights by scientists did little to influence the content or enactment of society's laws. The body politic did not modify legislative or other legal norms to take into account a dynamic set of relationships with nature. Society's laws continued to conceive of land as a static resource—a property or commodity available for real estate development or for harvesting natural resources such as fish, timber, or agricultural crops. Nature could be owned and developed. Parks would be delimited, "preserved," and set aside. The natural world was assumed by law to be a stable place, available for continued exploration and development.

Across the United States and around the world, most laws still assume that nature is static, not dynamic.<sup>52</sup> International law principles of national sovereignty and international intergovernmental regimes are premised on the paradigm of a static Earth on which national states can be defined. Law schools teach this static model in their courses on property law and international law. Recorded deeds set out metes and bounds, as if the land will be there in perpetuity; rules for accretion or loss of lands along rivers or bays are considered somewhat arcane exceptions to these standard property norms. Municipal zoning carves up development densities and uses. Insurance systems reimburse for casualties in order to rebuild or restore property. We rush disaster relief to victims of hurricanes and floods and then

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<sup>47</sup> MARSH, *supra* note 46, at 36.

<sup>48</sup> *Id.* at 43.

<sup>49</sup> CHARLES DARWIN, *ORIGIN OF SPECIES* (P.F. Collier & Son 1872) (1859).

<sup>50</sup> *See generally id.* (presenting Darwin's theory of evolution).

<sup>51</sup> *See* EUGENE ODUM, *FUNDAMENTALS OF ECOLOGY* 3 (3d ed. 1971) (recognizing Haeckel's 1866 introduction of the word "ecology"). Earlier, in 1863, Haeckel posited that change and adaptation are essential elements of life. *See generally* ERNST HAECKEL, *THE HISTORY OF CREATION: OR THE DEVELOPMENT OF THE EARTH AND ITS INHABITANTS BY THE ACTION OF NATURAL CAUSES* (1883).

<sup>52</sup> *See supra* notes 27–29 (referencing Clean Water Act ("restoring" our nation's waters), National Parks Organic Act ("conserving" parklands and the species that inhabit them), and the Taylor Grazing Act ("preserving" federal lands for future use)).

facilitate the rebuilding of areas of high hazard, as if the events were random accidents unlikely to recur.

Each jurisdiction—whether a nation or a village—tends to regard the natural system within its territory largely as a fixed, unchanging natural resource base. Few local authorities have any knowledge about which habitats within their boundaries are part of the migratory flyway or contribute to a global climate system. Few local authorities manage their impervious new land cover, such as parking lots and roads, so as to retain 100 percent of the rainwater on site; most planning authorities engineer to remove the water from their site downstream, letting storm water volume or quality become someone else's concern.<sup>53</sup> Most pesticide laws are based upon a legal presumption that chemicals used in accordance with the instructions on their labels will impact only the pest,<sup>54</sup> when in fact these chemicals bioaccumulate in the food chain.<sup>55</sup> Hazardous waste laws strive to contain 100 percent of waste chemicals, storing them in perpetuity in a treatment, storage, and disposal facility.<sup>56</sup> Water pollution laws imperfectly establish water quality standards and effluent limitations as if local conditions are all that matter.<sup>57</sup> The United States tolerates vast dead zones at the mouth of the Mississippi River, in the Chesapeake Bay, and elsewhere where chemical waste and the chemical and biological oxygen demand have eliminated conditions suitable for marine life.<sup>58</sup> Air pollution laws pretend that emission trading has controlled the problems associated with acid

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<sup>53</sup> See Env'tl. Prot. Agency, *Controlling Nonpoint Source Runoff Pollution From Roads, Highways, and Bridges*, at <http://www.epa.gov/owow/nps/roads.html> (last visited Apr. 10, 2005) (describing the difficulties of controlling runoff pollution from roads, highways, and bridges under current pollution prevention programs).

<sup>54</sup> See, e.g., Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136–136y (2000) (regulating domestic pesticide use primarily through a chemical registration mechanism); Grada A. Wossink & Theodore A. Feitshans, *Pesticide Policies in the European Union*, 5 DRAKE J. AGRIC. L. 223, 234–37 (2000) (discussing European Union legislation concerning pesticides).

<sup>55</sup> See, e.g., Marla Cone, *More Hermaphrodite Frogs Found In Years When DDT Was Used*, L.A. TIMES, Mar. 2, 2005, 2005 WLNR 3116965 (outlining results of a study that showed a dramatic increase in sex organ and other physical irregularities in frogs during the years in which DDT was widely used in the United States).

<sup>56</sup> See, e.g., Resource Conservation and Recovery Act of 1976, 42 U.S.C. §§ 6901–6992k (2000) (amending Solid Waste Disposal Act, Pub. L. No. 89-272, 79 Stat. 992) (providing domestic laws concerning hazardous waste remediation); MANUAL OF ENVIRONMENTAL POLICY: THE EU AND BRITAIN, at ch. 5 (Nigel Haigh ed., 2005) (discussing EU policy and legislation on hazardous waste management).

<sup>57</sup> See, e.g., 33 U.S.C. §§ 1251–1387 (2000) (providing the domestic regulatory scheme for water pollution prevention and remediation); MANUAL OF ENVIRONMENTAL POLICY: THE EU AND BRITAIN, *supra* note 56, ch. 4 (discussing EU policy and legislation on water pollution).

<sup>58</sup> See Carol Kaesuk Yoon, *A "Dead Zone" Grows in the Gulf of Mexico*, N.Y. TIMES, Jan. 20, 1998, at F1, available at 1998 WLNR 3033556 (discussing scientific studies of the dead zone in the Gulf of Mexico created by nutrient-rich runoff from the Mississippi River); Francis X. Clines, *Progress in Cleaning Chesapeake Bay, but Far to Go*, N.Y. TIMES, July 22, 2001, at A16, available at 2001 WLNR 3351438 (describing the cleanup efforts to address dead zones in Chesapeake Bay).

rain,<sup>59</sup> when it is clear that acid rain still harms eastern Canada and the United States, threatening the unique sugar maple.<sup>60</sup>

As Asia's economy booms, it is producing air and water pollution on a vaster scale than produced during the Industrial Revolution in Europe and North America. India has 23 cities with more than 1 million persons, and none meet the World Health Organization's air quality standards for healthy air.<sup>61</sup> Acid rain is China's largest "export" to Japan.<sup>62</sup> We can trace Asian aerosols arriving here in North America.<sup>63</sup> But the bulk of Asia's air pollutants contribute to acidic water vapor that sweeps across Southeast Asia, forming a cloud over the Indian Ocean that is two miles deep and 3,000 miles long. The monsoon pushes this "atmospheric brown cloud" up into the Indian subcontinent, where it precipitates as acid rain.<sup>64</sup> Throughout Asia, the combination of soot with other air pollutants has reduced the amount of sunlight that reaches the surface of the earth by ten percent, thereby reducing agricultural yields.<sup>65</sup> The current problems in Asia are not atypical; more than three decades after Sweden put acid rain on the world agenda at the United Nations' 1972 Stockholm Conference on the Human Environment, acid rain from within Europe still harms Scandinavia.<sup>66</sup>

All nations continue to treat pollution as a local phenomenon. They manage land use with a local perspective, ignoring global problems. The laws for private property, spatial planning, and development invariably reinforce this paradigm. The environment remains an assumed "given"—a place to dump wastes, a source of resources, and land to be molded to our needs. The law treats the environment as a static component of the socioeconomic world. If there is a problem with a natural phenomenon, sound engineering can solve it.

This "static" legal paradigm has worked effectively within its limits. Setting aside areas of natural or aesthetic wonder for protection remains a core effort of environmental law. Thoreau and Marsh had called for protecting areas of nature from destructive human development,<sup>67</sup> and by the late nineteenth century, the United States heeded this call, creating

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<sup>59</sup> See Daniel Altman, *Just How Far Can Trading of Emissions Be Extended?*, N.Y. TIMES, May 31, 2002, at C1, available at 2002 WLNR 4026765 (discussing emissions trading under the Clean Air Act and President Bush's proposed Clear Skies Initiative).

<sup>60</sup> See Franz Litz & Karen Roy, *Clean Air: Vital to New York's Natural Resources*, N.Y. STATE CONSERVATIONIST, Dec. 1, 2004, at 1, available at 2004 WLNR 14491683 (discussing acid rain as a continuing threat to the ecosystem of upstate New York and the surrounding area; noting that New York's sugar maples are particularly vulnerable to the impacts of acid rain).

<sup>61</sup> See Charles W. Petit, *A Darkening Sky*, U.S. NEWS & WORLD REPORT, Mar. 17, 2003, at 46.

<sup>62</sup> See *Scourge That Knows No Boundaries*, S. CHINA MORNING POST, Aug. 27, 2004, at 15, available at 2004 WLNR 5979787 (discussing the acid rain in both Japan and Korea resulting from coal-burning power plants in China).

<sup>63</sup> See Petit, *supra* note 61, at 46.

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> See *Brussels' Bunker Blunder*, LLOYD'S LIST INT'L, Sept. 23, 2004, 2004 WLNR 71451805 (recognizing that EU environmental regulations still fall short of regulating emissions in mainland Europe that travel into Scandinavia, adversely impacting lakes and tress).

<sup>67</sup> See *supra* notes 36–48 and accompanying text.

national parks.<sup>68</sup> Across the world, as human development has encroached on extraordinarily wondrous natural areas, other nations have independently established national parks, local parks, land conservancies, marine parks, and wilderness areas. The World Commission on Protected Areas, one of the commissions within IUCN, compiles data for the U.N. Secretary-General's List of Protected Areas.<sup>69</sup> If all the designated protected areas around the world were gathered in one place, they would comprise an area vaster than the Indian subcontinent.<sup>70</sup> No treaty requires this action; nations emulate each other and take pride in establishing their national parks.

While protected areas serve myriad environmental functions such as benefiting migratory species and sustaining the biological diversity of flora and fauna, governments treat these areas as static. Few "protected areas" are designated to cope with patterns of their natural destruction like Cape Cod National Seashore, which accommodates human use despite radical geological change. Most protected areas exist within the confines of a line on a map and require other land uses to acknowledge and conform to that designation.

This static model of law is ill-suited to a world of environmental change. When the volcano on the Caribbean island of Monserrat erupted, its citizens became ecological refugees.<sup>71</sup> Some have been in New York City for years; the U.S. State Department announced in 2004 that it wants to expel them because the volcanic eruption is over and their emergency refugee status no longer exists.<sup>72</sup> Yet, they cannot return to their island because much of it is uninhabitable. The Haitian boat people are also ecological refugees. They flee their barren hills and valleys depleted of life, and the U.S. intercepts them and sends them home.<sup>73</sup> The people of many South Pacific islands have experienced rising sea levels and wonder where they shall remake their lives once their homelands can no longer sustain human settlements.<sup>74</sup> Elsewhere, expanding desert areas displace humans and fauna, producing more ecological refugees.<sup>75</sup>

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<sup>68</sup> See GEORGE CAMERON COGGINS ET AL., *FEDERAL PUBLIC LAND AND RESOURCE LAW* 104-06, 140, 943-68 (5th ed. 2002) (discussing the creation and policy of the national parks system).

<sup>69</sup> For information on U.N. protected areas, see IUCN's World Commission on Protected Area webpage at <http://www.iucn.org/themes/wcpa>.

<sup>70</sup> IUCN, *About Protected Areas*, at <http://www.iucn.org/themes/wcpa/wcpa/protectedareas.htm> (last visited Apr. 10, 2005) (indicating that the world's protected areas cover an area roughly the size of India and China combined).

<sup>71</sup> Nina Bernstein, *U.S. is Ending Haven for Those Fleeing a Volcano*, N.Y. TIMES, Aug. 9, 2004, at A1, available at 2004 WLNR 5549805.

<sup>72</sup> *Id.*

<sup>73</sup> See generally Barbara Crossette, *The Century of Refugees Ends and Continues*, N.Y. TIMES, Dec. 31, 2000, at A4, available at 2000 WLNR 3290194.

<sup>74</sup> See, e.g., Nicholas D. Kristoff, *In Pacific, Growing Fear of Paradise Engulfed*, N.Y. TIMES, Mar. 2, 1997, at A1, available at 1997 WLNR 4858413 (discussing the effects of global warming on 160 island countries and the potential displacement of their citizens if sea-level rise continues).

<sup>75</sup> See, e.g., Barbara Crossette, *Village Committees Learn How to Guard Endangered Forest in Bangladesh*, N.Y. TIMES, Aug. 6, 1991, at C4, available at 1991 WLNR 3074310 (recognizing that expansive logging and the resulting desertification has imperiled forest-dwelling peoples in Bangladesh).



Sea-level rise is a phenomenon occurring in all regions of the world.<sup>76</sup> The seas are reshaping the coasts all over the world, just as they have always done on Cape Cod. People in the low-lying regions of Bangladesh already experience the tragic consequences of flooding and sea-level rise.<sup>77</sup> Yet the static perspective blinds each coastal jurisdiction as if it need only worry about its own local coastline.

Thanks to the studies and reports of the Intergovernmental Panel on Climate Change,<sup>78</sup> leaders in many nations have come to understand that each nation's climate and weather are linked in a global pattern. Most nations prefer to focus on issues of public concern other than their own contributions to increased carbon dioxide levels in the atmosphere.<sup>79</sup> National leaders defer worrying about changes in weather and climate because these changes are uncertain in intensity and effect.<sup>80</sup> From time immemorial, people have asked, "What can you do about the weather anyway?"

#### IV. IUCN'S INTEGRATED VISION OF HUMANS IN NATURE

In contrast to the longstanding geopolitical and legal assumption that nature serves primarily as a static substrate for human activity, a different scientific and legal paradigm is gradually emerging. Emerson,<sup>81</sup> Thoreau,<sup>82</sup> and Marsh<sup>83</sup> elaborated ideas about conservation of nature in the nineteenth century, which Theodore Roosevelt began to enact into law in the early twentieth century.<sup>84</sup> Comparable conservation activity was afoot in Europe.<sup>85</sup> In the second half of the twentieth century, conservationists advocated

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<sup>76</sup> See, e.g., CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS, *supra* note 3, at 4 (noting an increase in global sea levels). See generally RACHEL CARSON, *THE SEA AROUND US* (Oxford Univ. Press 2003) (1950) (recognizing sea-level rise and other changes in the world's oceans).

<sup>77</sup> See, e.g., Bob Herbert, *Cold Facts of Global Warming*, N.Y. TIMES, July 10, 2000, at A19, available at 2000 WLNR 3248883 (discussing effects of sea-level rise in Bangladesh).

<sup>78</sup> See, e.g., CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS, *supra* note 3; CLIMATE CHANGE 2001: IMPACTS, ADAPTATION, AND VULNERABILITY, *supra* note 3 (detailing the science behind global warming, as well as its potential future impacts).

<sup>79</sup> See, e.g., David E. Sanger, *Bush Will Continue to Oppose Kyoto Pact on Global Warming*, N.Y. TIMES, June 12, 2001, at A1, available at 2001 WLNR 3382059 (reporting President Bush's firm opposition to the Kyoto Protocol on global warming); Bradford C. Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL. L. 1, 10-13 (2005) (discussing the Bush Administration's conclusion that the Clean Air Act does not provide the Environmental Protection Agency authority to regulate carbon dioxide).

<sup>80</sup> See, e.g., Andrew Revkin, *All That Hot Air Must Be Having an Effect*, N.Y. TIMES, Jan. 12, 2003, available at 2003 WLNR 5649217 (describing the Bush Administration's position that climate change requires no action while the science remains uncertain).

<sup>81</sup> RALPH WALDO EMERSON, *Nature* (1836), in *THE WORKS OF RALPH WALDO EMERSON IN ONE VOLUME* 266-76 (Black's Readers Service 1950).

<sup>82</sup> HENRY DAVID THOREAU, *Walden*, in *THE SELECTED WORKS OF THOREAU: CAMBRIDGE EDITION* 243-465 (Houghton Mifflin 1975) (1854).

<sup>83</sup> See generally MARSH, *supra* note 46.

<sup>84</sup> See COGGINS ET AL., *supra* note 68, at 106 (describing President Roosevelt's efforts to reserve vast areas of land for conservation management).

<sup>85</sup> Finland, Germany, and the United Kingdom all adopted conservation laws in the early 20th century. ERCMAN, *supra* note 20, at 231, 238, 274.

enactment of laws to ensure that humans take nature into account in all their activities. Since 1948, IUCN's coalition has grown to number 82 state members, 112 environmental agencies, and 851 nongovernmental organizations, all collaborating in a union for world conservation.<sup>86</sup> Through IUCN's Species Survival Commission, over 7,000 scientists worldwide prepare the "Red Data Books" on species that are threatened or in danger of extinction.<sup>87</sup> IUCN's World Commission on Protected Areas works with most of the national parks services around the world and every decade holds a World Parks Congress assessing global efforts to protect designated park areas.<sup>88</sup>

IUCN's Commission on Environmental Law, currently numbering over 900 environmental law experts from all regions of the world, has taken the lead on developing environmental law. In 1948, the founders of IUCN set forth among the new Union's objectives the duty "to instigate international agreements on the protection of nature."<sup>89</sup> By 1958, the Union began to receive requests from different nations for experts to assist in preparing nature conservation laws. By 1963, the Union established its Commission on Legislation and Administration, the precursor of its present Commission on Environmental Law.<sup>90</sup> From the start, the leaders of the Commission worked on the assumption that the natural systems of the Earth were dynamic and interrelated. Like those engaged in shaping the first generation of environmental law within the United States and in most other nations, the Commission's early leaders such as Dr. Wolfgang E. Burhenne and Prof. Keith Lynton Caldwell promoted studies toward a new body of legislation and treaties that could promote sustainable yields from natural resources, preserve species and their habitat, and integrate the stewardship of natural systems with management of human social and economic systems.<sup>91</sup>

IUCN envisions Earth as one biosphere where all living systems are linked and where the role of environmental laws is to guide and adapt governmental and other legal systems toward a conservation ethic.<sup>92</sup>

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<sup>86</sup> IUCN, *IUCN Membership at a Glance*, at <http://www.iucn.org/members/Mem%20Statistics.htm> (last visited Apr. 10, 2005).

<sup>87</sup> See generally IUCN, *IUCN Red List of Threatened Species*, at <http://www.redlist.org> (last visited Apr. 10, 2005).

<sup>88</sup> Most recently, the World Park Congress met September 8–17, 2003 in Durban, South Africa. IUCN, *World Parks Congress 2003*, at <http://www.iucn.org/themes/wcpa/wpc2003> (last visited Apr. 10, 2005).

<sup>89</sup> See HOLDGATE, *supra* note 9, at 47.

<sup>90</sup> See *Resolution on Conservation Laws*, G.A. Res. 4, IUCN General Assembly, 8th Sess., at 24 (1963) (establishing the Commission on Legislation and Administration), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>91</sup> See HOLDGATE, *supra* note 9, at 91–92 (detailing the Commission on Legislation and Administration's early efforts).

<sup>92</sup> For instance, the Preamble to the IUCN Statutes recognizes that "conservation of nature and natural resources involves preservation and management of the living world, the natural environment of humanity, and the earth's renewable resources on which rests the foundation of human civilization . . . the increasing impoverishment of natural resources will inevitably result in a lowering of human standards of living but that this trend need not be irreversible provided that people fully come to recognize their close dependence upon these resources and to the recognition of the need to preserve and manage them in a way that is conducive to the peace,

Stewardship of nature depends first on the scientific understanding of the environment. This understanding has evolved as the science of Earth's systems has advanced. Environmental law is not a static field. For instance, protected areas are no longer viewed just as parks with defined borders. All protected areas need to be surrounded by buffer zones, including wildlife corridors and other programs to mediate between the preserved areas and adjacent developing areas.<sup>93</sup> IUCN has adopted a well-elaborated set of criteria for classifying and managing different types of protected areas.<sup>94</sup> However, a second generation of legislation and adjustments to environmental preservation laws are required.<sup>95</sup> Legislation must evolve and adapt as the natural or human environments change.

The IUCN Commission on Environmental Law has studied and advanced several international agreements to guide nations in the process of adapting from a fossilized view of nature toward one that accommodates change. Four brief case studies demonstrate how IUCN's expertise and quiet diplomacy have helped to establish important elements of both international and national environmental law.

The first agreement to illustrate IUCN's catalytic role is the 1973 Washington Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES),<sup>96</sup> in which the United States convened the diplomatic conference where the treaty was negotiated and signed. The second agreement is the 1979 Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS),<sup>97</sup> to which the United States is not yet a party. Third is Part XII of the U.N. Convention on the Law of the Sea

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progress and prosperity of humanity." IUCN Statutes of 5 Oct. 1948, revised on 22 Oct. 1996 (including Rules of Procedures of the World Conservation Congress, revised on 10 Oct. 2000) [hereinafter Statutes or Rules]. IUCN's Statutes appear in the official treaty series for treaties in force in several states (e.g., the Netherlands) and are published online at <http://www.iucn.org/members/Documents/statutesen.pdf>.

<sup>93</sup> For general information on international buffer zones, see Diego Martino, *Buffer Zones Around Protected Areas*, ELECTRONIC GREEN J. (Dec. 2001), at <http://egj.lib.uidaho.edu/egj15/martino1.html>.

<sup>94</sup> The several criteria for protected areas of the World Commission on Protected Areas have been incorporated into the 2002 revised African Convention on the Conservation of Nature and Natural Resources, endorsed by the African Union, and now going through the ratification processes of the several African nations. The African Convention on the Conservation of Nature, Sept. 15, 1968, 1001 U.N.T.S. 3 (revisions agreed to in 2003, but not yet in force) [hereinafter African Convention]. The revised agreement is available at <http://www.africa-union.org>.

<sup>95</sup> See, e.g., TOWARDS A "SECOND GENERATION" IN ENVIRONMENTAL LAWS IN THE ASIAN AND PACIFIC REGION: SELECT TRENDS (Lye Lin-Heng & Maria Socorro Z. Manguiat eds., 2003) (advocating for new environmental laws to address changing conditions in Southeast Asia) [hereinafter SECOND GENERATION].

<sup>96</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 (entered into force July 1, 1975) [hereinafter CITES]. For information on CITES generally, see DAVID S. FAVRE, INTERNATIONAL TRADE IN ENDANGERED SPECIES: A GUIDE TO CITES (1989).

<sup>97</sup> Convention on the Conservation of Migratory Species of Wild Animals, June 3, 1979, 19 I.L.M. 15 (entered into force Nov. 1, 1983) [hereinafter CMS]. For further information, see <http://www.cms.int>.

(UNCLOS),<sup>98</sup> which forms the environmental law norms for the world's oceans, a treaty the United States has signed but not yet ratified.<sup>99</sup> The fourth is the Convention on Biological Diversity (CBD),<sup>100</sup> which the United States has signed but not yet ratified.<sup>101</sup> Together with the "soft law" norms in the U.N. Charter for Nature,<sup>102</sup> for which the IUCN Law Commission had prepared the initial text, these laws represent key elements of an emerging body of global law for the biosphere. The Commission has contributed to many other treaties and national statutes,<sup>103</sup> but the pattern for these other legal initiatives is similar to the treaties described here.

#### *A. The Convention on Trade in Endangered Species (CITES)*

IUCN's Commission on Environmental Law received a mandate to study a possible new treaty to help curb poaching and trade of endangered species in 1966.<sup>104</sup> The Commission convened a drafting group of legal experts, led by Dr. Françoise Burhenne-Guilman (IUCN Secretariat) and Cyrill de Klemm, which prepared a study draft entitled "Convention on the Import, Export and Transit of Certain Species." Two years of quiet negotiations about this text ensued; by 1971, over 120 nations had been consulted.

During this time, Congressman John Dingell held hearings in Congress on proposals to strengthen the Lacey Act,<sup>105</sup> which made it unlawful to ship any wildlife in interstate commerce within the United States if the species was taken in violation of the wildlife laws of the states. The IUCN draft

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<sup>98</sup> The United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3 (entered into force Nov. 16, 1994) [hereinafter UNCLOS]. More information on UNCLOS is available online at [http://www.un.org/Depts/los/convention\\_agreements/convention\\_overview\\_convention.htm](http://www.un.org/Depts/los/convention_agreements/convention_overview_convention.htm).

<sup>99</sup> Although President George W. Bush submitted the U.N. Law of the Sea Convention to the Senate for ratification in his first term, as of February 2005, the Senate has not yet ratified the treaty. Andrew Freedman, *Rice Pledges Support for Law of Sea as Opponents Air Concerns*, ENV'T & ENERGY DAILY, Feb. 1, 2005, 2005 WL 62125717.

<sup>100</sup> Convention on Biological Diversity, June 5, 1992, 31 I.L.M. 818 (entered into force Dec. 29, 1993) [hereinafter CBD]. The CBD maintains a website at <http://www.biodiv.org>.

<sup>101</sup> President Clinton submitted the CBD to Congress in 1993, but ratification efforts failed, and there have been no congressional developments in regard to the convention since 1994.

<sup>102</sup> See *World Charter for Nature*, *supra* note 19.

<sup>103</sup> Principal among these are the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, T.I.A.S. No. 11084, 996 U.N.T.S. 245 (entered into force Dec. 21, 1975) [hereinafter Ramsar Convention]; Convention Concerning the Protection of the World Cultural and Natural Heritage, Nov. 16, 1972, 27 U.S.T. 37, 1037 U.N.T.S. 151 (entered into force Dec. 17, 1975) [hereinafter World Heritage Convention]; the African Convention, *supra* note 94; and the ASEAN Agreement on the Conservation of Nature and Natural Resources, July 9, 1985 (not yet in force), *reprinted in* SELECTED MULTILATERAL TREATIES IN THE FIELD OF THE ENVIRONMENT 343 (Immanuel Rummel-Bulska & Seth Osafo eds., 2d ed. 1991).

<sup>104</sup> *Resolution on Illegal Traffic in Wildlife Species*, G.A. Res. 5, IUCN General Assembly, 8th Sess., at 24 (1963), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>105</sup> Lacey Act of 1900, ch. 553, 31 Stat. 187 (codified as amended at 16 U.S.C. §§ 701, 3371-3378 and 18 U.S.C. § 42 (2000)).

convention was made a part of the record and the executive branch agencies endorsed the concept of a new treaty to curb unlawful international trade in endangered species.<sup>106</sup> The support of Russell E. Train, then Under Secretary of the Department of the Interior, of IUCN was later made a part of the record in the Senate hearings on the Endangered Species Conservation Act of 1969.<sup>107</sup> In passing the 1969 Act, Congress endorsed the idea that IUCN's Commission on Environmental Law had been advocating:

To assure the worldwide conservation of endangered species and to prevent competitive harm to affected United States industries, the Secretary, through the Secretary of State, shall seek the convening of an international ministerial meeting on fish and wildlife prior to June 30, 1971, and included in the business of that meeting shall be the signing of a binding international convention on the conservation of endangered species.<sup>108</sup>

With the support of Congress, IUCN's Commission on Environmental Law worked with the United States Department of State to organize a diplomatic conference on the treaty. The United States convened the diplomatic conference in February of 1973. The year before, IUCN's Commission had worked with the parties gathered at the 1972 U.N. Stockholm Conference on the Human Environment and won the recommendation of Stockholm in favor of an endangered species treaty.<sup>109</sup> This support presented international consensus in favor of the treaty, ensuring that the United States' invitation would be well received by other nations. IUCN had laid a supportive foundation for the treaty over a period of nearly a decade, thereby guaranteeing its successful negotiation and ratification, as well as its entry into force on July 1, 1975.<sup>110</sup>

IUCN's Law Commission understands, however, that it is not enough to secure a new treaty's entry into force. IUCN consistently dedicates its legal experts as volunteers through the Commission on Environmental Law, its

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<sup>106</sup> Congressman Dingell's proposals addressing international agreements for fish and wildlife preservation were eventually adopted as part of the Endangered Species Conservation Act of 1969, Pub. L. No. 91-135, § 5, 83 Stat. 275, 278 (1969) (formerly codified at 16 U.S.C. § 668cc-5(b) (1970)) (repealed by Endangered Species Act of 1973, Pub. L. No. 93-205, § 14, 87 Stat. 884, 903 (1973)). Several hearings were held on an Endangered Species Conservation Act, during which the proposals for IUCN's international approach were endorsed by members of Congress, as well as the Kennedy Administration. *See generally Endangered Species: Hearing on H.R. 9424 and H.R. 9493 Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 89th Cong. (1965); *Endangered Species: Hearing on S. 335, S. 671, and S. 1280 Before the Subcomm. on Energy, Natural Resources, and the Env't of the Comm. on Commerce*, 91st Cong. (1969).

<sup>107</sup> *Endangered Species: Hearing on S. 335, S. 671, and S. 1280 Before the Subcomm. on Energy, Natural Resources, and the Env't of the Comm. on Commerce*, 91st Cong. 68 (1969).

<sup>108</sup> Pub. L. No. 91-135, § 5, 83 Stat. 275, 278 (1969) (formerly codified at 16 U.S.C. § 668cc-5(b) (1970)) (repealed by Endangered Species Act of 1973, Pub. L. No. 93-205, § 14, 87 Stat. 884, 903 (1973)).

<sup>109</sup> *Action Plan for the Human Environment*, Recommendation 99, U.N. Doc. A/CONF. 48/14/Rev.1 (1972), reprinted in 11 I.L.M. 1460 (1972).

<sup>110</sup> CITES, *supra* note 96.

scientific experts through the Species Survival Commission, and its small number of staff lawyers and staff scientists, to the *implementation* of the convention. Just as it took a decade for the idea of this an international law to become a reality, it has taken three decades of hard work to ensure its implementation. IUCN worked with national governments on the design of implementing legislation,<sup>111</sup> and sent lawyers to the conferences of the parties to CITES to provide expertise regarding the elaboration of appendices, rules of procedure, and decisions.<sup>112</sup> IUCN's members continue to assign the Commission on Environmental Law a mandate to monitor and assist the implementation of CITES.

*B. Part XII of U.N. Convention on the Law of the Sea (UNCLOS)*

The U.N. Convention on the Law of the Sea is a remarkable legal instrument. It was intended to be a codification of centuries-old rules for the high seas, as well as the restatement of rules on coastal waters and the governance of the exclusive economic zone in which coastal states could exploit natural resources.<sup>113</sup> Aside from some general principles of international law,<sup>114</sup> there were no accepted norms for protection of the marine environment before the negotiations for the law of the sea convention began. In 1970, the U.N. General Assembly had agreed to convene a conference to codify the law of the sea and to update the four Geneva Conventions that had been the product of the first U.N. Conference on the Law of the Sea in 1958.<sup>115</sup> This would be the first international plenary negotiating conference for many of the newly independent nations now members of the UN. The agenda for this Third Conference on the Law of the Sea (UNCLOS III) included issues of marine environmental protection.

Members of IUCN's Commission on Environmental Law participated in the plenary negotiating sessions as observers.<sup>116</sup> An IUCN Task Force was

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<sup>111</sup> See generally CYRILLE DE KLEMM, SPECIES MENTIONED LEGISLATION—AN INDEX DEVELOPED BY THE IUCN ENVIRONMENTAL LAW CENTRE (1984).

<sup>112</sup> IUCN, *What is the Species Survival Commission (SSC)?*, at <http://www.iucn.org/themes/ssc/aboutssc/whatisssc.htm> (last visited Apr. 10, 2005) (discussing IUCN functions with regard to species survival, including technical and scientific advice provided to governments). The last CITES Conference of the Parties was held in Bangkok, Thailand in the fall of 2004.

<sup>113</sup> See DAVID HUNTER ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 678–80 (1998) (providing the history and purpose of UNCLOS).

<sup>114</sup> For instance, the rule *sic utere tuo ut alienum non laedas* (so to use your own as not to injure others) was recognized as a general principle of international law in the Trail Smelter Arbitration (U.S. v. Canada), 3 R.I.A.A. 1938, 1962–66 (1949) and confirmed in Principle 21 of the *Stockholm Declaration*, *supra* note 1, at 3.

<sup>115</sup> The four Geneva Conventions were 1) Convention on the Territorial Sea and the Contiguous Zone, April 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205 (entered into force Sept. 10, 1964); 2) Convention on the Continental Shelf, April 29, 1958, 15 U.S.T. 471, 499 U.N.T.S. 311 (entered into force Jun. 10, 1964); 3) Convention on the High Seas, April 29, 1958, 13 U.S.T. 2312, 450 U.N.T.S. 82 (entered into force Sept. 30, 1962); and 4) Convention on Fishing and Conservation of the Living Resources of the High Seas, April 29, 1958, 17 U.S.T. 138, 559 U.N.T.S. 285 (entered into force Mar. 20, 1966).

<sup>116</sup> Participants included the Chair of IUCN's Commission on Environmental Law (CEL), Dr. Wolfgang Burhenne; the Sierra Club and its Executive Director, J. Michael McCloskey; the

set up to support the consultations.<sup>117</sup> This Task Force consulted widely with delegates and also conducted a series of seminars on the natural history and environmental problems of the oceans for diplomats attending the several negotiating sessions for the convention. Plenary deliberations in multilateral negotiations are frequently delayed while small contact groups of key delegates negotiate quietly to agree on consensus proposals to submit back to the plenary. While these contact group negotiations are advancing, there are periods when little can proceed in the plenary session. It was during these quiet periods, primarily at the sessions held from June to August 1974 in Caracas, Venezuela, that the IUCN Environmental Law Commission and others convened scientific seminars for the diplomats on the environmental management issues that should be addressed in any new treaty for the oceans.<sup>118</sup>

During the nine years of UNCLOS III negotiations from 1973 to 1982, IUCN, UNEP, and others were developing the elements of marine environmental management. In the United States, environmental NGOs and scientists had pressed Congress for the enactment of the Coastal Zone Management Act of 1972 (CZMA),<sup>119</sup> the Marine Protection, Research and Sanctuaries Act of 1972,<sup>120</sup> and the Marine Mammal Protection Act of 1972.<sup>121</sup> The implementation of these national laws provided a body of experience to present to diplomats charged with negotiating the law of the sea convention.

After its establishment in 1973, the U.N. Environment Programme also began to negotiate its "Regional Seas Programme," which included the adoption of treaties for the environmental management of the Persian Gulf in the Kuwait Agreement of 1978<sup>122</sup> and for the Mediterranean Sea in the Barcelona Convention of 1976.<sup>123</sup> Like IUCN, UNEP recommended expanding UNCLOS's vision to include provisions on the marine environment.

IUCN's role was to identify national innovations and best practices that should be embraced as international norms. IUCN had put forth a number of specific proposals for the Revised Single Negotiating Text of the U.N. Third Conference on the Law of the Sea,<sup>124</sup> much of which drew upon a strategy

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chairs of its International Committee, Thaddeus Tryzna and Nicholas A. Robinson; and Patricia Scharlin, director of its International Office, all of whom were also active members of CEL.

<sup>117</sup> IUCN YEARBOOK 39 (1974).

<sup>118</sup> At the Caracas sessions, well-known experts such as Thor Heyerdahl were invited to make presentations, which during the slow periods of the negotiations, often drew a larger attendance than the actual plenary treaty negotiations.

<sup>119</sup> Pub. L. No. 89-454, Title III, 80 Stat. 203 (codified as amended at 16 U.S.C. §§ 1451-1465 (2000)).

<sup>120</sup> Pub. L. No. 92-254, § 2, 86 Stat. 1052 (codified as amended at 33 U.S.C. §§ 1401-1445 (2000)) (also known as the Ocean Dumping Act).

<sup>121</sup> Pub. L. No. 92-522, Title 1, § 101, 86 Stat. 1027 (codified as amended at 16 U.S.C. §§ 1361-1421h (2000)).

<sup>122</sup> Kuwait Regional Convention for Co-Operation on the Protection of the Marine Environment from Pollution, Apr. 24, 1978, 1140 U.N.T.S. 133 (entered into force July 1, 1979).

<sup>123</sup> Convention for the Protection of the Mediterranean Sea Against Pollution, Feb 16, 1976, 11 I.L.M. 290 (entered into force Feb. 12, 1978).

<sup>124</sup> *IUCN Intervenes on Law of Sea*, IUCN BULL., Oct. 1976, at 55.

that IUCN and the World Wildlife Fund's Marine Programme had prepared in 1976.<sup>125</sup> Although many of the elements of the strategy dealt with specific species at risk, the general thrust of the proposal became items for inclusion in the negotiation of Part XII.

Preparation of the provisions of Part XII of UNCLOS became possible as a consensus emerged that environmental protection norms for the oceans should be included in the treaty. The IUCN Commission on Environmental Law convened a small consultation on environmental protection at the United Nations in New York in 1977. With the support of Elliott Richardson, who headed the U.S. delegation to UNCLOS III, and others such as Dr. Alexander Yankov, then chair of the Committee of the U.N. Conference on the Law of the Sea for the marine environment, research and technology transfer, meetings were convened to work on the new section on marine environmental protection.<sup>126</sup> Large contact group sessions were held in Geneva, Switzerland, in 1979 and 1980.<sup>127</sup> Subsequent meetings were held during the Law of the Sea Institute Conference in Kiel, Germany, and at the "Pacem in Maribus" Conference in Vienna, Austria.<sup>128</sup> A consensus draft of Part XII emerged and became a part of the Convention that was finally agreed to and opened for signature in Montego Bay, Jamaica, in 1982.<sup>129</sup>

While many individuals, national delegations, and organizations can take some credit for the innovative negotiations of Part XII of UNCLOS, IUCN's involvement was significant. Part XII reflects the innovations in national environmental law on marine stewardship that IUCN was able to explain to the international diplomats engaged in the negotiations. IUCN's sharing of scientific information in a legal context and its comparative legal analysis of national initiatives provided the precedents that were incorporated into the international norms set forth in Part XII.<sup>130</sup> IUCN's Commission on Environmental Law did not stop in 1982. It worked to assist nations on the national implementation of the treaty and to secure ratification.<sup>131</sup> By the time UNCLOS entered into force in 1994, IUCN's

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<sup>125</sup> *The Seas Must Live*, IUCN BULL., Dec. 1976, at 65.

<sup>126</sup> IUCN issued critiques of shortcomings in the drafts in 1977 and in March of 1978 to the 7th session of UNCLOS III meeting in Geneva, Switzerland.

<sup>127</sup> THE ENVIRONMENTAL LAW OF THE SEA 121 (Douglas M. Johnston ed., 1981).

<sup>128</sup> The recommendations of the IUCN Commission on Environmental Law to these meetings are summarized in THE ENVIRONMENTAL LAW OF THE SEA. *Id.* at 395-419.

<sup>129</sup> UNCLOS, *supra* note 98.

<sup>130</sup> See, e.g., *id.* art. 206, 21 I.L.M. at 1309 (establishing environmental impact assessment that resembles the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-44370f (2000)); *id.* art. 207, 21 I.L.M. at 1310 (establishing land-based point and non-point source marine pollution controls that resemble those found in the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (2000)); *id.* art. 212, 21 I.L.M. at 1311 (regulating atmospheric ocean pollution much like the Clean Air Act, 42 U.S.C. §§ 7401-7671q (2000)).

<sup>131</sup> See, e.g., *Environmental Law of the Sea*, G.A. Res. 16/12, IUCN General Assembly, 16th Sess., at 79-80 (1984) (announcing UNCLOS ratification and implementation initiatives to be headed by IUCN),

[http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).



marine law experts had devoted nearly another decade to the implementation of the Convention.<sup>132</sup>

### *C. Convention on Migratory Species (CMS)*

The Bonn Convention on Migratory Species of Wild Animals (CMS) is an important treaty for IUCN, although the CMS is not well known in North America because the United States has not yet adhered to it. Since its founding in 1948, IUCN has made a priority of protecting migratory species across all nations within the migratory range of the species. Negotiation of an international agreement to help protect migratory species also required a multi-year undertaking by IUCN staff.

The U.N. Stockholm Conference on the Human Environment in 1972 had recommended negotiation of "international conventions and treaties to protect species inhabiting international waters or those which migrate from one country to another."<sup>133</sup> Later that year, the IUCN General Assembly meeting in Banff, Alberta, Canada, also called for a migratory species treaty.<sup>134</sup> In 1974, the German government took the lead in proposing implementation of these recommendations, and invited the IUCN Environmental Law Centre in Bonn, Germany, to help. By 1975, IUCN Commission members had prepared a draft convention,<sup>135</sup> which the Federal Republic of Germany sent to nations with which it then maintained diplomatic relations for consultations. In 1976, a meeting was held in Germany to review the draft and the comments it spawned. The German government invited IUCN's Commission to prepare a revised draft convention in light of the comments made, and the second draft appeared in 1978.

Germany convened a diplomatic conference in Bonn in 1979; following negotiation of the final text, 21 nations signed the new treaty.<sup>136</sup> IUCN's Commission then consulted with these nations regarding their ratification of the CMS, which entered into force in November of 1983.<sup>137</sup> A Secretariat was established in Bonn, Germany. IUCN's Law Commission then addressed

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<sup>132</sup> IUCN's provision of legal expertise on implementation of Part XII continues. IUCN, *IUCN Charts a Course for Conserving High Seas Biodiversity*, at <http://www.iucn.org/themes/law/dev11.html> (last visited Apr. 10, 2005).

<sup>133</sup> *Action Plan for the Environment*, Recommendation 32, U.N. Doc. A/CONF. 48/14/Rev.1 (1973), reprinted in 11 I.L.M. 1434 (1972).

<sup>134</sup> *Protection of Wide-Ranging Species*, Recommendation 16, IUCN General Assembly, 11th Sess., at 40 (1972), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>135</sup> Daniel Navid, *Draft International Convention on the Conservation of Migratory Species of Wild Fauna*, 2 ENVTL. POL'Y & LAW 117 (1976).

<sup>136</sup> See Ecolex, *Treaty Status Table: Convention on the Conservation of Migratory Species of Wild Animals*, at [http://www.ecolex.org/ecolex/en/treaties/treaties\\_matrix.php?docnr=2359&language=en&title=Convention%20on%20the%20Conservation%20of%20Migratory%20Species%20of%20Wild%20Animals%20&TR=&sortorder=0&Oldsortorder=0](http://www.ecolex.org/ecolex/en/treaties/treaties_matrix.php?docnr=2359&language=en&title=Convention%20on%20the%20Conservation%20of%20Migratory%20Species%20of%20Wild%20Animals%20&TR=&sortorder=0&Oldsortorder=0) (last visited Apr. 10, 2005).

<sup>137</sup> See CMS, *supra* note 97.

specific issues regarding the regional implementation of the convention.<sup>138</sup> IUCN's actions involving the CMS also illustrate the importance of quiet diplomacy over a period of a decade, followed by attention to the implementation of the terms of the agreement. For instance, IUCN actively participated in the development of the African-Eurasian Waterbird Agreement,<sup>139</sup> which grew out of the IUCN's consultations on the CMS. With the support of the Netherlands, the Waterbird Agreement was negotiated and entered into force in 1999, addressing management of the migratory range of over 235 species of birds in 117 countries.<sup>140</sup> IUCN's Commission and Environmental Law Centre continue to advise the Convention Secretariat in Bonn and work with state members on the elaboration of the management provisions for listed and yet-to-be-listed migratory species.

#### *D. Convention on Biological Diversity (CBD)*

While UNCLOS addressed issues of pollution and environmental impact assessment of actions affecting the marine environment, the CMS addressed migratory species, and other treaties IUCN helped develop addressed parks<sup>141</sup> and wetlands,<sup>142</sup> there remained the need for a set of global norms to conserve biodiversity in all its aspects. The study of such an overarching international agreement became a priority for IUCN after the adoption of the U.N. World Charter for Nature in 1982.<sup>143</sup> IUCN had worked closely with UNEP to build the global consensus for the World Charter for Nature, which provided a normative framework within which other international agreements might be developed.

After four years of study within IUCN and its Commissions and with other interested groups such as the Kew Royal Botanical Gardens,<sup>144</sup> the Commission on Environmental Law presented a draft for a Convention on Biological Diversity in 1988 at the IUCN General Assembly held in Costa Rica.<sup>145</sup> The Commission on Environmental Law held a workshop to present

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<sup>138</sup> See generally CYRILLE DE KLEMM, *ELEMENTS OF AN AGREEMENT ON THE CONSERVATION OF WESTERN PALEOARTIC MIGRATORY SPECIES OF WILD ANIMALS* (1983).

<sup>139</sup> Agreement on the Conservation of African-Eurasian Migratory Waterbirds, Jun. 16, 1995 (entered into force Nov. 1, 1999), [http://www.unep-aewa.org/documents/agreement\\_text/eng/agree/agree\\_full.htm](http://www.unep-aewa.org/documents/agreement_text/eng/agree/agree_full.htm).

<sup>140</sup> UNEP, *Introduction to the African-Eurasian Waterbird Agreement*, at <http://www.unep-aewa.org/about/introduction.htm> (last visited Apr. 10, 2005).

<sup>141</sup> See, e.g., World Heritage Convention, *supra* note 103.

<sup>142</sup> See, e.g., Ramsar Convention, *supra* note 103.

<sup>143</sup> Principle 2 of the Charter states, "The genetic viability of the earth shall not be compromised; the population levels of all life forms, wild and domesticated, must be at least sufficient for their survival and to this end necessary habitats shall be safeguarded." *World Charter for Nature*, *supra* note 19, 22 I.L.M. at 457.

<sup>144</sup> The IUCN 15th General Assembly had requested a study of the conservation of genetic resources. *Genetic Resources*, G.A. Res. 15/10, IUCN General Assembly, 15th Sess., at 63 (1981), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf). This call was reiterated in more detail at IUCN's 16th General Assembly. *Wild Genetic Resources and Endangered Species Habitat Protection*, G.A. Res. 16/24, IUCN General Assembly, 16th Sess., at 84 (1984), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>145</sup> *Development of Environmental Law*, Recommendation 17.22, IUCN General Assembly,

its draft of the convention. Following revisions to this draft, IUCN shared it with other interested international organizations, including UNESCO, UNEP, Food and Agriculture Organization (FAO), and others.

IUCN's consultations with UNEP through its Chair, Dr. Wolfgang E. Burhenne, led to a consensus among states represented in the UNEP Governing Council that a convention on the subject of biological diversity was needed. Through the leadership of the United Kingdom and others, the Governing Council requested establishment of an ad hoc group to develop a convention on *in situ* preservation and a convention on biological diversity. The IUCN study draft became the basis for the work of the ad hoc group, which of course included IUCN's environmental law experts. In 1990, FAO had prepared a study on *ex situ* biodiversity conservation that also addressed issues regarding potential uses of biodiversity. The ad hoc group then recommended negotiation of a wide convention, encompassing all the elements identified as relevant.

Through the expert leadership of the head of IUCN's Environmental Law Centre, Dr. Françoise Burhenne-Guilmin, IUCN actively participated in the negotiation of the new convention. In 1991, the UNEP Governing Council convened an International Negotiation Committee made up of interested U.N. member states. IUCN Commission members such as Dr. Viet Koster of Denmark participated as delegates. After four plenary negotiating sessions, the Convention on Biological Diversity (CBD) was submitted to the United Nations Conference on Environment and Development to be opened for signature in Rio de Janeiro in 1992. The opportunity to present a further convention to the 1992 "Earth Summit" had provided the stimulus needed to conclude the negotiations, but without the IUCN study draft, the convention could not have been developed in such a short time.

IUCN continued to work on the CBD, preparing a detailed publication explaining its terms and the scientific foundations for the agreement.<sup>146</sup> IUCN consulted widely with states on the ratification of the agreement, which entered into force in December of 1993.<sup>147</sup> Consultations then began regarding national implementation of the agreement.<sup>148</sup> IUCN's Commission on Environmental Law was asked to assist in the negotiation of the first protocol to the CBD, the Biosafety Protocol, which opened for signature in January of 2000,<sup>149</sup> and in turn prepared and published another study on the legal and scientific aspects of this further agreement.<sup>150</sup> The Commission and

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17th Sess., at 102-03 (1988),

[http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>146</sup> LYLE GLOWKA ET AL., GUIDE TO THE CONVENTION ON BIOLOGICAL DIVERSITY (1994).

<sup>147</sup> CMS, *supra* note 97.

<sup>148</sup> See CYRILLE DE KLEMM, BIOLOGICAL DIVERSITY CONSERVATION AND THE LAW: LEGAL MECHANISMS FOR CONSERVING SPECIES AND ECOSYSTEMS (1993) (detailing the implementation of the CBD at the national level).

<sup>149</sup> See Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Jan. 29, 2000, 39 I.L.M. 1027 (entered into force Sept. 11, 2003). The United States is not a party to this Protocol.

<sup>150</sup> See generally RUTH MACKENZIE ET AL., AN EXPLANATORY GUIDE TO THE CARTAGENA PROTOCOL ON BIOSAFETY (2003), <http://www.iucn.org/themes/law/pdffdocuments/biosafety-guide.pdf>.

Law Centre provide legal advice for the IUCN submissions to the meetings of the Conference of the Parties to the CBD.

The CBD is a framework agreement whose elements are now being elaborated by the decisions of the Conference of the Parties.<sup>151</sup> It is remarkable that IUCN was able to secure negotiation and ratification of this agreement in a period of six years. The global concern for the environment, manifested in the 1992 meetings in Rio de Janeiro, certainly explains the remarkable success of the effort. In accordance with the framework provided by the CBD, nations in all regions are now revising their national legislation on biological diversity issues, and IUCN is providing expertise as requested in this process.

#### V. IUCN'S "CREATIVE" CATALYTIC ROLE: CONCEPTUAL LAW DEVELOPMENT

These four case studies illustrate how IUCN's Commission on Environmental Law has been a creative force in shaping the elements of a new law for the biosphere at both international and national levels of government. IUCN's Commission on Environmental Law calls this process "conceptual law development."<sup>152</sup> This creative process requires a core of legal and scientific experts working together over a significant period of time. Conceptual law development is very different from the political advocacy campaigns of NGOs<sup>153</sup> or the foreign policy programs of a given government's administration,<sup>154</sup> because conceptual law development requires quiet diplomacy and a willingness to work through expert studies to establish the foundation for an international consensus for new reform. IUCN's Commission is willing to devote its expertise over a period of at least a decade, study the issues, discuss and brief the nations and other stakeholders, participate in formal negotiations (often taking a back seat), and work with the state parties to an agreement to assist them in their national and international implementation of conservation agreements. IUCN's Commission on Environmental Law and Environmental Law Centre are supported by modest allocations of IUCN's budget and the substantial in-kind contribution of legal services by experts *pro bono publico*.

IUCN, of course, is not the only organization engaged in such conceptual law development activities. Individual nations have taken such a

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<sup>151</sup> The Secretariat for the CBD resides in Montreal, Canada and maintains a website at <http://www.biodiv.org>.

<sup>152</sup> Dr. Françoise Burhenne-Guilman, the first head of the IUCN Environmental Law Centre, and her Commission colleagues, principal among them Cyrille de Klemm and Wolfgang Burhenne, coined the term "conceptual law development."

<sup>153</sup> The World Wildlife Fund often launches campaigns with the purpose of persuading governments to adopt a specific environmental goal, and national NGOs also advance legislation to meet specific goals. These political processes follow a very different path than does conceptual law development.

<sup>154</sup> The negotiation of bilateral or multilateral free trade agreements by the U.S. Trade Representative under the administration of President George W. Bush or the negotiation and ratification of the Panama Canal Treaty under the administration of President Jimmy Carter are examples of the more traditional foreign policy program that makes new international law, but is a process wholly distinct from conceptual law development.

role, as Sweden did with the design and negotiation of the Stockholm Convention on Persistent Organic Pollutants (POPs).<sup>155</sup> UNEP has been the principal force in this field for many multilateral environmental agreements (MEAs).<sup>156</sup> Several MEAs were advanced under UNEP's Executive Director, Dr. Mostafa Tolba. These MEAs include the many regional seas agreements,<sup>157</sup> the Vienna Convention for the Protection of the Ozone Layer,<sup>158</sup> the Montreal Protocol,<sup>159</sup> and other agreements where UNEP convened diplomatic conferences and worked with member states to prepare draft conventions and then negotiate their acceptance. Each of these international agreements is a strand in the new tapestry of international environmental law binding nations to cooperate in combating threats to the global environment from human activity and to cope with global environmental change. Like IUCN, UNEP also works to assist nations in the implementation of the national laws needed under the MEAs.

The difference between the UNEP approach and that of a purely intergovernmental international organization is that all of UNEP's work is based on the direction of its state members. In contrast, IUCN's leadership is due in large part to its commissions of senior experts who volunteer their time to advance conservation of nature and natural resources. These experts devote much of their academic or professional careers to furthering IUCN's work. They represent a pool of expert talent that cannot be bought. UNEP and similar bodies rely on hired consultants who may or may not engage the most experienced specialists available. IUCN's Environmental Law Commission represents experts from all regions, developing and developed alike, and from all legal systems, whether based upon the common law, civil law, Islamic law, socialist law, or customary law.<sup>160</sup> No other consultancy, even if hired by intergovernmental organizations such as FAO or UNEP, can command such a range of expertise. Moreover, no consultancy can devote over a decade of expertise to work through all steps required for conceptual law development.

The role of IUCN is difficult to assess, partially because it is a unique international organization that is overlooked by political scientists and legal experts, and partially because its accomplishments cannot be understood

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<sup>155</sup> See generally MARCO OLSEN, ANALYSIS OF THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS (2003).

<sup>156</sup> See generally MOSTAFA K. TOLBA & IWONA RUMMEL-BULSKA, ENVIRONMENTAL DIPLOMACY: NEGOTIATING ENVIRONMENTAL AGREEMENTS FOR THE WORLD, 1973-1992 (1998).

<sup>157</sup> See, e.g., Convention on the Conservation of the Living Resources of the Southeast Atlantic, Oct. 23, 1969, 801 U.N.T.S. 101 (entered into force Oct. 24, 1971); Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts, Sept. 13, 1973, 1090 U.N.T.S. 92 (entered into force July, 28, 1974); Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific, Nov. 24, 1989, 1899 U.N.T.S. 3 (entered into force May 17, 1991).

<sup>158</sup> Vienna Convention for the Protection of the Ozone Layer, Mar. 22, 1985, T.I.A.S. No. 11,097, 1513 U.N.T.S. 293 (entered into force Sept. 22, 1988).

<sup>159</sup> Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, S. TREATY DOC. NO. 10, 100th Cong., 1st Sess. (1987), 1522 U.N.T.S. 29 (entered into force Jan. 1, 1989).

<sup>160</sup> See IUCN, *IUCN Members*, at <http://www.iucn.org/members/directory.cfm> (last visited Apr. 10, 2005) (listing all IUCN member states).

without studying both international public environmental law and comparative national environmental law. IUCN's unique status under international law is delineated below for the first time in a publication.<sup>161</sup> As IUCN becomes better understood, further legal scholarship should evaluate IUCN's contributions and in so doing advance the field of environmental diplomacy. IUCN does not boast of its accomplishments, but simply gets on with its work, leaving scholars to study and evaluate its efforts.<sup>162</sup>

IUCN's successful process for conceptual law development has six distinct phases. The four case studies above have illustrated these steps. They can be restated as follows:

First, IUCN's initiatives are derived from the observations and recommendations of environmental scientists. Only after the scientists associated with IUCN<sup>163</sup> arrive at a consensus that an environmental problem needs remediation do the environmental law specialists in IUCN begin their studies about what range of options for legal instruments or activities might ameliorate the problem.

Second, IUCN's Commission on Environmental Law convenes a team of legal experts who understand the scientific issues and can bring to bear the perspectives of different geographic regions and the world's diverse legal traditions. Cultural sensitivity is already a part of the different legal systems around the world, and an acceptable range of legal options can be arrived at by consulting in each tradition.

Third, once a proposed legal reform has been researched and described, IUCN consults with key decision makers and other environmental legal experts.<sup>164</sup> Because they need to be conducted globally, these consultations can last for months or years. This process combines a peer review with an off-the-record political critique. It is done without publicity and usually results in significant and realistic changes to the design of the proposed legal reforms.

Fourth, IUCN then convenes appropriate technical meetings, at which legal experts from the interested stakeholders in all affected regions study, critique, and refine the revised proposal.<sup>165</sup> This step has the effect of both honing the proposal and securing a degree of political support for the refined proposal.

Fifth, based on the growing consensus among legal officials from one or more nations, IUCN consults with a state that is willing to sponsor the

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<sup>161</sup> See *infra* Part VII.

<sup>162</sup> A history of IUCN's environmental law program is in preparation. See BARBARA LAUSCHE, CONTRIBUTING TO THE DEVELOPMENT OF ENVIRONMENTAL LAW: THE HISTORY OF IUCN ENVIRONMENTAL LAW PROGRAMME (forthcoming 2006).

<sup>163</sup> IUCN employs a small scientific staff and has a Chief Scientist to network with scientific institutions, learned societies, and academies. IUCN also gathers over 10,000 individual senior scientists in its commissions, most of whom are enlisted in IUCN's Species Survival Committee and World Commission on Protected Areas.

<sup>164</sup> See IUCN COMM'N ON ENVTL. LAW, MANDATE: 2005-2008, [http://www.iucn.org/themes/law/pdffdocuments/CEL\\_Mandate\\_2005-2008.pdf](http://www.iucn.org/themes/law/pdffdocuments/CEL_Mandate_2005-2008.pdf) (documenting IUCN's future consultation agenda).

<sup>165</sup> An example of this step is the presentation of an early draft of the Convention on Biological Diversity to the IUCN 17th General Assembly in Costa Rica in 1988.

refined legal reform, either by introducing it for action in an appropriate intergovernmental forum or by convening a diplomatic conference to adopt the reform. At this point, the process is public and interested nations assign representatives to negotiate a formal agreement using the proposal as a study draft.<sup>166</sup> The intergovernmental process results in the adoption of some version of the proposed reform.

Sixth, once the international agreement is in place, IUCN then works with those nations that have agreed to the reform to determine the available options for implementing the reform through national legislation and national or local administrative action. This final step is essential to the process and distinguishes IUCN's approach from that of organizations who consider their work completed once the international agreement is formally in place. When IUCN is involved, implementation, compliance, and enforcement are an integral part of the design and proposal.

These six phases of conceptual law development are based on contributing expertise and engaging in quiet environmental diplomacy. The negotiation of the first five phases can be evaluated using the traditional tools of international legal research. Evaluation of the sixth phase is more complicated. To measure and assess IUCN's role in implementing the international norms at the national level, comparative environmental legal research is required. Since comparative environmental law is a subject rarely taught in law schools, there is little capacity among most national or international environmental law experts to work across legal traditions. If the remedial purposes of environmental law are to be realized internationally, more resources must be devoted to strengthening comparative environmental law.<sup>167</sup> In Dubos's vision, we need to understand how local law is capable of thinking globally.<sup>168</sup> Today's international environmental law runs the risk of being purely formalistic, uninformed by any understanding of whether the international norms are effective within a nation.

## VI. COMPARATIVE LAW ANALYSIS: AN ESSENTIAL ENVIRONMENTAL LAW PRIORITY

How can one know that the international law for the biosphere is taking root around the world? Are these treaties merely a set of policy instruments, or is the cooperation that they stimulate having an effect? What explains, for instance, whether Russia's implementation of the Kyoto Protocol<sup>169</sup> will be effective? To answer such questions, one must assess national environmental laws. Environmental law is a continuum of legal norms and

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<sup>166</sup> For instance, IUCN's draft of the World Charter for Nature was refined by the Governing Council of the U.N. Environment Programme, after circulation of the draft to the U.N. member states for their comments. See Burhenne & Irwin, *supra* note 21, at 17-39 (listing comments by various delegates during debate over the Charter).

<sup>167</sup> See *Agenda 21*, *supra* note 4, ¶8, *reprinted in* AGENDA 21: EARTH'S ACTION PLAN, *supra* note 4, at 115-36.

<sup>168</sup> See *supra* note 1.

<sup>169</sup> Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22 (1998) (entered into force Feb. 15, 2005).

instruments, embracing actions from the local level through the global level and *vice versa*.

Environmental law does not exist purely as a subfield or component of international public law, although most international law experts consider it as such. Admittedly, at the international level, environmental law serves to integrate decision making among nations, encourage the use of the same scientific methods and sharing of comparable data, and build the capacity of nations to establish environmental management regimes that permit them to implement their common agreements under the differentiated conditions appropriate to each nation. These are traditional functions for public international law agreements. Yet one cannot progressively advance or study international environmental law without paying as much or more attention to how environmental legal instruments are adopted and function at the national and local levels, often independent of any international obligations. Both sectors of law are part of the same continuum of laws governing human management of natural phenomena. Conceptual development of environmental law requires the use of comparative law.

#### *A. The Significance of Comparative Law Techniques*

Comparative law is not a branch of law, but rather a methodology. Comparative law teaches methods for finding, understanding, and applying the law of different jurisdictions, often with very different legal traditions.<sup>170</sup> One nation or state within a federal nation may enact the law of "manslaughter," as in the Penal Law of New York<sup>171</sup> (or the Model Penal Code<sup>172</sup>), but Parliament has not enacted such a "crime" in the United Kingdom. Similarly, when an environmental injury causes loss of human life, the criminal law sanctions in different nations can regard the event in disparate ways. Since corporations engage in the same manufacturing activities around the world, being able to compare how the environmental laws treat these same activities is of substantial importance to corporate managers. From another perspective, the lack of the manslaughter classification of criminal conduct might require a prosecutor to classify the same sort of industrial accident with loss of life as murder in one jurisdiction and the lesser crime of manslaughter in another. India's criminal indictment of the former Chairman of Union Carbide, residing in the United States, as a result of the deaths in the Bhopal tragedy in India is a graphic illustration of this point.<sup>173</sup>

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<sup>170</sup> Various national regimes are compared in *COMPARATIVE ENVIRONMENTAL LAW & REGULATION*, *supra* note 25, and *PUBLIC ENVIRONMENTAL LAW IN THE EUROPEAN UNION AND THE UNITED STATES: A COMPARATIVE ANALYSIS* (Rene J.G.H. Seerden et al. eds., 2002).

<sup>171</sup> N.Y. PENAL LAW § 125.20 (McKinney 2004).

<sup>172</sup> MODEL PENAL CODE § 210.3 (2001).

<sup>173</sup> *See Homicide Charge Upheld in Bhopal Case*, N.Y. TIMES, Aug. 29, 2002, at A6, available at 2002 WLNR 4056094 (noting that an Indian court refused to lessen the charge against former Union Carbide chairman Warren Anderson from homicide to "hurt by negligence;" the charge stemmed from the 1984 gas leak at the company's Bhopal plant, which allegedly caused the death of over 14,000 people).



As global patterns of trade, finance, and communications render the world a global village, it is important for lawyers to understand how the distinct legal systems of each nation relate to one another.<sup>174</sup> Comparisons of environmental regulations can identify why one tradition may be more effective with one sort of environmental process or rule than another tradition.<sup>175</sup> Comparative environmental law analysis is needed in order to understand creative environmental measures applied in one nation and apply them in another.<sup>176</sup> Since many environmental impacts are transboundary in effect or affect shared resources such as the oceans or atmosphere, comparative law analysis cannot be avoided.

Comparative law also brings the attorney into touch with the Roman law roots shared by the common law and civil law traditions and where those roots diverge in contemporary practice. The Roman "public trust doctrine" derives from Justinian's Institutes,<sup>177</sup> which took hold in England, was received as part of the common law of the United States,<sup>178</sup> and was recently recognized by India's Supreme Court based on the law received from Great Britain during the period of the Raj.<sup>179</sup> Comparative legal analysis acquaints the lawyer with how the civil law tradition has evolved in Europe and how it has taken root in South America and Meso America, in Russia, and even in Japan, which chose to adopt the German Civil Code as a model for its law reform.<sup>180</sup> Comparative law orients the lawyer to socialist law traditions<sup>181</sup> still in use in China and Vietnam and in the various oblasts and autonomous republics of the Russian Federation. This field facilitates understanding of Islamic law as a basis for government in theocratic states, where the Holy Qu'ran is the basic law.<sup>182</sup> In like vein, environmental norms

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<sup>174</sup> See, e.g., MARK WILDE, *CIVIL LIABILITY FOR ENVIRONMENTAL DAMAGE: A COMPARATIVE ANALYSIS OF LAW AND POLICY IN EUROPE AND THE UNITED STATES* (2002) (discussing issues of liability); ENVIRONMENTAL LAW, THE ECONOMY, AND SUSTAINABLE DEVELOPMENT: THE UNITED STATES, THE EUROPEAN UNION, AND THE INTERNATIONAL COMMUNITY (Richard L. Revesz et al. eds., 2000) (discussing issues of economic development); Thomas Henne, *Environmental Policy in Germany and the United States*, 51 AM. J. COMP. L. 207 (2003) (discussing comparative norms).

<sup>175</sup> See, e.g., RICHARD MUNCH ET AL., *DEMOCRACY AT WORK: COMPARATIVE SOCIOLOGY OF ENVIRONMENTAL REGULATION* (2001) (comparing the systems in France, Germany, the United Kingdom, and the United States); DAVID VOGEL, *NATIONAL STYLES OF REGULATION: ENVIRONMENTAL POLICY IN GREAT BRITAIN AND THE UNITED STATES* (1986) (comparing Great Britain with the United States).

<sup>176</sup> See, e.g., J.A. Spanogle, Jr., *American Attorneys' Use of International and Comparative Legal Analysis in Everyday Practice*, 28 WAKE FOREST L. REV. 1 (1993) (arguing that as the marketplace becomes global, the practice of law must also become internationalized).

<sup>177</sup> J. INST. 2.2.1 (discussing *res communes* (things owned by everyone), which included air, running water, and the sea and its shores).

<sup>178</sup> See Joseph Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 475-76 (1970) (tracing the roots of the American public trust doctrine back to English and Roman traditions).

<sup>179</sup> *M.C. Mehta v. Kamal Nath & Others*, (1977) 1 S.C.C. 388 (India).

<sup>180</sup> Philip J. McConaughay, *Rethinking the Role of Law and Contracts in East-West Commercial Relationships*, 41 VA. J. INT'L L. 427, 430 (2001) ("Japan's more-than-a-century-old civil code essentially replicates the late nineteenth-century German Civil Code.").

<sup>181</sup> See generally S.S. ALEKSEEV, *SOCIALISM AND LAW: LAW IN SOCIETY* 82-84 (Jane Sayer trans., 1990) (tracking the historical development of socialist law).

<sup>182</sup> For instance, while the Holy Qu'ran clearly forbids individuals from polluting, it is silent

may require an understanding of the unwritten customary laws of indigenous peoples.<sup>183</sup>

Because comparative environmental law is premised on studying how different legal systems address the same phenomena of the natural sciences, the problem of “incommensurability” is less troubling for the environmental lawyer.<sup>184</sup> Because most environmental laws have been enacted since 1972, they appear as a form of administrative law, engrafted onto the legal tradition. The same technologies cause or allow solutions to pollution; the same functions of the hydrologic cycle transfer chemicals from acid rain to surface and ground waters; the same human health impacts recur. Comparative environmental law, as a relatively new focus of study, can examine creative innovations across nations and not get bogged down in sorting through comparability issues among the jurisdictions studied.<sup>185</sup>

IUCN has always focused on comparative law approaches to environmental conservation across regions and nations. IUCN maintains one of the world’s largest and oldest law libraries on the environmental laws of different nations.<sup>186</sup> Without such a reference library, IUCN’s approach to conceptual law development could not have succeeded as well as it has. These materials now are increasingly collected on electronic databases

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as to whether a corporation is barred from polluting. *See generally* M. IZZI DIEN, *THE ENVIRONMENTAL DIMENSIONS OF ISLAM* (2000) (examining the environment as a central tenet of Islam). Application of norms to contemporary corporate entities needs to be elaborated by commentary on the strictures contained in the Holy Qu’ran.

<sup>183</sup> Hunting and fishing rules of tribal communities may supplant or conflict with the rules established by the government of the state where these communities are located. This situation requires collaborative measures by the state’s conservation officials with the leaders of the tribal community if the conservation objectives of each are to be realized. For a comprehensive examination of domestic and international tribal rights in land, the environment, and natural resources, see JUDITH V. ROYSTER & MICHAEL C. BLUMM, *NATIVE AMERICAN NATURAL RESOURCES LAW* 473–580 (2002).

<sup>184</sup> “Incommensurability” refers generally to the incompatibility of two legal systems. The problem is most acute in the context of injury to persons or property while they are in a foreign jurisdiction. IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 497–512 (6th ed. 2003).

<sup>185</sup> Comparative environmental law is detached from the schools of comparative law that have preceded it, largely because it has an instrumental focus on solving environmental problems. A broader academic study, of course, could examine environmental law from a range of noninstrumental perspectives. These might include the use of analysis drawn from historic periods of comparative legal study. Professor Richard Oliver Brooks classifies these periods of study as a) classical, b) enlightenment, c) social science and legal realist, d) policy studies, and e) comparative law within international law. Richard Oliver Brooks, *The Contributions of Comparative Law to the Study of the Comparative Law of the Environment*, Discussion Paper for the Association of American Law Schools Conference on Teaching Environmental Law in a Global Context (June 15–18, 2004, Portland, Oregon) (unpublished, on file with author). If the deleterious and adverse impacts of environmental degradation and the disruptions of climate change were not so pressing, recourse to a wider range of comparative law analysis would be desirable in any disciplined study of comparative environmental law. Consistent with the study of IUCN’s mission, this Essay has chosen to focus only upon the more instrumental roles for comparative environmental law studies as tools to assist nations to better address their environmental problems.

<sup>186</sup> For a listing of IUCN Depository Libraries, see <http://www.iucn.org/publications/dl.htm> (last visited Apr. 10, 2005).

available through the Internet,<sup>187</sup> making comparative law more accessible to environmental law specialists worldwide. How can a lawyer find this law? How does she or he interpret it? What can you learn from another nation's laws that enables you to better understand how to solve the same sort of problem that you encounter in your own country? Comparative law provides the method by which to answer these questions.<sup>188</sup>

Because every nation is rapidly elaborating its systems of environmental law, the techniques of comparative law are exceptionally useful. Earth's natural systems are integrated throughout the biosphere, and the effectiveness of one nation's environmental statutes is complemented or undermined by the efficacy of another nation's comparable enactments.<sup>189</sup> Framework treaties such as the U.N. Framework Convention on Climate Change<sup>190</sup> or Part XII of the U.N. Convention on the Law of the Sea increasingly set forth common obligations for different nations, but it is the national laws linked to the framework treaties that must do the real work to govern human conduct consistently. Only such national laws can restore the stratospheric ozone layer, protect migratory species, maintain the environmental systems of the polar regions, or abate acid rain.

Comparative legal analysis facilitates understanding of how environmental law is becoming a harmonized, if not congruent, body of administrative law in nations with different legal traditions. CITES is entirely implemented and administered at the national level; acting under national authority, each nation's customs officials are, in effect, the environmental enforcement agents for curbing trade in endangered species.<sup>191</sup> In 1992, the U.N. Conference on Environment and Development in Rio de Janeiro assigned a priority to elaborating national law in accordance with the recommendations in Agenda 21.<sup>192</sup> Many nations formulated a national version of Agenda 21 to guide their legislative efforts.<sup>193</sup> Comparative environmental law lets us understand how environmental law can provide the harmonized means toward sustainability.

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<sup>187</sup> For example, the UNEP (<http://www.unep.org>) and IUCN (<http://www.iucn.org>) websites offer a wealth of legal documents and materials.

<sup>188</sup> Teaching comparative law is a venerable tradition in law schools. See Roscoe Pound, *The Place of Comparative Law in the American Law School Curriculum*, 8 TUL. L. REV. 161 (1934) (emphasizing the importance of comparative law instruction in American legal education).

<sup>189</sup> To aid comparison of these laws, IUCN has compiled and published a synthesis of national and international environmental laws in the Asian and Pacific regions. 1 DONNA G. CRAIG ET AL., CAPACITY BUILDING FOR ENVIRONMENTAL LAW IN THE ASIAN AND PACIFIC REGION 203-334 (2d ed. 2002).

<sup>190</sup> United Nations Framework Convention on Climate Change, May 9, 1992, S. TREATY DOC. NO. 38, 102nd Cong., 2nd Sess. 1 (1992), 31 I.L.M. 849 (1992) [hereinafter FCCC].

<sup>191</sup> For example, the United States enforces CITES under the Endangered Species Act of 1973 and its accompanying regulations. 16 U.S.C. § 1531(a)(4)(F) (2000).

<sup>192</sup> See *Agenda 21*, *supra* note 4, ¶8, reprinted in AGENDA 21: EARTH'S ACTION PLAN, *supra* note 4, at 115-36.

<sup>193</sup> The various chapters of Agenda 21 are a guide to what nations need to do in order to better harmonize their conduct to ensure that socioeconomic development is environmentally sustainable.

Employing comparative law techniques is key to identifying where environmental laws are being implemented effectively at the national level, even when there is no treaty to guide them. This is true in the case of managing national parks or engaging in environmental impact assessments of actions. One can also identify how each nation innovates to implement an international norm, such as those in a multilateral environmental agreement. In the first instance, the importance of comparative law can be illustrated by briefly reviewing national regimes for the law of environmental impact assessment. In the second instance, comparative law affords access to national laws in order to discern how coastal zone management techniques help to implement UNCLOS Part XII.

### *B. Environmental Impact Assessment*

Environmental impact assessment (EIA) has become perhaps the most common procedure that governments worldwide can employ as a way to cope with environmental change.<sup>194</sup> EIA was initially an American idea, born with the enactment of the National Environmental Policy Act of 1969.<sup>195</sup> Almost immediately, Ontario, Canada; New South Wales, Australia; California; and New York City enacted laws based on NEPA.<sup>196</sup> Gradually since then, national governments as well as local authorities have been enacting EIA laws.<sup>197</sup> The European Union's Directive in 1985 launched the Dutch and French revisions to their EIA laws and introduced EIA into the laws of the United Kingdom and elsewhere.<sup>198</sup>

By the time the United Nations convened its Conference on Environment and Development—the Rio de Janeiro “Earth Summit”—in 1992, EIA had gained international support. Principle 17 of the Rio de Janeiro Declaration provides, “Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.”<sup>199</sup> While all

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<sup>194</sup> See generally Nicholas A. Robinson, *International Trends in Environmental Impact Assessments*, 19 B.C. ENVTL. AFF. L. REV. 591 (1992).

<sup>195</sup> Pub. L. No. 91-100, 83 Stat. 852 (1970) (codified as amended 42 U.S.C. §§ 4321-4370e (2000)).

<sup>196</sup> See Nicholas A. Robinson, *EIA Abroad: The Comparative and Transnational Experience*, in ENVIRONMENTAL ANALYSIS: THE NEPA EXPERIENCE 679, 684-88 (Stephen G. Hildebrand & Johnnie B. Cannon eds., 1993) (listing EIA statutes for Canada, Australia, and various other jurisdictions).

<sup>197</sup> William L. Andreen, *Environmental Law and International Assistance: The Challenge of Strengthening Environmental Law in the Developing World*, 25 COLUM. J. ENVTL. L. 7, 40-41 (2000); Robinson, *supra* note 194, at 597, app. 1 at 611 (both listing various governments' EIA legislation).

<sup>198</sup> See Paul D. McHuigh, *The European Community Directive—An Alternative Environmental Impact Assessment Procedure?*, 34 NAT. RESOURCES J. 589 (1994) (describing the 1985 EU Directive).

<sup>199</sup> *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF. 151/26 (vol. 1), reprinted in 31 I.L.M. 874 (1992).

provinces and states in Canada<sup>200</sup> and Australia<sup>201</sup> have enacted EIA, only 19 of the states in the United States have done so.<sup>202</sup> EIA is widely adopted and used in developing nations.<sup>203</sup>

EIA is exceptionally useful in addressing environmental change because it is flexible and contextual. Every impact needs to be factually evaluated in terms of its short-term and long-term effects, alternative means of attaining the desired result, unavoidable impacts, and ways to mitigate adverse effects.<sup>204</sup> EIA requires public disclosure of the environmental analysis and the opportunity for public comment.<sup>205</sup> At its best, EIA is a full disclosure and mediation or conflict resolution process. All stakeholders can present their views, and their interests are taken into account. Where EIA procedures are avoided or incomplete, judicial review is available to ensure that the procedures are followed.<sup>206</sup>

Since EIA examines the cumulative impact of actions,<sup>207</sup> it is well suited to assessing how incremental additions of carbon dioxide emissions can be avoided, how habitat for migratory species can be enhanced, or how energy conservation can be best achieved. EIA can take into account increased storm water runoff levels as a consequence of climate change and require measures to retain increased storm waters on site. EIA can anticipate sea-level rise and the impacts on developments in coastal zones and flood plains. All this can be done without the need to revise local ordinances or bylaws or state and national statutes.

EIA can also be used for programs and planning. "Strategic Environmental Assessment" in European practice,<sup>208</sup> the programmatic EIS

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<sup>200</sup> See D. Paul Emond & William A. Tilleman, *Environmental Impact Assessment*, in ENVIRONMENTAL LAW & POLICY 211 (Elaine L. Hughes et al. eds., 1993) (describing EIA in Canada).

<sup>201</sup> GERRY BATES, ENVIRONMENTAL LAW IN AUSTRALIA 142-89 (4th ed. 1995) (explaining EIA in Australia).

<sup>202</sup> See Erika L. Preiss, Comment, *The International Obligation to Conduct an Environmental Impact Assessment: The ICJ Case Concerning the Gabčíkovo-Nagymaros Project*, 7 N.Y.U. ENVTL. L.J. 307, 314 (1999) ("By 1990, nineteen states, the District of Columbia, and Puerto Rico had all adopted NEPA-like systems.").

<sup>203</sup> See generally MOHAMMED A. BEKHECHI & JEAN-ROGER MERCIER, THE LEGAL AND REGULATORY FRAMEWORK FOR EIA: A STUDY OF SELECTED COUNTRIES IN SUB-SAHARAN AFRICA (2002); see also Andreen, *supra* note 197, at 40 (noting that at least 60 nations—including many developing nations—have adopted some type of EIA process).

<sup>204</sup> See the definitions for the EIA process in the United States at 40 C.F.R. § 1508 (2004). The definition provided to guide the assessment of the "significance" of environmental impacts is particularly useful in demonstrating how EIA can flexibly address a wide range of actions. *Id.* § 1508.27 (presenting extensive guidelines on how to analyze the "context" and "intensity" of federal actions).

<sup>205</sup> See, e.g., 40 C.F.R. § 1503 (2004) (detailing NEPA's public comment procedures).

<sup>206</sup> For example, domestic review of the EIA process is provided by the Administrative Procedure Act, 5 U.S.C. §§ 551-559, 701-706, 1305, 3105, 3344, 4301, 5335, 5372, 7521 (2000), which grants EIA stakeholders a right to challenge agency action under NEPA. *Id.* § 706.

<sup>207</sup> See, e.g., 40 C.F.R. § 1508.7 (2004) (defining "cumulative impacts" considered under NEPA as environmental impacts resulting "from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions").

<sup>208</sup> See, e.g., Amended Proposal for a Council Directive on Assessment of the Effects of Certain Plans and Programmes on the Environment, 1998 O.J. (C 29/08) 14 (EU directive

in NEPA practice,<sup>209</sup> and the generic EIS in practice under the New York State Environmental Quality Act<sup>210</sup> allow agencies to take an in-depth early look at how overall programs can avoid adversely affecting the environment. EIA is almost entirely a matter of national law. It is the subject of two treaties negotiated through the U.N. Economic Commission for Europe: the Espoo Convention on Environmental Impact Assessment in a Transboundary Context<sup>211</sup> and the more comprehensive Århus Agreement on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.<sup>212</sup> Both treaties have entered into force. The latter mandates EIA on a pan-European basis and has been ratified by all of the former Republics of the U.S.S.R. except Russia. Although the United States is not a party to either agreement, NEPA applies in a transboundary context in North America.<sup>213</sup> A somewhat weaker law governs in Russia.<sup>214</sup>

Despite the near universal applicability of EIA procedures, there are still many who resist the use of EIA. Ministries and project proponents who “know” they want their project or will economically benefit from it are less interested in taking the time to restudy the impacts of their projects. Parties who view development as an entitlement are often uninterested in the side effects on other stakeholders. EIA is only well-regarded when parties understand the need to take a broad environmental view in light of the ecological links, social consequences, and long-term cumulative impacts of the proposed action. Often they need to walk through the process to attain this understanding, which is why strict enforcement of procedures requiring agencies to take a “hard look” at impacts is needed. In this regard, the U.S. Supreme Court is entirely correct in requiring strict adherence to EIA procedures.<sup>215</sup> Because environmental analysis cuts across borders and can

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extending environmental assessments to a broad range of programs), <http://europa.eu.int/comm/environment/eia/96511-9973.pdf>; see also Kevin R. Gray, *International Environmental Impact Assessment: Potential for a Multilateral Environmental Agreement*, 11 COLO. J. INT'L ENVTL. L. & POL'Y 83, 123-24 (2000) (discussing the Amended Council Directive and its impact on strategic environmental assessments).

<sup>209</sup> See, e.g., *Kleppe v. Sierra Club*, 427 U.S. 390, 409-10 (1976) (holding that NEPA may require a comprehensive or programmatic impact statement to assure consideration of environmental impacts where several related actions are simultaneously pending); 40 C.F.R. § 1508.25(a) (2004) (detailing the scope of the action for analysis in the impact statement).

<sup>210</sup> N.Y. ENVTL. CONSERV. LAW §§ 8-0101 to 0117 (McKinney 2004); N.Y. COMP. CODES R. & REGS. tit. 6, § 617.1 (2005) (providing for generic environmental impact statements to assess the incremental impacts of programmatic actions).

<sup>211</sup> Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991, 30 I.L.M. 800 (entered into force Sept. 10, 1997).

<sup>212</sup> Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25, 1998, 38 I.L.M. 517 (entered into force Oct. 30, 2001).

<sup>213</sup> See Exec. Order No. 12,114, 44 Fed. Reg. 1957 (Jan. 4, 1979) (extending NEPA procedures to federal actions taken outside of the United States).

<sup>214</sup> The Russian Federation has a procedure called “Ecological Expertise.” Federal Law on Ecological Expertise, No. 174-FZ (Nov. 23, 1995).

<sup>215</sup> See, e.g., *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-52 (1989) (recognizing that NEPA mandates federal agencies to take a “hard look” at possible

extend beyond a single jurisdiction, EIA requires states to look at change beyond their boundaries. The fact that environmental laws already require the use of EIA across many regions means that methods for assessing sea-level rise or any other environmental effect could be rapidly designed on a standardized basis and instituted widely. Comparing EIA procedures among different nations provides useful insights regarding how to enhance this environmental law as it is applied. Innovations in using EIA to cope with the effects of climate change<sup>216</sup> will be an important focus for future comparative law studies.

EIA is similar to another environmental tool, coastal zone management (CZM). EIA should, of course, also be used in all specific actions in the coastal zone. CZM, or "integrated coastal zone management" as it is called in Asia and elsewhere, seeks to manage competing uses for the coasts through a planning process that can anticipate possible conflicts and adverse effects and avoid them.

### *C. Coastal Zone Management*

Since most of the world's population chooses to live along the coasts of oceans, lakes, and rivers, conflicts over competing economic and social demands for coastal resources arise often. To cope with such conflicts, recent legislation has required coastal planning procedures that anticipate and avoid such conflicts by mapping coastal zones and adopting procedures to select certain uses when more appropriate to a site than others. The first statute to set up such a process was the Coastal Zone Management Act of 1972,<sup>217</sup> in which the U.S. Congress provided resources for the states to inventory and zone their coastal areas pursuant to a standard set of policies. Once the state zones were enacted and found to be consistent with the federal standards, all federal agencies were required to follow the state's zoning decisions.<sup>218</sup> In this way, consistency in decision making on the coasts could be assured at local, regional, and national levels of government.

Following the successful implementation of coastal zone management in the United States, others sought to explain and urge implementation of the process in other regions. Chapter 17 of Agenda 21 outlined the purpose and process of CZM.<sup>219</sup> In order to differentiate it from mere spatial zoning or allocation of land uses under a town and country planning system, the

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environmental consequences of proposed federal actions); *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976) (determining that a court's duty under NEPA is to ensure that an agency has taken a "hard look" at all possible impacts to the environment).

<sup>216</sup> For instance, NEPA provides the statutory basis for the President's Council on Environmental Quality to issue new regulations to standardize how federal agencies might evaluate climate change during EIA under NEPA. 42 U.S.C. §§ 4332(2)(E)–(F) (2000).

<sup>217</sup> Pub. L. No. 92-583, 86 Stat. 1280 (1972) (codified as amended at 16 U.S.C. §§ 1451–1464 (2000)).

<sup>218</sup> 16 U.S.C. § 1456(c) (2000).

<sup>219</sup> See *Agenda 21*, *supra* note 4, ¶ 17.1(a) (calling for integrated management and sustainable development of coastal marine areas, including exclusive economic zones), reprinted in *AGENDA 21: EARTH'S ACTION PLAN*, *supra* note 4, at 307.

U.N. Conference on Environment and Development emphasized in Agenda 21 the use of “integrated” coastal zone management (ICZM).<sup>220</sup> ICZM encourages the integration of social, economic, and environmental uses of coastal areas and resources in a more comprehensive way: “Coastal states commit themselves to integrated management and sustainable development of coastal areas and the marine environment under their national jurisdiction.”<sup>221</sup>

In response to the recommendations of Agenda 21, organizations like the World Bank, IUCN, FAO, and UNEP prepared and published guidelines for ICZM.<sup>222</sup> In Asia, UNEP launched extensive capacity-building programs to educate officials on the use of ICZM.<sup>223</sup> The Association of South East Asian Nations (ASEAN), with grant support from the U.S. Agency for International Development, studied CZM in Southeast Asia from 1986 to 1992, eventually recommending use of ICZM in that region.<sup>224</sup> As a result, ASEAN nations came to use ICZM widely.<sup>225</sup> The United Nations Development Programme (UNDP) successfully supported application of ICZM in the Philippines’ Batangas Bay and in China’s Xiamen Province.<sup>226</sup> UNEP also promoted the use of ICZM within the Wider Caribbean Region.<sup>227</sup> Comparable coastal land-use planning procedures exist in Western Europe.<sup>228</sup>

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<sup>220</sup> *Agenda 21*, *supra* note 4, ¶ 17.5, *reprinted in* AGENDA 21: EARTH’S ACTION PLAN, *supra* note 4, at 309.

<sup>221</sup> *Id.* The provisions enumerated in ¶ 17.5 are substantially congruent with those in the United States’ CZMA, 16 U.S.C. §§ 1451–1452 (2000).

<sup>222</sup> *See, e.g.*, FAO, GUIDELINES FOR INTEGRATED COASTAL AREA MANAGEMENT AND AGRICULTURE, FORESTRY, AND FISHERIES (1998), [http://www.fao.org/documents/show\\_cdr.asp?url\\_file=/docrep/W8440e/W8440e00.htm](http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/W8440e/W8440e00.htm); WORLD BANK, GUIDELINES FOR INTEGRATED COASTAL ZONE MANAGEMENT (1996), [http://wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1996/08/01/000009265\\_3961219091924/Rendered/PDF/multi\\_page.pdf](http://wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1996/08/01/000009265_3961219091924/Rendered/PDF/multi_page.pdf).

<sup>223</sup> *See* UNEP, *Education, Training, and Capacity Building*, at [http://www.roap.unep.org/html/policy\\_implement.htm](http://www.roap.unep.org/html/policy_implement.htm) (last visited Apr. 10, 2005) (describing regional ICZM training programs in Asia).

<sup>224</sup> *See* Koh Kheng-Lian and Nicholas A. Robinson, *Strengthening Sustainable Development in Regional Inter-Governmental Governance: Lessons from the “ASEAN Way,”* 6 SING. J. INT’L & COMP. L. 640, 663 (2002) (explaining that ASEAN formulated ten strategies for environmental improvement, including protection and management of coastal zones).

<sup>225</sup> *See* UNEP, A COMPARATIVE REVIEW OF COASTAL LEGISLATION IN SOUTH EAST ASIA (2003) (listing ASEAN countries that have adopted ICZM), [http://www.gpa.unep.org/documents/PADH/Legislation\\_Study\\_Final\\_Report\\_2003.pdf](http://www.gpa.unep.org/documents/PADH/Legislation_Study_Final_Report_2003.pdf); *see also* James N. Paw & Chua Thia-Eng, *Climate Changes and Sea Level Rise: Implications of Coastal Area Utilization and Management in South-East Asia*, 15 OCEAN AND SHORELINE MANAGEMENT 205 (1991) (discussing ICZM as a way to counteract the effects of global warming in Southeast Asia).

<sup>226</sup> *See generally* UNDP, *UNDP Updates: Batangas Bay Demonstration Project* (1996), *reprinted in* 2 CRAIG ET AL., *supra* note 189, at 220–23; UNDP, *UNDP Updates: Xiamen Project Shows Significant Achievements*, *reprinted in* 2 CRAIG ET AL., *supra* note 189, at 223–25.

<sup>227</sup> *See generally* UNEP CARIBBEAN ENVIRONMENT PROGRAMME, GUIDELINES FOR INTEGRATED PLANNING AND MANAGEMENT OF COASTAL AND MARINE AREAS IN THE WIDER CARIBBEAN REGION, TECHNICAL REPORT 42 (1996), <http://www.cep.unep.org/pubs/Techreports/tr42en/index.html>.

<sup>228</sup> *See* JOHN R. SALTER, EUROPEAN ENVIRONMENTAL LAW §§ 5.14, 5.46 (2003) (explaining European adoption of ICZM).



ICZM has been emulated by many nations because its process has proven to be effective. Nations implement ICZM voluntarily; there is no obligation to do so under any treaty. To date, ICZM has addressed ways to reconcile contending claims on the same scarce coastal resources. In the future, however, all CZM and ICZM programs will need to cope with the effects of climate change and sea-level rise. Rather than merely providing for ways to manage competing uses, future coastal planning must help all users adapt to higher flood tide surges and more pervasive coastal erosion accompanying higher average water levels. There will be a need to restore or enhance coastal wetlands as buffers against storm surges and to avert erosion of upland areas, as well as a need to provide habitat for coastal fish and shellfish resources, as former habitats may be adversely affected with sea-level rise and intense coastal storms. Coastal infrastructure for shipping, docks, and channels will need to be reassessed in light of sea-level rise.

In short, ICZM must become "Adaptive" CZM (ACZM). Environmental law needs to anticipate the sort of new procedures coastal regions will need to develop. The cascade of excess reactive nitrogen washing off from fertilized lands into coastal waters is already causing "dead zones."<sup>229</sup> Land-based sources of pollution have not been effectively controlled in most regions of the Earth. ACZM will need to leverage a renewed commitment to removing pollutants, while providing means to cope with the new challenges resulting from sea-level rise. Since relative sea-level rise of a meter or more is predicted during the coming century as polar glacial ice melts,<sup>230</sup> nations should prioritize developing ACZM policies and practices. IUCN, other bodies such as UNEP, and even regional organizations can help accelerate such planning and assist nations in implementing ACZM. Comparative law techniques can be used to identify successful ACZM models from given nations so that other nations can study the examples and adapt them to their own circumstances.

#### *D. Insights Gained Through Comparative Law*

Various national governments have made innovations as they implement both EIA and ICZM within their environmental protection systems. Without the comparative study of national environmental law, it would be difficult to perceive the widespread use of these techniques, much less the more innovative features. Enactment of EIA or ICZM laws will not be evident from an examination of the environmental obligations of states under international law. Nations choose to adopt such techniques when they encounter environmental problems and seek ways to manage them. As governments consider how other nations have dealt with comparable situations, they choose to emulate procedures that appear attractive. A more

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<sup>229</sup> See *supra* note 58 and accompanying text (noting domestic "dead zones" at the mouth of the Mississippi River and in Chesapeake Bay)

<sup>230</sup> See CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS, *supra* note 3; CLIMATE CHANGE 2001: IMPACTS, ADAPTATION, AND VULNERABILITY, *supra* note 3 (both predicting future sea-level rise due to global warming).

systematic and robust use of comparative law techniques could advance the transfer of environmental conservation experience among nations.

Comparative legal research can also assist in gauging how capable a nation may be in implementing new international environmental obligations or how effective the nation is in complying with obligations already assumed. Since the natural systems of the biosphere interact and are interlinked, the laws for their protection are only as strong as the weakest legal link. Implementation of the U.N. Framework Convention on Climate Change depends on containing the greenhouse gas emissions of each signatory nation. Similarly, enhancing the migration of a species requires conservation of habitat throughout any given species' range. Analysis of national environmental law regimes is necessary in evaluating the implementation of environmental treaties.

For instance, as the Kyoto Protocol to the U.N. Framework Convention on Climate Change enters into force,<sup>231</sup> an international law perspective might commend the Russian Federation for its adherence and criticize Australia or the United States for not joining the convention. This view ignores the many measures adopted by state governments in both the Australian and American federations to curb greenhouse gas emissions.<sup>232</sup> Moreover, the international perspective based on formal ratifications tends to assume that the Russia Federation and Japan can and will implement the Kyoto Protocol's terms. Japan clearly has the technological capacity to reduce greenhouse gas emissions by six percent from the 1990 levels between 2008 and 2012, but domestic economic and political opposition to making the adjustments needed to do so make such reductions unlikely. As London's *Financial Times* has observed, "Japan's only chance of meeting its targets is to buy huge amounts of credits, particularly from Russia. . . . Japan is likely to become one of the most active emissions trading markets."<sup>233</sup> Having closed obsolete industrial facilities after 1990 with the end of the Soviet Union, the Russian Federation emits fewer greenhouse gases and thus has credits to sell.<sup>234</sup> Yet there is little indication that in return for the sale of its credit, the Russian Federation will enhance its environmental laws or its capacity to make the further reductions in greenhouse gases that eventually will be needed to stabilize climate conditions.

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<sup>231</sup> By its terms, when nations providing 55% of the world greenhouse gas emissions ratify the Kyoto Protocol, it can enter into force. Kyoto entered into force February 16, 2005, following the ratification of the Russian Federation.

<sup>232</sup> The establishment of carbon trading by the Chicago Commodities Board, or the decisions of California and New York to mandate more than 10% of energy be generated by non-carbon based fuels, are major actions not "visible" by a formalistic analysis of ratifications of the Kyoto Protocol alone. For a discussion of state and local initiatives to curb greenhouse gas emissions, see Union of Concerned Scientists, *Renewable Electricity Standards at Work in the States*, at [http://www.ucsusa.org/clean\\_energy/renewable\\_energy/page.cfm?pageid=47](http://www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageid=47) (last visited Apr. 10, 2005).

<sup>233</sup> *Russia's Kyoto Move Rings the Alarm in Tokyo: Moscow's Ratification of the Greenhouse Gas Protocol Has Highlighted Japan's Lack of Progress in Curbing Emissions*, FINANCIAL TIMES (London), Nov. 3, 2004, at 13.

<sup>234</sup> See *Russians Facing Unemployment*, N.Y. TIMES, May 8, 1994, at A12 (declaring that capitalism resulted in the shutdown of many inefficient Russian factories).

Comparative law analysis permits a more profound understanding of when nations will be able to implement environmental laws and when that implementation is unlikely. Until political consensus exists to support implementation, governments may view environmental laws as disruptive of settled rights and entitlements, and thus may seek to limit the scope or effect of such laws.<sup>235</sup> Consider, for instance, the reluctance of the U.S. Supreme Court to further the remedial intent of environmental laws.<sup>236</sup> Despite the creative conceptualization of EIA in NEPA in 1969, the U.S. Supreme Court has consistently read NEPA only to embrace a procedural rule, ignoring its substantive mission to guide decision makers to anticipate and avoid or mitigate adverse environmental impacts.<sup>237</sup> On the other hand, 34 American states (which make up 99.9 percent of the nation's coastline) have enacted coastal zone management laws, providing effective management of demands on scarce coastal resources.<sup>238</sup>

Jurists in the United States, of course, are not alone in misunderstanding the legislative purpose of environmental laws. The Russian Federation makes up 40 percent of the northern hemisphere, and how the Federation protects its environment and implements its obligations under multilateral environmental agreements is critical to the biosphere. The Russian Federation is a party to the U.N. Framework Convention on Climate Change and the Kyoto Protocol, but comparative legal analysis of the condition of the Federation's domestic environmental law produces grave concerns as to its capability to implement its obligations under either treaty.

Before its dissolution, the U.S.S.R. was on the verge of shaping important environmental law reforms.<sup>239</sup> Environmental cooperation with the United States and others had advanced sharing of environmental data and joint efforts to combat pollution and conserve resources.<sup>240</sup> After the U.S.S.R. dissolved, however, the focus on environmental matters declined

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<sup>235</sup> For discussion of a number of reasons why there is consistent resistance to implementing environmental laws, see Nicholas A. Robinson, *Sustainable Science for a Sustainable Environment: Legal Systems, Decisionmaking, and the Science of Earth's Systems: Missing Procedural Links*, 27 *ECOLOGY L.Q.* 1077 (2001).

<sup>236</sup> Professor Richard Lazarus has ably documented the Court's blinkered approach to environmental law. See generally Richard J. Lazarus, *Thirty Years of Environmental Protection Law in the Supreme Court*, 17 *PACE ENVTL. L. REV.* 1 (1999); Richard J. Lazarus, *Environmental Law and the Supreme Court: Three Years Later*, 19 *PACE ENVTL. L. REV.* 653 (2002); Richard J. Lazarus, *Judging Environmental Law*, 18 *TULANE ENVTL. L.J.* 201 (2004).

<sup>237</sup> See, e.g., *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 535, 548 (1978) (determining that NEPA only imposes procedural requirements); *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 372 (1989) (explaining that NEPA does not mandate specific substantive environmental results).

<sup>238</sup> See Nat'l Oceanic & Atmospheric Admin., Office of Ocean & Coastal Res. Mgmt., *Coastal Zone Management*, at <http://coastalmanagement.noaa.gov/czm> (last visited Apr. 10, 2005) (stating that the domestic CZM Program is made up of 34 states, managing 99.9% of the national shoreline); see also WILLIAM L. WANT, *LAW OF WETLANDS REGULATION* §§ 13.1-13.36 (15th ed. 2004) (listing the CZM laws of the 34 coastal states).

<sup>239</sup> See generally Nicholas A. Robinson, *Perestroika and Priroda: Environmental Protection in the U.S.S.R.*, 5 *PACE ENVTL. L. REV.* 351 (1988).

<sup>240</sup> Nicholas A. Robinson & Gary Waxmonsky, *The U.S.-U.S.S.R. Agreement to Protect the Environment: 15 Years of Cooperation*, 18 *ENVTL. L.* 404 (1988).

markedly in the newly formed Russian Federation and elsewhere in the former U.S.S.R. Since the privatization of the state industries and the shift of economic power from government to oligarchs in various commercial sectors such as oil, gas, and banking, governmental agreements to restore damaged environmental areas and address new environmental challenges have been set aside. President Vladimir Putin was persuaded to abolish the Ministry of the Environment (Minpriroda) and even to merge the environment agency (Goskompriroda) into the Natural Resource Ministry, the agency charged with developing and exploiting natural resources.<sup>241</sup>

Other authorities in the Russian Federation have challenged this neglect of environmental protection. The Commissioner on Human Rights, Oleg Orestovich Myronov, submitted a report to President Putin and to the State Duma, the parliament of the Russian Federation, in October of 2002, entitled "The Environment and Violations of Human Rights."<sup>242</sup> The Commission on Human Rights is established under the Russian Federation's Constitution and thus is not subject to executive termination like the state environmental agency.<sup>243</sup>

Although the Russian Federation strengthened its "Law on Protection of the Environment,"<sup>244</sup> adopted an administrative decree on "Ecological Doctrine" in 2002, and increased federal funding for some aspects of nature protection, most of the norms prescribed by law are not yet implemented in practice. Former Human Rights Commissioner Myronov recognized these deficiencies, noting that the state bodies for sanitary and epidemiological supervision have not addressed the pollution from the economic sector: "Approximately one sixth of the territory of the country, residence to about 60 million people, is environmentally unsafe."<sup>245</sup> Air and water pollution are unabated in most urban and industrial areas,<sup>246</sup> and contamination from radioactivity is a continuing crisis in many areas.<sup>247</sup> The Commissioner found violations of the rights of the indigenous peoples to their traditional wildlife management,<sup>248</sup> and he determined that the Russian Federation's Constitutional guarantees of full access to environmental information were being denied in a number of instances.<sup>249</sup>

The Commissioner's report documents the slow implementation of government programs for sanitary protective zones and recites the failure to prosecute environmental crimes. The report is extraordinary in providing an overview of how the Federation's declared environmental values are largely

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<sup>241</sup> Decree of the President of the Russian Federation on the Structure of the Federal Bodies of the Executive Authority, No. 867 (May 17, 2000).

<sup>242</sup> THE ENVIRONMENT AND THE VIOLATIONS OF HUMAN RIGHTS: SPECIAL REPORT OF THE COMMISSION ON HUMAN RIGHTS IN THE RUSSIAN FEDERATION (Pensoft 2004) (2002) [hereinafter SPECIAL REPORT].

<sup>243</sup> KONST. RF art. 103(1)(e) (1993), available at <http://www.constitution.ru/en/10003000-06.htm>.

<sup>244</sup> Law on the Protection of the Environment, No. 7-F3 (Jan. 10, 2002).

<sup>245</sup> SPECIAL REPORT, *supra* note 242, at 14.

<sup>246</sup> *Id.* at 16-25.

<sup>247</sup> *Id.* at 25-35.

<sup>248</sup> *Id.* at 55-66.

<sup>249</sup> *Id.* at 66-85.

disregarded in practice. Commissioner Myronov's report indicates that when normal administrative systems for environmental protection are impaired and the problems of environmental health are acute, it is necessary for special state bodies to act. The Commissioner concluded his report soberly:

The care for nature is the care for people. The protection and the rational use of the environment is an important prerequisite for the well-being of the society, its further life and development. Otherwise, the grandsons and great-grandsons of the people living today will inherit the country polluted with radiation and heavy metals, the country with no forests, with rivers that look like sewage ditches, with shoaled and poisoned seas. The result of all of this is going to be poor health of the population, congenital illnesses and genetic disorders.<sup>250</sup>

With these domestic crises and much of the nation being denied its basic human right to a livable environment, it is easy to see why the Russian Federation will struggle in fulfilling its Kyoto Protocol obligations: the Federation's systems of implementation for meeting the obligations of a treaty simply do not exist. Study of the Human Rights Commissioner's report does more than illuminate shortcomings in how the Russian Federation implements its environmental laws; the dissemination of the report is itself a part of international environmental cooperation. The Center for Russian Environmental Rights in Moscow, headed by Dr. Alexey Yablokov, arranged with the Commissioner for Human Rights for the translation and international publication of this report. The Russian Federation is a state member of IUCN, and the Federation's environmental law experts have been leaders in the IUCN Commission on Environmental Law for many years.<sup>251</sup> Yablokov serves as a member of the Council of IUCN, and a grant from IUCN's Commission on Environmental Law supported the translation and publication of the Human Rights Commission's report in English. IUCN's Commission on Environmental Law cooperates with colleagues in the Russian Federation, helping build the Federation's environmental law capabilities wherever possible.

Comparative law is an integral part of the process of conceptual law development in the work of IUCN's Commission on Environmental Law. Without recourse to comparative law techniques, it is difficult to assess the effectiveness of both international and national environmental regimes. IUCN's operations, working both locally and globally, have prompted it to employ comparative law actively in national and international law. All those who would build environmental law worldwide need to study and use this experience.

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<sup>250</sup> *Id.* at 84-85.

<sup>251</sup> Dr. Oleg Stepanovich Kolbasov, the "father" of environmental law in the former U.S.S.R., was a Vice Chairman of the IUCN Commission on Environmental Law for many years.

## VII. IUCN'S UNIQUE STATUS AS CATALYST FOR INTERNATIONAL COOPERATION AND THE PROGRESSIVE DEVELOPMENT OF ENVIRONMENTAL LAW

Greater use of IUCN's experience in conceptual law development on the part of nations, international organizations, or NGOs could strengthen and extend the evolving environmental law for management of the biosphere. IUCN represents opportunities to creatively apply new environmental laws to sustain development and the natural systems that development depends upon. Through IUCN's commissions and the combined efforts of its members, IUCN is a catalytic agent for conceptualizing and implementing new laws for Earth's biosphere. IUCN has the legal status and capacity to expand its creative roles. To understand how IUCN functions differently from nation states, the UN's specialized agencies and subsidiary organs, and other international organizations, it is important to understand the *sui generis* status that IUCN enjoys under international law.

IUCN is constituted through its Statutes.<sup>252</sup> Following a three-year period of consultation and deliberation, the World Conservation Congress (formerly the IUCN General Assembly) revised the IUCN Statutes of 1948 at its members' meeting in Montreal, Canada in October of 1996.<sup>253</sup> The revised Statutes were adopted by unanimous consent of all IUCN state members and nongovernmental organization members.

Article 1 of the IUCN Statutes provides as follows:

The International Union for Conservation of Nature and Natural Resources (IUCN) (also known as The World Conservation Union) is constituted in accordance with Article 60 of the Swiss Civil Code as an international association of governmental and non-governmental members. Therefore, it has legal personality and may perform any act in accordance with its objectives.<sup>254</sup>

The objectives of IUCN were also revised and restated in article 2 as follows:

The objectives of IUCN shall be to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.<sup>255</sup>

IUCN is unique among international organizations in that it was created by and has consistently possessed a membership of sovereign states,<sup>256</sup> state

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<sup>252</sup> Statutes, *supra* note 92.

<sup>253</sup> See Proceedings of the World Conservation Congress of IUCN, 1st Sess. (1996) (containing prior IUCN proposals and resolutions from 1948 onward), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>254</sup> Statutes, *supra* note 92, art. 1.

<sup>255</sup> *Id.* art. 2.

<sup>256</sup> The IUCN Statutes define "states" to mean "members of the United Nations or any of its Specialized Agencies, or of the International Atomic Energy Agency, or parties to the Statutes of the International Court of Justice." *Id.* art. 5(a).

governmental agencies,<sup>257</sup> international and national nongovernmental organizations (NGOs),<sup>258</sup> and nonvoting affiliate members.<sup>259</sup> IUCN's decision making process at its World Conservation Congress occurs through a bicameral voting process. The IUCN members' delegates accredited to the Congress sit collectively; however, the states and governmental agencies vote in one chamber, while the NGOs vote in another chamber. Under IUCN's Statutes, each state member has three votes in the World Conservation Congress, one of which is shared by that state's government agency members; the national NGO members have one vote; and the international NGO members have two votes.<sup>260</sup> This weighted voting, and the fact that a majority of the states must vote in favor of any decision taken at the Congress for that decision to be adopted, defines the intergovernmental character of IUCN.

IUCN's constitution is unique among international organizations, and therefore it is necessary to provide some clarifications regarding IUCN's legal status. In understanding the unique characteristics of the IUCN Statutes, it is useful to examine two issues: 1) the state acts which created IUCN in 1948 (the states that established IUCN knew they were founding a unique, new international organization for conserving nature and natural resources); and 2) IUCN's legal status under international law and the Union's relationship with member states under municipal law.

#### A. *The Acts Constituting IUCN*

When IUCN was founded in 1948, it marked the culmination of over three decades of work following the initial recommendations of a diplomatic conference in 1913.<sup>261</sup> Acting in response to recommendations from the *Ligue Suisse pour la Protection de la Nature*,<sup>262</sup> the International Association of Game, Fish & Conservation Commissions,<sup>263</sup> the Congress of Zoology,<sup>264</sup> and the representatives of 17 nations<sup>265</sup> convened in Berne, Switzerland, in

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<sup>257</sup> The Statutes define "government agencies," many of which are park departments or environmental ministries, as "organizations, institutions and, when applicable, government departments which form part of the machinery of government in a State, including those agencies of the components of federal States or of States having an analogous structure." *Id.* art. 5(b).

<sup>258</sup> International nongovernmental organizations are "institutions and associations organized in two or more States." *Id.* art. 5(e). National nongovernmental organizations are "institutions and associations incorporated within a State." *Id.* art. 5(d).

<sup>259</sup> Affiliate members are "government agencies, national and international nongovernmental organizations" which are not direct members of IUCN. *Id.* art (5)(f).

<sup>260</sup> *Id.* arts. 34-35.

<sup>261</sup> The early history of IUCN has been compiled by Sir Martin Holdgate, former Director General of IUCN, and published as *THE GREEN WEB - A UNION FOR WORLD CONSERVATION*, *supra* note 9.

<sup>262</sup> The *Ligue Suisse pour la Protection de la Nature*—also known as *Pro Natura*—is an NGO founded by Paul Sarasin and others in Switzerland in 1909.

<sup>263</sup> The International Association of Game, Fish & Conservation Commissions is an intergovernmental body comprised of Canada, Mexico, and the United States.

<sup>264</sup> The Congress of Zoology is a scientific body of experts.

<sup>265</sup> Argentina, Austria, Belgium, Denmark, France, Germany, Hungary, Italy, Netherlands,

1913 and agreed to establish an international commission for the international protection of nature. Unfortunately, World War I interrupted this initiative, and when the 16 states met in Paris in 1921 to reactivate the Commission, there was insufficient support from the *Ligue Suisse pour la Protection de la Nature* and the Swiss Confederation to launch the body. Thereafter, in 1925 and 1928, the International Union of Biological Sciences<sup>266</sup> called for the establishment of an international union for conservation, and finally the International Office for the Protection of Nature was established as an expert NGO in 1935 to further cooperation with national conservation programs.

Immediately following the Second World War, governments, scientific bodies of experts, and NGOs again called for establishment of an international organization to address the conservation of natural resources around the world. The United Nations Educational, Scientific and Cultural Organization (UNESCO) agreed to convene a meeting to establish the new body, but refused to limit membership to governments alone. In 1947, a preparatory meeting attended by representatives of the U.N. Trusteeship Council, UNESCO, FAO, 23 states, and several NGOs convened in Brunnen, Switzerland.<sup>267</sup> The meeting prepared a draft provisional constitution for the International Union for the Protection of Nature and called upon UNESCO to convene a conference to establish the new union and build on the initial 1913 diplomatic recommendations.<sup>268</sup>

Following this, the UNESCO General Conference instructed its Director General to convene an international technical conference for the protection of nature at its second session sitting in Mexico. The *Ligue Suisse pour la Protection de la Nature* urged UNESCO and the Republic of France to convene the meetings in France. Eventually, it was mutually agreed that France would invite other states, UNESCO would invite international organizations, and the *Ligue Suisse pour la Protection de la Nature* would invite the NGOs.<sup>269</sup>

UNESCO organized the Constitutive Conference of the International Union for the Protection of Nature in France at Fontainebleau, from September 30th to October 7th, 1948. At the same time, UNESCO also arranged a scientific technical meeting on conservation. The need for the new IUCN to have scientific commissions of experts was evident from its founding: most of the scientific experts for conservation were employed by universities and institutes, rather than states or their ministries. Since 1948, IUCN has enjoyed the contributions of the world's leading experts on subjects related to conservation.

At Fontainebleau, it was decided that the new Union should have both state and NGO members, giving it a unique constitution well suited for the

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Norway, Portugal, Russia, Sweden, Switzerland, the United Kingdom, and the United States.

<sup>266</sup> The International Union of Biological Sciences is an expert scientific body.

<sup>267</sup> These NGOs included the International Union of Biological Sciences, the International Office for the Protection of Nature, and the *Ligue Suisse pour la Protection de la Nature*.

<sup>268</sup> See generally JOHANN BUTTIKOFER, REPORT ON THE CONFERENCE FOR THE INTERNATIONAL PROTECTION OF NATURE: PROCEEDINGS, RESOLUTIONS AND REPORTS (1946).

<sup>269</sup> HOLDGATE, *supra* note 9, at 30.



special challenges of harnessing public and private interests needed to achieve conservation.<sup>270</sup> It was also agreed that the new Union should assist the then newly established United Nations system. The Preamble to the 1948 Statutes declared,

'Protection of Nature' is a matter of vital concern to all nations, and furthering of it is the primary concern of no single effective international agency [and] . . . it would be of assistance to various governments, the United Nations and its Specialized Agencies and other interested international organizations, if an effective international agency were established for the 'Protection of Nature.'<sup>271</sup>

Acting on these premises, the Statutes established a role for scientific experts, organizing them into commissions whose mandates and chairs would be decided by the General Assembly. This remains IUCN's method of directly involving scientists in its work. For example, in 1996 the World Conservation Congress voted on the mandates for six commissions of scientific experts and elected their chairs.<sup>272</sup>

IUCN's governance was structured to efficiently utilize both public and private expertise.<sup>273</sup> Originally, the IUCN General Assembly was comprised of both state and NGO members voting together; the division of the assembly's governance into state and NGO voting chambers was established in amendments to the IUCN Statutes adopted in 1956 at Edinburgh, Scotland.<sup>274</sup> IUCN's founding states also created a novel means of associating the state members with the NGO members by structuring the Statutes for the new Union under the expansive provisions of article 60 of the Swiss Civil Code.<sup>275</sup> In this format, the constitutive process for the new

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<sup>270</sup> In his history of IUCN, Sir Martin Holdgate comments upon this decision as follows:

There may have been four particular reasons why this hybrid status was chosen. First, it may have helped gain recognition among intergovernmental bodies like the U.N. agencies. Second, state members were in a position to pay significant dues. Third, if the Union had a number of state members, governments were likely to take its findings more seriously. Fourth, the hybrid structure must help co-operation across the divide between governmental and non-governmental sectors.

*Id.*

<sup>271</sup> IUCN Statutes of 5 Oct. 1948 pmb1.

<sup>272</sup> See, e.g., *Commission on National Parks and Protected Areas, now called the World Commission on Protected Areas*, Res. 1.3, World Conservation Congress, 1st Sess., at 283 (1996), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf); *Species Survival Commission*, Res. 1.4, World Conservation Congress, 1st Sess., at 285 (1996), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf); *Environmental Law Programme*, Res. 1.41, World Conservation Congress, 1st Sess., at 344 (1996), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>273</sup> Initially, IUCN's members included 18 states, 7 international nongovernmental organizations, and 107 national governmental agencies and nongovernmental organizations. HOLDGATE, *supra* note 9, at 33.

<sup>274</sup> *Id.* at 65.

<sup>275</sup> Article 60 of the Swiss Civil Code provides,

Associations which have a political, religious, scientific, artistic, charitable, social or any other than an industrial object, acquire the status of a person as soon as they show by their constitution their intention to have a corporate existence. The constitution must be

Union permitted states to become members of IUCN simply by announcing their decision to “adhere” to the Statutes, government agency members were permitted to join with the consent of their state, and NGO members were admitted to membership by decision of the IUCN Governing Council, which was elected by the General Assembly.<sup>276</sup>

The Statutes constitute a treaty obligation on the part of the states adhering thereto,<sup>277</sup> and a corporate and contractual obligation on the part of the NGOs admitted to membership. The Statutes in 1948 provided that “[t]he Executive Board may take such action as it considers desirable to give the Union legal capacity in the countries in which it operates that may be necessary for the fulfillment of its objects.”<sup>278</sup> Under the principles of the international law of cooperation in the Charter of the United Nations,<sup>279</sup> IUCN became yet another of the growing number of specialized international organizations established immediately following World War II mandated to draw together the expertise on how best to conserve nature and natural resources.

IUCN and its members have been so successful in this mission that IUCN’s concept of “sustainable development”<sup>280</sup> was endorsed in the 1987 Report of the U.N. World Commission on Environment and Development,<sup>281</sup> and later became the policy theme for the recommendations of the United Nations Conference on Environment and Development (UNCED) in 1992.<sup>282</sup> One of the hallmarks of UNCED recommendations was the call for a partnership between public and private interests to work toward realizing sustainable development. For the past 50 years, IUCN’s state members, governmental agency members, and NGO members have demonstrated how one unique international organization can work to make this partnership a reality.

Today, IUCN’s members meet every four years in the World Conservation Congress to adopt the program and budget for the Union, establish the mandates for its commissions of scientific experts, elect the governing Council and chairs of its commissions, and adopt policy directives

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drawn up in writing and state the object, the capital and the organization of the society.

1 THE SWISS CIVIL CODE 21 (Ivy Williams trans., 1925).

<sup>276</sup> Statutes, *supra* note 92, arts. 3(a), 4, 5(a).

<sup>277</sup> A number of state members publish the IUCN Statutes in their formal collections of treaties in force (e.g. the Netherlands).

<sup>278</sup> IUCN Statutes of 5 Oct. 1948 art. 12. The worldwide set of agreements between IUCN and sovereign states developed under this authority was consolidated in 1996 in part I, article 1, of the Statutes. *See* Statutes, *supra* note 92, art. 1.

<sup>279</sup> U.N. CHARTER art. 1, para. 3.

<sup>280</sup> This concept was first presented in 1980 in IUCN’s *World Conservation Strategy*, announced together with the United Nations Environment Programme (an organ of the UN) and the World Wildlife Fund (an NGO and IUCN member). *See* CARING FOR THE EARTH: A STRATEGY FOR SUSTAINABLE LIVING 10, 18–42 (1991) (reissue of IUCN, WORLD CONSERVATION STRATEGY – LIVING RESOURCE CONSERVATION FOR SUSTAINABLE DEVELOPMENT (1980)).

<sup>281</sup> *See generally* Report of the UN World Commission on Environment and Development, U.N. Doc. No. A/42/427 (1987), *reprinted in* OUR COMMON FUTURE (1987).

<sup>282</sup> *See* Agenda 21, *supra* note 4, *reprinted in* AGENDA 21: EARTH’S ACTION PLAN, *supra* note 4, at 1-636 (setting forth an action plan for environmental reforms).

for the Union. IUCN has members and offices in each region of the world. IUCN currently is comprised of 82 states, 112 governmental agencies, and 774 nongovernmental organizations.<sup>283</sup> Altogether, IUCN has some 927 members in 138 states, as well as Palestine and certain territories.<sup>284</sup> The seat or headquarters of IUCN is situated in Gland, Switzerland, where its governing Council meets.

### *B. IUCN's Legal Status Under International Law*

IUCN's unique character under international law can be evaluated from several perspectives. First, the international personality of IUCN must be understood. Second, IUCN's own Statutes constitute a kind of *lex specialis*, which states acknowledge under international law. Third, state practice has been to accord IUCN recognition as an intergovernmental organization. Fourth, and finally, IUCN's status under municipal law facilitates its transnational mission and activities.

#### *1. International Law Criteria for Determining International Personality*

IUCN's legal personality has been recognized under international law. IUCN is an international person in terms of the criteria accepted in international law as indicia of legal personality. In light of decisions of the International Court of Justice, as well as general state practice, Dr. Ian Brownlie restates these criteria as follows:

- 1) [A] permanent association of states, with lawful objects, equipped with organs; 2) a distinction, in terms of legal powers and purposes, between the organization and its member states; 3) the existence of legal powers exercisable on the international plane and not solely within the national systems of one or more states.<sup>285</sup>

While one may restate these criteria broadly, Dr. Brownlie cautions that "these criteria relate to delicate issues of law and fact and are not always easy to apply."<sup>286</sup> Dr. C.F. Amerasinghe has aptly described the nature of international institutional law as "inherently a *lex specialis*, a law proper to each organization, lacking general implications."<sup>287</sup> The International Court of Justice, ruling in *Reparations for Injuries Suffered in the Service of the United Nations (Reparations)*,<sup>288</sup> observed that "the rights and duties of an entity such as the Organization must depend upon its purpose and functions

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<sup>283</sup> See IUCN, *supra* note 86 (detailing IUCN's membership).

<sup>284</sup> *Id.*

<sup>285</sup> BROWNIE, *supra* note 184, at 649.

<sup>286</sup> *Id.*

<sup>287</sup> C.F. AMERASINGHE, PRINCIPLES OF THE INSTITUTIONAL LAW OF INTERNATIONAL ORGANIZATIONS 15 (1996) ("There are still no general rules or principles relating to international bodies corporate to which we can automatically turn when in search of their personal law.") (citing C.W. JENKS, PROPER LAW OF INTERNATIONAL ORGANIZATIONS 6-7 (1962)).

<sup>288</sup> 1949 I.C.J. 174 (Apr. 11).

as specified or implied in its constituent documents and developed in practice."<sup>289</sup> Dr. Amerasinghe elaborated on the International Court of Justice ruling in the *Reparations* case:

(i) [T]he fulfillment of these criteria is to be tested in relation to the 'intention' behind the establishment of the organization as reflected in the objective circumstance of such establishment including the constitution of the organization... and (ii) any negative elements in those circumstances, including the constitution, must be taken into account in determining whether international personality does not exist.<sup>290</sup>

Commentators have applied these criteria to evaluate whether an organization has international personality using either the inductive approach (examining the rights and duties conferred by states upon the organization and deriving the status therefrom)<sup>291</sup> or the objective approach (examining those aspects of the organization's structure which indicate international characteristics to find whether international law would accord recognition to the organization).<sup>292</sup> Under either of these methods of evaluation, IUCN has the constitutive indicia of international personality.

IUCN is a permanent association of states with international and nongovernmental organizations that was formed to advance conservation of nature and natural resources. IUCN is equipped with the organs necessary to obtain these objectives; it has a plenary assembly of members, a governing Council, specialized commissions of experts, and a permanent international secretariat, including a headquarters and offices around the world.<sup>293</sup>

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<sup>289</sup> *Id.* at 180.

<sup>290</sup> AMERASINGHE, *supra* note 287, at 84.

<sup>291</sup> For example, one commentator has noted,

Whilst, therefore, specific acknowledgment of the possession of *international* personality is extremely rare, it is permissible to assume that most organizations created by a multilateral inter-governmental agreement will, so far as they are endowed with functions on the international plane, possess some measures of international personality in addition to the personality within the systems of municipal law of the members which all the agreements on privileges and immunities (and often the basic constitutions) provide for.

D.W. BOWETT, *THE LAW OF INTERNATIONAL INSTITUTIONS* 275 (1963).

<sup>292</sup> See generally FINN SEYERSTED, *OBJECTIVE INTERNATIONAL PERSONALITY OF INTERNATIONAL ORGANIZATIONS* 46-48 (1964).

<sup>293</sup> International law commentators Thomas Buergenthal and Harold Maier note that international organizations "must have a permanent secretariat or institutional structure. Some authorities also assume that they must have a membership consisting entirely or principally of states." THOMAS BUERGENTHAL & HAROLD G. MAIER, *PUBLIC INTERNATIONAL LAW* 37 (1990). IUCN's mission requires the close collaboration of states and NGOs, and because states have the controlling vote over decisions affecting them, the IUCN framework meets Buergenthal and Maier's criteria. Only states "adhere" to the IUCN Statutes as an international agreement with an automatic right of admission; government agency and NGO members of IUCN must be admitted by Council on application and associate with the Statutes under the associations provisions of article 60 of the Swiss Civil Code. This is a unique accommodation of the different legal capacities of the three types of IUCN members, which has worked well since its inception in 1948.

Moreover, there is a clear distinction in terms of legal powers and purposes between IUCN and its member states; the biosphere of the Earth consists of interrelated natural systems that extend beyond the jurisdiction and control of any one state. The state members of IUCN have acknowledged that this scientific interdependence necessitates their cooperation through IUCN. IUCN meets the needs that its member states cannot meet alone. Finally, IUCN has duties assigned to it by states under its Statutes, several different environmental international agreements, and through its regional and bilateral agreements with certain states, which oblige IUCN to operate internationally and not solely, or even partially, within the national systems of one or more states.

In the founding of IUCN and in the repeated acts enhancing IUCN's functions, the state members of IUCN have defined its duties and functions on an international plane. As Dr. Manuel Rama-Montaldo has observed,

It may now be considered to be customary international law that every time States create an organization fulfilling those objective preconditions they endow it with international personality as already defined. However, since it is for the States to create the preconditions of the existence of a complete international person, they are also entitled to limit by constitutional provisions some or other of the rights arising from that personality.<sup>294</sup>

The states that established IUCN by the Act of the UNESCO Conference in 1948, and the states that have since adhered to the IUCN Statutes, have established IUCN as an international juridical body for the specifically delimited role of advancing conservation and sustainable natural resource use. Thus, IUCN serves a mission on which all states depend and which no state can accomplish alone.

## *2. The Lex Specialis of IUCN as an International Person*

IUCN's structure and activity illustrate the international personality of the Union. IUCN is established as an international organization solely in command of the decisions affecting its operations. IUCN exists in order to maintain the integrity and diversity of nature and the equitable and sustainable use of natural resources.<sup>295</sup> The members of IUCN agree to these ends, and they thus have the right to participate in the World Conservation Congress,<sup>296</sup> nominate candidates for election to IUCN's offices, submit motions to the Congress, and vote in sessions of the Congress and at other

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<sup>294</sup> Manuel Rama-Montaldo, *International Legal Personality and Implied Powers of International Organizations*, 44 BRIT. Y.B. OF INT'L L. 111, 147 (1970). Dr. Rama-Montaldo concluded that "among customary rights arising from the functional structure of international organizations might be placed the right to organize the working of its internal organs, the right to establish the procedure, rights of the staff, and even the creation of new organs. All these have a functional basis." *Id.* at 152-53.

<sup>295</sup> Statutes, *supra* note 92, art. 2.

<sup>296</sup> *Id.* art. 12(a)(1).

times via mail ballot.<sup>297</sup> The members undertake express obligations to support IUCN's objectives, pay the assessed dues, and submit information to IUCN relevant to these duties.<sup>298</sup> Failure to meet these obligations results in the suspension of the right to vote or of membership.<sup>299</sup> Over the past 50 years, both state and NGO members have had these sanctions applied to them. Many nations have also undertaken to host the World Conservation Congress<sup>300</sup> and have entered into formal, written agreements with IUCN both to contribute to bearing the extraordinary costs associated with the Congress and to ensure that "all persons entitled to attend the World Congress shall be admitted to that State without discrimination" and that "all participants . . . shall have the right of free expression in the sessions of the World Congress and associated meetings."<sup>301</sup>

One of the clear attributes of international legal personality is an entity's autonomy in its decision-making process. IUCN clearly possesses this autonomy. No state or other international organization can direct IUCN; only its members have this right. As discussed earlier,<sup>302</sup> IUCN's Statutes provide the methods of voting separately for states and for NGO members;<sup>303</sup> states enjoy a weighted three votes, with their government agency members voting within one of the votes allotted to the state of which that agency member is a part.<sup>304</sup> The Statutes further provide that a decision of the Congress shall be deemed taken only if a simple majority of the states voting agree to favor a question put to a vote, and a simple majority of the NGOs voting also agree.<sup>305</sup> The Congress takes all the business of the Union, including appeals from various decisions.<sup>306</sup> In addition, IUCN's members determine their internal procedures, and have adopted formal regulations to that end.<sup>307</sup> The Rules of Procedure of the World Conservation Congress were initially adapted from the Rules of Procedure of the United Nations General Assembly.<sup>308</sup>

The World Conservation Congress elects a Council which has the powers of the Congress when the Congress is not sitting and can amend the Regulations of IUCN.<sup>309</sup> The Council also appoints the Director General of IUCN. When adhering to IUCN's Statutes, the state members of IUCN agree to "respect the exclusively international character of the responsibilities of the Director General and the staff, and not seek to influence them unduly in

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<sup>297</sup> *Id.* art. 12(b).

<sup>298</sup> *Id.* art. 12(c).

<sup>299</sup> *Id.* art. 13.

<sup>300</sup> For example, Argentina (1994), Australia (1990), Costa Rica (1988), U.S.S.R. (1978), Zaire (1975), Canada (1972), India (1969), and the United Kingdom (1956).

<sup>301</sup> Statutes, *supra* note 92, arts. 21(a), (b).

<sup>302</sup> See *supra* note 259 and accompanying text.

<sup>303</sup> Statutes, *supra* note 92, arts. 34–35.

<sup>304</sup> *Id.* arts. 34(a), 35(a).

<sup>305</sup> *Id.* art. 31.

<sup>306</sup> *Id.* art. 20(b).

<sup>307</sup> Rules, *supra* note 92.

<sup>308</sup> Rules of Procedure for the U.N. General Assembly, U.N. Doc. A/520.Rev.15 (1985).

<sup>309</sup> Statutes, *supra* note 92, art. 101. Members may review such amendments at the Congress. *Id.* art. 103.

the discharge of their responsibilities.”<sup>310</sup> The Congress also defines the mandates and programs for the specialized commissions of experts, each of which has the academic or professional independence of its discipline. This expertise and its role in IUCN is independent and accountable ultimately to the Congress alone. The Council reports solely to the Congress and its members.

### *3. State Practice with Respect to IUCN's International Personality*

Beyond these constituent characteristics of IUCN, external recognition of the Union's functional attributes also indicates its international status. As set forth below, IUCN is treated as an international organization with the capacity to enter into agreements with other international organizations; IUCN is recognized as an international juridical person in a number of treaties, including four multilateral agreements; and IUCN's mission and role within the international law principles of cooperation give it a unique character among international organizations.

#### *a. Capacity to Enter Agreements*

IUCN has entered into a number of international agreements with other organizations. For instance, IUCN and the United Nations (through the United Nations Environment Programme) have agreed to establish a Joint Environmental Law Information System (JELIS).<sup>311</sup> IUCN has several special agreements with UNESCO and provides services to the UNESCO Secretariat for UNESCO programmatic obligations. By mutual agreement, IUCN prepares for the United Nations Secretary General the United Nations List of Protected Areas.<sup>312</sup> IUCN has entered into formal agreements for cooperation with the United Nations Development Programme and the United Nations Environment Programme, among other agencies.

#### *b. Treaty Recognition*

States have assigned duties and obligations to IUCN under a number of international agreements. Not all the state parties to these international agreements are members of IUCN, and thus a significant number of IUCN non-member states have acted to accept IUCN's juridical role under these treaty regimes. Under the UNESCO World Heritage Convention, the state parties have constituted a World Heritage Committee; the Convention requires that this Committee “cooperate” with IUCN and provides that “for the implementation of its programmes and projects, the Committee may call

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<sup>310</sup> *Id.* art. 82.

<sup>311</sup> See generally IUCN, *Joint Environmental Law Information Service: A New Initiative to Provide Information Via the Internet*, at [http://www.iucn.org/info\\_and\\_news/press/elc-launch/jelis\\_brochure.html](http://www.iucn.org/info_and_news/press/elc-launch/jelis_brochure.html) (last visited Apr. 10, 2005).

<sup>312</sup> See *supra* note 69 and accompanying text.

on such organizations, particularly . . . the International Union for the Conservation of Nature and Natural Resources.”<sup>313</sup> IUCN prepared the initial proposals for and participated in the drafting of the Washington Convention on the International Trade in Endangered Species and maintains a role as chief scientific advisor to the Conference of the Parties in application of article XI, paragraph 7.<sup>314</sup> IUCN is expressly assigned secretariat functions for the Conference of the Parties under the Ramsar Convention on Wetlands of International Importance where the state parties provide in article 8 of the Convention that IUCN “shall perform the continuing bureau duties under this Convention.”<sup>315</sup>

Additionally, IUCN is an active expert participant in several of the Antarctic Region treaties,<sup>316</sup> and the states party to the Wellington Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) have expressly authorized the Commission established by CRAMRA to “cooperate with the International Union for the Conservation of Nature and Natural Resources.”<sup>317</sup> IUCN participated in the formulation, negotiation, and implementation of the Rio de Janeiro Convention on Biological Diversity (IUCN serves as a principal scientific advisor to the Conference of the Parties in application of article 23, paragraph 5)<sup>318</sup> and other international agreements.<sup>319</sup> IUCN has also initiated and facilitated adoption of numerous “soft law” instruments such as the World Charter for Nature.<sup>320</sup> In light of these formal treaty obligations that states have invested in IUCN, it is evident that IUCN is both a “subject of international law” as that term is used in article III of the Vienna Convention on the Law of Treaties<sup>321</sup> and maintains international personality because it independently performs international expert and policy roles—initiating studies, proposing protocols and new conventions, entering into agreements with states and international organizations, assisting states in treaty implementation, and providing expert advice.

<sup>313</sup> World Heritage Convention, *supra* note 103, art. 13.

<sup>314</sup> See IUCN, *IUCN's Involvement with CITES*, at <http://www.iucn.org/themes/cec/conventions/cites.htm> (last visited Apr. 10, 2005) (detailing IUCN's involvement under CITES art. XI, ¶ 7).

<sup>315</sup> Ramsar Convention, *supra* note 103, art. 8.

<sup>316</sup> See, e.g., Antarctic Treaty, Dec. 1, 1959, 12 U.S.T. 794, 204 U.N.T.S. 285 (entered into force June 23, 1961); Convention on the Conservation of Antarctic Marine Living Resources, May 20, 1980, T.I.A.S. No. 10,240, 19 I.L.M. 841 (1980) (entered into force Apr. 7, 1982) [hereinafter CCAMLR]. For more information on treaties addressing wildlife and natural resource conservation in Antarctica, see U.S. DEPT OF STATE, HANDBOOK OF THE ANTARCTIC TREATY SYSTEM (9th ed. 2002), <http://www.state.gov/g/oes/rls/rpts/ant/>.

<sup>317</sup> Convention on the Regulation of Antarctic Mineral Resource Activities, June 2, 1988, 27 I.L.M. 859 (not yet in force).

<sup>318</sup> CBD, *supra* note 100, art. 23.

<sup>319</sup> For example, see IUCN's work on the African Convention on the Conservation of Nature and Natural Resources. IUCN, AN INTRODUCTION TO THE AFRICAN CONVENTION ON THE CONSERVATION OF NATURE AND NATURAL RESOURCES, at ix, <http://www.iucn.org/themes/law/pdffdocuments/EPLP56En.pdf>.

<sup>320</sup> *World Charter for Nature*, *supra* note 19.

<sup>321</sup> Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331 (entered into force Jan. 27, 1980).



*c. Increasing Cooperation*

IUCN's international role has expanded substantially as states and scientists have come to a more complete understanding of the challenges of maintaining healthy conditions on Earth. Since the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, all states have acknowledged the importance of IUCN's functional mission. IUCN's evolution is not unlike that of other *sui generis* international organizations, such as the International Committee of the Red Cross (ICRC). ICRC is also juridically organized under article 60 of the Swiss Civil Code, but now has international status under humanitarian and international law, has duties assigned to it under the Geneva Conventions, and has been accorded Observer Status by the United Nations General Assembly. However, unlike the ICRC, IUCN has immediate and controlling participation of states in its governance as full members of the organization. IUCN's international legal status has evolved since 1948 and continues to evolve. IUCN may perform any international act it is in a practical position to undertake within the limits set forth in the IUCN Statute, and so long as it does not impose obligations on its member states without the states' prior agreement.<sup>322</sup>

This pattern of international organizations serving specified functions has been in existence since the founding of the Rhine (1815) and the Danube (1856) Commissions,<sup>323</sup> the Universal Postal Union (1874), the ICRC, and others. The International Court of Justice recognized that the capacity to function on the international plane was an essential element of international personality.<sup>324</sup> Since IUCN has developed new programs beyond those of any of its members, IUCN serves its members in ways not otherwise available to them. It is evident that IUCN meets the criteria for international personality: IUCN's World Conservation Congress and Council express a will detached from that of the member states and possess defined objectives to be attained through the fulfillment of the functions of the Union.<sup>325</sup>

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<sup>322</sup> See Finn Seyersted, *Objective International Personality of Intergovernmental Organizations: Do Their Capacities Really Depend Upon Their Constitutions*, 4 INDIAN J. INT'L L. 1, 25-26 (1964) (discussing jurisdiction of intergovernmental organizations over member states).

<sup>323</sup> The Permanent Court of International Justice observed, "As the European Commission is not a State, but an international Institution with a special purpose, it only has the functions bestowed upon it by the Definitive Statute with a view to the fulfillment of that purpose." Jurisdiction of the European Commission of the Danube between Galatz and Braila, 1927 P.C.I.J. (ser. B) No. 14, at 64 (Dec. 8).

<sup>324</sup> The International Court of Justice noted,

[T]he progressive increase in the collective activities of States has already given rise to instances of action upon the international plane by certain entities which are not States. . . . It is difficult to see how such a convention could operate except upon the international plane and as between parties possessing international personality.

Reparations for Injuries Suffered in the Service of the United Nations, 1949 I.C.J. 174, 178-79 (Apr. 11).

<sup>325</sup> Dr Rama-Montaldo commented,

The states adopting the IUCN Programme in the World Conservation Congress have assigned to IUCN numerous international duties, especially with respect to building the capacity of developing nations for sustainable development. No one nation can save a migratory species if the habitat of that species is preserved in one nation but destroyed in another; no one state can stop hazardous chemicals from entering its ecosystems and food chains from another state unless the discharges in the other state are controlled; no downstream state can prevent the flooding from natural resource misuse by an upstream state. Solving these problems calls for the expertise of an institution such as IUCN. The IUCN Programme facilitates the cooperation of the public and private sectors, the work of national and local authorities, and the expertise of scientists and citizens alike.

#### *4. IUCN's Legal Capacity Under Municipal Law*

Even though IUCN meets the generally accepted criteria for international status under public international law, it is generally acknowledged that the presence of "international personality" under international law does not necessarily determine the organization's status under municipal law.<sup>326</sup> Thus, it remains necessary for each state also to accord to IUCN such legal capacity as IUCN requires for its operations with and within that state.<sup>327</sup>

IUCN has entered into agreements with a number of states where it operates offices. These agreements accord IUCN such privileges and immunities as are necessary for the performance of the Union's functions in that state. IUCN has entered agreements with the Swiss Federal Council, the United States, Ecuador, and Kenya in regard to exemption from taxation of personnel, exemption from duties, free movement of staff, and other

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[I]nternational personality is not a mere formal concept but entails precise legal consequences which may be summed up as enabling the person to operate on an international plane, manifesting itself as a distinct entity and entering into relationships with other international persons. This personality is dependent upon general international law in the sense that it is customary to assume that States creating an organization with the characteristics defined above endow it with a full legal capacity. But since it is for them to create the organizations, they might also limit some rights arising from personality if particular provisions of the constitution so specify.

Rama-Montaldo, *supra* note 294, at 155.

<sup>326</sup> F.L. KIRGIS, JR., INTERNATIONAL ORGANIZATIONS IN THEIR LEGAL SETTING 29 (1977).

<sup>327</sup> In particular, Dr. Bekker states,

National courts have accepted in practice the legal personality of international organizations even in the absence of express provisions to that effect . . . legal personality in the legal order of member and non-member states in practice has always been granted on one or two grounds: (1) the State *recognizes* the international personality of the organization and legal personality under domestic law follows from personality under international law; or (2) the organization has been *lawfully established* by foreign States and according to the rules of *private international law* legal personality acquired abroad is accepted.

PETER H.F. BEKKER, THE LEGAL POSITION OF INTERGOVERNMENTAL ORGANIZATIONS 62-63 (1994).

matters. These agreements are premised upon recognition of IUCN's international personality and constitute "organizational immunities" as appropriate to the objectives and functions of IUCN.<sup>328</sup> As noted above, IUCN has regularly entered into written conference agreements with the states that undertake to host the World Conservation Congress and its predecessor General Assembly.<sup>329</sup>

IUCN's members have chosen to resolve questions of a private law nature with respect to the headquarters secretariat of IUCN by choosing to be constituted in accordance with article 60 of the Swiss Civil Code.<sup>330</sup> Recourse to Swiss law has facilitated the organization and operation of the IUCN Secretariat. Such a choice of law provision is in keeping with the functional development of IUCN's programmes.<sup>331</sup> Similarly, IUCN chose Swiss law to govern the disposition of assets in the unlikely event of dissolution.<sup>332</sup>

IUCN's member states recognize the international personality of IUCN even in the absence of formal agreements with IUCN.<sup>333</sup> States that are not members of IUCN have legal procedures to recognize the juridical status of IUCN under their municipal laws, as is demonstrated by IUCN's work in over 65 nations that have not yet adhered to the IUCN Statutes. All nonmember states are also obliged to recognize IUCN's international personality under the principles of international law of international organizations set forth above.

In April of 1998, IUCN's Council decided to approach its member states to explore a request to the United Nations General Assembly to grant it Observer Status. In seeking Observer Status, IUCN reflected the interests of its members to work more fully within the United Nations system for sustainable development, as expressed in a Resolution of the World Conservation Congress adopted in Montreal in 1996.<sup>334</sup> Confirmation of

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<sup>328</sup> The term "organizational immunities" means "the body of law pertaining to the privileges and immunities of international organizations as such." *Id.* at 97 (citing G.H. Glann et al., *Immunities of International Organizations*, 22 VA. J. INT'L L. 247, 266 (1982)).

<sup>329</sup> *Id.* at 139 ("In such cases the host relationship is only a *temporary* one, which makes the conference agreement in effect a simplified headquarters agreement, being limited in time.").

<sup>330</sup> Statutes, *supra* note 92, art. 1.

<sup>331</sup> Dr. Bowett states,

In seeking the law appropriate to govern its relations with outside entities, an organization may, according to the circumstances, turn to international law, including possibly conventions to which it is not a party, or general principles of law (including general principles of the conflict of laws), to the 'domestic law' of the organization itself or even to systems of private law.

BOWETT, *supra* note 291, at 296-97.

<sup>332</sup> *Id.* at 306-07 ("Whether or not a particular organization will wish to provide in its constitution for the contingency of dissolution will depend upon political factors . . . dissolution is . . . very sensibly anticipated in the constitutions of the financial agencies.").

<sup>333</sup> See HENRY G. SCHERMERS & NIELS M. BLOKKER, *INTERNATIONAL INSTITUTIONAL LAW* § 1599 (3d ed. 1995) ("International organizations with personality in national law have the capacity to perform all acts which legal persons may normally perform."). Often the law of the host state is used as a source of rules to govern conduct. BEKKER, *supra* note 327, at 61.

<sup>334</sup> *Relations with the United Nations System*, Res. 1.80, World Conservation Congress, 1st

IUCN as a unique international and intergovernmental organization occurred in 2000 when the United Nations General Assembly invited IUCN to become an Observer<sup>335</sup> and in 2001 when IUCN's Director General, Maritta Koch-Weser, opened IUCN's resident Observer Mission in New York at the U.N. headquarters.<sup>336</sup> As IUCN's Statutes provide, IUCN has legal personality and "may perform any act in conformity with its objectives . . . to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable."<sup>337</sup>

#### VIII. AN EVOLVING RECONCILIATION BETWEEN HUMANS AND NATURE

IUCN's evolution from a small organization in 1948 to a global union in 2005 mirrors a growing social concern for the health of humans and nature within the biosphere. The recognition that nations now accord to IUCN's status reflects their commitment to foster improvements in environmental conditions. States recognize that environmental protection is one of the three pillars of sustainable development, equal to the economic and social pillars.<sup>338</sup> Through such declarations and the establishment of environmental laws, the process of responding affirmatively to combat environmental degradation can be discerned. As René Dubos observed,

The ecological image of human life that is now emerging is in part a consequence of concern for environmental degradation . . . . Starting from natural conditions, human societies have created cultural environments that in turn have influenced the course of their social evolution – a process of feedback characteristic of all ecological systems.<sup>339</sup>

IUCN has grown enormously since 1948, as has the field of environmental law since it emerged after the U.N. Stockholm Conference on the Human Environment in 1972. IUCN's founding members have regularly expanded its programs and called upon it to do more. IUCN has moved its focus from the protection of nature to equitable and ecological sustainability in the use of

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Sess., at 409 (1996) (declaring that "the effective implementation of IUCN's Mission requires closer work with the many organs of the UN, including its specialized agencies and programmes, and with other related international organizations," and requesting the Council "to undertake a comprehensive review of IUCN's relations with the United Nations, its specialized agencies, and other international organizations, and to report to the next World Conservation Congress"), [http://www.iucn.org/congress/documents/IUCN\\_previous\\_Congress\\_outputs\\_en.pdf](http://www.iucn.org/congress/documents/IUCN_previous_Congress_outputs_en.pdf).

<sup>335</sup> G.A. Res. 195, U.N. GAOR, 54th Sess., U.N. Doc. A/RES/54/195 (1999).

<sup>336</sup> Letter of the IUCN Director General to the Secretary General of the United Nations (on file with author).

<sup>337</sup> Statutes, *supra* note 92, arts. 1, 2.

<sup>338</sup> See *Johannesburg Plan of Implementation*, *supra* note 7, ¶ 5 ("Accordingly, we assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing three pillars of sustainable development—economic development, social development and environmental protection—at local, national regional and global levels."), *reprinted in* STRATEGIES TOWARD SUSTAINABLE DEVELOPMENT: IMPLEMENTING AGENDA 21, *supra* note 7, at 757.

<sup>339</sup> DUBOS, *supra* note 2, at 146.

natural resources. At the same time, it has become fully international in the geographic representation of its governing Council and in the worldwide operations of its commissions and Secretariat. The expansion of IUCN's operations since 1948 has taken place during a period when "the scope and content" of international law itself has rapidly developed.<sup>340</sup> With the completion of the United Nations Conference on Environment and Development in 1992, issues concerning the environment have come to form a central place in geopolitical decision making internationally.

Founded as an intergovernmental organization with nongovernmental organizations and states as members, IUCN is unique among international organizations. NGO members form an essential part of the cooperative partnership that has characterized IUCN's growth. The bicameral nature of IUCN's governance in the World Conservation Congress, with states and government agencies' votes counted separately from NGOs' in the Congress, offers a promising model for others to combine civil society with governments in common undertakings. Today, in its structure and functional program, IUCN embodies what the United Nations Conference on Environment and Development called for in 1992 in Agenda 21: "a global partnership for sustainable development."<sup>341</sup>

IUCN's juridical personality derives from its structure and role as an international association of states, government agencies, and NGOs united to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. It functions worldwide, on an international plane, and is charged by its members to apply its expertise to build the effectiveness of environmental law on a worldwide basis. IUCN's remarkable success in building environmental law

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<sup>340</sup> Dr. P.K. Menon has observed,

During the last few decades, especially after the establishment of the United Nations, profound changes have taken place in the scope and content of international law. One of the most important changes is the massive horizontal expansion of the international society composed of nation States due to the sweeping wave of the decolonization process. Another major development is the phenomenal growth of international organizations as permanent institutions for the cooperation of States. A third important change is in the subject matter of international law which is at present becoming actively concerned with various vital topics affecting the promotion of human welfare rather than the mere prevention of national warfare.

P.K. Menon, *The International Personality of Individuals In International Law: A Broadening of the Traditional Doctrine*, 1 FLA. ST. J. TRANSNAT'L L. & POL'Y 151, 151-52 (1992).

<sup>341</sup> Agenda 21 provides,

Humanity stands at a defining moment in its history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns, and greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. No nation can achieve this on its own; but together we can – in a global partnership for sustainable development.

*Agenda 21*, *supra* note 4, ¶ 1.1, *reprinted in* AGENDA 21: EARTH'S ACTION PLAN, *supra* note 4, at 1.

underscores its acceptance by nations as a catalyst and force for building capacity at national and international levels on legal stewardship of the biosphere. As international legal commentators Dr. Henry G. Schermers and Dr. Niels M. Blokker have noted,

While the institutional structure and development of each organization is unique, to the extent that it is not pre-determined by binding rules with which states must comply when setting up an international organization this development represents in some measure an *acquis institutionnel*, an institutional achievement or status quo which has been accepted and is used and developed further.<sup>342</sup>

IUCN's own evolution amply exemplifies this ongoing process.

The challenges associated with global change will test IUCN's constitution and press the Union to devote much more attention to conceptual law development. The norms and methods of environmental law will be needed to stimulate new measures to protect the environment and sustain social and economic development. Since it enters into force without the United States, the Kyoto Protocol is only likely to reduce greenhouse gas emissions by two percent by 2010.<sup>343</sup> As Michael Meacher, former British Environment Secretary put it,

No one policy is sufficient to confront climate change. It requires the combination of contraction and convergence to force down the use of fossil fuels; a global switch, led by fiscal incentives into renewable sources of energy, and a huge campaign to maximize conservation and relentlessly squeeze the prodigious waste of energy.<sup>344</sup>

Because present trends in economic growth suggest that greenhouse gases will rise by as much as 75 percent by 2020,<sup>345</sup> the processes of conceptual law development and the comparison and emulation of national or local environmental law innovations will need to be stimulated to greater activity. Law can advance the use of renewable energy sources, management of the demand for energy, and the elimination of waste of energy.<sup>346</sup> The legacy of carbon emitted since the beginning of the Industrial Revolution rests as a heavy burden on present and future generations.

Global changes such as sea-level rise and climate change will oblige human society to change and evolve. This change is afoot. The only question is whether societies will employ law to guide an ordered adaptation that maintains their civilized heritage or find their traditional values lost as the

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<sup>342</sup> SCHERMERS & BLOKKER, *supra* note 333, § 1987.

<sup>343</sup> Michael Meacher, *Political Will Is Needed to Deliver Kyoto's Goal*, FIN. TIMES (London), Oct. 18, 2004, at 13, 2004 WLNR 9806078.

<sup>344</sup> *Id.*

<sup>345</sup> Organization for Economic Co-operation and Development, *Climate Change*, at [http://www.oecd.org/departement/0,2688,en\\_2649\\_34361\\_1\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/departement/0,2688,en_2649_34361_1_1_1_1_1,00.html) (last visited Apr. 10, 2005).

<sup>346</sup> See *generally* ENERGY LAW AND SUSTAINABLE DEVELOPMENT (Adrian J. Bradbrook & Richard L. Ottinger eds., 2003).

changes overwhelm societies. Law can be a powerful and positive force in guiding how that adaptation will occur. As René Dubos observed,

We cannot escape from the past, but neither can we avoid inventing the future. With our knowledge and sense of responsibility for the welfare of humankind and the Earth, we can create new environments that are ecologically sound, aesthetically satisfying, economically rewarding, and favorable to the continued growth of civilization.<sup>347</sup>

Creative evolution in reshaping the legal framework for human stewardship of Earth is the continuing work of IUCN's Commission on Environmental Law. IUCN is enlisting university law faculties in this mission through the extension of its research for the conceptualization of new environmental law developments in the IUCN Academy of Environmental Law.<sup>348</sup> There is ample work here for all.

Environmental law is not yet a mature and pervasive system for ensuring a harmonious interaction between people and nature. Much more conceptual law development will be needed for such an eventuality to come to pass. IUCN's model will need to be replicated many times over. Dubos, as an erstwhile optimist, would find that the recognition nations accord IUCN under international law is symptomatic of their readiness to strengthen environmental law further. From the tension between existing environmental problems and the need to conceive of solutions to resolve those problems we shall see the creative evolution of a new and more productive relationship between human society and natural systems on Earth.

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<sup>347</sup> DUBOS, *supra* note 2, at 159.

<sup>348</sup> See generally Nicholas A. Robinson, *The IUCN Academy of Environmental Law: Seeking Legal Underpinnings for Sustainable Development*, 21 PACE ENVTL. L. REV. 325 (2004).