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ARTICLES

FROM STOCKHOLM TO KYOTO AND BACK TO THE UNITED STATES: INTERNATIONAL ENVIRONMENTAL LAW'S EFFECT ON DOMESTIC LAW

Joel B. Eisen*

We Americans think we're so darned smart. We invented modern environmental law, developed its sophisticated "command-and-control" structure, got the public involved as never before in fighting corporate polluters, and achieved measurable successes by getting lead out of our air and bald eagles back

^{*} Associate Professor of Law and Director, Robert R. Merhige, Jr. Center of Environmental Law, University of Richmond School of Law; B.S., Massachusetts Institute of Technology; J.D., Stanford Law School. I thank the family and friends of George E. Allen for making this intellectual journey a rich and rewarding one. Much credit is due to my Allen Chair colleagues—Professor Ben Boer, Professor Edith Brown Weiss, Professor Beatriz Bugeda, and Professor Philippe Sands—for their energetic involvement with the Allen family and the law school community, and for their lively and creative demonstrations of the richness and vitality of international environmental law. I also thank the University of Richmond School of Law for its generous financial support of my research, and John Dernbach and my colleagues, Michael Allan Wolf and W. Wade Berryhill for their invaluable assistance and comments on earlier drafts of this article. Last, but certainly not least, I would like to thank my editor for life, Tamar Schwartz Eisen. The ideas and opinions expressed herein are my own, and I am responsible for any errors or omissions.

^{1.} The system of "command and control" regulation is so named because its statutes and regulations "impose detailed, legally enforceable limits, conditions, and affirmative requirements on industrial operations, generally controlling sources that generate pollution on an individual basis." Rena I. Steinzor, Reinventing Environmental Regulation: The Dangerous Journey From Command To Self-Control, 22 HARV. ENVIL. L. REV. 103, 104 (1998).

^{2.} See infra Part II (discussing the importance of public participation in environmental law).

^{3.} Levels of lead in the nation's ambient air declined 96% between 1970 and 1987 as a result of the U.S. Environmental Protection Agency's (EPA) rules phasing

from near extinction.⁴ We've even tried "second generation" tools such as emissions trading systems⁵ and incentive-based regulatory flexibility approaches when we discovered our system's limitations.⁶ Not that we've got it all figured out,

down the amount of lead allowed in gasoline. See C.E.Q. 20th ANN. REP. 8 (1989). For a discussion of the EPA's regulations, see Thomas O. McGarity, Radical Technology-Forcing in Environmental Regulation, 27 Loy. L.A. L. REV. 943, 947-52 (1994). Professor McGarity's description of the complicated fifteen-year history of these regulations is an excellent case study of wrangling among special interest groups, administrative agencies, and the courts. See id.

- 4. In 1963, there were only 417 nesting pairs of bald eagles in the nation. In 1994, there were over 4,000, and the U.S. Fish and Wildlife Service (FWS) downgraded the bald eagle from "endangered" to "threatened" status. See 50 C.F.R. § 17.11(h) (1998). The continued recovery of the bald eagle population led the FWS to consider proposing the removal of the bald eagle from the list altogether. See James Gerstenzang, Eagle May Fly From Nest of Endangered, L.A. TIMES, May 6, 1998, at A1; see also Lois J. Schiffer & Ann C. Juliano, Reform of Environmental Regulations: Three Points, 12 NAT. RESOURCES & ENV'T 175, 175 (1998) (counting recovery of endangered species such as the bald eagle as a success story of environmental regulatory programs).
- 5. For example, Title IV of the Clean Air Act, added by the Clean Air Act Amendments of 1990, 42 U.S.C. §§ 7651-71q (1994), created the well-known, market-based system for trading sulfur dioxide allowances. See generally James E. Krier, Marketable Pollution Allowances, 25 U. Tol. L. Rev. 449 (1994); Henry E. Mazurek, Jr., The Future of Clean Air: The Application of Futures Markets to Title IV of the 1990 Amendments to the Clean Air Act, 13 TEMP. ENVIL. L. & TECH. J. 1 (1994).
- 6. A good example of a flexible approach to an "inflexible" environmental statute is the "no surprises" policy under the Endangered Species Act (ESA). See 16 U.S.C. § 1531-44 (1994). Section 9 of the ESA proscribes any "taking" of a listed endangered animal. See 16 U.S.C. §§ 1538(a)(1)(B), 1532(19) (1994) (defining "take" broadly as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct"). A private landowner may apply for an "incidental take" permit under section 10(a) of the ESA for a taking "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity," in return for adopting a habitat conservation plan (HCP) designed to protect the species. See 16 U.S.C. § 1539(a)(1)(B) (1994). Under the "no surprises" policy, the landowner receives a promise that the government will pay for any additional conservation measures required if unforeseen consequences occur. See No Surprises Policy, 62 Fed. Reg. 29,091 (1997) (to be codified at 50 C.F.R. §§ 17.22(b)(5)-(6), 17.32(b)(5)-(6), 222.22(g)-(h)); J.B. Ruhl, While the Cat's Asleep: The Making of the "New" ESA, 12 NAT. RESOURCES & ENV'T 187, 188-190 (1998) (describing the "no surprises" policy); Joseph L. Sax, New Departures For Land And Water: Concluding Perspectives on Ecosystem Management, 24 ECOLOGY L.Q. 883 (1997) (discussing the HCP process and the "no surprises" policy).

mind you, but we're inclined to think of ourselves as world leaders when it comes to environmental protection.

We've created a massive bureaucracy to administer an unwieldy system of environmental laws that rivals the tax code for sheer complexity.⁸ We are busy playing the endgame of environmental law's first three decades, tallying up our system's achievements,⁹ excoriating its inconsistencies and failures to regulate this pollutant or that activity,¹⁰ debating with each other about its future,¹¹ and simply working out the bugs

Of course, some also take on the task of defending these achievements against those who would roll back environmental laws. See generally Zygmunt J.B. Plater, Environmental Law as a Mirror of the Future: Civic Values Confronting Market Force Dynamics in a Time of Counter-Revolution, 23 B.C. ENVIL. AFF. L. REV. 733 (1996) (describing rollback initiatives in the 104th Congress); Joseph L. Sax, The Second Annual Lloyd K. Garrison Lecture on Environmental Law: Using Property Rights to Attack Environmental Protection, 14 PACE ENVIL. L. REV. 1 (1996).

^{7.} Virtually since the creation of the environmental regulatory system, there has been a lively discussion of its strengths and weaknesses. For an early debate, compare Bruce A. Ackerman & Richard B. Stewart, Reforming Environmental Law, 37 STAN. L. REV. 1333 (1985), which criticizes command and control systems, with Howard Latin, Ideal Versus Real Regulatory Efficiency: Implementation of Uniform Standards and "Fine-Tuning" Regulatory Reforms, 37 STAN. L. REV. 1267 (1985), which criticizes the opponents of command and control regulation.

^{8.} See William H. Rodgers, Jr., A Superfund Trivia Test: A Comment on the Complexity of the Environmental Laws, 22 ENVIL. L. 417, 420 (1992) (providing a humorous look at the complex "hydra-headed nature of the modern environmental laws"). For the direct comparison to tax law, see Jerry L. Anderson, The Environmental Revolution At Twenty-Five, 26 RUTGERS L.J. 395, 411 (1995) (stating that "[a] few experiences with environmental law can make the tax code seem like a walk in the park").

^{9.} See generally Arnold W. Reitze, Jr., A Century of Air Pollution Control Law: What's Worked; What's Failed; What Might Work, 21 ENVIL. L. 1549 (1991) (detailing achievements and challenges in laws controlling air pollution); William H. Rodgers, Jr., The Seven Statutory Wonders of U.S. Environmental Law: Origins and Morphology, 27 LOY. L.A. L. REV. 1009 (1994) (praising section 102 of the National Environmental Policy Act (NEPA), section 301 of the Federal Water Pollution Control Act (FWPCA), and other successful environmental laws).

^{10.} See, e.g., Arnold W. Reitze, Jr., Population, Consumption and Environment Law, 12 NAT. RESOURCES & ENVT 89, 89 (1997) (claiming that environmental laws "have failed to deal effectively with many problems"). According to Professor Reitze, "[s]ignificant wetland and wildlife habitat losses continue; the natural forests in the United States are disappearing; most urban areas fail to meet one or more air quality standards; and global warming has not been seriously addressed." Id. He also advocates action to deal with the "failure to understand the holistic interrelationship of environmental degradation to population and consumption." Id.; see also Arnold W. Reitze, Jr., Environmental Policy—It Is Time For A New Beginning, 14 COLUM. J. ENVIL. L. 111 (1989).

^{11.} See Steinzor, supra note 1 (discussing "reinvention initiatives" such as Project

in the system.¹² It should come as no surprise that many of us pay little attention to international environmental law.¹³ It isn't that we believe it is unnecessary. We acknowledge a role for international solutions in curbing transboundary pollution, a straight-forward extension of the notion that pollution knows no boundaries.¹⁴ But overwhelmingly, we think of international

XL); see also Robert V. Percival, Responding to Environmental Risk: A Pluralistic Perspective, 14 PACE ENVTL. L. REV. 513, 526 (1997) (discussing reasons for "efforts to 'reinvent regulation"); 12 NAT. RESOURCES & ENV'T (1997) (a collection of articles discussing regulatory reform). Beyond the initiatives designed to achieve regulatory reform, there are frequent calls to overhaul various statutes or regulatory regimes. These are so numerous that I will spare the reader the tedium of a list.

Some of the freshest contemporary salvos in the reinvention debate are the innovative works advocating new organizing principles or frameworks for a next generation of environmental law. See generally John C. Dernbach, Sustainable Development as a Framework for National Governance, 49 CASE W. RES. L. REV. 1 (1998) (advocating reform of existing laws and institutions based upon principles of sustainable development); Lakshman Guruswamy, Integrating Thoughtways: Re-Opening of the Environmental Mind?, 1989 WIS. L. REV. 463; J.B. Ruhl, Thinking of Environmental Law as a Complex Adaptive System: How to Clean Up the Environment by Making a Mess of Environmental Law, 34 HOUS. L. REV. 933 (1997) (applying the theory of complex adaptive systems to environmental law and describing how it might be revolutionized to comport with this theory).

12. A good example of the gaps, inconsistencies, and other shortcomings of modern environmental regulation is the haphazard regulation of "toxic" and "hazardous" pollutants under the various pollution control statutes. See John C. Dernbach, The Unfocused Regulation of Toxic and Hazardous Pollutants, 21 HARV. ENVIL. L. REV. 1 (1997).

Even when we think we have solved a problem, it may nevertheless reemerge. See William H. Rodgers, Jr., Deception, Self-Deception, and Myth: Evaluating Long-Term Environmental Settlements, 29 U. RICH. L. REV. 567 (1995) (describing problems with "settling" environmental disputes).

13. See, e.g., A. Dan Tarlock, The Influence of International Environmental Law On United States Pollution Control Law, 21 VT. L. REV. 759, 760 (1997) (noting that "United States environmental law has . . . as a whole, ignored the relationship between domestic and international environmental law, and most lawyers have paid little attention to the possibility that international law could influence the content of our law").

14. A frequently asserted justification for domestic environmental law is the curbing of interjurisdictional spillovers. Among the first to advocate this proposition was Professor Richard Stewart. See Richard B. Stewart, Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy, 86 YALE L.J. 1196, 1226-30 (1977) (stating that federal controls are necessary to prevent spillover effects); infra note 37 and accompanying text (discussing the perception that the Trial Smelter decision held transboundary pollution unlawful); see also Daniel C. Esty, Revitalizing Environmental Federalism, 95 MICH. L. REV. 570, 593, 626-27 (1996); Richard L. Revesz, Federalism and Interstate Environmental Externalities, 144 U. PA. L. REV. 2341, 2342-43 (1996).

After the adoption of Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration, it is now "widely recognized to reflect customary international

environmental law as a largely sanctionless creation "full of sound and fury, signifying nothing," the "jurisprudential equivalent of vaporware." ¹⁶

I imagine most environmental lawyers have heard of the Montreal Protocol¹⁷ or the recent global climate change agreement, ¹⁸ though I suspect few could tell you much about how

law" that nations have a responsibility to not cause transboundary pollution. Philippe Sands, International Environmental Law: An Introductory Overview, in GREENING INTERNATIONAL LAW xv, xv (P. Sands ed., 1994); see also Malgosia Fitzmaurice, Presentation by Dr. Malgosia Fitzmaurice, in Increasing the Effectiveness of the INTERNATIONAL COURT OF JUSTICE: PROCEEDINGS OF THE ICJ/UNITAR COLLOQUIUM TO CELEBRATE THE 50TH ANNIVERSARY OF THE COURT 398, 401 (Connie Peck & R.S. Lee eds., 1997); Cliona J.M. Kimber, A Comparison of Environmental Federalism in the United States and the European Union, 54 MD. L. REV. 1658, 1659 (1995) (discussing the importance of multijurisdictional solutions to international transboundary pollution problems); Kal Raustiala, The "Participatory Revolution" In International Environmental Law, 21 Harv. Envil. L. Rev. 537, 537 (1997); Mark J. Spaulding, Transparency of Environmental Regulation and Public Participation in the Resolution of International Environmental Disputes, 35 SANTA CLARA L. REV. 1127, 1128 (1995) ("Pollution does not respect national borders. Therefore, we see an increasingly international emphasis on global commons and cross-border pollution prevention and clean-up."); A. Dan Tarlock, Exclusive Sovereignty Versus Sustainable Development of a Shared Resource: The Dilemma of Latin American Rainforest Management, 32 Tex. INT'L L.J. 37, 44 (1997) ("The environmental case against exclusive national sovereignty [over resources] rests on the scientific and economic argument that unacceptable levels of transboundary and global spillovers exist. . . ."). But see Thomas W. Merrill, Golden Rules For Transboundary Pollution, 46 DUKE L.J. 931, 934 (1997) (arguing that regulation of transboundary pollution at the domestic and international level is "underdeveloped").

- 15. WILLIAM SHAKESPEARE, MACBETH, Act V, sc. 5.
- 16. Daniel A. Farber, Environmental Federalism in a Global Economy, 83 VA. L. REV. 1283, 1314 (1997). "Vaporware" is the term for the widespread practice in the computer industry of announcing products not yet (and maybe never) ready for the marketplace. See Robert Prentice, Vaporware: Imaginary High-Tech Products and Real Antitrust Liability in a Post-Chicago World, 57 OHIO ST. L.J. 1163, 1163 n.2 (1996).
- 17. Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, S. Treaty Doc. No. 10, 100th Cong., 1st Sess. (1987), 26 I.L.M. 1541, 1550 (entered into force Jan. 1, 1989) [hereinafter Montreal Protocol]; see also Dale S. Bryk, The Montreal Protocol and Recent Developments to Protect the Ozone Layer, 15 HARV. ENVIL. L. REV. 275 (1991). The Montreal Protocol, "perhaps the most widely cited and analyzed [international] environmental agreement," is probably the most familiar agreement to domestic lawyers. See Raustiala, supra note 14, at 543.
- 18. Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22 [hereinafter Kyoto Protocol]; see also Charlotte Booncharoen & John Gase, International Commitment Toward Curbing Global Warming: The Kyoto Protocol, 4 ENVIL. LAW. 917 (1998); William K. Stevens, Meeting Reaches Accord to Reduce Greenhouse Gases, N.Y. TIMES, Dec. 11, 1997, at A1 (discussing provisions of the Kyoto Protocol and predicting difficulty in ratification by the U.S. Senate).

they work. Beyond that, knowledge about international environmental law is probably thin. Consider this series of lawyerly followup questions about any treaty: What substantive and procedural obligations does it impose on signatories such as the United States? Is there a regulatory agency comparable to the EPA that supervises the agreement? Do we do what we're supposed to do under the agreement? If not, who (if anyone) can do something about it? How successful has the agreement been in achieving its goals?²¹

I doubt most environmental lawyers could answer these questions; a year ago, I would not have put my knowledge of international environmental law to this test. Like others, I tended to think this body of law was rather ineffectual and wholly separate from domestic environmental law.²² I confess to having been mistaken. The recent and rapid developments in international environmental law can influence our domestic system of environmental law. We should abandon any conceptual separation of the two bodies of law, and instead think of the two as having evolved into a new relationship in which international environmental law can and does play a role in the development and refinement of domestic law.²³

International environmental law is maturing into a remarkably sophisticated body of law that is increasingly becoming

^{19.} In posing this question, of course, I have left aside the role that customary international law plays in safeguarding the environment. See Sands, supra note 14, at xxii ("The primary role of treaties and acts of international organizations should not obscure the important—albeit secondary—role played by customary international law.").

^{20.} Professor Edith Brown Weiss terms this an inquiry regarding "compliance," distinguishing this question from questions of implementation and effectiveness of international environmental agreements. See infra notes 201-09 and accompanying text.

^{21.} To Professor Brown Weiss, this is a question of the agreement's "effectiveness." See infra Part II.C.1.b.

^{22.} As Professor Brown Weiss observes, I was certainly not alone; there is a long tradition of drawing "a sharp line between international and domestic law," but that divide is "fading." Edith Brown Weiss, *Understanding Compliance With International Environmental Agreements: The Baker's Dozen Myths*, 32 U. RICH. L. REV. 1555, 1557-58 (1999).

^{23.} I am indebted to Professor Ben Boer for making this observation in his public lecture in the Allen Chair Visiting Scholars series, and to each of the Allen Professors for prompting me to explore the connection between the two systems of law. See infra notes 104-05 and accompanying text.

intertwined with domestic law. I discuss this relationship in this article, building upon lessons learned from the distinguished visiting scholars of the George E. Allen Chair in Law at the University of Richmond School of Law for the Spring 1998 semester²⁴ through their interaction with faculty, students of the Allen Chair Symposium and seminar series, and the law school community. Through the keen insights of these scholars, the reader will come to see the vital and dynamic nature of the connection between domestic and international environmental law.

Like all associations between two complex systems, this is a multifaceted relationship. International environmental law's influence on the content of domestic law is perhaps the way in which the two systems are most obviously symbiotic.²⁵ The conjunction of the two occurs in a complex process. International environmental agreements often assume a linear cause-and-effect relationship with domestic law: the agreement calls for domestic law to be enacted to implement its provisions or conform to its norms. I caution the reader that the relationship is not so linear as it appears, and is indeed much messier. The interweaving between the two systems is a sort of discursive

^{24.} The George E. Allen Chair in Law was endowed by the family and friends of George E. Allen to honor this distinguished Virginia trial lawyer and founder of the highly regarded civil litigation firm of Allen, Allen, Allen & Allen, based in Richmond, Virginia. The Spring 1998 semester marked the ninth year that the faculty of the University of Richmond School of Law had the opportunity to invite eminent figures in law and related fields to visit the law school and participate in a symposium and advanced seminar.

In 1998, the title for the symposium and course was "Resolving International Environmental Disputes in the 1990s and Beyond." The group of four visiting scholars and holders of the Allen Chair—Professor Beatriz Bugeda of Universidad Iberoamericana, Mexico City, Mexico; Professor Ben Boer, University of Sydney, Australia; Professor Edith Brown Weiss, Georgetown University Law Center, Washington, D.C.; and Professor Philippe Sands, Reader in International Law, University of London and Professor, Global Law Faculty, New York University Law School—was well-suited to explore the future of international environmental law. Each professor is highly qualified and well regarded, and each has extensive scholarship and practice experience in the field of international environmental law. The professors were truly an international contingent, hailing from Australia, Great Britain, Mexico, and the United States. Each professor visited the law school for approximately one week, during which the professor taught two seminar classes, gave a public presentation to the university community, engaged in a faculty colloquy, and took part in other activities related to the course theme.

^{25.} By this, I do not mean to imply that the two systems are locked in a dependent affiliation, but merely to suggest that there is a close relationship.

interlocution with inadequately understood feedback mechanisms and cause-and-effect linkages.

Comparing the two legal regimes, one often does not observe a direct cause-and-effect link between an international environmental agreement or principle and its domestic counterpart, but instead sees frequent false starts and opportunities missed or as yet unexplored. In his article, Professor Ben Boer demonstrates how principles developed at the world stage (in this case, "sustainable development") can serve as a source of domestic law. The complexity involved in translating that principle into domestic law is evidenced in Professor Boer's observation that, at present, the implementation of sustainable development principles in the Asian region shows "little consistency."26 That principles initially developed on the international stage can lead to domestic innovation, but only with assiduous attention to their implementation, is also apparent in the tepid American response to fulfill the international agenda for sustainable development.27

Beyond influencing the content of domestic law, international environmental law can often have enormous impact precisely because it is an evolving regime grappling with many problems comparable to those first addressed decades ago in the domestic setting. This asynchronous evolution of the international environmental legal regime often takes us down the road not taken, ²⁸ yielding solutions different from and in some cases complementary to those available under domestic environmental laws. International environmental law can also play a hortatory role inspiring us to strengthen cherished principles in domestic law. Both of these roles are in evidence in Professor Beatriz Bugeda's analysis of the Cozumel Submission brought under the Citizen's Submission process of the North American Free Trade Agreement (NAFTA) environmental side agreement. ²⁹ While

^{26.} Ben Boer, The Rise of Environmental Law in the Asian Region, 32 U. RICH. L. REV. 1503, 1545 (1999).

^{27.} See infra Part II.

^{28.} See Robert Frost, The Road Not Taken, in COLLECTED POEMS, PROSE, & PLAYS 103 (Richard Polrer & Mark Richardson eds., 1995).

^{29.} See Beatriz Bugeda, Is NAFTA up to Its Green Expectations? Effective Law Enforcement under the North American Agreement on Environmental Consideration, 32 U. RICH. L. REV. 1591, 1605-13 (1999).

criticizing its many flaws and making suggestions for improvement, Professor Bugeda finds that this process creates an international forum for public input in domestic development projects. Just as importantly though, her analysis reinforces the legitimacy of public participation in domestic fora.

The experience that actors gain in the evolution of international environmental law provides valuable lessons for the domestic setting. Scholars who sift methodically through this experiential evidence, analyzing its trends and offering recommendations for change, develop insights useful for thinking about complex problems in the domestic system. Professor Edith Brown Weiss's article, based on a groundbreaking international study of compliance by eight nations with five international environmental agreements, debunks a "Baker's Dozen" of thirteen myths about how and why nations comply with these and other international agreements.30 Her analysis provides useful principles that help explain why all actors give effect to international law, and affords tremendous insights about how domestic laws should be structured to effectuate compliance. Professor Philippe Sands focuses on international environmental litigation and the tension it generates between nations and the international community. His article offers insights applicable not only in an analysis of the proper role of international tribunals, but also in the ongoing discussion of national sovereignty, and, by analogy, in the debate over environmental federalism in the United States.31

In Part I, I begin my discussion of the relationship between the two legal regimes with a brief introduction to modern international environmental law to assist those whose knowledge is as limited as mine was not too long ago. I also describe how the Allen Chair Symposium and seminar series was designed to facilitate exploration of major trends in international environ-

^{30.} See generally Brown Weiss, supra note 22. For a detailed description of the study of compliance, which Professor Brown Weiss conducted with political scientist Harold K. Jacobson and a team of international collaborators, see Edith Brown Weiss, The Five International Treaties: A Living History, in Engaging Countries: Strengthening Compliance With International Environmental Accords (Edith Brown Weiss & Harold K. Jacobson eds. 1998) [hereinafter Engaging Countries].

^{31.} See generally Philippe Sands, International Environmental Litigation and Its Future, 32 U. RICH. L. REV. 1619 (1999).

mental law. Part II provides a more in-depth look at the specific relationship between domestic and international environmental law. I conclude that international environmental law informs domestic law as a wellspring of law leading to domestic innovation, a complement to domestic law, a source of hortatory experience, and a laboratory for experiential insights. From time to time, I refer to the specific challenges of domestic "brownfields" laws and policies, a subject which I have addressed in detail elsewhere.

I. RESOLVING INTERNATIONAL ENVIRONMENTAL DISPUTES IN THE 1990S AND BEYOND: RECENT TRENDS IN INTERNATIONAL ENVIRONMENTAL LAW

The integrating theme for the Spring 1998 Allen Chair series was Resolving International Environmental Disputes in the 1990s And Beyond. Twenty-five years ago, the notion of a seminar-long scholarly series devoted to international environmental law would have been curious at best and probably laughable at worst. Even the most ardent supporters of international environmental law would have concluded, to quote Gertrude Stein, that "there is no there there." The situation is very different today, following a quarter century of rapid development and evolution of the law.

A. From Stockholm to Kyoto: International Environmental Law Grows and Matures

Most observers believe the modern era in international environmental law began at the 1972 Stockholm Conference.³³ As in the domestic setting, however, there is a longer history of legal activity aimed at protecting the international environment. Professor Sands traces the genesis of international environmental law to the turn of the twentieth century.³⁴ He notes that an international arbitral tribunal decision in 1893, which allowed British exploration of fur seals on the high seas, but

^{32.} GERTRUDE STEIN, EVERYBODY'S AUTOBIOGRAPHY 289 (1937).

^{33.} See United Nations Conference on the Human Environment at Stockholm, June 5-16, 1972 [hereinafter Stockholm Conference].

^{34.} See Sands, supra note 31, at 1619-21.

prescribed regulations to protect the seals, "marked the beginning of international environmental law." In the twentieth century, a number of developments predate the Stockholm Conference: the bilateral and multilateral international environmental agreements dating to the early 1900s on subjects such as protecting wildlife, the well-known Trail Smelter decision of 1941, the 1949 UNSCCUR conference (which "sowed the seeds for the development of legislation to address international environmental issues"), and agreements negotiated in the 1950s and 1960s after UNSCCUR to address marine pollution and other topics. However, one could best describe international environmental law in this period as developing "incrementally."

The Stockholm Conference "placed global environmental issues firmly on the international government agenda for the first time." Conference delegates adopted a declaration of environmental principles, the "Stockholm Declaration." This non-binding statement featured twenty-six general principles, two of which, regarding states' responsibility not to cause transboundary harms within the context of national sovereignty, serve as bedrock statements of international environmen-

^{35.} Id. at 1621; see also Sands, supra note 14, at xv.

^{36.} One example of such an agreement was the International Convention for the Regulation of Whaling. Convention for the Regulation of Whaling, Sept. 24, 1931, 49 Stat. 3079, 155 L.N.T.S. 359; see also Edith Brown Weiss, International Environmental Law: Contemporary Issues and the Emergence of a New World Order, 81 GEO. L.J. 675, 676 (1993).

^{37.} Philippe Sands notes that the *Trail Smelter* case, Trail Smelter Arbitration (U.S. v. Can.), 3 R.I.A.A. 1907 (1935), which predates the development of virtually all modern international environmental law, is frequently—and mistakenly—cited for the proposition that transboundary pollution is unlawful under international law. *See* Sands, *supra* note 31, at 1621-22; *cf.* Brown Weiss, *supra* note 36, at 676-77.

^{38.} Sands, supra note 31, at 1622.

^{39.} See id. at 1623-24; Brown Weiss, supra note 36, at 677-78.

^{40.} Sands, supra note 31, at 1623.

^{41.} Ben Boer, Institutionalizing Ecologically Sustainable Development: The Roles of National, State, and Local Governments in Translating Grand Strategy Into Action, 31 WILLAMETTE L. REV. 307, 307 (1995).

^{42.} Declaration of the United Nations Conference on the Human Environment, June 16, 1972, U.N. Doc. A/CONF.48/14 and Corr. 1, reprinted in 11 I.L.M. 1416 (1972) [hereinafter Stockholm Declaration].

^{43.} Principle 2 provides: "The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate." Id. at princ. 2. Principle 21 con-

tal law.⁴⁴ The Stockholm Declaration, taken together with an action plan embodying recommendations for specific actions, "represented the international community's first effort at constructing a coherent strategy for the development of international policy, law, and institutions to protect the environment."⁴⁵

While rapid developments were well underway even as the Stockholm Conference took place,⁴⁶ most observers believe that Stockholm catalyzed the growth of international environmental law.⁴⁷ It can now be claimed that there is "a solid body of rules of international environmental law."⁴⁸ Sources of this law include bilateral, regional, and multilateral treaties, "secondary legislation" (binding and non-binding acts of international organizations),⁴⁹ customary rules of international law, and non-binding documents such as the Stockholm Declaration.⁵⁰ International environmental law incorporates broadly applicable norms such as the "precautionary principle," calling for environmental protective measures in the absence of full scientific certainty regarding threats of harm,⁵¹ and "intergenerational"

strains this by recognizing "the sovereign right of nations to exploit their own resources." Id. at princ. 21. See generally Louis B. Sohn, The Stockholm Declaration on the Human Environment, 14 HARV. INT'L L.J. 423 (1973).

- 44. See Sands, supra note 14, at xxxi.
- 45. See id.
- 46. "Many important legal developments took place in the period surrounding the [Stockholm] Conference, including negotiation of the Convention on International Trade in Endangered Species, the London Ocean Dumping Convention, the World Heritage Convention, and the first of the UNEP regional seas conventions." Brown Weiss, supra note 35, at 678.
 - 47. See, e.g., Sands, supra note 14, at xxvii.
- 48. Id. at xxviii; see also Brown Weiss, supra note 36 at 679. See generally Sands, supra note 14, at xxxv-xxxviii (discussing the role of standards in modern international environmental law).
- 49. Non-binding instruments are popularly known as "soft law." See generally Pierre-Marie Dupuy, Soft Law and the International Law of the Environment, 12 MICH. J. INT'L L. 420 (1991).
- 50. See generally Sands, supra note 14, at xxii-xxiii (discussing sources of modern international environmental law).
- 51. This concept is enshrined in the Rio Declaration. See United Nations Conference on Environment and Development: Rio Declaration on Environment and Development June 14, 1992, UNCED Doc. A/CONF.151/Rev. 1, reprinted in 31 I.L.M. 874, 879 [hereinafter Rio Declaration]; see also Boer, supra note 41, at 313. But see Frank B. Cross, Paradoxical Perils of the Precautionary Principle, 53 WASH. & LEE L. REV. 851, 852 (1996) (describing the prominence of the precautionary principle in international and domestic environmental law, but criticizing it as "deeply perverse in its

equity," recognizing that the needs of both present and future generations must be taken into account in environmental policy-making.⁵²

There are now about 1000 bilateral, regional, and multilateral documents that contain provisions aimed at safeguarding natural resources or curbing pollution,⁵³ many of which have been adopted since Stockholm. Multiple agreements are being developed at any given time, making it difficult for nations simply to keep up with the negotiations.⁵⁴ As Professor Brown Weiss has noted, the coverage and scope of these agreements differs significantly from those of the past:

The subject matter of international environmental agreements now bears little resemblance to that in agreements concluded in the first half of this century, which focused on boundary rivers, fishing rights, and protection of particularly valued animal species. Today there are agreements to control pollution in all environmental media, conserve habitats, protect global commons, such as the high-level ozone layer, and protect resources located within countries that are of concern to the international community. . . .

The scope of international agreements has expanded significantly since 1972: from transboundary pollution agreements to global pollution agreements; from control of direct emissions into lakes to comprehensive river basin system regimes; from preservation of certain species to conservation of ecosystems; from agreements that take effect only at national borders to ones that restrain resource use and control

implications for the environment and human welfare").

^{52.} See Rio Declaration, supra note 51, princ. 3 (stating that "the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations"). Professor Brown Weiss, whose groundbreaking book on intergenerational equity, EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW. COMMON PATRIMONY. INTERGENERATIONAL EQUITY (1989), maintains that present generations have a responsibility to future generations to protect the environment and notes that "sustainable development is inherently intergenerational." Brown Weiss, supra note 36, at 707. See generally Edith Brown Weiss, Sustainable Development Symposium, A Reply to Barresi's "Beyond Fairness to Future Generations," 11 Tul. Envil. L.J. 89 (1997); Edith Brown Weiss, Environmentally Sustainable Competitiveness: A Comment, 102 YALE L.J. 2123 (1993).

^{53.} See Brown Weiss, supra note 22, at 1555.

^{54.} See Brown Weiss, supra note 36, at 679; Sands, supra note 14, at xxx.

activities within national borders, such as for world heritages, wetlands, and biologically diverse areas.⁵⁵

International agreements increasingly embody sophisticated regulatory techniques, including specific obligations to reduce pollution or conserve resources that impose responsibilities on nations beyond those found in domestic environmental law. Under the Kyoto Protocol, for example, the United States would have to reduce its emissions of specified gases thought to contribute to global warming by 7% from 1990 levels in the 2008-2012 timeframe.⁵⁶ Another example of increasing complexity is the recognition of the relationship between trade and the environment, long ignored, in the context of the General Agreement on Tariffs and Trade (GATT) and North American Free Trade Agreement (NAFTA).57 The breadth and depth of international environmental law was in evidence twenty years after Stockholm, when the international community gathered for the United Nations Conference on Environment and Development (UNCED or Rio Conference), in Rio de Janeiro. The Convention on the Conservation of Biological Diversity and Framework Convention on Climate Change were opened for signature, and the delegates approved the Rio Declaration on Environment and Development⁵⁸ and the far-reaching Agenda 21.⁵⁹

Put all these agreements, standards, principles, prescriptions and legal techniques together, and a fairly consistent picture emerges. Once "marginal," environmental issues have become "a central concern of the UN, GATT and other international institutions, and to all governments." As one observer notes, the proliferation of international environmental law means that "we

^{55.} Brown Weiss, *supra* note 36, at 679-81; *see id.* at 680-81 (listing international and regional agreements negotiated between 1985 and 1992).

^{56.} See Kyoto Protocol, supra note 18, at art. 3 (imposing obligation on countries listed in Annex I) and Annex I (listing the United States with a 7% reduction target).

^{57.} See Sands, supra note 14, at xli; see generally John H. Jackson, World Trade Rules and Environmental Policies: Congruence or Conflict?, 49 WASH. & LEE L. REV. 1227 (1992). The body of literature on NAFTA and GATT is expanding rapidly. See infra note 102 and accompanying text (listing articles discussing the dispute resolution process under NAFTA's environmental side agreement).

^{58.} See Rio Declaration, supra note 51.

^{59.} United Nations Conference on Environment and Development, Agenda Item 21, U.N. Doc. A/Conf.151/PC/100/Add.1 (1992) [hereinafter Agenda 21].

^{60.} Sands, supra note 14, at xxx.

may be in the early stages of the development of a genuine regime of international environmental protection." Still, international environmental law is not yet as sophisticated as that of the United States or Europe. It is a "fledgling," growing and maturing but still in its formative stages. In its path of development stands a host of challenges. With power dispersed among secretariats and other bodies, there is no coordinated home for international environmental regulatory authority. Mechanisms for non-governmental organizations (NGOs)64 or private citizens to participate in international environmental decision making are currently limited. There are problems with implementation of and compliance with international environmental agreements. At present, nations rarely resort to official dispute resolution fora to address international environmental conflicts, and when they do, the results are not encouraging.

As Professor Sands has noted, there is lingering doubt about international environmental law's future:

Despite impressive achievements, there is reason to doubt that this body of law will have significant impact on actual governmental and human [behavior]. Limited implementation and enforcement suggests that international environmental law remains in its formative stages. Law-making is

^{61.} Farber, *supra* note 16, at 1316. As Professor Brown Weiss observes, some scholars would disagree, particularly "those in the Realist School [who] question the relevance of international law at all." Brown Weiss, *supra* note 22, at 1559-60 (footnote omitted).

^{62.} See Brown Weiss, supra note 36, at 707; Sands, supra note 14, at xxx; see also Sanford E. Gaines, Global and Regional Perspectives on International Environmental Protection, 19 Hous. J. Int'l L. 983, 983-84 (1997).

In spite of its roots in the early years of the twentieth century, international environmental law is still immature. Its rapid but helter-skelter growth in recent years marks a movement still in its adolescent phase, with all the energy, tension, hope, and fear of that time of life, and all its vulnerability to outside influences.

Id.

^{63.} See Sands, supra note 14, at xxx.

^{64.} For the purposes of this article, NGOs are "private organizations that are directly engaged in influencing international environmental law." Raustiala, supra note 14, at 541; see generally A. Dan Tarlock, The Role of Non-Governmental Organizations in the Development of International Environmental Law, 68 CHI.-KENT L. REV. 61 (1992). NGOs are comparable to public interest groups in domestic environmental law. See, e.g., Steve Charnovitz, Two Centuries of Participation: NGOs and International Governance, 18 MICH. J. INT'L L. 183, 186-87 (1997) (noting that the definition of an NGO is rather fluid).

decentralized, with legislative initiatives being developed in literally dozens of different intergovernmental organizations at the global, regional, and sub-regional level. Coordination among the initiatives is inadequate, leading to measures which are often duplicative and sometimes inconsistent. Moreover, the law-making process tends to be reactive and ad hoc in nature, often vulnerable to the vagaries of political, economic, and scientific events and findings.⁶⁵

B. Allen Chair Professors Assess International Environmental Law's Progress

Professor Sands's appraisal, while accurate today, might have a short shelf life. As is the case domestically, developments in international environmental law now occur rapidly. Delegates in Japan adopted the Kyoto Protocol less than one month before the Law School's Spring 1998 semester began. The NAFTA machinery is less than five years old; until the end of 1997, no case had proceeded to the conclusion of the Citizen's Submission process under its environmental side agreement. Professor Brown Weiss has identified specific changes taking place in this body of law. Nations negotiate and conclude international environmental agreements more quickly: "[i]t is now rare for countries to need more than two years to negotiate even complicated, detailed international agreements."66 Negotiators create mechanisms to promote flexibility in responding to improved scientific understanding, and have directed their attention increasingly to protecting ecosystems rather than protecting against individual harms.⁶⁷ There is increased attention to the impact of treaties on nonparties, and broadening of public input in the development and enforcement of international environmental agreements.68 With the emergence of increasingly detailed agreements,69 parties are fashioning creative methods of ensuring implementation and compliance.

^{65.} Sands, supra note 14, at xxx.

^{66.} Brown Weiss, supra note 36, at 685-86.

^{67.} See id. at 688-91.

^{68.} See id. at 691-94.

^{69.} See id. at 696.

As Professor Sands observed, international environmental law has "grown from a body of national and bilateral rules into an area increasingly governed by regional and global obligations, including enforceable standards." The Allen Chair seminar series considered some of this development's far-reaching implications. Rather than focus exclusively on one treaty or environmental medium, the seminar series was designed as a crosscutting examination of major trends in the evolution of international environmental law, including those to which I now turn.

1. Implementing Agreements Requires More Effort and Attention

Implementing international environmental agreements or non-binding "soft law"—taking steps necessary to make documents effective at the national level"—is an increasingly complicated proposition as legal texts become more detailed and prescriptive. International environmental agreements are rarely self-executing. An agreement or "soft law" document can require nations to adopt implementing legislation or regulations; the Kyoto Protocol, for example, would force the United States to develop energy conservation strategies and other emissions-reducing measures. Other necessary implementation steps could include such measures as the designation of an appropriate liaison to international bodies. It has become quite clear that nations do not automatically take all of these steps. For example, the Basel Convention on controlling international traffic in hazardous waste was never ratified in the

^{70.} Sands, supra note 14, at xv.

^{71.} Professor Sands defines implementation as, "[w]hat formal or informal steps must a State or international institution take to implement its international legal obligations." Philippe Sands, Enforcing Environmental Security, in GREENING INTERNATIONAL LAW 50, 52 (Philippe Sands ed., 1994); see infra Part III.C.1.a. (discussing Professor Brown Weiss's analysis of "implementation" as differentiated from "compliance").

^{72.} An excellent case study of the challenges inherent in implementing complex agreements is Edith Brown Weiss, New Directions for the Great Lakes Water Quality Agreement: A Commentary, 65 CHI.-KENT L. REV. 375 (1989).

^{73.} See Brown Weiss, supra note 22, at 1562; Sands, supra note 71, at 53.

^{74.} See Kyoto Protocol, supra note 18, at art. 2.

^{75.} See, e.g., Sands, supra note 71, at 53.

United States because it would have required Congress to pass changes to the Resource Conservation and Recovery Act. 76

Professor Boer has focused much of his contemporary work on the implementation of sustainable development principles (emanating from Agenda 21 and documents preceding it) in the Asian region. He co-authored a recent book, *International Environmental Law in the Asia Pacific*, ⁷⁷ that collects numerous case studies on implementing international environmental law in the region, some of which he shared with the seminar course students and the law school community. With his indefatigable spirit, years of expertise and comprehensive knowledge of the problems facing individual countries in the Asian region, such as India, Pakistan, Nepal, Sri Lanka, Vietnam, China, and island nations of the Pacific, he has been a leader in calling for innovative national environmental laws and regional cooperation frameworks to promote sustainable development. ⁷⁸

2. There Is an Increased Focus on Compliance

It is one thing to marshal the political will to negotiate an international environmental agreement, still another to implement it, and yet another altogether to secure compliance with its provisions. Paradoxically, while recent agreements incorporate a wide variety of mechanisms designed to secure compliance, ⁷⁹ little is actually known about whether they succeed. As Professor Brown Weiss observes, compliance "has long been neglected as an important issue in international law"; the "conventional wisdom" about compliance is that nations comply with international agreements because it is in their self-interest to

^{76.} See Tarlock, supra note 13, at 763; Mark Bradford, Note, The United States, China & the Basel Convention on the Transboundary Movements of Hazardous Wastes And Their Disposal, 8 Fordham Envil. L.J. 305 (1997). For a contemporary discussion of the implementation of the Basel Convention elsewhere, see Philippe Sands, Book Review and Note, 91 Am. J. Int'l L. 572 (1997) (reviewing Katharina Kummer, International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules (1995)).

 $^{77.\} See$ Ben Boer et al., International Environmental Law in the Asia Pacific (1998).

^{78.} See generally Boer, supra note 26.

^{79.} See generally ENGAGING COUNTRIES, supra note 30; Brown Weiss, supra note 22; cf. Tarlock, supra note 13, at 763 (noting that international environmental agreements embody innovative compliance mechanisms).

do so.⁸⁰ Now, however, that fiction is crumbling and compliance issues are attracting increased attention from commentators, many of whom follow Professor Brown Weiss's lead.⁸¹

Professor Brown Weiss's empirical study of eight nations and five environmental agreements, a team effort with political scientist Dr. Harold Jacobson and a group of researchers operating in nations around the world, is a landmark effort addressing compliance issues. It examines how and why it is that international environmental agreements secure compliance with their provisions. Not surprisingly, this study has garnered substantial praise for its broad scope and creation of a valuable knowledge base on compliance issues. According to one admirer, the Brown Weiss-Jacobson study on compliance has the extremely useful function of moving the debate over compliance from "ivory tower description" to a comprehensive and wideranging discussion of the ways in which actual agreements succeed. As a further movement in this direction, Professor

^{80.} Brown Weiss, *supra* note 22, at 1556, 1559. Besides the assumption that nations comply, Professor Brown Weiss lists other reasons why scant attention has been paid to compliance:

In international environmental law, this occurs in part because political capital comes from negotiating new agreements, not from complying with those agreements already negotiated. This also occurs for other reasons: it is often hard to measure compliance; effectiveness of the agreement does not necessarily correlate with compliance of the agreement; and resources to promote compliance have often been minimal.

Id. at 1556 (footnotes omitted). For additional discussion by Professor Brown Weiss of this and other issues related to compliance, see Edith Brown Weiss, Strengthening National Compliance with International Environmental Agreements, 27 ENVIL. POLY & L. 297 (1997) [hereinafter Brown Weiss, Strengthening National Compliance].

^{81.} The 1997 annual meeting of the American Society of International Law (ASIL) and a recent symposium sponsored by the Michigan Journal of International Law focused on compliance issues, "a topic that has seized the attention of researchers within international law." Jose E. Alvarez, Why Nations Behave, 19 MICH. J. INT'L L. 303, 303 (1998). Both meetings reflected the considerable influence of Professor Brown Weiss's work on compliance: for example, the title of the Michigan symposium incorporated her "implementation, compliance and effectiveness" framework for evaluating compliance. See id. at 303; see also infra notes 201-07 and accompanying text. Other scholars have been quick to adapt Professor Brown Weiss's definitions of relevant terms. See, e.g., Jo Elizabeth Butler, The Establishment of a Dispute Resolution/Non-Compliance Mechanism in the Climate Change Convention, in Maria Gavouneli, Compliance with International Environmental Treaties: The Empirical Evidence, 91 AM. SOC'Y INT'L L. PROC. 234, 252 (1997) (referring to Professor Brown Weiss's definition of "implementation").

^{82.} See generally Engaging Countries, supra note 30.

^{83.} See Alvarez, supra note 81, at 305.

Brown Weiss's Allen Chair article uses the study results to pick apart conventional wisdom about compliance by undercutting thirteen familiar assumptions, all of which, she avers, "turn out either to be myths or to apply only in certain carefully prescribed conditions." ⁸⁴

As international environmental law matures, the compliance discussion led by Professor Brown Weiss and Dr. Jacobson serves another valuable purpose. It calls into question the Realist School's doubts "whether international . . . law can be even considered 'law' without a unified supranational government, or should merely be considered 'evanescent moments of international cooperation." Some would still argue that international environmental law amounts to little in the absence of a central sovereign. To Professor Brown Weiss, this view is grounded in a traditional view of the structure of the international law system, one that, as she demonstrates in her article, is changing rapidly:

The myths [about compliance] are set in an international legal system that is in a process of transition from a state-centered, hierarchical and static structure to one that consists of networks of actors and is non-hierarchical and dynamic. Moreover, the framework for compliance has changed from one that is hierarchical and "top down" to one that involves dynamic interactions between states and non-state actors and international and domestic constituencies across state lines.⁸⁷

In this emerging international law system, it is simply not the case that "states do not comply at all with their international obligations;" the reality is much more complicated. Thus, ac-

^{84.} Brown Weiss, supra note 22, at 1560.

^{85.} Kyle Danish, The New Sovereignty: Compliance With International Regulatory Agreements, 37 Va. J. Int'l. L. 789, 804 (1997) (book review); see also Harold H. Koh, Why Do Nations Obey International Law?, 106 Yale L. J. 2599, 2608-17 (1997) (discussing whether international law is truly "law"); supra note 61 (discussing the Realist School position).

^{86.} See, e.g., Alberto Szekely, Compliance With Environmental Treaties: The Empirical Evidence, A Commentary on the Softening of International Environmental Law, in Compliance with International Environmental Treaties: The Empirical Evidence, supra note 81, at 234.

^{87.} Brown Weiss, supra note 22, at 1557.

^{88.} Id. at 1561.

cording to one admirer, by debunking the conventional wisdom about compliance Professor Brown Weiss also advances the debate about international environmental law "beyond wellworn debates about whether international law is truly 'law' to . . . 'post-ontological' inquiries appropriate to the new maturity of the international system."⁸⁹

3. The Status of National Sovereignty Remains in Flux

International environmental law is creating more constraints, not fewer, on nations' abilities to act independently. 90 Detailed international agreements embodying specific obligations necessarily encroach on national sovereignty. The dynamism in this relationship can be seen by examining the increasing importance of international tribunals in environmental cases, which necessarily invites a discussion of the relationship between international and national courts. Professor Sands's article assesses the future of international environmental litigation. 91 In it, he describes the "embryonic framework" for litigating these cases, which includes a variety of tribunals. Professor Sands discusses recent activity of the European Court of Justice and the International Court of Justice (ICJ) at length. The ICJ, or "World Court" as it is popularly known, is "the principal judicial arm of the United Nations [and] a dispute settlement body available under many environmental treaties, including the Climate Change and Biodiversity Conventions."92 Its pivotal role in international environmental litigation stems from the fact that treaties may give the ICJ compulsory jurisdiction over an environmental dispute, or more typically, provide for jurisdiction upon consent of the parties.93

^{89.} Alvarez, supra note 81, at 303.

^{90.} See, e.g., Brown Weiss, supra note 36, at 710 (noting that "[i]n many international legal instruments, states have agreed to constrain 'operational sovereignty' while continuing to retain formal national sovereignty"); Sands, supra note 14, at xvii-xviii.

^{91.} See generally Sands, supra note 31. Professor Sands has written extensively elsewhere about international environmental litigation, including cases decided before the ICJ and other international tribunals (particularly those in Europe). See, e.g., Sands, supra note 71, at 57-59 (discussing the role of judicial settlement of international environmental disputes).

^{92.} Sands, supra note 71, at 57.

^{93.} See id. at 57-58.

Professor Sands has distinguished himself both as an academic and an actively practicing barrister. His observations stem directly from his experience, most notably as a co-counsel in several of the most recent ICJ cases to take up environmental matters. Recently, he served as a counsel for Hungary in the important case concerning the Gabcíkovo-Nagymaros project, a dispute about the construction of dams on the Danube River between Hungary and Slovakia. His detailed critique of the ICJ's handling of environmental disputes therefore merits careful attention, both for its assessment of the future of international environmental litigation and for its implications for national sovereignty. Environmental litigation and for its implications for national sovereignty.

4. Public Participation in International Environmental Lawmaking and Enforcement Is More Significant

The explosive rise of NGO participation in international environmental decision making has been called a "fundamental shift" in international law, perhaps equal in scope to the earlier rapid expansion of public participation in the United States. ⁹⁶ As one commentator states, "the rhetoric of inclusion [at the international level] is not mere rhetoric": international players are emulating steps taken decades ago to guarantee public

^{94.} Judgment in Case Concerning the Gabcíkovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 3 (Sept. 25); reprinted in 37 I.L.M. 162 (1998); see also Hungary and Slovakia Told To Resolve Dam Tiff, L.A. TIMES, Sept. 26, 1997, at A12; Justice For All From A Global Courtroom, LAWYER, Mar. 19, 1996, at 9 (describing the World Court's recent activities and Professor Sands' involvement in the Gabcíkovo-Nagymaros case).

For earlier discussions of this complicated case, see generally Gabriel Epstein, Application of International Water Law to Transboundary Groundwater Resources, and the Slovak-Hungarian Dispute Over Gabcíkovo-Nagymaros, 19 SUFFOLK TRANSNAT'L L. REV. 67 (1995); Aaron Schwabach, Diverting the Danube: The Gabcíkovo-Nagymaros Dispute and International Freshwater Law, 14 BERK. J. INT'L L. 290 (1996); Paul R. Williams, International Environmental Dispute Resolution: The Dispute Between Slovakia and Hungary Concerning Construction of the Gabcíkovo and Nagymaros Dams, 19 COLUM. J. ENVIL. L. 1 (1994).

^{95.} In Part II, I will invite the reader to consider the implications for a related issue: domestic environmental lawmaking in a time of active debate over environmental federalism.

^{96.} See Raustiala, supra note 14, at 539 ("As in the twentieth century American experience, the expansion of the substantive domain of environmental regulation has been accompanied by an expanded procedural and participatory regime.").

input in the American system.⁹⁷ It was therefore appropriate for the Allen Chair Symposium and seminar series to assess the status of this "participatory revolution."⁹⁸

An excellent example of the rise of public participation in international environmental law is the system of public input established under the environmental side agreement to NAFTA. the North American Agreement on Environmental Cooperation (NAAEC),99 which "goes further than most multilateral treaties in terms of NGO access and participation."100 Professor Bugeda is an authority on this Citizen's Submission process, having played a central role (as chief of the Mexican Liaison Office of the Commission for Environmental Cooperation's (CEC)) in developing the factual record¹⁰¹ for the Cozumel Submission—the lone submission to date to proceed to this stage of the process. Her analysis of the Cozumel Factual Record is an instructive case study. Professor Bugeda concludes that the Citizen's Submission process, despite its inherent shortcomings, is an "interesting and innovative procedure" that empowers ordinary citizens to take part in international environmental decision making. 102 As she demonstrates, it can al-

^{97.} Id. at 581-82.

^{98.} See id. at 583.

^{99.} North American Agreement on Environmental Cooperation, Sept. 14, 1993, U.S.-Can.-Mex., 32 I.L.M. 1480 [hereinafter NAAEC].

^{100.} Raustiala, supra note 14, at 549.

^{101.} See Final Factual Record of the Cruise Ship Pier Project in Cozumel, Quintana Roo, Secretariat of the CEC, Factual Record No. 1 (1997) [hereinafter Cozumel Factual Record].

^{102.} Bugeda, supra note 29, at 1614. There is a rapidly expanding body of literature on this subject. See, e.g., Greg Block, Independent Review of the North American Agreement For Environmental Cooperation, SB79 ALI-ABA 291 (1998) (analyzing the NAAEC's performance and, inter alia, the initial stages of the Cozumel dispute); Joseph F. DiMento and Pamela M. Doughman, Soft Teeth in the Back of the Mouth: The NAFTA Environmental Side Agreement Implemented, 10 Geo. Int'l Envil. L. REV. 651 (1998); Noemi Gal-Or, Multilateral Trade and Supranational Environmental Protection: The Grace Period of the CEC, or a Well-Defined Role?, 9 GEO. INT'L ENVIL. L. REV. 53 (1996); David Lopez, Dispute Resolution under NAFTA: Lessons from the Early Experiences, 32 TEX. INT'L L.J. 163 (1997); James E.R. Lord. Article 14(2) of the North American Agreement on Environmental Cooperation: How High Is The Hurdle?, 2 GREAT PLAINS NAT. RES. J. 43 (1997) (discussing the Cozumel Citizen Submission and the requirement that submitters exhaust local remedies); David G. Schiller, Great Expectations: The North American Commission on Environmental Cooperation Review of the Cozumel Pier Submission, 28 U. MIAMI INTER-AM. L. REV. 437 (1997) (discussing initial stages of the Cozumel Pier Terminal dispute); Scott A. Keefer, Comment, Citizen Petitions Under the North American Agreement on Environ-

so spur increased domestic public participation directly by empowering ordinary citizens to accuse countries of failing to enforce their environmental laws, and indirectly by generating information to "publicly denounce those governments when such enforcement does not occur."¹⁰³

II. INTERNATIONAL ENVIRONMENTAL LAW INFORMS DOMESTIC LAW

From this brief description of the work of Professors Boer, Brown Weiss, Bugeda, and Sands, the reader should be prompted to read their articles on the maturing regime of international environmental law. These articles confirm the need to move past stale debates about whether international environmental law is law at all to second-generation inquiries about its future. However, the Allen Chair Symposium and seminar series afforded an opportunity to do more than demonstrate that environmental law is beyond doubt a global enterprise. 104 Professor Boer challenged the audience at his public lecture to view domestic and international environmental law as increasingly interrelated. In this Part, I accept that challenge and delve more deeply into the relationship between international and domestic environmental law. At first, one might think the differences between the two legal regimes are so great that one could not possibly inform the other. That view, however, would be mistaken; for a number of reasons, it is no longer an "idle question" to evaluate international environmental law's impact on domestic law. 105

mental Cooperation, 5 Tulsa J. Comp. & Int'l L. 211 (1997).

^{103.} Bugeda, supra note 29, at 1614.

^{104.} The rapid expansion and development of this body of law and its growing domestic impact make environmental law an excellent example of the internationalization of law practice and the concomitant need for globalization of the law school curriculum. See Nicholas A. Robinson, International Environmental Law, SC56 ALI-ABA 185 (Feb. 11, 1998) (noting an "emerging practice paradigm" that, "[o]ver the next 35 years, the global and transnational aspects of practicing law, and especially environmental law, will (1) alter how U.S. lawyers practice environmental law in their 'domestic' practices, and (2) come to embrace an international law content").

^{105.} See Tarlock, supra note 13, at 760.

A. "Sustainable Development" Is a Conceptual Foundation for Domestic Innovation

Probably the most obvious way in which international environmental law influences domestic law is that it has established first principles that serve as conceptual foundations for domestic innovation. Professor Boer observes that three separate phenomena are taking place as international environmental law matures: "globalization, internationalization, and regionalization." As part of internationalization, "countries are looking externally to environmental conventions and agreements to guide their own policies and laws."107 In the United States, this is a remarkable turn of events. I began this article by proposing that many domestic environmental lawvers have something of a nation-centered perspective. We still tend to think our task is to translate American ideals to the rest of the world. 108 Today, international environmental law turns that logic on its head. It can and does serve as a direct stimulus for the enactment of domestic laws. The United States is often obliged by an international environmental agreement to promulgate laws to implement the agreement or come into compliance with its norms. 109 Besides binding obligations, in-

^{106.} Boer, supra note 26, at 1508.

^{107.} Id. at 1509.

^{108.} Of course, we have been remarkably successful at this. See, e.g., Tarlock, supra note 13, at 759 ("United States environmental law has served as the international standard for the emerging regime of international environmental law."). Professor Sands describes American influence as follows:

[[]T]he United States has, historically, played a dominant role in the development of international environmental law. Many of the principles endorsed by the Rio Declaration on Environment and Development were first expressed in U.S. domestic legislation, especially the emerging rules of international law concerning environmental impact assessment, the right of citizens to have access to environmental information and rights of redress before judicial and administrative bodies, and provisions on liability for environmental damage. Many of these emerging international commitments can be traced directly to domestic U.S. law, which has in this and other ways contributed significantly to international law reform.

Philippe Sands, The "Greening" Of International Law: Emerging Principles And Rules, 1 IND. J. GLOBAL LEGAL STUD. 293, 293 (1994).

^{109.} See infra notes 128-30 and accompanying text; see also Tarlock, supra note 13, at 761-62 (citing the example of the Endangered Species Act, "initially enacted to implement the Convention on Trade in Endangered Species").

ternational environmental law has yielded important principles that can be touchstones for domestic innovation. 110

Perhaps the most notable example of such a principle is the one I focus on in this section: the emergence of "sustainable development"—a principle first articulated on the world stage—as a new framework for integrating economic development and environmental concerns in domestic legal systems.

1. The Development of "Sustainable Development"

Sustainable development has become widely accepted as a framework for advancing developmental and environmental goals both at the domestic and international level.¹¹¹ Sustainable development means much more than maintaining a stock of resources over time.¹¹² Sustainable development principles can revolutionize environmental law¹¹³ by addressing issues of

^{110.} See Tarlock, supra note 13, at 762 (noting that international environmental law can provide the "conceptual foundation" for domestic law); see also Nicholas A. Robinson, Attaining Systems for Sustainability Through Environmental Law, 12 NAT. RESOURCES & ENV'T 86, 87 (1997) ("Multilateral environmental agreements (MEAs), such as the Montreal Protocol and other agreements under the Vienna Convention on the Protection of the Stratospheric Ozone Layer or the Convention on Biological Diversity, provide common 'rules of the road' for national legislatures shaping their environmental laws."). Professor Tarlock argues that the authority of the Foreign Commerce Clause could be invoked to use these principles to justify stronger domestic environmental laws. See Tarlock, supra note 13, at 761-62.

^{111.} See Boer, supra note 26, at 1510-12; see also Tarlock, supra note 14, at 52.

^{112.} See Tarlock, supra note 14, at 52 (noting that "the concept of sustainability comes from earlier ecological studies of predator-prey relationships and was adopted by economists to refer to the maintenance of capital stocks over a limited time horizon."); see also Philip Shabecoff, A New Name for Peace 198 (1996) (noting that "sustainability of resources, after all, was the central intellectual premise underlying conservationism" and describing efforts in the 1970s and 1980s to draw attention to depletion of resources); Joel B. Eisen, Toward a Sustainable Urbanism: Lessons from Federal Regulation of Urban Stormwater Runoff, 48 WASH. U. J. URB. AND CONTEMP. L. 1, 3-4 (1995). Problems related to resource depletion, overconsumption of resources, and pollution are obviously integral to discussions of sustainable development. See generally Boer, supra note 41, at 316-17 (quoting JEREMY CAREW-REID ET AL., STRATEGIES FOR NATIONAL SUSTAINABLE DEVELOPMENT: A HANDBOOK FOR THEIR PLANNING AND IMPLEMENTATION 17 (1994)). For that reason, writers occasionally continue to refer to sustainability in the language of steady state maintenance of resources. See, e.g., James Howard Kunstler, The Geography of Nowhere 246 (1993) (contrasting "a sustainable economy" with an "exhaustive economy").

^{113.} See Ruhl, supra note 11, at 992-95 (proposing sustainable development as a policy principle for a "revolutionized environmental law").

pollution and resource depletion while simultaneously incorporating economic concerns and equity arguments first raised by developing nations.¹¹⁴

Sustainable development's modern history dates to the 1980 publication of the World Conservation Strategy; 115 its "decisive breakthrough" on the world stage was the publication of the Brundtland Report (better known as Our Common Future). 117 That report had a potent message: environmental issues, economic concerns, and developmental inequities must be addressed together. 118 Our Common Future provides the most commonly cited definition of sustainable development: 119

sustainable development has been adopted as the standard of modern international environmental law in an effort to bridge the North-South or rich-poor environmental gap... [and that] the major challenge posed by the theory of sustainable development has been to systematically and permanently incorporate the full environmental consequences of resource use into the modern economic concepts that help to structure the politics of resource allocation).

115. INTERNATIONAL UNION FOR THE CONSERVATION OF NATURE AND NATURAL RESOURCES ET AL., WORLD CONSERVATION STRATEGY: LIVING RESOURCE CONSERVATION FOR SUSTAINABLE DEVELOPMENT (1980); see also Boer, supra note 41, at 308 (noting that the publication of the World Conservation Strategy spurred governments to establish national conservation strategies); Dernbach, supra note 11, at 15 n.71, (noting that the 1987 OUR COMMON FUTURE report builds upon the WORLD CONSERVATION STRATEGY).

116. See SHABECOFF, supra note 112, at 198.

117. WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE (1987) [hereinafter Our Common Future]; see also Boer, supra note 41, at 310; Jonathan Lash, Toward a Sustainable Future, 12 NAT. RESOURCES & ENV'T 83, 83 (1997) (stating that "[sustainable development] is an idea made prominent by the World Commission on Environment and Development"); SHABECOFF, supra note 112, at 198-99 (describing the development of Our Common Future).

118. See OUR COMMON FUTURE, supra note 116, at 5 (stating that "ecology and economy are becoming ever more interwoven—locally, regionally, and globally—into a seamless net of cause and effect"); see also Lash, supra note 117, at 83; Tarlock, supra note 14, at 52 ("The Brundtland Commission succeeded in collapsing the dichotomy between environmental protection and development to induce the developing world to accept the legitimacy of environmental protection.").

119. See BOER ET AL., supra note 77, at 13; see also Dernbach, supra note 11, at 17-18; Lash, supra note 117, at 84 (noting that the President's Commission on Sustainable Development adopted the Our Common Future definition); Tarlock, supra note 14, at 52 (terming the Our Common Future definition the "current working definition of sustainable development").

^{114.} See SHABECOFF, supra note 112, at 198-99; Dernbach, supra note 11, at 16; Eisen, supra note 112, at 3 (noting the potential for sustainable development to "address equity concerns, such as achieving a just distribution of resources between developed and developing nations"); Tarlock, supra note 14, at 52-53 (noting that

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- (1) The concept of "needs," in particular the essential needs of the world's poor, to which overriding priority should be given; and
- (2) The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. 120

As Professor Boer has noted, "there has been a good deal of debate over the definition of sustainable development and over what principles might be identified as assisting in its achievement."121 But "[n]otwithstanding the debate over what the principles of sustainable development are," the international community has acted to endorse the concept and flesh out its specifics. 122 The Rio Conference "introduce[d] the mandate of sustainable development as the basis for global, national, and local action,"123 with twenty-seven principles designed to adsustainable development. The UNCED delegates unanimously adopted a second document, Agenda 21, that, as Professor Boer has noted, "provides policies, plans, programmes, and guidelines for national governments to implement the Rio Declaration principles."124

^{120.} OUR COMMON FUTURE, supra note 117, at 87; see also BOER ET AL., supra note 77, at 13.

^{121.} BOER ET AL., supra note 77, at 13. Professor Boer has criticized the OUR COMMON FUTURE definition "because it invites narrow interpretations such as 'sustainable economic development,' without explicitly requiring concern for or focus on the continued viability of ecosystems." Boer, supra note 41, at 317 (emphasis in original).

^{122.} BOER ET AL., supra note 77, at 13.

^{123.} Boer, supra note 41, at 313; see also Dernbach, Sustainable Development, supra note 11, at 18 (noting that at Rio "for the first time, the international community endorsed sustainable development."); Tarlock, Latin American Rainforest Management, supra note 14, at 52 (noting that "Rio indicated the formal success of the Brundtland Commission, thus making sustainable development the organizing principle for all future international efforts") (emphasis in original).

^{124.} Boer, supra note 41, at 314; Dernbach, supra note 11, at 18-19, 27 (noting that Agenda 21's principles are the basis for an "ambitious intergenerational social, economic, and environmental compact."); see also Tarlock, supra note 14, at 52 n.86.

Professor Boer notes that Agenda 21, "should be read together with the Rio Declaration." Boer, supra note 41, at 314 n.60. See generally Dernbach, supra note 11 (discussing implementation of sustainable development principles in the United

Agenda 21's comprehensiveness makes it the blueprint for action on sustainable development at the national and international level. Its forty chapters provide an encyclopedic pattern of goals and objectives for sustainable development, and specific actions that nations should take to achieve those goals and objectives. As "soft law," it is every country's responsibility to incorporate Agenda 21 into its domestic decision making and to create national policies based on Agenda 21's mandates. It the IUCN Draft International Covenant on Environment and Development is adopted as an international treaty, it could elevate principles of sustainable development to an international requirement. Sustainable development will then have completed its transition from an aspirational princi-

States); see infra Part II.A.2 for a discussion of Agenda 21's implementation domestically and internationally.

125. See Dernbach, supra note 11, at 19.

126. See id.; John Dernbach, U.S. Adherence to Its Agenda 21 Commitments: A Five-Year Review, [1997] 27 Envtl. L. Rep. (Envtl. L. Inst.) 10,504 (containing a thorough discussion of Agenda 21). See generally Robert F. Blomquist, Virtual Borders? Some Legal-Geo-Philosophical Musings on Three Globally Significant Fragile Ecosystems Under United Nations' Agenda 21, 45 CLEV. St. L. Rev. 23, 24 (1997) (stating that "Agenda 21 was intended by its drafters to be 'a comprehensive action plan on sustainable development to guide the policies of governments for the remainder of this century and into the next."); Lash, supra note 117, at 84.

127. Professor John Dernbach's recent article outlining the many steps the United States would be required to take to use sustainable development as a framework for decision making at all levels of government illustrates that sustainable development has advanced well beyond the aspirational definition of the OUR COMMON FUTURE report. See generally Dernbach, supra note 11.

128. To some extent we recognize a limited normative force of certain norms even though we concede that those norms would not be enforceable by an international court or other international organ. . . . To say that it [soft law] does not exist because it is not of the "enforceable" variety that most legal norms exhibit might blind us to another dimension of the reality of international practice.

INTERNATIONAL ENVIRONMENTAL LAW ANTHOLOGY 55 (Anthony D'Amato and Kirsten Engel eds., 1996).

129. WORLD CONSERVATION UNION, DRAFT INTERNATIONAL COVENANT ON ENVIRONMENT AND DEVELOPMENT (1995) [hereinafter IUCN DRAFT COVENANT].

130. See BOER ET AL., supra note 77, at 15-17 (discussing the draft covenant); see also Nicholas A. Robinson, IUCN's Proposed Covenant on Environment and Development, 13 PACE ENVIL. L. REV. 133 (1995) (describing the origin of the draft covenant). The covenant has no legal effect at present, but Professor Boer notes that it may be submitted to the United Nations for adoption as a treaty. See BOER ET AL., supra note 77, at 16. Article 1 of the draft covenant states that its objective is "to establish integrated obligations to achieve the environmental conservation and sustainable development necessary for humans to enjoy a healthy and productive life within nature." IUCN DRAFT COVENANT, supra note 129, art. 1.

ple to a set of requirements imposed on every nation to guide development and implementation of environmental laws.

2. Implementing Sustainable Development Principles in the Asian Region and in the United States

If one were to take Agenda 21 seriously, it would require a fundamental reordering of societal institutions; Professor Boer cites provisions calling for development and implementation of comprehensive "legal and regulatory framework[s] for environmental management" and recognizes that "substantial barriers of an economic, political, and sometimes cultural character" can hamper progress toward this goal.¹³¹ Not surprisingly, as Professor Nicholas Robinson has observed, "in many nations [sustainable development is still undefined operationally." Sustainable development cannot be implemented simply by allocating funding for a single government program or establishing a blue ribbon panel. Professor Boer has noted that "[t]he achievement of sustainability is a complex task, involving a broad range of governmental, community, and industry initiatives. These initiatives must be implemented globally, regionally, nationally, locally, and individually."133

Professor Boer's article is a comprehensive compendium of case studies examining how sustainable development principles articulated on the international level have served as the impetus for laws and regulations in individual nations and sub-re-

^{131.} Boer, supra note 26, at 1507; see also Dernbach, supra note 126, at 10,506 (stating that one cannot just "take Agenda 21 off the shelf and implement it"). This sort of fundamental change is exactly what Professor Dernbach recommends in his most recent article on sustainable development. He argues that this type of change "may represent the only realistic means of achieving sustainable development":

At day's end, the core responsibility of developed countries is to recreate workable models of sustainable development within their own boundaries that are not merely functional, but that are obviously more attractive than the development approach that they are currently pursuing. Indeed it can be argued that the most important way for developed countries to exercise international leadership is through their domestic implementation and use of such models.

Dernbach, supra note 11, at 45; cf. Robinson, supra note 110, at 87 (noting that "[sustainable development] is a goal with many obstacles blocking its realization").

^{132.} Robinson, supra note 110, at 87.

^{133.} Boer, supra note 41, at 325.

gions of the Asian region. Professor Boer observes that countries in the Asia-Pacific region have only begun to incorporate strategies for sustainability into their environmental laws and regulatory structures. The extent to which individual countries in the Asian region have developed and implemented environmental laws varies widely, as Professor Boer notes in his case studies. India has comprehensive environmental laws but implementation has been "weak." Nepal's environmental law, by contrast, is barely two years old. Countries in the Mekong river region "are at different stages of legislative sophistication concerning the protection of the environment." China (whose formidable environmental problems Professor Boer discusses at length) has adopted its own Agenda 21 and has formed a "National Environment Protection Agency" but is only "slowly" addressing its "serious environmental challenges." descriptions of the environmental challenges.

Professor Boer's extensive discussion of environmental laws and regulatory frameworks in the Asian region provides a wealth of insights about the obstacles standing in the path of successful implementation of sustainable development principles in specific situations. These obstacles include imprecise definition of programs "necessary to achieve a coherent approach" to environmental protection; insufficient financial resources and technical expertise; inadequate administrative, political, and legal structures to bring about change; recalcitrant government bureaucrats unwilling to make tough choices; and

^{134.} See generally Boer, supra note 26.

^{135.} Id. at 1522.

^{136.} Id. at 1539.

^{137.} Id. at 1523 (discussing the Mekong River Basin Agreement and finding that it "lacks sufficient detail").

^{138.} See id. at 1527, 1549 (discussing "financial impediments" to achieving the goals of the ASEAN Strategic Plan of Action and noting that the South Asian countries "could clearly use a great deal of assistance" and that there is a "need for further technical assistance and resources" in the South Pacific island nations).

Similarly, Professor Sands has observed that "increased technical, financial, and other assistance to States, particularly to developing States, is necessary to encourage domestic implementation." See Sands, supra note 14, at xlvii.

^{139.} See Boer, supra note 26, at 1527, 1544 (discussing the ASEAN Strategic Plan of Action and political obstacles to change in China generally); cf. Robinson, supra note 110, at 87.

^{140.} See Boer, supra note 26, at 1533 (discussing environmental protection in Indonesia); cf. Robinson, Attaining Systems For Sustainability, supra note 110, at 87 (noting that environmental progress can be thwarted because "most nations have left in

deficient political will on the part of nations to cooperate with each other.¹⁴¹ He suggests greater regional cooperation to address important environmental problems based on the possible model of the South Pacific Regional Environment Programme.¹⁴² That, he says, would "promote a more consistent approach to environmental management and conservation of natural resources in the region."¹⁴³

Environmental law in the United States is obviously more well developed than that of the Asian region but still lags behind in terms of achieving sustainable development. Commentators have called for the United States to have a "more consistent approach" to environmental law based on sustainable development principles, noting that the "concerted effort to progressively integrate governmental decision making on environmental, social, and economic issues"144 that Agenda 21 requires is lacking. Professor John Dernbach, who has studied American efforts to implement Agenda 21, concludes it "has had little discernible effect on U.S. law and policy."145 The rather modest implementation efforts include the establishment of a President's Council on Sustainable Development (PCSD), whose reports, 146 filled with platitudes and recommendations overflowing with motherhood-and-apple-pie appeal. 447 have been largely ignored.148

place the agencies and jurisdictions that preside over the old policies" and "these institutional players are . . . wedded to 'business as usual'").

^{141.} See Boer, supra note 26, at 1527-28 (quoting Simon S.C. Tay, South East Asian Forest Fires: Haze over ASEAN and International Environmental Law, 7 REV. Eur. Community & Int'l Envil. L. 202, 204 (1998)).

^{142.} See id. at 1547-50.

^{143.} Id. at 1550.

^{144.} Dernbach, supra note 126, at 10,507.

^{145.} Id. See generally Donald A. Brown, Thinking Globally and Acting Locally: The Emergence of Global Environmental Problems and the Critical Need to Develop Sustainable Development Programs at State and Local Levels in the United States, 5 DICK. J. ENVTL. L. & POLY 175 (1996) (reaching similar conclusions).

^{146.} President's Council on Sustainable Development, Building on Consensus (1997); President's Council on Sustainable Development, Sustainable America: A New Consensus for Prosperity, Opportunity and a Healthy Environment For the Future (1996) [hereinafter Sustainable America].

^{147.} One PCSD goal for sustainable development is to "[e]nsure that every person enjoys the benefits of clean air, clean water, and a healthy environment at home, at work, and at play." SUSTAINABLE AMERICA, *supra* note 146, at ch. 1. Who wouldn't be opposed to that?

^{148.} See Dernbach, supra note 126, at 10,508; J.B. Ruhl, The Seven Degrees of Rel-

The PCSD reports and other federal efforts hardly amount to a comprehensive plan to implement Agenda 21's recommendations and proposals. In a revealing recent essay, Professor J.B. Ruhl describes "seven degrees of relevance" in translating policy ideas into law, from the first degree where "the idea becomes widely expressed through a generally-accepted norm statement," to the seventh degree where the norm becomes fully embodied in hard law. 149 He finds that the PCSD's reports were an "opening salvo" in the evolution of American sustainable development policy. 150 He observes that "Sustainable America is a long way from hard law to apply" but believes that the PCSD "advances rather than stalls or reverses the evolution of [U.S.] sustainable development policy."151 This puts sustainable development at the fifth degree of relevance—it is not translated into law, but is nevertheless part of the everyday parlance of federal agencies.152

Along the way to making a more fully formed sustainable development law, good ideas could be frustrated by uncommitted or recalcitrant bureaucrats, or by insufficient education of the general public and a resulting lack of interest. Yet as Professor Ruhl explains, while neither the PCSD's reports, nor the subsequent policy discussions of sustainable development by federal governmental agencies have been translated into law, "the message flowing out of official channels is loud and clear—sustainable development is a fully endorsed norm statement of environmental policy." How the United States will take the remaining steps to transform this policy into law remains unclear. Given how little has been accomplished and how much would be required, it is difficult if not impossible to pre-

evance: Why Should Real-World Environmental Attorneys Care Now About Sustainable Development Policy?, 8 DUKE ENVIL. L. & POLY F. 273, 288 (1998) (stating that "there has been no broad initiative thus far to create law that explicitly builds upon the PCSD's work").

^{149.} Ruhl, supra note 148, at 277.

^{150.} Id. at 285.

^{151.} Id. at 286.

^{152.} See id. at 284.

^{153.} See Dernbach, supra note 126, at 10,507-19 (describing the obstacles to implementing sustainable development in the United States); Ruhl, supra note 148, at 292-93 (listing the "five systemic factors . . . that impede sustainable development" in the United States and citing Professor Dernbach's analysis).

^{154.} Ruhl, supra note 148, at 287.

dict the future course of sustainable development law in the United States. Professor Boer, like his American counterparts who believe in the concept as a framework for change, is toiling at an early stage of legal innovation. In the United States and the Asian region, overcoming formidable obstacles—somewhat different ones in each case, to be sure—will be necessary to complete the successful implementation of the "first principle" of sustainable development created on the world stage.

B. Reinvigorating Democracy—Public Participation and the Cozumel Submission

International environmental law can do more than generate first principles. The ascendancy of public input in the international environmental decision making system can reinvigorate democracy domestically. Enhanced participation at the international level can mean much more than the simple expansion of public participation opportunities available to actors and the concomitant expansion in procedural guarantees in international fora. 155 First, in a limited but growing number of situations, international environmental law provides a direct mechanism of citizen input in project decisions even where domestic law precludes it. Professor Bugeda's analysis demonstrates that an international environmental law mechanism—such as the development of the "factual record" in the Cozumel case—can provide a direct avenue for public input in a domestic project. In the United States, concerned citizens could use the Citizen's Submission process to influence individual decisions, though, as I discuss below, I believe it would be difficult to do so.

Second, the Cozumel experience demonstrates the importance of using all relevant means to generate openness and transparency in the availability of information, especially where these means are lacking under domestic law. Professor Bugeda reminds us that although the Citizen's Submission process is limited because it can proceed no further than the development of a factual record, it has provided a springboard for Mexican

^{155.} See Raustiala, supra note 14, at 539-40 (noting that "international regulation increasingly influences and shapes domestic policy, [and] the procedures of international and national policymaking have converged," citing public participation as an example).

environmental groups to discuss the project's merits in public fora (which they would previously have been unable to do). Thus, the final lesson of Professor Bugeda's article is just as significant: that we need both formal mechanisms for public participation and the ability and resources to create meaningful public input through other means when formal mechanisms are insufficiently available or exercised.

I begin this section by placing the Cozumel Submission in the context of the rise of public participation in international environmental decision making.

1. Increased Public Participation in International Environmental Decision Making

While international environmental law allows for some public input, this was not always the case. Until very recently, NGOs played a limited role in the development and enforcement of international environmental law. NGO involvement in international law in the period before 1972 has been characterized with the label of "[u]nderachievement." NGO involvement in international environmental law was no different. With very few exceptions, environmental treaties neither mentioned public participation nor provided explicitly for any public involvement. 157

Since then, NGO influence in international environmental decision making has been on the rise. The Brundtland Re-

^{156.} See Charnovitz, supra note 64, at 190. It bears noting, however, that NGOs have not always been uninvolved in international law, as some have claimed. Charnovitz describes a cyclical pattern in which NGO influence has risen or fallen periodically throughout the past two centuries.

^{157.} See Raustiala, supra note 14, at 545. Before the recent expansion in NGO participation in environmental decision making in the 1980s and 1990s, the Convention on International Trade in Endangered Species (CITES) contained perhaps the most significant mechanism for NGO participation. See Convention on International Trade in Endangered Species of Wild Fauna and Flora, opened for signature March 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 [herreinafter CITES]; Raustiala, supra note 14, at 569 (calling the "inclusive participatory rules" of CITES an "anomaly" in international environmental law of the time); id. at 549 (stating that "CITES stands out as the first major multi-lateral treaty to incorporate NGOs in an active way, and is clearly a landmark in this regard"); see also EDITH BROWN WEISS ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 983 (1998) (calling NGO participation "integral to the operation of CITES").

^{158.} See Charnovitz, supra note 64; Raustiala, supra note 14; see also Brown

port was the first international report to advocate expanded public participation opportunities. Building upon that foundation, Agenda 21 and the Rio Declaration call for broad public participation in developing and enforcing laws, and for increased public access to information necessary to facilitate this involvement. The Rio Declaration states that "environmental issues are best handled with participation of all concerned citizens, at the relevant level." Agenda 21 advocates broadbased public participation in environmental decision making as a "fundamental prerequisite for the achievement of sustainable development." Idea

Reflecting this enhanced emphasis on citizen participation, the trend is toward increased participation in international environmental decision making. NGOs have "assumed an increasingly important role in the negotiation, ratification, implementation, and enforcement of international environmental agreements." NGOs have increasingly taken part in official negotiations and have attempted to influence developments through informal pressure and other techniques. Professor Bugeda notes that the unique feature of the NAAEC in terms of public participation is that any citizen or environmental group may become directly involved in enforcement by making a submission to the Secretariat of the CEC, the body which administers the NAAEC, asserting that a party to the agreement is "failing to effectively enforce its environmental

Weiss, supra note 36, at 693-94 (describing the myriad of ways in which NGOs are involved both formally and informally in developing international environmental law).

159. See OUR COMMON FUTURE, supra note 117; see also Raustiala, supra note 14, at 565-66.

^{160.} See, e.g., Boer, supra note 41, at 332 (noting that "both Agenda 21 and the Rio Declaration recognise the vital importance of public participation to the achievement of environmental goals"); Dernbach, Sustainable Development, supra note 11, at 40.

^{161.} Rio Declaration, supra note 51, at princ. 10; see also Boer, supra note 41, at 332; Raustiala, supra note 14, at 566.

^{162.} Agenda 21, supra note 59, at para. 23.2; see also Dernbach, supra note 11, at 37 n.198.

^{163.} Brown Weiss, supra note 36, at 693.

^{164.} See id. at 693-94.

laws."165 This, of course, is exactly what took place in the Cozumel pier terminal dispute.

2. The Cozumel Experience and Domestic Public Participation

a. The Cozumel Submission

The Citizen's Submission process, as noted above, empowers ordinary citizens or environmental groups to make submissions to the CEC asserting that a party to the NAAEC is "failing to effectively enforce its environmental laws." The process had previously been used by a handful of submitters; the Cozumel Submission was the first to reach the stage of a factual record. 167

By stark contrast to the normal American ideal, public participation was lacking in the evaluation of the Cozumel port terminal. Mexican environmentalists had little opportunity to have their voices heard in any environmental impact analysis of the terminal project under the "NEPA-like" provisions of Mexico's General Law for Ecological Equilibrium and Environmental Protection (LGEE). As Professor Bugeda explains, and as reflected in the *Cozumel Factual Record*, this was especially egregious because the proposed construction project was a major undertaking:

^{165.} Bugeda, supra note 29, at 1598 (footnote omitted); see NAAEC, supra note 99, at art. 14; David Lopez, Dispute Resolution Under NAFTA: Lessons from the Early Experience, 32 Tex. INT'L L.J. 163 (1997) (detailing descriptions of the Citizen's Submission process); see generally Commission For Environmental Cooperation (visited May 13, 1998) http://www.cec.org (describing the CEC's activities and the citizen submissions lodged to date).

^{166.} Bugeda, supra note 29, at 1598 (footnote omitted); see supra note 165 and accompanying text.

^{167.} See Bugeda, supra note 29, at 1594.

^{168.} LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCÍON AL AMBIENTE [L.G.E.E.] (1996) (Mex.), available in LEXIS, Envirn Library, Mxenv File (General Law of Ecological Equilibrium and Environmental Protection). The LGEE provisions under Article 28 are discussed in Cozumel Factual Record, supra note 100, at 4. See also Bugeda, supra note 29, at 1606-07. See generally Heather N. Stevenson, Environmental Impact Assessment Laws in the Nineties: Can the United States and Mexico Learn From Each Other?, 32 U. RICH. L. REV. 1675 (1999) (discussing Mexican environmental impact assessment law, comparing it to NEPA, and finding that NEPA provides for more extensive public input).

According to the Submitters, the "Cruise Ship Pier Project in Cozumel, Quintana Roo" forms an "indivisible part" of a larger-scale project, which the Submitters refer to as the "Port Terminal Project," comprising, in addition to the Pier, a passenger terminal building, a means of access from the terminal to the cruise ship pier, a parking lot, and a public access road leading to the Chan-Kanaab Highway.¹⁶⁹

The citizen submitters argued that construction of the pier was authorized without proper evaluation of the entire project, as required under Article 28 of the LGEE.¹⁷⁰ Information needed to validate this claim was difficult, if not impossible, for Mexican environmental groups to obtain from recalcitrant bureaucrats. The Mexican authorities' stonewalling response to the original submission confirms the lack of governmental attention to citizen groups' concerns.¹⁷¹

The publication of the factual record was the endpoint of a lengthy process prescribed by Articles 14 and 15 of the NAAEC.¹⁷² The process commenced with the submission, continued through the CEC Secretariat's "acceptance" of the submission and two CEC Council votes (the first to prepare a factual record and the second to make the resulting document public), and ended with the factual record's publication.¹⁷³ The fifty-five page factual record was the product of a considerable investment of CEC resources, including several years' effort on Professor Bugeda's part. It presents a comprehensive look at the Cozumel project; its sections include an exhaustive detailed summary of the facts developed in the CEC's investigation¹⁷⁴

^{169.} Cozumel Factual Record, supra note 101, at 3.

^{170.} See L.G.E.E., tit. I., ch. V, art. 28. This argument sounds familiar because it is directly analogous to those made in cases in the United States where environmentalists argue that projects are improperly segmented to avoid preparation of environmental impact statements under NEPA. See WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW § 9.8(3), at 952-57 (2d ed. 1994).

^{171.} See Cozumel Factual Record, supra note 101, at 7; Bugeda, supra note 29, at 1606-10.

^{172.} See NAAEC, supra note 99.

^{173.} See Bugeda, supra note 29, at 1616; see also Lopez, supra note 165, at 185 (footnotes omitted); Submissions on Enforcement Matters—Articles 14 & 15 of the North American Agreement on Environmental Cooperation (NAAEC) (visited Nov. 10, 1998) http://www.cec.org/english/citizen/index.cfm?format=1 (description of the Citizen's Submission process available on the CEC's Web site).

^{174.} See Cozumel Factual Record, supra note 101, at 13-40.

and a seventeen-year chronological history of development in the Cozumel Pier area.¹⁷⁵ As such, the factual record spotlights a wealth of information not previously publicly available. Serving as the culmination of a lengthy and thorough investigation, the factual record is also a substantial professional achievement for Professor Bugeda and her collaborators.

b. Lessons for Domestic Public Participation

Using Professor Bugeda's analysis as a reminder of the importance of broad-based domestic participation might seem unnecessary. We generally consider public involvement in our environmental decision making one of the "untouchables of modern democracy." Extensive public participation in domestic environmental law is deeply rooted, 77 so much so that we often assume its omnipresence. Public activism led to the enactment of modern federal environmental laws. Stakeholder participation is common in the creation of new laws, development of environmental regulations by administrative agencies, 181 and even in the design of reinvention initia-

^{175.} See id. at 45-52.

^{176.} Jim Rossi, Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking, 92 NW. U. L. REV. 173, 176 (1997).

^{177.} See Zygmunt J.B. Plater, From the Beginning, a Fundamental Shift of Paradigms: A Theory and Short History of Environmental Law, 27 LOY. L.A. L. REV. 981, 982 (1994); Joseph L. Sax, Environmental Law: More Than Just a Passing Fad, 19 U. MICH. J.L. REFORM 797, 801-02 (1986); see also Rossi, supra note 176, at 175 (noting that public participation enjoys a "sacrosanct status" in our society). For an interesting contemporary perspective, see Henry H. Perritt, Jr., Is the Environmental Movement a Critical Internet Technology?, 8 VILL. ENVIL. L.J. 321, 323 (1997) (stating that the "Environmental Movement pioneered mass political movements to protect the environment" and analyzing the potential use of the Internet to further environmental goals).

^{178.} See Mark J. Spaulding, Transparency of Environmental Regulation and Public Participation in the Resolution of International Environmental Disputes, 35 SANTA CLARA L. REV. 1127, 1135 (1995) (stating that "we take for granted our broad access to the courts and our ability to use the courts in order to address environmental issues").

^{179.} See SHABECOFF, supra note 112, at 62 (describing the history of public involvement in fashioning environmental laws).

^{180.} See Spaulding, supra note 178, at 1136-37.

^{181.} See Raustiala, supra note 14, at 576 ("The APA and subsequent statute-specific procedures rest squarely on the notion that 'people should have a chance to say what kind of law they want before it is made." (quoting MARTIN SHAPIRO, WHO GUARDS THE GUARDIANS? 45 (1988))). Providing opportunities for public comment on

tives.¹⁸² There is a long tradition of citizen involvement in enforcing environmental laws in the courts.¹⁸³ In recent years, informal stakeholder dialogues have attempted to extend public participation beyond that provided by formal means.¹⁸⁴ In short, public participation, defined as broadly as possible, is a touchstone of modern environmental law with widely recognized benefits.¹⁸⁵

pending regulations and permits is, of course, "accepted practice for regulators at all levels of government." Final Report of the Enterprise for the Environment, the Environmental Protections System in Transition 49 (1997) [hereinafter E4E Report].

Where the ordinary notice and comment procedure of citizen input in regulation may be ineffective, the process of negotiated rulemaking (or "reg-neg") may promote direct stakeholder involvement in regulatory development. See Siobhan Mee, Negotiated Rulemaking and Combined Sewer Overflows (CSOs): Consensus Saves Ossification?, 25 B.C. ENVIL. AFF. L. REV. 213 (1997) (stating that "[t]he process is a means of achieving improved regulation through cooperation between government agencies, the regulated community, and public interest groups"). See generally Cary Coglianese, Assessing Consensus: The Promise and Performance of Negotiated Rulemaking, 46 DUKE L.J. 1255, 1271, 1330-36 (1997) (describing negotiated rulemaking and providing an assessment of its promise of improving the rulemaking process).

182. See Steinzor, supra note 1, at 112 (noting that initiatives such as the Common Sense Initiative and Project XL "involve some form of public participation"); cf. id. at 141-43 (commenting, however, that these public participation processes are often inadequate).

183. See generally Zygmunt J.B. Plater, In the Wake of the Snail Darter: An Environmental Law Paradigm and Its Consequences, 19 U. MICH. J.L. REFORM 805 (1986) passim (discussing the author's involvement in the famous "snail darter" lawsuit under the Endangered Species Act).

Since the enactment of the Clean Air Act Amendments of 1970, which added the citizen suit provision of Clean Air Act § 304 (Clean Air Act § 304(a), 42 U.S.C. § 7604 (1994)), similar provisions have become common in federal environmental statutes. See ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY 571 (1992) (listing numerous citizen suit provisions of federal environmental statutes); Barry Boyer and Errol Meidinger, Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizens Suits Under Federal Environmental Laws, 34 BUFF. L. REV. 833, 835-68 (1985); David R. Hodas, Enforcement of Environmental Law in a Triangular Federal System: Can Three Not be a Crowd When Enforcement Authority is Shared by the United States, the States and Their Citizens?, 54 Md. L. REV. 1552, 1617-27 (1995). But see Cass R. Sunstein, What's Standing After Lujan? Of Citizens Suits, "Injuries," and Article III, 91 MICH. L. REV. 163, 222 (1992) (noting that "the citizen suit is probably best understood as a band-aid superimposed on a system that can meet with only mixed success").

184. See E4E REPORT, supra note 181, at 49.

185. These benefits include:

[E]ngaging stakeholders (1) supports democratic decision-making, (2) ensures that public values are considered, (3) develops the understanding needed to make better decisions, (4) improves the knowledge base for decision-making, (5) can reduce the overall time and expense involved in

This ideal, however, is not always met, as I have demonstrated elsewhere with respect to brownfields redevelopment projects. In cases where domestic law provides inadequate means of public input, international environmental law can provide new means of public participation, even though one would still be hard pressed to argue that a mechanism like the Citizen's Submission process gives NGOs and ordinary citizens as much influence as ordinary citizens have in the United States. 187

For example, local activists in the United States could consider a submission as an alternative to domestic public participation processes. Critics of the remediation process at a Superfund site could argue that the United States was failing to enforce its environmental laws effectively, and request the development of a factual record. The basis of such a submission presumably would be that the EPA should require a more stringent standard of cleanup. The factual record, as in the Cozumel case, would serve as a basis for the investigation and development of facts to support this contention. Leaving aside for the moment the considerable procedural obstacles involved in proceeding to this stage, 189 the factual record's limitations

decision-making, (6) may improve the credibility of agencies responsible for managing risks, and (7) should generate better-accepted, more readily implemented risk-management decisions.

Id. (quoting Presidential/Congressional Commission on Risk Assessment and Risk Management, Framework for Environmental Risk Management, Final Report 52 (1997)).

^{186.} See generally Joel B. Eisen, "Brownfields of Dreams"?: Challenges and Limits of Voluntary Cleanup Programs and Incentives, 1996 U. Ill. L. REV. 883.

^{187.} For example, there is little recognition of the ability of an individual citizen to sue to enforce international environmental agreements. See, e.g., Schiller, supra note 102, at 448. But see Lopez Ostra v. Spain, 20 Eur. H.R. Rep. 277 (1995) (individual plaintiff successful in case before the European Court of Human Rights on environmental claim premised upon violations of an international human rights convention).

^{188.} The submitters would argue that the cleanup did not meet the requirements of the strict cleanup standard of CERCLA § 121. See 42 U.S.C. § 9621 (1994).

^{189.} The submission could be doomed from the outset. The CEC Secretariat has sole discretion to reject a submission, and the NAAEC outlines several factors to guide the Secretariat's decision. In the seminar course, Professor Bugeda highlighted one important factor that might cause a rejection: the Secretariat may reject a submission if it deems the submission to be designed to harass industry rather than promote enforcement of environmental law. See NAAEC, supra note 99, art. 14(1)(a)-(f), at 1488-89; see also Bugeda, supra note 29, at 1599.

pose a problem. Professor Bugeda joins other commentators who have criticized the process of NAAEC Articles 14 and 15 because it terminates in the preparation of a document which is only informational and has no legal force. To proceed further under the NAAEC and require a party to enforce its environmental laws, the dispute resolution process must be invoked. Unfortunately, that process is available only to parties to the agreement, not to ordinary citizens. 191

Professor Bugeda's article, however, does more than allow us to observe that the Citizen's Submission process could be extended to domestic projects, however useful that might be. She points out that the information revealed during the preparation of the factual record enabled NGOs and Mexican lawyers to use the media to attempt to hold governments and developers accountable for their actions. Elevating the discussion of the Cozumel project to the international level provoked heightened attention to the project and created added pressure on the Mexican government to comply with applicable domestic environmental laws. 192 The result, however, was hardly a desirable outcome for Mexican environmentalists. Media attention catalyzed a "spirited debate" about the Cozumel project, 193 but in the end, Professor Bugeda concludes that, "the procedure had little impact on the environmental community, and none whatsoever on the tourist project in Cozumel."194

Despite this outcome, the Cozumel experience shows the Citizen's Submission process to be "a crucial advance for the involvement of . . . NGOs[] in the North American environmental dialogue." The public pressure brought to bear on the Cozumel project through this process demonstrates the

^{190.} See Bugeda, supra note 29, at 1603-04; see also Gal-Or, supra note 102, at 75 (noting that "the absence of direct guarantee of remedy is perceived by some as a serious shortcoming of the submission process"); Mary Sutter, Pull Pier Permits, "Green" Groups Urge Mexico Ministries, J. COMM., Nov. 6, 1997, at 3B (noting that "environmentalists complain that, with no enforcement recommendations, the [factual record] does little to help the environment in NAFTA countries").

^{191.} See NAAEC, supra note 99, art. 20; see also Bugeda, supra note 29, at 1594; Gal-Or, supra note 102, at 75.

^{192.} See Bugeda, supra note 29, at 1615; see also Gal-Or, supra note 102, at 91.

^{193.} See Bugeda, supra note 29, at 1615; cf. Gal-Or, supra note 102, at 77-78.

^{194.} Bugeda, supra note 29, at 1616.

^{195.} Id. at 1603 (footnote omitted).

value of openness and transparency of information. The importance of making information available is highlighted adroitly by the fact that Mexican environmental groups could not have generated public pressure on the government and developer to comply with environmental laws without information previously withheld from them. In this case, even a relatively weak international process limited to preparation of an unenforceable informational document created opportunities for ventilating important issues. In the United States, of course, environmentalists frequently resort to public fora to monitor compliance with environmental laws. If a community group has the benefit of information as comprehensive as that of the Cozumel Factual Record, it will be better able to do this in any particular case. Reminding us of the importance of this is another important accomplishment of Professor Bugeda's article.

C. New Ways of Thinking About Old Problems (The Example of Compliance)

Professor Brown Weiss's article spotlights another way in which international environmental law affects domestic law: it can shed insight into how a domestic regulatory system should be structured to effectuate compliance with its provisions. One commentator notes that the potential impact of Professor Brown Weiss's work on compliance extends beyond international environmental agreements, 197 providing a theoretical basis for a discussion of compliance in international law generally. 198 I believe this groundbreaking study may have even wider applicability. In this section, I propose that it can inform important issues related to compliance in the domestic setting, using the example of brownfields laws and policies to make my point.

Because international environmental law is so new, the actors in the system are constantly trying out new approaches to

^{196.} This is also demonstrated by Professor Brown Weiss's discussion of the utility of reporting requirements in international environmental agreements. See infra Part II.C.1.c.

^{197.} See Alvarez, supra note 81, at 303.

^{198.} See id. at 307.

ensure compliance with the evolving legal regime. Professor Brown Weiss has described some of these as follows:

Features which are intended to encourage compliance . . . include the establishment of an implementation committee and non-compliance procedures, which have been unusually effective for the Montreal Protocol, engagement of an enforcement officer (as in CITES), publication of violations (as in CITES and Basel), providing a formal role for NGOs (as in UNESCO's World Heritage Convention and in CITES) developing a formal way with industry (as in the Montreal Protocol and Ozone Action) and establishing scientific and technical assessment and advice bodies to ensure that the convention keeps pace with scientific advances.²⁰⁰

The breathtaking variety of this experimentation suggests that any means of ensuring compliance domestically will probably have some international parallel. Finally, the iterative nature of compliance mechanisms in international environmental law, with contemporary agreements building upon the successes and failures of the past, will offer lessons for approaches to implement when first choices do not work.

So when we ask whether domestic actors are in "compliance" with a law or policy, whether the law is "effective" in meeting societal goals, or whether states and the federal government should rely on negative incentives such as sanctions or less formal norms of ensuring compliance, I suggest that Professor Brown Weiss's debunking of myths about compliance can offer some valuable insights.

1. Demythologizing Compliance

Before proceeding to a discussion of implications for the domestic setting, I summarize some of Professor Brown Weiss's significant observations. I caution the reader that others could also be viewed as important to the domestic setting; for example, her comments about Myth Nine (concerning the role of NGOs) have considerable implications for our view of the role of public interest environmental groups in the domestic law sys-

^{199.} See Brown Weiss, supra note 36, at 708.

^{200.} Brown Weiss, Strengthening National Compliance, supra note 80, at 302.

tem. In this section, I group a number of Professor Brown Weiss's responses to conventional wisdom about compliance into three categories for the purpose of drawing parallels to the domestic setting. These categories include:

- Delimiting the Analysis (Myths One and Two): Professor Brown Weiss argues that compliance should not be assumed. She also claims that analyzing the extent to which it occurs requires conceptual separation of three different inquiries.
- Deciding Which Strategies Best Secure Compliance (Myths Three, Five, Ten, Eleven, and Thirteen): Professor Brown Weiss discusses which strategy of ensuring compliance with agreements works best in individual circumstances, focusing on the obligations incorporated in agreements and the measures available to ensure compliance with them; she also argues that a "one size fits all" approach to compliance is inappropriate.
- Evaluating Specific Compliance Strategies (Myth Six): Professor Brown Weiss assesses the utility of reporting requirements in international environmental agreements; this, of course, is related to the inquiry above but important in its own right.
- a. Evaluating Compliance Through Separate Inquiries About "Implementation," "Compliance," and "Effectiveness" (Myths One and Two)

Professor Brown Weiss immediately refutes the classical notion that countries always comply with international agreements. She argues that the reality of compliance is a very different matter; "compliance," she has noted previously, "is a complex process." It cannot be judged as a choice of extremes: while "no country complies fully with all its international legal obligations," it is not the case either that states fail to comply at all. Of particular note is that the success of compliance depends on a country's "capacity to comply," meaning (among other things) the relative technical and legal expertise of actors in the system. Scholars often assume that nations

^{201.} Id. at 297.

^{202.} Brown Weiss, supra note 22, at 1560.

^{203.} Id.; see id. at n.17.

have equal and constant capacities to comply with agreements.²⁰⁴ This assumption, according to Professor Brown Weiss, is erroneous. Moreover, the degree of compliance not only differs among nations, but varies over time because it depends on factors subject to change; for example, "there is a general trend toward increased compliance by states the longer the agreement is in effect."²⁰⁵

Having demonstrated the complexities of deciding whether nations comply with agreements, Professor Brown Weiss next offers an analytical framework for evaluating compliance. She argues that "implementation," "compliance," and "effectiveness" are not the same, but rather different concepts that must be addressed separately.206 She touches briefly on implementation—"the actions taken to give effect to the domestic obligations of the agreement"-and then shows that compliance is broader than both "implementation" and "enforcement" because it requires an evaluation of three separate but related issues:207 compliance with procedural duties such as submitting annual reports; compliance with substantive obligations of agreements (e.g., the Montreal Protocol's requirement of phasing out CFCs by the year 2000); and "compliance with the spirit of the agreement."208 Finally, Professor Brown Weiss cautions that effectiveness and compliance should be evaluated separately. Using the example of the Convention on International Trade in Endangered Species (CITES), she argues that deciding whether an agreement is "effective" in meeting its stated or unstated goals "is not necessarily correlated with compliance."209 Decoupling the two concepts implies that an agreement might be judged as effective without full compliance

^{204.} See, e.g., Ibrahim F.I. Shihata, Implementation, Enforcement, and Compliance with International Environmental Agreements—Practical Suggestions in Light of the World Bank's Experience, 9 GEO. INT'L ENVIL. L. REV. 37, 39 (1996).

^{205.} Brown Weiss, supra note 22, at 1561; see also Brown Weiss, Strengthening National compliance, supra note 80, at 297.

^{206.} See Brown Weiss, supra note 22, at 1562-63.

^{207.} Id. at 1562; see id. at 1562-63; cf. Sands, supra note 71, at 53 (noting that "state compliance requires action in three ways: it must adopt national enabling legislation, policies and programmes; it must ensure compliance within its jurisdiction and control; and it must fulfil any obligations to the appropriate international institutions, such as reporting the national measures taken to give effect to the obligations").

^{208.} Brown Weiss, supra note 22, at 1563 (footnote omitted).

^{209.} Id. at 1564.

by actors in the system, which is on its face a remarkable but appropriate conclusion.

b. Assessing the Efficacy of Strategies to Achieve Compliance (Myths Three, Five, Ten, Eleven, and Thirteen)

Beginning with Myth Three, and continuing throughout the rest of her article, Professor Brown Weiss tackles a subject that has occupied both domestic and international lawyers for decades. The core question is almost deceptively simple: which strategies are best for ensuring that nations comply with agreements? To address this question, Professor Brown Weiss considers, in turn, traditional assumptions relating to important subparts of this inquiry: whether agreements should feature binding or non-binding obligations (Myth Three); whether these obligations should be defined precisely or more generally (Myth Five); whether formal dispute resolution processes are important (Myth Ten); whether coercive measures such as sanctions are essential to deal with situations of noncompliance (Myth Eleven); and finally, whether compliance strategies should apply uniformly (Myth Thirteen).

Her insights with respect to Myths Three, Five, and Eleven challenge several assumptions about international environmental agreements: that they must feature concretely defined, binding obligations, backed by the threat of negative incentives such as "sanctions (military or economic), penalties, and measures such as withdrawing membership privileges under the agreement"²¹⁰ to secure compliance. She concludes that non-binding obligations—even if described generally in an agreement—have numerous benefits. They "create expectations that may shape behavior and avoid disputes," often lead to binding obligations later, "provide flexibility to adapt to changing conditions," and "send important signals about how countries are expected to behave."211 She finds that, "under some circumstances nonbinding instruments may be complied with as well as binding ones."212 Regarding the utility of formal dispute resolution, Professor Brown Weiss concludes that while "[m]any interna-

^{210.} Id. at 1584.

^{211.} Id. at 1567, 1568, 1569 (footnote omitted).

^{212.} Id. at 1570.

tional environmental agreements provide for formal dispute settlement procedures," in practice "the parties have never invoked the formal dispute settlement procedures contained in most . . . agreements" and resolve their disputes in less formal fora such as meetings of the parties to an agreement.²¹³

As for coercive measures, Professor Brown Weiss observes that "the historical record indicates that states have not relied upon coercive measures to secure compliance with international environmental agreements."214 However, she notes that the option of sanction-based enforcement may be necessary if parties are likely to disobey an agreement; they are "particularly useful for countries whose intention to comply is weak or who face strong domestic pressures to lapse into noncompliance."215 In her view, there are three distinct types of strategies to ensure compliance: coercive measures, technical and financial incentives, and "sunshine" strategies. 216 "Sunshine" mechanisms could include the following techniques, many of which will be familiar to domestic environmental lawyers: "reporting, on-site monitoring, NGO participation, public access to information, transparency in decision making, public information measures such as newsletters, local community involvement, industry monitoring, and persuasion by parties and secretariats."217

The importance of sunshine strategies cannot be overlooked; Professor Brown Weiss states that, "[i]nternational environmen-

^{213.} Id. at 1581, 1582 (footnote omitted); see also Fitzmaurice, supra note 14, at 399 (stating that there is a trend in international environmental law "to lead away from traditional, adversarial systems of dispute settlement, towards, for instance, noncompliance procedures . . . or, in the case of the Court, towards a more widespread use of advisory competence"). Cf. Sands, supra note 31, at 1639-40 (stating that

if states want international adjudicatory mechanisms, they do not seem to want those that apply a contentious and conflictual procedure to environmental matters. So, for example, in the field of ozone depletion, and soon also in other areas such as climate change and sulphur pollution, states are putting in place noncontentious procedures that are characterized by having more of an administrative function.)

^{214.} Brown Weiss, supra note 22, at 1586.

^{215.} Id.; cf. Danish, supra note 85, at 802 (citing to arguments made by George Downs and his co-authors about the utility of coercive measures).

^{216.} See Brown Weiss, supra note 22, at 1588.

^{217.} Id. (footnote omitted); see also Brown Weiss, Strengthening National Compliance, supra note 80, at 299.

tal agreements rely primarily on sunshine methods and incentives."²¹⁸ Another commentator calls for a "social enforcement" approach to compliance: a middle ground that incorporates features of a sanction-based approach and sunshine measures.²¹⁹ The sunshine strategy, as this commentator and others have observed, depends largely on a nation's "reputation" in the international community.²²⁰ Coercion is therefore inappropriate for a variety of reasons. It is a blunt instrument that is "as likely to undermine a treaty regime as to preserve it."²²¹ Moreover, measures such as sanctions are not a realistic option for most nations because often only powerful nations can resort to them.²²²

For all of these reasons, no compliance strategy will work alone. This leads Professor Brown Weiss to her conclusion about Myth Thirteen: compliance cannot be structured the same way for each nation. A "mix of compliance strategies needs to be available for each agreement," and the mix needs to be

^{218.} Brown Weiss, supra note 22, at 1588; see also Brown Weiss, Strengthening National Compliance, supra note 80, at 299 (sunshine methods are "the key way of insuring compliance" in international environmental law); Danish, supra note 85, at 795-96; Farber, supra note 16, at 1314 (discussing ABRAM CHAYES & ANTONIA HANDLER CHAYES, THE NEW SOVEREIGNTY: COMPLIANCE WITH INTERNATIONAL REGULATORY AGREEMENTS (1995), Professor Farber contends that "formal enforcement is of limited efficacy, whereas various informal types of pressure to conform with international norms may have more influence"); Shihata, supra note 204, at 41-42 (terming consensual measures the optimal means for achieving sustainable development).

Critics of Professor Brown Weiss's position point to the observed high rates of compliance with agreements that feature binding obligations. These statistics, however, can be misleading. See David G. Victor, The Use and Effectiveness of Non-Binding Instruments in the Management of Complex International Environmental Problems, in Compliance with International Environmental Treaties: The Empirical Evidence, supra note 81, at 241 (noting that "compliance with legally binding agreements has been high, but that often the influence of binding commitments on behavior is low").

^{219.} See Danish, supra note 85, at 804.

^{220.} See Brown Weiss, Strengthening National Compliance, supra note 80, at 299; Farber, supra note 16, at 1315 (quoting the Chayeses); cf. Lakshman Guruswamy, Book Review, 91 Am. J. Int'l L. 207, 209 (1997) (reviewing Ronald B. Mitchell, Intentional Oil Pollution at Sea (1994) (claiming that "international law does invoke compliance because it governs a law-abiding community of States, not a gang of bandits or bank robbers"). Professor Koh notes that this view evokes themes about domestic law that Professor Chayes develops in his classic book about domestic legal process. See Koh, supra note 84, at 2638.

^{221.} Danish, supra note 85, at 797; see also Brown Weiss, Strengthening National Compliance, supra note 80, at 302.

^{222.} See Danish, supra note 85, at 797.

structured differently for each nation: "[t]he particular mix of compliance strategies needed to induce compliance with a specific agreement will vary according to the profile of a state's intent and capacity to comply with the agreement."223 Moreover, constant attention needs to be paid to the variables of intent and capacity. Even if the country was able to comply at first, it may be unable to do so later: bureaucratic structures, technical and financial resources, and other assets necessary for compliance can evolve over time, and not always for the better. 224 Professor Brown Weiss has concluded in her previous work that only careful research can tell us what methods are best for ensuring compliance with any given agreement. 225 The bottom line is considerably different from a lawyerly reliance on coercion: innovative thinking, not a simple reliance on negative incentives, is required to effectuate compliance, and actors' intent and capacity to comply must be considered in developing compliance strategies.

c. Assessing the Utility of Reporting Requirements (Myth Six)

Professor Brown Weiss makes several interesting points about a specific type of "sunshine" measure that has "become customary . . . in nearly all new international environmental agreements:"²²⁶ the requirement to file regular reports with treaty secretariats. The reporting requirement has many salutary features. The process of requiring the accumulation of information for and the drafting of reports can educate parties about the agreement, help "build local capacity to comply with the substantive obligations in the treaty," and serve as an important tool for monitoring compliance.²²⁷ But these require-

^{223.} Brown Weiss, supra note 22, at 1588.

^{224.} See id.

^{225.} See Brown Weiss, Strengthening National Compliance, supra note 80, at 298.

^{226.} Brown Weiss, supra note 22, at 1574.

^{227.} Id.; see also Brown Weiss, Strengthening National Compliance, supra note 80, at 299.

In certain instances, NGOs have a more direct role in generating and using the information from the parties about their obligations under particular agreements. Professor Brown Weiss notes that the World Conservation Monitoring Unit tracks the reports made under CITES and provides extensive information about the status of each endangered species. See Brown Weiss, supra note 157, at 983; see also Catharine L. Krieps, Sustainable Use of Endangered Species Under CITES: Is it a Sustainable Alternative?, 17 U. PA. J. INT'L ECON. L. 461 (1996).

ments are not without their disadvantages. Because incompleteness and inaccuracies in reports is likely to be endemic,²²⁸ there must be a review process capable of highlighting violations.²²⁹ As Professor Brown Weiss observed in the seminar course, this is often lacking in the international setting: international bodies are often reluctant to call nations on the carpet to account for violations of reporting requirements (particularly inaccuracies in reports).

In the seminar course and in her article, Professor Brown Weiss discusses two reasons why inadequate reporting takes place, the first of which is the phenomenon of "reporting congestion."230 Numerous international environmental agreements contain reporting requirements. Nations are signatories to multiple agreements, so national, state, and local officials will be devoting precious time responding to these requirements. In a nation with limited technical and scientific expertise, this increases the potential for inaccuracy or incompleteness.²³¹ The second problem involves the logistical difficulties inherent in assembling the information required for reports. In the seminar class, Professor Brown Weiss discussed the annual report required under CITES, which requires the aggregation of such data as identification of species on export-import permits generated by nations around the world in a non-standardized fashion. Given these logistical difficulties, it is not surprising that

^{228.} The Brown Weiss-Jacobson study found a range of rates of compliance with reporting requirements. See Brown Weiss, supra note 22, at 1575. Other empirical studies have reached similar conclusions. A study by the United States General Accounting Office and a study conducted for the United Nations Conference on Environment and Development on the Effectiveness of International Environmental Agreements have both found that "the proportion of states rigorously complying with reporting requirements was disappointingly low." See Shihata, supra note 204, at 43.

229. See Brown Weiss, supra note 22, at 1574: see also Victor, supra note 218 at

^{229.} See Brown Weiss, supra note 22, at 1574; see also Victor, supra note 218, at 248.

^{230.} Brown Weiss, Strengthening National Compliance, supra note 80, at 299. See also Brown Weiss, supra note 36, at 700; Bethany Lukitsch Hicks, Treaty Congestion in International Environmental Law: The Need for Greater International Coordination, 32 U. RICH. L. REV. 1643 (1999) (identifying congestion in reporting requirements as an example of "procedural" treaty congestion).

^{231.} See Brown Weiss, supra note 22, at 1574; see also Shihata, supra note 204, at 43 (noting that because the number of international environmental agreements is growing rapidly in the past two decades, reporting requirements require capacity that nations may not have to make the reports).

many reports are "incomplete, inaccurate, or late," and ineffective for the purpose of monitoring compliance. 232

2. Toward a New Approach to Compliance in the Domestic Setting

As in the international arena, the field is wide open for scholars to evaluate compliance issues in the domestic setting. The issues that Professor Brown Weiss discusses in the framework of the baker's dozen myths about compliance have received little notice from commentators writing about my area of focus in this section: the set of state and federal policies intended to expedite the remediation and redevelopment of "brownfields" sites (abandoned or underutilized urban sites that sit idle in part due to concerns over environmental contamination). The primary initiators of brownfields laws have been the states. Since 1988, almost forty states have developed voluntary cleanup programs (VCPs) through statutory and regulatory reforms intended to speed up the cleanup of brownfields sites. The federal government has been active as well.

Many (including me) have spilled considerable ink assessing the wisdom of federal and state brownfields policies,²³⁶ but

^{232.} Brown Weiss, supra note 22, at 1574 (footnote omitted).

^{233.} See Robert H. Abrams, Comment, Superfund and the Evolution of Brownfields, 21 WM. & MARY ENVIL. L. & POLY REV. 265, 273 (1997) (discussing characteristics of brownfields sites); see also William W. Buzbee, Brownfields, Environmental Federalism, and Institutional Determinism, 21 WM. & MARY ENVIL. L. & POLY REV. 1, 4 n.1 (1997) (setting forth a similar definition of brownfields); Eisen, supra note 186; Michael Allan Wolf, Dangerous Crossing: State Brownfields Zoning and Federal Enterprise Zoning, 8 FORDHAM ENVIL. L.J. (forthcoming 1999) (manuscript on file with author) (discussing the relationship between brownfields policies and enterprise zone laws and policies).

^{234.} See Eisen, supra note 186, at 914-15 n.153; see also Buzbee, supra note 233, at 27-46 (describing "first mover" dynamics to explain how states came to take the lead in brownfields law and policy); Wolf, supra note 233 (manuscript at 12-14); Abrams, supra note 233, at 284-87 (discussing the evolution of Michigan's brownfields program).

^{235.} Since I last counted the number of states with formal voluntary cleanup programs, see Eisen, supra note 186, at 1033-39, a number of states have either amended or established voluntary cleanup programs. See generally 2 BROWNFIELDS LAW AND PRACTICE (Michael B. Gerrard ed., 1998) (listing and describing the features of state programs).

^{236.} See Robert S. Berger et al., Recycling Industrial Sites in Eric County: Meeting the Challenge of Brownfield Redevelopment, 3 BUFF. ENVIL. L.J. 69 (1995); Jane F.

few have devoted much attention to mechanisms designed to ensure the long-run protectiveness of brownfields cleanups. In part, of course, this is because this area of environmental law is new. Many state brownfields programs came into existence in the mid- to late 1990s, and few have a track record of successful cleanups spanning five or more years.²³⁷ I suggest a transformation similar to that occurring in international environmental law is imminent: less attention will be paid to justifying the laws; more to evaluating their efficacy. When we do get around to addressing those complicated questions, it would be wise to turn to Professor Brown Weiss's article.

Professor Brown Weiss offers insights about "what drives relevant actors, including private multi-national corporations, non-governmental organizations, and governments, to 'give effect' to international law."²³⁸ There is a universal quality to her conclusions about this broad theme that prompts us to refrain from dismissing the study as limited to international environmental law. Of course, there are considerable differences between the domestic and international settings, particularly the entrenched enforcement-driven nature of most of our envi-

Clokey, Wisconsin's Land Recycling Act: From Brownfield to Greenfield, 2 WIS. ENVIL. L.J. 35 (1995); Steven F. Fairlie, The New Greenfields Legislation: A Practitioner's Guide to Recycling Old Industrial Sites, 5 DICK. J. ENVIL. L. & POL'Y 77 (1996); James T. O'Reilly, Environmental Racism, Site Cleanup and Inner City Jobs: Indiana's Urban In-fill Incentives, 11 YALE J. ON REG. 43 (1994); David B. Hawley, Note, The Brownfields Property Reuse Act of 1997: North Carolina Creates an Additional Incentive to Reclaim Contaminated Properties, 76 N.C. L. REV. 1015 (1998); Peter K. Johnson, Note, Mr. Smith Goes to Washington: 1997 Superfund Amendments: Will it Solve the Liability Problem and How Will This Affect Massachusetts?, 31 NEW ENG. L. REV. 1269 (1997); Thomas G. Kessler, Comment, The Land Recycling and Environmental Remediation Standards Act: Pennsylvania Tells CERCLA Enough Is Enough, 8 VILL. ENVIL. L.J. 161 (1997); Tara Burns Koch, Comment, Betting on Brownfields - Does Florida's Brownfields Redevelopment Act Transform Liability Into Opportunity?, 28 STETSON L. REV. 171 (1998); Eric D. Madden, Comment, The Voluntary Cleanup and Property Redevelopment Act-The Limits of the Kansas Brownfields Law, 46 U. KAN. L. REV. 593 (1998); Daniel Michel, Comment, The CERCLA Paradox and Ohio's Response to the Brownfield Problem: Senate Bill 227, 26 U. Tol. L. REV. 435 (1995); Alexander H. Tynberg, Comment, Oregon's New Cleanup Law: Short-Term Thinking at the Expense of Long-Term Environmental and Economic Prosperity, 12 J. ENVIL. L. & LITIG. 471 (1997). See generally Joel B. Eisen, Brownfields Policies for Sustainable Cities, 9 DUKE ENVIL. L. & POL'Y F. 187 (1999).

^{237.} For a listing of sites remediated in one of the larger state programs within the past three years, see Pennsylvania Department of Environmental Protection, Pennsylvania's Land Recycling Program: Annual Report 1-3 (1998).

^{238.} Alvarez, supra note 81, at 307-08.

ronmental laws. The distinctions, however, are less significant than one would think. The voluntary nature of most brownfields programs leads the actors in the system to treat litigation as an unwanted last resort. Variations in the cast of characters are not as pronounced as they appear. The globalization of law means that the international environmental law system consists increasingly of an extensive framework of interaction among nation-states, their sub-units, and private and public sector organizations, with this constant interaction increasingly resembling that which takes place domestically. With the appropriate caveats, therefore, one can begin to extend Professor Brown Weiss's conclusions to the compliance setting of domestic environmental law.

a. Defining the Compliance Inquiry

As in the international setting, one cannot assume reflexively that participants in the brownfields remediation system comply with the laws; as Professor Farber notes, "even within a wellintegrated system such as the United States, local compliance is not an automatic reflex."240 Indeed, Professor Brown Weiss refutes this assumption on the international level in part by drawing an analogy to studies showing that "citizens and other private actors do not necessarily comply fully with national, state (province), or local laws."241 Professor Brown Weiss's insights also give us an idea of what "compliance" means in the domestic setting. Separating implementation from compliance is important because brownfields laws, like international environmental agreements, are not always wholly self-executing; some state statutes require implementing measures in the form of regulations establishing cleanup standards.242 Beyond this, these are complex compliance issues. Consider just two of the many issues involved in a brownfields cleanup: (1) whether the property owner took the appropriate steps to ensure compliance with an applicable cleanup standard, and (2) whether the owner

^{239.} See Brown Weiss, supra note 36, at 709. I discuss this "globalization" trend further in Part II.D. infra.

^{240.} Farber, supra note 16, at 1315.

^{241.} Brown Weiss, supra note 22, at 1561-62.

^{242.} See Ohio Rev. Code Ann. § 3746.04(b)(1) (Anderson 1997) (Repl. Vol.) (directing the preparation of rules identifying appropriate cleanup standards).

actually performed a cleanup to the appropriate level. It is not hard to see that all three of Professor Brown Weiss's compliance subissues—procedural, substantive, and "spirit of the agreement" concerns—are triggered by these questions.

Unfortunately, in brownfields cleanups, these compliance issues require more attention than they have been given at present.²⁴³ There is another inquiry that one can derive from Professor Brown Weiss's response to Myth One. Does an individual state's program advance the goals of brownfields law and policy? In Professor Brown Weiss's terminology that is more properly characterized as a question of effectiveness. Even if all participants in brownfields remediation complied substantially with all state and federal legal requirements, that does not necessarily mean the laws are effective. I leave further elaboration on this intriguing notion for another day.

b. Deciding on Appropriate Compliance Strategies

Which compliance strategy or strategies will prove most useful in the brownfields setting? The regulatory structure is premised on its voluntariness, so it is not immediately apparent that sanctions are an appropriate instrument for ensuring compliance. I offer a hypothetical situation for considering a situation of potential noncompliance.

Assume a subsequent purchaser of a brownfields site first remediated for industrial use intends to build houses on that site. I also assume, as is often true, that a state's regulations require additional cleanup of a brownfields site in that case for use for residential purposes,²⁴⁴ and that the state could prohibit the purchaser from using the property in the desired manner without performing an additional cleanup.²⁴⁵ The state

^{243.} Theoretical treatments of this issue have begun to appear. See generally Wolf, supra note 232 (advocating a "PLUS" system to address long-term protectiveness at brownfields sites). However, no empirical analysis comparable in scope to the Brown Weiss-Jacobson study exists.

^{244.} See, e.g., OHIO ADMIN. CODE §§ 3745-300-08(B)(2)(c), (B)(2)(d) (1998) (defining "residential," "commercial," and "industrial" land uses and setting separate generic soil cleanup standards for each, with the residential standard being the strictest); see also Wolf, supra note 233 (manuscript at 32-34).

^{245.} For a list of states that have adopted this approach, see Eisen, supra note 186, at 960 n.331. States also rely on private law means such as covenants recorded

could also presumably withdraw privileges (for example, barring the purchaser from eligibility to receive state grants or subsidies if it did not perform an adequate cleanup).

Following Professor Brown Weiss's lead, it is important to observe that not all purchasers are alike, and not all compliance strategies should be either. A hybrid social enforcement strategy might be better for some cases than simply relying on sanctions alone. For example, requiring regular reports from actors and evaluating compliance through review of those reports could be effective in the brownfields setting. The purchaser could be required to make a comprehensive report at the moment when the property transfer was contemplated, and submit periodic reports and agree to on-site inspections after performing the cleanup.

Indeed, one might conclude that a mix of different strategies is important precisely because no two developers of brownfields sites are alike. Consider the variables of intent and capacity. In my hypothetical, our subsequent purchaser may have the intent to comply with the requirement to remediate the site to a residential cleanup standard. However, the purchaser may be unable to do so if, for example, there is lingering scientific uncertainty over key issues, such as the appropriate level of cleanup required or the likelihood that a specified remedy might fail to protect human health and the environment over time. Relying on a reporting requirement alone may be useful in this case; the inherent shortcomings could be dealt with by providing technical or financial assistance to the purchaser. This

with initial purchasers' deeds, but, "as every first-year property law student schooled in the intricacies of common-law servitudes could testify, the most common form of use restriction found in private law—the real covenant—is an eminently unwieldy and unreliable mechanism to bind subsequent purchasers of the brownfield parcel." Wolf, supra note 233 (manuscript at 37).

^{246.} See also Ruhl, supra note 11, at 940 (arguing for diversity in regulatory approaches, rather than the traditional American pattern of reliance on command-and-control mechanisms, because we should think of environmental law as a "complex adaptive system").

^{247.} This is the premise underlying state property transfer statutes. See Eisen, supra note 186, at 959-61.

^{248.} See id. at 906-10. See generally John S. Applegate, The Perils of Unreasonable Risk: Information, Regulatory Policy, and Toxic Substances Control, 91 COLUM. L. REV. 261 (1991); John S. Applegate, Worst Things First: Risk, Information, and Regulatory Structure in Toxic Substances Control, 9 YALE J. ON REG. 277 (1992).

would comport with an important lesson of Professor Brown Weiss's article: the mix of compliance measures must be designed to deal with the variety of actors in the process and the problems inherent in securing compliance.

c. Revisiting the Reporting Requirement

In my hypothetical above, I imposed a reporting requirement on some purchasers, and, as in the international setting, the requirement would have many desirable features. Our historical openness regarding information contained in the reports²⁴⁹ would ensure transparency and allow environmental groups to detect noncompliance.²⁵⁰ So too could the exercise of meeting a reporting obligation educate the purchaser about compliance with brownfields cleanup requirements. However, we need to account for some of the same problems Professor Brown Weiss identifies, particularly "report congestion." In my hypothetical, the subsequent purchaser may cut corners on its brownfields cleanup report if it also has to make reports required under other state and federal environmental laws (not to mention tax, securities, and other laws). That this means the reporting re-

^{249.} The information would presumably be available to non-governmental organizations under a state analogue to the Freedom of Information Act. See, e.g., VA. CODE ANN. §§ 2.1-340-346.1 (Repl. Vol. 1995 & Cum. Supp. 1998).

^{250.} This is comparable to Professor Bugeda's suggestion that a Mexican environmental group could use the information developed in the Cozumel Factual Record. See supra notes 192-94 and accompanying text.

It would not be an entirely unknown feature in domestic environmental law, of course, to require regular reports; consider, for example, the Emergency Planning and Community Right-To-Know Act's (EPCRA) reporting requirement and the availability of citizen suits to enforce it. See 42 U.S.C. §§ 11001-50 (1994). The information accumulated in the EPA's database of information reported under EPCRA, the "Toxic Release Inventory," has served as the basis for a number of citizen suits. See Michael J. Vahey, Comment, Hazardous Chemical Reporting Under EPCRA: The 7th Circuit Eliminates the "Better Late Than Never" Excuse From Citizen Suits, 29 LOY. U. CHI. L.J. 225 (1997). These suits are not guaranteed to succeed. Courts have recently split on the question of whether EPCRA allows citizens to recover for historical violations of EPCRA's reporting requirements. Compare Steel Co. v. Citizens for a Better Env't, 90 F.3d 1237 (7th Cir. 1996), vacated, 118 S. Ct. 1003 (1998) (allowing claims for wholly past violations), and Vahey, supra, with Atlantic States Legal Found. v. United Musical Instruments, U.S.A., Inc., 61 F.3d 473 (6th Cir. 1995) (denying claims for historical violations).

The Supreme Court recently vacated Steel Company, finding that petitioners lacked standing to bring their action. Three Justices argued that EPCRA does not authorize citizen suits for historical violations. See Steel Company, 118 S. Ct. 1003.

quirement is no panacea for effectuating compliance in the brownfields setting is yet another important lesson to be derived from Professor Brown Weiss's analysis.

D. The Dynamic Nature of National Sovereignty and Lessons for the Environmental Federalism Debate

As I noted earlier, the rapid evolution of international environmental law may also offer insights about delineating the appropriate balance of regulatory power among federal, state and local governments. At first, it would seem that Professor Sands' article is an unlikely place to turn for help, focusing as it does on a theme comparable to Professor Brown Weiss's discussion of Myth Ten regarding the utility of formal dispute resolution procedures: "[w]ith more international environmental obligations on the horizon, now is certainly the time to start thinking about the arrangements we wish to have in place in the next century to help resolve the disputes that will inevitably arise." 251

Professor Sands first describes the current status of international environmental litigation. He finds that existing tribunals such as the International Court of Justice (ICJ), the European Court of Justice, and the Appellate Body of the World Trade Organization have a decidedly mixed record in terms of integrating environmental considerations into their decisions. Then, he analyzes the recurring proposal to address perceived shortcomings of the current system by creating an international environmental court, and concludes that "the time is clearly not ripe to establish such a body."252 He believes the international community should encourage litigation in existing fora, particularly by "those players most directly affected by environmental issues," believing "[t]he time will no doubt come when these players will gain enhanced access to the more traditional bodies."253 His article is a valuable resource for lawyers who want to find ways to expand the traditional limited view of international environmental litigation's purpose.

^{251.} Sands, supra note 31, at 1640; see supra note 213 and accompanying text.

^{252.} Sands, supra note 31, at 1640.

^{253.} Id. at 1641.

Another way to look at his article, however, is that it illustrates the dynamic nature of the relationship between nations and the international community. In the second part of this section, I argue that the debate over this relationship's future has features comparable to the environmental federalism debate raging in the United States, and that Professor Sands offers lessons that can translate to that debate. Before making this argument, I begin with a summary of Professor Sands's conclusions about international environmental litigation.

1. The Future of International Environmental Litigation

Professor Sands finds that there is a "steady increase in international environmental litigation" which will "continue" given the rapid proliferation of international environmental law.²⁵⁴ At the moment, however, there is a relatively meager and incoherent body of case law in this field. He analyzes the ICJ's recent cases, noting that the ICJ has little experience with environmental disputes. As recently as 1994, he observed that the ICJ "is yet to make a really significant contribution to the development of international environmental law."²⁵⁵ Four years later, he believes that the ICJ's treatment of three cases (Nuclear Tests II, Nuclear Weapons Advisory Opinion, and Gabcíkovo-Nagymaros)²⁵⁶ has "indicated an ability to address environmental issues, at least indirectly."²⁵⁷

^{254.} Id.

^{255.} Id. at 1625 (quoting Philippe Sands, The International Court of Justice and the European Court of Justice, in GREENING INTERNATIONAL INSTITUTIONS 221 (Jacob Werksman ed. 1996)). See also Fitzmaurice, supra note 14, at 398.

During the first four decades of the [ICJs] existence, environmental issues hardly featured at all in the matters that came before it, and this, despite the growing importance of environmental protection in the development of international law during the 1970s and 1980s. . . . The only case which directly raised major environmental issues was the Nuclear Tests I case in 1974; but the [ICJ] ignored these and rested its decision on other grounds.

Id.

^{256.} Legality of the Use by a State of Nuclear Weapons in Armed Conflict, 1995 I.C.J. 3 (July 6) (known as Nuclear Tests II); Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8), reprinted in 35 I.L.M. 809 & 1343 (1996); Judgment in Case Concerning the Gabcíkovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 3 (Sept. 25), reprinted in 37 I.L.M. 162 (1998).

^{257.} Philippe Sands, Statement of Mr. Philippe Sands, in Increasing the Effectiveness of the International Court of Justice: Proceedings of the

In the first two of these cases, though, the ICJ "side-stepped" important and basic issues.²⁵⁸ It was therefore "possibly . . . radical" for the ICJ even to recognize in the *Gabcíkovo-Nagymaros* case that emerging environmental norms and standards must be taken into account by nations, though the ICJ's opinion hardly went as far as it could have to integrate principles such as the precautionary principle into its decision.²⁵⁹ In short,

the question arises as to whether the ICJ has missed an opportunity to indicate a real willingness to show its environmental credentials? This is not to say that environmental concerns should have trumped all others. Certainly, the court demonstrated an understanding of the unique difficulties presented by environmental issues, of the existence of various standards to be applied, and of an indication as to how these could be applied to the facts.²⁶⁰

Thus, recent ICJ decisions have brought attention to environmental considerations, but "do not contribute to the much needed development of the law by way of judicial insight." Other tribunals have been more successful, particularly the European Court of Justice, which, with its "established environmental case load of over 150 cases," constitutes "the principal driving force in developing European Community (EC) environmental law." Still others, such as the European Court of Human Rights, 263 the International Centre for the Settlement of In-

ICJ/UNITAR COLLOQUIUM TO CELEBRATE THE 50TH ANNIVERSITY OF THE COURT 438, 439 (Connie Peck & R.S. Lee eds., 1997).

^{258.} Sands, supra note 31, at 1629 (footnote omitted). Professor Lakshman Guruswamy agrees with this judgment, observing that in the Nuclear Weapons Advisory Opinion, the ICJ avoided the responsibility of enforcing an international environmental agreement. See also Laksman Guruswamy, Commentary of Professor Lakshman Guruswamy, in Increasing the Effectiveness of the International Court of Justice: Proceedings of the ICJ/UNITAR Colloquium to Celebrate the 50th Anniversity of the Court 418, 426-27 (Connie Peck & R.S. Lee eds., 1997).

^{259.} Sands, supra note 31, at 1631; see id. at 1630.

^{260.} Id. at 1633.

^{261.} Id.

^{262.} Id. at 1626.

^{263.} In the seminar course, Professor Sands discussed the case of Lopez Ostra v. Spain in which the court allowed a plaintiff to bring an environmental cause of action alleging breaches of Articles 3 and 8 of the European Convention of Human Rights, found in favor of the plaintiff for breach of Article 8, and awarded damages

vestment Disputes, and the Appellate Body of the World Trade Organization, have adjudicated cases involving environmental issues.²⁶⁴ With international environmental law growing rapidly, the meager record of decisions to date and the involvement by multiple tribunals lead some to call for the establishment of a single international environmental court:

[P]roponents of a dedicated international environmental court or tribunal argue that existing bodies lack the requisite expertise, that the absence of a single body will lead to a fragmentation in the application of environmental standards, and that the failure of the ICJ to play an adequate role leaves a major gap.²⁶⁵

While the ICJ's creation of an "Environment Chamber" would appear to respond to this view, Professor Sands sees it at best as an "effort[] to head off... a new body."²⁶⁶

Professor Sands then discusses the wisdom of establishing such a court. Taking up this complex question,²⁶⁷ he acknowledges the range of views regarding the proper function of international adjudication,²⁶⁸ particularly the "two basic approach-

and costs and expenses. See Lopez Ostra v. Spain, 20 Eur. H.R. Rep. 277, 292-98 (1995).

^{264.} See Sands, supra note 31, at 1634; see also Shihata, supra note 204, at 45 (discussing cases decided before the ICSID).

^{265.} Sands, supra note 31, at 1636.

^{266.} Id. at 1640. Ibrahim Shihata of the World Bank states that the Chamber could "bring about a greater degree of compliance with environmental obligations." Shihata, supra note 204, at 44. Professor Sands has found this claim unpersuasive, having observed that "the Chamber is essentially a political creation It seems to me extremely unlikely that a case would ever get to the Chamber, unless it was on an extremely narrow point, on the interpretation of a treaty." Sands, supra note 257, at 439.

^{267.} Delegates at a conference held in Rome approved a treaty establishing a single permanent tribunal to deal with international offenses such as genocide and war crimes, over the objection of the United States's delegates. See Elizabeth Neuffer, War Crimes Tribunal Adopted As U.S. Votes "No," BOSTON GLOBE, July 18, 1998, at A1.

The discussion of creating a single environmental tribunal is similar to that about the potential for creating a single global environmental regulatory body. See Esty, supra note 14, at 112; Sir Geoffrey Palmer, New Ways to Make International Environmental Law, 86 AM. J. INT'L L. 259, 282-83 (1992) (proposing the creation of an "International Environmental Organization"); see also Brown Weiss, supra note 36, at 699 (noting Sir Geoffrey Palmer's proposal for a "common institutional home for international environmental agreements"). Like the idea of a single environmental tribunal, the desire for a single supranational organization to handle environmental issues "is not commonly shared." Shihata, supra note 204, at 42.

^{268.} See generally Laurence R. Helfer and Anne-Marie Slaughter, Toward a Theory

es" of a "minimalist" view (a tribunal should decide the precise questions presented to it) and an expansive view (a tribunal should fill gaps in vague international environmental treaties). He then raises problems common in environmental law both at the domestic and international level: the difficulty of resolving competing scientific claims, the challenges of interpreting complex statutory and regulatory language, and so forth. He also introduces issues unique to international environmental law, such as the different positions of developed and developing countries about environmental issues. The such as the different positions of developed and developing countries about environmental issues.

While Professor Sands believes that more international environmental litigation is likely, he observes that it is too soon to establish an international environmental court.²⁷² He states that nations simply do not want such a tribunal:

[S]tates are not clamoring to establish an international environmental court. . . . [I]f states want international adjudicatory mechanisms, they do not seem to want those that apply a contentious and conflictual procedure to environmental matters. So, for example, in the field of ozone depletion, and soon also in other areas such as climate change and sulphur pollution, states are putting in place noncontentious procedures that are characterized by having more of an administrative function. . . . a sort of international alternative dispute resolution. 273

At present, then, working with the existing system holds more promise than creating a new court. Professor Sands observes that, "the possibility of an international environmental court should be kept on our radar screens, but the time is clearly not ripe to establish such a body. The very fear of its creation may serve as an inducement for various courts to demonstrate their ability to address environmental issues."

of Effective Supranational Adjudication, 107 YALE L.J. 273 (1997) (discussing international adjudication generally, and evaluating the potential for translating European models of transnational adjudication to other legal systems).

^{269.} Sands, supra note 31, at 1637.

^{270.} See id. at 1637-38.

^{271.} See id. at 1639.

^{272.} See id. at 1640.

^{273.} Id. at 1639-40.

^{274.} Id. at 1640.

2. The Future of National Sovereignty: Parallels to the Environmental Federalism Debate

There is additional insight to be gleaned from Professor Sands's comments that hint at the considerable flux in the relationship between individual nations and the international community. Professor Sands does not suggest, as others have, that the international environmental law regime necessarily "portend[s] the 'demise' or even the 'end' of 'sovereignty' (at least as traditionally conceived). Instead, one can read Professor Sands's article as confirming the considerable flux in the relationships of actors in this system. His comments about the dynamic nature of international environmental litigation hint at a larger tension between national sovereignty and the need to address international environmental issues. The importance of national sovereignty is well established in international environmental law. It finds its most notable expression in Principle 21 of the Stockholm Declaration, which states:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.²⁷⁷

This statement has been reaffirmed in Principle 2 of the Rio Declaration, "with the addition of the words 'and developmental' after the word 'environmental,' at the insistence of various developing economies." Note that this declaration still leaves

^{275.} See id. at 1639-40; cf. Alvarez, supra note 81, at 303 (noting that international environmental agreements make significant intrusions on domestic jurisdiction).

^{276.} Alvarez, supra note 81, at 303; cf. Lynton K. Caldwell, International Environmental Politics: America's Response to Global Imperatives, in ENVIRONMENTAL POLICY IN THE 1990S TOWARD A NEW AGENDA 301, 301 (Norman J. Vig and Michael E. Kraft eds., 1990) (stating that "[t]he concept of national sovereignty is of declining significance in a world that increasingly faces environmental problems affecting people everywhere").

^{277.} Stockholm Declaration, supra note 42, at princ. 21.

^{278.} Ben Boer, Environmental Law and the Law of Nature, HUMAN RESOURCES

much room for interpretation. What actions create "damage . . . beyond the limits of national jurisdiction?" How are these actions to be reconciled with the "sovereign right" of nations to control their economic destinies? Which institution has responsibility for making these judgments?

Nations' reluctance to establish a single environmental court, of course, perhaps best exemplifies the lack of resolution of this tension. Professor Sands has noted that states balk at surrendering sovereignty to international institutions: "Sovereign interests, however, have resulted in a general unwillingness of States to transfer much—if any—enforcement power to international institutions. This unwillingness highlights the fundamental tension between the juridical reality of States' territorial sovereignty over their natural resources and the physical reality of ecological interdependence." 279

That "fundamental tension" is evident in the ICJ's treatment of recent cases. The ICJ's hesitation to adopt common environmental principles evidences a considerable reluctance to submit individual nations to the will of the international community. Additionally, the ICJ's judgments are difficult to enforce. By coincidence, during Professor Sands's residence in Richmond, the ICJ heard Paraguay's request for "provisional measures" in the Breard case. Angel Breard, a Paraguayan national, had been sentenced to death in Virginia for the rape and murder of an Alexandria woman. Paraguay claimed that Breard's rights under Article 36 of the Vienna Convention on Consular Relations were violated because Breard was not given an opportunity to consult with a Paraguayan consular official during his trial. The ICJ "indicated" provisional measures, pending a decision on the merits of this claim. Virginia refused to obey

FOR SUSTAINABLE DEVELOPMENT, May 1997, at 1-2.

^{279.} Sands, supra note 71, at 55.

^{280. &}quot;Provisional measures" are a remedy roughly equivalent to a preliminary injunction in domestic law, and are authorized by Article 41 of the statute establishing the International Court of Justice. They are "intended to preserve the respective rights of the parties pending [a] decision, and [presuppose] that irreputable prejudice shall not be caused to rights which are the subject of a dispute in judicial proceedings "International Court of Justice, Statute of the International Court of Justice (visited Nov. 2, 1998) http://www.icj-cij.org/Basicdoc/Basetext/istatute.htm.

^{281.} See Philippe Sands, An Execution Heard Round The World, L.A. TIMES, Apr. 16. 1998. at B9.

^{282.} See International Court of Justice, Vienna Convention on Consular Relations

the provisional measures, with Governor James Gilmore claiming Virginia was not obliged to follow the ICJ order unless ordered to do so by an American court, and executed Breard. Professor Sands' comments on the Breard case (in the seminar course and other law school fora) and the ICJ's environmental cases raise an exceedingly complex—and to date unresolved—question about national sovereignty: in what instances should international judgments supplant individual nations' decisions (and, in the Breard case, decisions of their political sub-units)?²⁸⁴

If one were to substitute American states for nations and the federal government for international institutions, this discussion about sovereignty could be seen to parallel the environmental federalism debate now raging in the United States.²⁸⁵ Broadly speaking, the states see themselves as innovators and seek to avoid federal involvement in environmental protection; the EPA seeks to ensure federal primacy and the achievement of minimum environmental protection standards. On the surface, any comparison to the international setting might seem unwarranted due to differences in legal and political dynamics. Domestic

⁽Para. v. U.S.), Request For The Indication of Provisional Measures, Order, April 9, 1998 (visited Nov. 2, 1998) http://www.icj-cij.org/idocket/idocket/ipaus/ipaus/rame.
htm>; see also Sands, supra note 280. I would be remiss if I did not acknowledge the extensive work done by my colleague, Professor Leslie Kelleher, on this case at the domestic level, and her involvement, together with Professor Sands and Professor Daniel Murphy of the Law School, in a forum held during Professor Sands's visit. For a more comprehensive discussion of this issue, see Philippe Sands, The Breard Case: From Virginia to the Hague, 11 RICH. L. 10 (1998).

^{283.} See Sands, supra note 281.

^{284.} One need only contemplate the Supremacy Clause implications of a suggestion that state and federal courts should defer to judgments of the ICJ to see the analytical quagmire ahead. See U.S. CONST. art. VI, cl. 2; see also Sands, supra note 282, at 10. See generally Frank Green, Albright Asks: Stay Execution, RICH. TIMES-DISPATCH, Apr. 14, 1998, at A1; Frank Green, Court Will Hear Advice on Breard Execution Scheduled For Tomorrow Night, RICH. TIMES-DISPATCH, Apr. 13, 1998, at B1 (discussing the argument before the Supreme Court regarding Virginia's obligations to enforce the ICJ order, including Supremacy Clause implications).

^{285. [}A] central and raging debate in environmental law focuses on the balance of power between state and federal governments and the merit of the system of so-called "cooperative federalism" that has been in place for twenty-five years and under which the federal government has taken the policy-shaping and standard-setting role for the states and their local subdivisions.

Ruhl, supra note 11, at 981; see also Buzbee, supra note 233. Scholarly treatments of this issue are listed in Ruhl, supra note 11, at 981 n.190.

states and private actors face the possibility of federal retribution if they disobey their obligations (and, of course, it is precisely this fear that drives the states to call for increased autonomy). At present, nations have no such worries about the enforcement power of any international body.²⁸⁶

Professor Sands, however, reminds us that nations are increasingly entering into binding obligations, compliance with which will have to be obtained in some fashion. He emphasizes the need to "start thinking about the [institutional] arrangements we wish to have in place in the next century" to handle environmental issues.²⁸⁷ Observing that there is no one optimal dispute resolution forum, he proposes instead the consideration of litigation in a variety of fora. He concludes his article with an energetic discussion of the potential roles of a wide range of decision making bodies, including the ICJ, Permanent Court of Arbitration, Hamburg Tribunal, and others.²⁸⁸

It is this search for a multifaceted environmental law regime that finds a parallel on the domestic level, where scholars highlight the limitations of traditional suppositions about the federal-state relationship. Professors William Buzbee and J.B. Ruhl, for instance, challenge rigid assumptions about federal and state interests in environmental protection—including generalizations about state sovereignty and federal primacy—as masking the complexity of the issues and the need for diversity in regulatory approaches.

Professor Buzbee, commenting specifically on brownfields law and policy, observes an "institutional determinism" whereby actors make simplistic and deterministic assumptions about what governments and brownfields developers think and do.²⁸⁹ To Professor Buzbee, determining which level of government should make decisions such as setting brownfields policies to

^{286.} See Sands, supra note 31; cf. Christopher D. Stone, Defending The Global Commons, in Greening International Law 34, 36 (noting that "combatting strategic behaviour and securing cooperation in the international arena is considerably more difficult than overcoming the analogous obstacles in domestic contexts" because in the latter, "dissenters—potential freeriders—can be simply forced to pay their share by law").

^{287.} Sands, supra note 31, at 1640.

^{288.} See id. at 1640-41.

^{289.} See generally Buzbee, supra note 233.

ensure subsequent purchasers' compliance with their obligations would have a complex answer; no one single institutional option would suffice. Similarly, Professor Ruhl's "complex adaptive systems" theory leads him to the comparable conclusion that traditional cooperative federalism approaches are insufficient for the environmental law of the next century. Instead, he calls for "nested, coupled levels of [regulatory] organization," featuring both traditional forms of regulation and cooperative mechanisms such as interstate compacts.

Other writers, particularly those who favor uniform federal environmental controls over decentralization and devolution,²⁹¹ might not view calls for webbed institutional relationships so favorably. Professor Sands would probably disagree with this conclusion. Like Professors Ruhl and Buzbee, he implies that centralizing regulatory authority (in this case, judicial authority to decide environmental cases) is not necessarily preferable at present to a system of institutional arrangements, however imperfect they may turn out to be. There may be a consistency problem, as maintaining coherence among decisions of different international tribunals²⁹² may be as difficult as ensuring that fifty states' brownfields programs protect the environment. This is a challenge to be identified and managed. Centralization in and of itself is not the answer.

III. CONCLUSION

The rich and varied theoretical work of the four Allen Chair Professors demonstrates that international environmental law is increasingly blended with its domestic counterparts. Its most obvious link to the domestic setting is as a source of domestic law, both directly through the requirement that domestic law conform to international agreements, and indirectly through the generation of first principles such as sustainable development. More than that, however, it reinforces cherished ideals such as public participation and, as it grows and matures into a com-

^{290.} Ruhl, supra note 11, at 982.

^{291.} See generally Howard Latin, Ideal Versus Real Regulatory Efficiency: Implementation of Uniform Standards and "Fine-Tuning" Regulatory Reforms, 37 STAN. L. REV. 1267 (1985) (arguing in favor of uniform centralized environmental controls).

^{292.} See Sands, supra note 31, at 1641.

plex regulatory regime, offers insights about our own environmental law system.

Therefore, as law becomes more global, domestic actors should pay careful attention to the growing impact of international environmental law on domestic law. The Allen Chair Professors demonstrate that there is a wide range of benefits to be recouped domestically from lessons learned on the world stage.