SYMPOSIUM

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Standing & Consensus: Globalism in *Massachusetts v. EPA*

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Massachusetts v. Environmental Protection Agency[1] (*EPA*) is a rare, potentially monumental case in the areas of standing, climate change regulation, and the degree of deference accorded in judicial review of agency action. For environmental litigation in particular, the case may prove transformative. Despite the considerable scholarly attention given to the case in the months since it was decided, three potentially crucial points have received relatively little attention: (1) the integration of an environmentalist worldview into standing analysis (by permitting a challenge to one input in an interconnected global system); (2) near embrace of scientific consensus on climate change that runs contrary to professed agency uncertainty; and (3) recognition of EPA's significant, but incomplete role in resolving a global environmental problem. On each point, *Massachusetts* supports a globalist view of environmental law by integrating global environmental concerns into cognizable challenges to domestic agency regulation.

Of its three holdings—that petitioners have standing, the Clean Air Act authorizes regulation of greenhouse gases, and EPA's reasons for declining to regulate were insufficient—standing receives the most careful attention in the Supreme Court's opinion.[2] That discussion wrestles with the feature of climate change that distinguishes it from most, if not all, environmental contexts in which the Court has ruled. Climate change is a global phenomenon. The very recognition of climate

1 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438 (2007).

2 *See id.* at 1463.

change as creating cognizable harms requires an acceptance of the interconnectedness of a global environmental system.

To review the issue presented—whether the EPA erroneously declined to regulate greenhouse gas emissions from new motor vehicles—the Court had to address a narrow and rigid standing doctrine that would seem to preclude review of a phenomenon that might be fairly characterized as "harmful to humanity at large."[3] By identifying concrete and particularized injuries traceable to climate change and potentially redressible by courts, the Court embraced a perspective on each element of standing that is fundamentally different from the narrow analysis that the Court demanded only fifteen years earlier. Recognizing a cognizable claim in *Massachusetts* required acceptance that courts may review challenges to one input into the climate system—emissions from new motor vehicles in the United States—even if the input is not itself determinative of the complete impact on the plaintiffs. Nonetheless, the opinion creates a question of how broadly the newly endorsed analysis will apply.

Similarly, the Court required a baseline against which to assess the claims, both for justiciability and on the merits. The global consensus on climate change science—its mechanisms and likely effects—provided that baseline. Rarely, if ever, has the Court so strongly endorsed a scientific position contrary to that professed by an expert agency. Whether this approach may be exported to other environmental issues remains to be seen, but the opinion provides a strong basis for arguing that widely recognized scientific interconnections within complex systems can support arguments against agency inaction premised on purported lack of knowledge about impacts.

Most broadly, *Massachusetts v. EPA* represents the first time that a majority of the U.S. Supreme Court recognized the relationship between U.S. environmental regulation and global environmental problems. In this sense, the decision is deeply globalist—it accepts jurisdiction based on the interconnection between U.S. environmental regulation and a global environmental system that is fed by many sources. This globalist

3 *Id.* at 1452 (quoting Massachusetts v. Envtl. Prot. Agency, 415 F.3d 50, 60 (D.C. Cir. 2005) (Sentelle, J., concurring in part and dissenting in part)).

view could become a stepping stone toward a new paradigm of judicial review in environmental matters of global concern.

This Article begins, in Part I, with an overview of the emergence of scientific and legal consensus (or near consensus) on the core mechanism underlying climate change and the need for regulatory action. Next, Part II provides historical background on the Supreme Court's development and application of standing doctrine, illustrating the unique difficulty of reconciling environmental cases with narrow conceptions of jurisdiction. In Part III, this Article discusses the majority opinion in *Massachusetts* and the dissent by Chief Justice Roberts on standing grounds. Part IV demonstrates the significance of *Massachusetts*' embrace of a standing theory based on interconnection in environmental systems, arguing that the analysis should apply equally to public and private plaintiffs in environmental cases. Further, Part V demonstrates the role of scientific consensus in driving the standing analysis and highlights the impact of this acceptance on lower court cases and the potential impact in other areas of environmental regulation. This part concludes by explaining the Court's broader recognition of U.S. regulation in a global context as a step toward a greater incorporation of global concerns in U.S. environmental litigation.[4]

I
CLIMATE CHANGE: SCIENTIFIC CONSENSUS, INTERNATIONAL LEGAL CONSENSUS, AND THE UNITED STATES' RESPONSE

Undoubtedly, "[c]limate change is a *global* environmental problem. Its causes, effects, and potential solutions transcend state boundaries, creating a need for international cooperation."[5] At the same time, climate change involves national and subnational causes, effects, and regulation.[6] Widespread scientific consensus exists that the anthropogenic release of

4 I will more thoroughly address incorporation of international concerns and consensus into future U.S. climate change litigation in a separate article.

5 Michele M. Betsill, *Global Climate Change Policy: Making Progress or Spinning Wheels?*, *in* THE GLOBAL ENVIRONMENT: INSTITUTIONS, LAW, AND POLICY 103, 103 (Regina S. Axelrod et al. eds., 2d ed. 2005).

6 *E.g.*, Hari M. Osofsky, *The Geography of Climate Change Litigation: Implications for Transnational Regulatory Governance*, 83 WASH. U. L.Q. 1789 (2005).

"greenhouse gases,"—including carbon dioxide, methane, and nitrous oxide, among others—accumulate in the earth's atmosphere, adding to the natural atmospheric presence of these heat-trapping gases and leading to an overall warming of the planet.[7]

The effects of rising mean global temperatures will vary by region and are not fully understood. However, in recent years, observation of events and scientific modeling have begun to suggest that linear effects (such as relatively gradual and constant rises in sea levels due to melting of glaciers and ice sheets) do not capture the full threat posed by anthropogenic climate change. Non-linear scenarios in which tipping points cause rapid climate change events present significantly less predictable dangers.[8]

Congress first formally recognized the possibility of climate change in 1978, in the National Climate Program Act, which directed further executive action to study the problem.[9] In 1987, Congress passed the Global Climate Protection Act, which directed the EPA to formulate a national policy to address climate change issues and urged diplomatic measures toward a multilateral climate agreement.[10]

Scientific and legal consensus concerning climate change has grown steadily since the 1980s.[11] Most significantly, the United Nations Intergovernmental Panel on Climate Change (IPCC) issued a series of reports that reflect the scientific community's growing confidence in the mechanisms and risks associated with

7 *See generally* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT, SUMMARY FOR POLICY MAKERS (2007), *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf [hereinafter IPCC REPORT]; NAT'L RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE: AN ANALYSIS OF SOME KEY QUESTIONS (2001).

8 IPCC REPORT, *supra* note 7, at 13–14.

9 National Climate Program Act, Pub. L. No. 95-367, 92 Stat. 601 (1978) (codified at 15 U.S.C. §§ 2901–2908 (2006)).

10 Global Climate Protection Act, Pub. L. No. 100-204, tit. xi, 101 Stat. 1331, 1407 (1987).

11 Naomi Oreskes, *The Scientific Consensus on Climate Change*, 306 SCIENCE 1686, 1686 (2004) (finding that, of the 928 peer-reviewed papers addressing "global climate change" published in the decade before 2003, none argued against the consensus position that anthropogenic greenhouse gas emissions are causing climate change).

anthropogenic climate change.[12] Most recently, IPCC's Fourth Assessment Report concluded, among other things, that "[w]arming of the climate system is unequivocal" and "[m]ost of the observed increase in globally-averaged temperatures since the mid-20th century is *very likely* due to the observed increase in anthropogenic [greenhouse gas] concentrations."[13]

Shortly after IPCC's First Assessment Report in 1990, the United States and other nations worked toward creating a comprehensive global response to climate change through a multilateral treaty regime. In 1992, 154 nations, including the United States, entered "the first international environmental agreement to be negotiated by virtually the whole of the international community," the UN Framework Convention on Climate Change (UNFCCC).[14] The UNFCCC, which was ratified by the United States Congress[15] but does not contain binding commitments to reduce emissions, explicitly seeks "stabilization of greenhouse gas concentrations in the atmosphere."[16] The UNFCCC requires parties to adopt measures and policies toward this end.[17] These measures and policies "will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions" of greenhouse gases.[18] The UNFCCC laid the groundwork for further monitoring, domestic action, and negotiation toward a binding international climate change regime.

12 *See generally* Intergovernmental Panel on Climate Change: IPCC Reports, http://www.ipcc.ch/ipccreports/index.htm (last visited Mar. 10, 2008).

13 IPCC REPORT, *supra* note 7, at 1, 5.

14 Philipe Sands, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 359 (2d ed. 2003); Donald A. Brown, *The U.S. Performance in Achieving Its 1992 Earth Summit Global Warming Commitments*, 32 ENVTL. L. REP. 10,741 (2002).

15 Brown, *supra* note 14, at 10,742 (The UNFCCC's provisions have been "agreed to by Congress and are now part of a binding treaty. They therefore constitute fully vetted U.S. promises about how it will approach global warming . . . . These UNFCCC commitments are therefore the only international obligations accepted by the United States that specifically define a national approach to global warming.").

16 United Nations Framework Convention on Climate Change art. 4, May 9, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 107, *available at* http://unfccc.int/resource/docs/convkp/conveng.pdf [hereinafter UNFCCC].

17 *Id.* art. 4(2).

18 *Id.* art. 4(2)(a).

Following IPCC's next comprehensive report in 1995, UNFCCC parties negotiated the Kyoto Protocol, which contained the first binding limitations on emissions of greenhouse gases.[19] Negotiation of UNFCCC's 1997 Kyoto Protocol involved over 150 states.[20] Despite signing the Kyoto Protocol and prominently supporting it during negotiations, the United States ultimately withdrew from the Protocol in 2001—the same year that the Natural Resources Council issued a report agreeing with IPCC's conclusions.[21] The Kyoto Protocol contains a level of detail and complexity that is unprecedented in international regulation of environmental issues.[22] The climate change regime represents the cutting edge of international environmental law, both in terms of overwhelming consensus on policy goals and the sophistication of international mechanisms agreed to by most states.

Since its withdrawal from the Kyoto Protocol, U.S. climate change policy has relied upon voluntary measures. Those measures include supposed incentives for domestic private sector emissions reductions and bilateral negotiations to encourage emissions reductions in other nations.[23] Currently, the international community is negotiating toward a post–Kyoto agreement.[24] Whether the United States will ultimately agree to binding international commitments is not clear.

One of the most direct avenues for challenging the existing lack of a binding response to climate change at the federal level is to claim that greenhouse gases should be regulated as pollutants under the Clean Air Act (CAA).[25] In 1998, EPA

19 Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22 (1998).

20 Philippe Sands & Jacqueline Peel, *Environmental Protection in the Twenty-first Century: Sustainable Development and International Law*, *in* THE GLOBAL ENVIRONMENT 43, 44 (Regina S. Axelrod et. al eds., 2d ed. 2005).

21 Douglas Jehl, *U.S. Going Empty-Handed to Meeting on Global Warming*, N.Y. TIMES, Mar. 29, 2001, at A22; *see* NAT'L RESEARCH COUNCIL, *supra* note 7.

22 Sands & Peel, *supra* note 20, at 48.

23 Several significant subnational efforts have emerged to fill the void. *See, e.g.*, Regional Greenhouse Gas Initiative: An Initiative of the Northeast and Mid-Atlantic States of the U.S., http://www.rggi.org/ (last visited Jan. 18, 2008).

24 *See, e.g.*, *Bali Roadmap*, EARTH NEGOTIATIONS BULL. (Int'l Inst. for Sustainable Dev.), Dec. 18, 2007, at 15, *available at* http://www.iisd.ca/download/pdf/enb12354e.pdf.

25 Clean Air Act, 42 U.S.C. §§ 7401–7671q (2006).

General Counsel Jonathan Cannon issued a memorandum opining that carbon dioxide met the legal definition of a pollutant under the CAA.[26] In 1999, approximately twenty environmental organizations and renewable energy proponents filed a petition with the EPA seeking regulation of carbon dioxide as a pollutant under the CAA.[27] A similar number of industry organizations opposed the petition. Also in 1999, EPA General Counsel Gary Guzy concluded that the CAA authorized the EPA to regulate carbon dioxide.[28]

In August 2003, the EPA denied the petition for rulemaking and determined it did not have authority to regulate carbon dioxide under the CAA.[29] EPA General Counsel Robert Fabricant simultaneously withdrew the Cannon memorandum and concluded that the CAA does not authorize the EPA to regulate carbon dioxide.[30]

In October 2003, a coalition of states, cities, and environmental groups commenced *Massachusetts v. EPA* to challenge EPA's denial of the petition. Ten states and numerous industry organizations joined the suit as intervenors in support of EPA's decision not to regulate carbon dioxide.[31] Among the biggest hurdles to the success of this action-forcing litigation on climate change was the doctrine of standing.[32] As

26 Memorandum from Jonathan Z. Cannon, Gen. Counsel, Envtl. Prot. Agency, to Carol M. Browner, Adm'r, Envtl. Prot. Agency (Apr. 10, 1998), *available at* http://www.virginialawreview.org/inbrief/2007/05/21/cannon-memorandum.pdf.

27 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438, 1446 (2007).

28 *Is CO_2 a Pollutant and Does EPA Have the Power to Regulate It?: Joint Hearing Before the Subcomm. on National Economic Growth, Natural Resources, and Regulatory Affairs of the House Comm. on Government Reform and Subcomm. on Energy and the Environment of the House Comm. on Science*, 106th Cong. 3–4 (1999) (statement of Gary S. Guzy).

29 Control of Emissions From New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, 52,925 (Sept. 8, 2003).

30 Memorandum from Robert E. Fabricant, Gen. Counsel, Envtl. Prot. Agency, to Marianne L. Horinko, Acting Adm'r, Envtl. Prot. Agency (Aug. 28, 2003), *available at* http://www.icta.org/doc/FabricantMemoAug282003.pdf.

31 *Massachusetts*, 127 S. Ct. at 1446.

32 Cases addressing standing prior to the Supreme Court's opinion in *Massachusetts* came out both ways. *See, e.g.*, Nw. Envtl. Def. Ctr. v. Owens Corning Corp., 434 F. Supp. 2d 957, 971 (D. Or. 2006) (finding plaintiffs had standing to bring suit); Connecticut v. Am. Elec. Power Co., 406 F. Supp. 2d 265, 274 (S.D.N.Y. 2005) (dismissing action because plaintiffs did not have standing). For a pre-*Massachusetts* discussion of standing in climate change cases, see Bradford C.

discussed below, the evolution of the standing doctrine has unnecessarily restricted federal courts from hearing issues on the cutting edge of environmental concern.

II
THE DEVELOPMENT OF STANDING DOCTRINE AND ITS INITIAL APPLICATION IN ENVIRONMENTAL CASES

A. Origins and Early Understanding of Standing

Massachusetts is a case concerned with the core limitations of federal court jurisdiction as created by Article III of the Constitution. Article III, Section 2 provides that "[t]he judicial power shall extend to . . . Cases . . . [and] Controversies."[33] Prior to the twentieth century, parties were understood to be able to access federal courts if a law provided for such access (a cause of action).[34] Indeed, "for the first 150 years of the Republic—the Framers, the first Congresses, and the Court were oblivious to the modern conception either that standing is a component of the constitutional phrase 'cases or controversies' or that it is a prerequisite for seeking governmental compliance with the law."[35] Indeed, far from articulating rigid standing requirements and "contrary to modern fastidiousness about saddling courts with 'nonjudicial' business, Congress in the early years of the Republic seemed to have little hesitation in using courts or judicial personnel as administrators."[36]

Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL. L. 1 (2005).

33 U.S. CONST. art. III, § 2, cl. 1.

34 Cass R. Sunstein, *What's Standing After* Lujan*? Of Citizen Suits, "Injuries," and Article III*, 91 MICH. L. REV. 163, 177 (1992). "There is absolutely no affirmative evidence that Article III was intended to limit congressional power to create standing . . . . [T]he claim that Article III bars citizen standing—once Congress has created it—seems most adventurous as a matter of history." *Id.* at 178.

35 Steven L. Winter, *The Metaphor of Standing and the Problem of Self-Governance,* 40 STAN. L. REV. 1371, 1374 (1988) (reaching the conclusion based on "a painstaking search of the historical material").

36 Jerry L. Mashaw, *Recovering American Administrative Law: Federalist Foundations, 1787–1801*, 115 YALE L.J. 1256, 1331 (2006). Mashaw recounts, among other examples, a 1790 statute requiring district judges to appoint three mariners to inspect vessels upon petition by the crew. *Id.*

The concept of standing can be traced to early twentieth century cases. Beginning in 1922, several cases held that individual citizens could not challenge the constitutionality of statutes unless they held a personal stake in their implementation (beyond paying taxes).[37] However, in the mid-1930s, leading texts on Article III power still did not discuss the concept of standing.[38]

"Standing" as a doctrine developed in conjunction with the emergence of the modern administrative state.[39] The Administrative Procedure Act (APA),[40] passed in 1946, created a framework for accessing the courts for review of agency action that comports with the "legal injury" conception of standing. It provides: "[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof."[41] In other words, citizens have standing if their common law or statutory interests are at stake, or if a statute specifically confers standing upon them.[42]

Administrative law further drove the development of standing doctrine as courts responded to a growing perception of agency capture by recognizing that beneficiaries of regulations, as well as regulated entities, could suffer legal injuries resulting from agency action.[43] A significant case in the development of modern environmental law, *Scenic Hudson Preservation Conference v. Federal Power Commission*,[44] illustrates the recognition that a legal wrong under the APA could include injuries suffered from failure to properly regulate. The Second Circuit reasoned:

> In order to insure that the Federal Power Commission will adequately protect the public interest in the aesthetic, conservational, and recreational aspects of power

37 *See, e.g.*, Massachusetts v. Mellon, 262 U.S. 447, 487–89 (1923); Fairchild v. Hughes, 258 U.S. 126, 129 (1922).

38 Winter, *supra* note 35, at 1376 n.23.

39 Sunstein, *supra* note 34, at 179.

40 Administrative Procedure Act, 5 U.S.C. §§ 551–559, 701–706 (2006).

41 5 U.S.C. § 702 (2006).

42 Sunstein, *supra* note 34, at 183–84.

43 *See id.* at 184.

44 Scenic Hudson Pres. Conference v. Fed. Power Comm'n, 354 F.2d 608, 615–17 (2d Cir. 1965).

> development, those who by their activities and conduct have exhibited a special interest in such areas, must be held to be included in the class of "aggrieved" parties under [the Federal Power Act judicial review provision]. We hold that the Federal Power Act gives petitioners a legal right to protect their special interests.[45]

One case in the vein of protecting regulatory beneficiaries, *Association of Data Processing Service Organizations, Inc. v. Camp*, transformed the concept of injury from one of "legal injury"[46] to the now-commonly-known concept of "injury in fact." In an opinion that has been described as "remarkably sloppy,"[47] but has nonetheless been extremely influential, Justice William O. Douglas sought to widen the courthouse doors by permitting access to anyone who suffered an "injury in fact" and was "arguably within the zone of interests" of the statute under which the regulations at issue were promulgated.[48] Shortly thereafter, the Court articulated the need for a causal link between the defendant's action and the injury, as well as a demonstration that the court could redress the harm.[49]

With some notable exceptions, standing in federal courts has been grounded largely in a private law, dispute resolution-model of litigation typified by a standard personal injury case. Yet, "[a]ll public enforcement of law, including environmental citizen suits, serves a public education function by highlighting the values society chooses to protect."[50] Thus, a conception of standing based on this public law understanding of adjudication as an elucidation and enforcement of social values would look to "whether the common law, a statute, or the Constitution grants the plaintiff a cause of action, not whether the plaintiff has

45 *Id.* at 616.

46 Ass'n of Data Processing Serv. Orgs., Inc. v. Camp, 397 U.S. 150, 151 (1970).

47 Sunstein, *supra* note 34, at 185.

48 *Data Processing*, 397 U.S. at 153.

49 According to Steven Winter, "[t]he causation/redressibility requirement first appeared in *Linda R. S. v. Richard D.*, 410 U.S. 614, 617–18 (1973), and was constitutionalized in *Warth v. Seldin*, 422 U.S. 490, 504 (1975)." Winter, *supra* note 35, at 1373 n.9.

50 Robin Kundis Craig, *Removing "The Cloak of a Standing Inquiry": Pollution Regulation, Public Health, and Private Risk in the Injury-in-Fact Analysis*, 29 CARDOZO L. REV. 149, 184 (2007).

suffered some particular form of personal harm."[51] Professor Daniel Farber has identified the tension between this private law model and the public law paradigm of litigation, exemplified by school desegregation cases, as underlying the puzzling and difficult aspects of applying modern standing doctrine.[52] The challenge presented to the traditional, private law model of litigation is apparent in many administrative law cases, particularly where citizens sue regulators to retain or ensure benefits from regulatory action. Moreover, when the suit involves protection of the environment, the injury-causation-redressability concepts may be even further removed from the direct physical or financial injuries underlying tort and contract litigation. Perhaps for this reason, many significant developments in standing doctrine since its modern articulation in the 1970s have grown from environmental cases.

B. Environmental Standing

The passage of major environmental statutes in the early 1970s included creation of innovative "citizen suit" provisions designed to provide an avenue for the public to challenge agency and industry actions impacting the environment. The CAA, for example, provides that "any person may commence a civil action on his own behalf" against an entity violating the Act or "against the [agency] where there is alleged a failure of the [agency] to perform any act or duty under this chapter which is not discretionary."[53]

From the early 1970s onward, environmental law cases have played a large role in the development of standing jurisprudence. In 1972, the Court applied the "injury in fact" test of *Data Processing* and dismissed on standing grounds a Sierra Club challenge to development in the Sierra Nevada Mountains for failure to demonstrate that the plaintiffs

51 Daniel A. Farber, *Environmental Litigation After* Laidlaw, 30 ENVTL. L. REP. 10,516, 10,518 (2000).

52 *Id.*

53 42 U.S.C. § 7604(a) (2006). One of the provisions that underlies the *Massachusetts* case states such a non-discretionary duty: "The Administrator shall by regulation prescribe . . . standards applicable to . . . any air pollutant from any class . . . of new motor vehicle[s] . . . which in his judgment cause . . . air pollution which may reasonably be anticipated to endanger public health . . . ." 42 U.S.C. § 7521(a)(1).

themselves would suffer injury.[54] Yet, the Court explicitly recognized that "[a]esthetic and environmental well-being . . . are important ingredients of the quality of life in our society" and damage to those interests "may amount to an 'injury in fact' sufficient to lay the basis for standing under § 10 of the APA."[55] Justice Blackmun, in dissent, would have gone further. He argued for an "imaginative expansion of our traditional concepts of standing in order to enable an organization . . . [with] pertinent, bona fide, and well-recognized attributes and purposes in the area of environment" to have standing to litigate environmental issues.[56] Justice Douglas, dissenting, would have "allowed environmental issues to be litigated before federal agencies or federal courts in the name of the inanimate object about to be despoiled . . . where injury is the subject of public outrage."[57]

Among the distinguishing and animating features of environmentalism, and thus to some extent the application of environmental law, is the concept of ecological interdependence. As Jonathan Cannon recently explained: "Environmentalists share a belief that humans and things in nature are closely interconnected and that human intervention affecting one part of a human-natural system can be expected to have deleterious effects elsewhere in the system."[58] If accepted, this "ecological model" has important implications for standing. Litigation to combat harm in terms of this ecological model requires acceptance of injury-causation-redressability relationships foreign to the private law, dispute resolution-centered approach.

The Supreme Court came closest to endorsing such an ecological model of standing in *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*.[59] In that

54 Sierra Club v. Morton, 405 U.S. 727, 733–35 (1972).

55 *Id.* at 734.

56 *Id.* at 757 (Blackmun, J., dissenting).

57 *Id.* at 741 (Douglas, J., dissenting); *see also* Christopher D. Stone, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450 (1972) (the most famous articulation of this proposal for grounding standing in non-human interests, which Justice Douglas cited in his dissent).

58 Jonathan Cannon, *Environmentalism and the Supreme Court: A Cultural Analysis*, 33 ECOLOGY L.Q. 363, 369 (2006).

59 United States v. Students Challenging Regulatory Agency Procedures (SCRAP), 412 U.S. 669 (1973).

case, the Court held that the trial court correctly denied a motion to dismiss on the ground that plaintiffs' pleadings, if proved, established standing for a challenge to railroad rate adjustments by users of the environment around the Washington, D.C. area.[60] The plaintiffs argued that the change would lead to a decrease in recycling and an attendant increase in resource consumption and pollution by manufacturers.[61] In *SCRAP*, the Court concluded that the plaintiffs had "alleged a specific and perceptible harm that distinguished them from other citizens who had not used the natural resources that were claimed to be affected."[62] Although the *SCRAP* Court acknowledged that the injury alleged was attenuated, it reasoned that the defendants had not challenged the truth of the allegations and that the matter was decided on a motion to dismiss.[63] It was, therefore, little more than a tentative embrace of a system-based theory of standing.

Throughout the 1970s and 1980s, environmentalists used citizen suit provisions of major environmental statutes to challenge agency actions that threatened the future of environmental law. These suits were particularly important in the 1980s as environmentalists sought to counteract the hostility of Reagan administration officials to environmental regulation.[64]

III
STANDING NARROWS

In the 1990s, standing became sharply more restrictive. This occurred most notably in *Lujan v. Defenders of Wildlife*.[65] Like *Massachusetts*, *Defenders* involved challenges to government action concerning international environmental issues.

60 *Id.* at 685.

61 *Id*. at 679–80. A later majority opinion by Chief Justice Rehnquist described *SCRAP* as "[p]robably the most attenuated injury conferring Article III standing" and "the very outer limit of the law." Whitmore v. Arkansas, 495 U.S. 149, 158, 159 (1990). On Chief Justice Rehnquist's view of environmental law, see James R. May & Robert L. Glicksman, *Justice Rehnquist and the Dismantling of Environmental Law*, 36 ENVTL. L. REP. 10,585 (2006).

62 *SCRAP*, 412 U.S. at 689.

63 *See id.* at 688–90.

64 *E.g.*, Nancy S. Marks, *Citizen Enforcement of Environmental Laws*, 29 ENV'T 5 (June 1987).

65 Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).

A. Lack of Globally Significant Environmental Precedent

The U.S. Supreme Court has rarely addressed environmental issues of global or even international concern. In no instance prior to *Massachusetts* has the Court discussed the importance of global environmental concerns to federal regulation. This section will briefly highlight some of the Court's earlier jurisprudence addressing international environmental issues, in which the Court has generally upheld federal action.

Perhaps the first international environmental law case to reach the Supreme Court was *Missouri v. Holland*, in which the Court upheld the Migratory Bird Treaty Act—a statute implementing the Migratory Bird Treaty—on the basis of the federal treaty power.[66] In the opinion, Justice Holmes described migratory birds as "a national interest of very nearly the first magnitude . . . [that] can be protected only by national action in concert with that of another power."[67]

In 1986, the Court issued perhaps its first opinion concerning global environmental issues, *Japan Whaling Association v. American Cetacean Society*.[68] The case involved a congressional requirement that the Secretary of Commerce certify to the President when a foreign country diminishes the effectiveness of an international fishery conservation program.[69] Conservationists argued that Japanese actions diminished the effectiveness of the International Convention for the Regulation of Whaling and commenced litigation to compel certification.[70] The district court and Court of Appeals held that certification was required; the Supreme Court reversed.[71]

Notably, in *Japan Whaling*, the Court concluded that the issue was justiciable despite an argument by the Japanese petitioners that it involved a nonjusticiable political question.[72] The Court

66 Missouri v. Holland, 252 U.S. 416 (1920).

67 *Id.* at 435.

68 Japan Whaling Ass'n v. Am. Cetacean Soc'y, 478 U.S. 221 (1986). Justice Marshall, in dissent, characterized whaling as an issue of "intense worldwide concern." *Id.* at 242 (Marshall, J., dissenting).

69 *Id.* at 226 (majority opinion).

70 *Id.* at 228–29. *See also* International Convention for the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, 161 U.N.T.S. 72.

71 *Japan Whaling*, 478 U.S. at 228–29.

72 *Id.* at 229.

reasoned that the issue at hand was an interpretation of the statute requiring certification and that "we cannot shirk this responsibility merely because our decision may have significant political overtones."[73] The Article III issues of injury, causation and redressability were not raised. On the merits, however, the Court invoked *Chevron* deference to uphold the Secretary's determination that certification was not automatically required because the petitioners were undisputedly violating the Convention.[74]

B. Lujan v. Defenders of Wildlife

The next major case involving global environmental concerns, *Lujan v. Defenders of Wildlife*, would reveal the power of the standing doctrine to remove U.S. courts from international environmental issues addressed by federal agencies.[75] The lead opinion reflects a theory of standing developed by Justice Antonin Scalia at least a decade earlier.

In 1983, then-Judge Scalia presented a controversial and historically questionable[76] portrait of standing in his article, "The Doctrine of Standing as an Essential Element of the Separation of Powers."[77] Drawing on several cases, beginning with *Marbury v. Madison*,[78] Scalia argues against the "overjudicialization of the process of self-governance."[79] He calls for a return to "the traditional requirement that the plaintiff's alleged injury be a particularized one, which sets him apart from the citizenry at large."[80] In Scalia's view, standing in administrative law should be limited primarily to the objects of regulation in order to prevent the courts from prescribing agency actions designed to

73 *Id.* at 231.

74 *Id.* at 233 (citing Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843 (1984)).

75 *See* Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).

76 *See, e.g.*, Sunstein, *supra* note 34, at 214 ("As a matter of history . . . Scalia's claim is not sound; in fact, it is baseless.").

77 Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers.*, 17 SUFFOLK U. L. REV. 881 (1983).

78 Marbury v. Madison, 5 U.S. (1 Cranch) 137 (1803).

79 Scalia, *supra* note 77, at 881.

80 *Id.* at 881–82.

serve the interests of the majority.[81] Although Scalia recognizes that a "legal rights" concept of standing prevailed into the 1970s, he views that concept through a private-law lens that frequently would not permit the beneficiaries of regulation to gain access to the courts despite statutory authorization.[82] He grounds his standing analysis in constitutional separation of powers concerns.

The view of standing articulated by then-Judge Scalia stands in opposition to the ecological world view's assessment of systemic effects related to a multitude of inputs. Scalia's conception of standing also has grave implications for the justiciability of globally important environmental issues affected by domestic regulation.

Lujan v. Defenders of Wildlife involved the application of the Endangered Species Act[83] to foreign aid decisions that could hasten the extirpation of species throughout the globe.[84] Justice Scalia, writing for a majority, determined that the plaintiffs failed to demonstrate sufficient injury because their standing affidavits:

> [P]lainly contain no facts . . . showing how damage to the species will produce "imminent" injury to [them]. That the women "had visited" the areas of the projects before the projects commenced proves nothing. . . . Past exposure to illegal conduct does not in itself show a present case or controversy regarding injunctive relief . . . if unaccompanied by any continuing, present adverse effects. And the affiants' profession of an "inten[t]" to return to the places they had visited before—where they will presumably, this time, be deprived of the opportunity to observe animals of the endangered species—is simply not enough. Such "some day" intentions—without any description of concrete plans, or indeed even any specification of *when* the some day will be—do not support a finding of the "actual or imminent" injury that our cases require.[85]

81 *Id.* at 894. For a very effective refutation of these claims, see Sunstein, *supra* note 34.

82 *See* Scalia, *supra* note 77, at 897.

83 Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1534 (2006).

84 Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).

85 *Id.* at 564 (internal quotation marks and citations omitted) (emphasis in original).

Justice Scalia also explicitly (and derisively) rejected systemic theories of standing, which averred that standing existed because of the nexus between the alleged injuries to the species and the plaintiffs' use of related ecosystems, the plaintiffs' interest in the species, and the plaintiffs' professional interest in the species.[86]

Writing for a plurality of the Court, Justice Scalia also concluded that the plaintiffs failed to demonstrate redressability. He reasoned that the Court could only order the Fish and Wildlife Service to require consultation by regulation, but it was not clear whether agencies providing foreign aid would be bound to follow such regulation.[87] He also relied on the limited percentage of aid that flows from U.S. agencies for any given project—observing that removal of such aid might not stop the project—to conclude that redressability was not shown.[88]

Finally, Justice Scalia, writing a section adopted by the majority, rejected a view of citizen suits that would afford standing on a procedural rights theory,[89] although he did observe in a footnote that standing may be relaxed in certain "procedural rights" cases.[90] He rejected an effort to distinguish taxpayer standing and similar cases based on the fact that those cases involved a purported constitutional right, whereas the *Defenders* plaintiffs sought enforcement of a statutory duty.[91]

In one of the more revealing passages in *Defenders*, Justice Scalia reasoned that regulatory beneficiaries ordinarily should face a much higher burden to show standing, effectively suggesting that courts should be more solicitous of regulated polluters than the environmentalist public. He stated:

> When the suit is one challenging the legality of government action or inaction, the nature and extent of facts that must be averred (at the summary judgment stage) or proved (at the trial stage) in order to establish standing depends considerably upon whether the plaintiff is himself an object of the action (or forgone action) at issue. If he is, there is ordinarily little question that the action or inaction has caused him injury, and that a judgment preventing or requiring the action will redress

86 *Id.* at 565–67.

87 *Id.* at 568–71.

88 *Id.* at 571.

89 *Id.* at 571–73.

90 *Id.* at 571 n.7.

91 *Id.* at 573–76.

> it. When, however, as in this case, a plaintiff's asserted injury arises from the government's allegedly unlawful regulation (or lack of regulation) of *someone else*, much more is needed. In that circumstance, causation and redressability ordinarily hinge on the response of the regulated (or regulable) third party to the government action or inaction—and perhaps on the response of others as well.[92]

Thus, Justice Scalia's opinion in *Defenders* can be understood to reject standing on at least two theoretical bases, both of them unfavorable to environmental interests and particularly global environmental concerns. The opinion employs a strictly localist approach to the nexus between the plaintiff and the alleged harm,[93] and it makes regulatory beneficiary standing contingent on the response of regulated entities.

Justice Kennedy, writing separately, agreed that the plaintiffs had not demonstrated an injury.[94] He noted, "it may seem trivial to require that [plaintiffs] acquire airline tickets to the project sites or announce a date certain upon which they will return," but he was apparently not troubled by that implication.[95] Importantly, however, Justice Kennedy concluded that standing had not been demonstrated through a much more contextual, ad hoc analysis than Justice Scalia's opinion and that "in different circumstances a nexus theory similar to those proffered here might support a claim to standing."[96] Further, Justice Kennedy did not join the redressability analysis and, although he concurred in the rejection of a procedural rights theory in this case, he urged that "[a]s [g]overnment programs and policies become more complex and farreaching, we must be sensitive to the articulation of new rights of action that do not have clear analogs in our common-law tradition."[97] He observed: "Modern

92 *Id.* at 561–62 (emphasis in original).

93 *See* Daniel A. Farber, *Stretching the Margins: The Geographic Nexus in Environmental Law*, 48 STAN. L. REV. 1247, 1249–54 (1996).

94 *Defenders*, 504 U.S. at 579–81 (Kennedy, J., concurring). Justice Stevens disagreed with both the injury and redressability analysis, although he concurred on different grounds. *Id.* at 581–85 (Stevens, J., concurring). Justices Blackmun and O'Connor dissented.

95 *Id.* at 579 (Kennedy, J., concurring).

96 *Id.* at 579 (citing Japan Whaling Ass'n v. Am. Cetacean Soc'y, 478 U.S. 221, 231 n.4 (1986)).

97 *Id.* at 580.

litigation has progressed far from the paradigm of Marbury suing Madison to get his commission."[98]

As in many other areas, Justice Kennedy has become a central swing vote in environmental standing cases. In fact, "[e]ver since joining the Court in 1987, Justice Kennedy has been the most significant Justice in environmental cases, at least to the extent that he has been in the majority more often than any other Justice, often providing the decisive fifth vote."[99] The importance of his concurrence in *Defenders*, while not necessarily clear in 1992, has gained prominence through *Massachusetts*.[100]

Some commentators, such as Cass Sunstein, argued vigorously that the strict standing doctrine announced by Justice Scalia in *Defenders* had no foundation in history or the Constitution.[101] Nonetheless, Justice Scalia's opinion—tempered somewhat by Justice Kennedy's concurring opinion—drove discussion of standing doctrine for years. It has thus far served as a definitive death-knell for a broad public law conception of standing in environmental cases adjudicated by the federal courts. *Defenders* remains the Court's strongest endorsement of a rigid, fact-based, localist injury inquiry and rejection of legislative power to create standing as a matter of constitutional law.

Chief Justice Roberts was in the Justice Department at the time of *Defenders* and, shortly after entering private practice in 1993, authored an essay strongly supporting Justice Scalia's opinion.[102] He reasoned:

> If Congress directs the federal courts to hear a case in which the requirements of Article III are not met, that Act of Congress is unconstitutional. *Defenders* is apparently the first Supreme Court case to so hold because of lack of Article III

98 *Id.* (citing Marbury v. Madison, 5 U.S. (1 Cranch) 137 (1803)).

99 Richard J. Lazarus, *Human Nature, the Laws of Nature, and the Nature of Environmental Law*, 24 VA. ENVTL. L.J. 231, 250 (2005).

100 *See infra* Part V.A.

101 Sunstein, *supra* note 34, at 214; *see also* Philip Weinberg, *Are Standing Requirements Becoming a Great Barrier Reef Against Environmental Actions?*, 7 N.Y.U. ENVTL. L.J. 1, 12 (1999) ("[T]he Court in [*Defenders of Wildlife*] and [*Steel Co.*] inflated Article III's case or controversy mandate beyond any conceivable intent on the part of the founders.").

102 John G. Roberts, Jr., *Article III Limits on Statutory Standing*, 42 DUKE L.J. 1219 (1993).

> standing, but the conclusion that Article III limits congressional power can hardly be regarded as remarkable.[103]

The deeper issue is whether Article III rigidly constrains the federal judiciary to a narrow dispute resolution function. By deciding this question in the affirmative, *Defenders* was an obvious and widely recognized restriction of standing for regulatory beneficiaries, particularly environmental interests.[104]

Justice Scalia authored a similarly restrictive plurality opinion in *Steel Co. v. Citizens for a Better Environment*.[105] In that case, the Court held that a claim asserted by private plaintiffs under the citizen suit provision of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA)[106] was not justiciable because it lacked redressability.[107] The defendant had undisputedly violated the requirements of EPCRA.[108] Justice Scalia's plurality opinion dismissed the citizen action by rejecting arguments that redressability would be satisfied by declaratory relief, an order authorizing the plaintiff to inspect the defendant's facility, an order compelling the defendant to provide the plaintiff with compliance reports, assessment of civil penalties against defendant or an award of litigation costs to the plaintiff.[109] In essence, Justice Scalia's opinion suggested that past violations of an environmental statute are not justiciable unless the plaintiff can point to a direct and personal benefit that would flow from successful litigation.[110]

The environmental community, among others, welcomed the softening of *Defenders*' approach to standing that came in *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc*.[111] In that case, the Court held that an environmental

103 *Id.* at 1226.

104 *See, e.g.*, Sunstein, *supra* note 34; Gene R. Nichol, Jr., *Justice Scalia, Standing, and Public Law Litigation*, 42 DUKE L.J. 1141 (1993).

105 Steel Co. v. Citizens for a Better Env't, 523 U.S. 83 (1998).

106 Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §§ 11001–11050 (2006).

107 *Steel Co.*, 523 U.S. at 105.

108 *Id.* at 87–88.

109 *Id.* at 105–08.

110 *See id.* at 127 (Stevens, J., concurring).

111 Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167 (2000). *See generally* Farber, *supra* note 51; Alberto B. Lopez, Laidlaw *and the Clean Water Act: Standing in the Bermuda Triangle of Injury in Fact, Environmental*

group demonstrated standing by providing affidavits from its members attesting that they did not use a river for recreation because of the polluted smell and appearance, attributable to Laidlaw's discharges in violation of the Clean Water Act.[112] The majority reasoned that civil penalties, paid to the government, were sufficient to demonstrate redressability "[t]o the extent that they encourage defendants to discontinue current violations and deter them from committing future ones."[113] Justices Scalia and Thomas, in dissent, disagreed with all three prongs of the majority's standing analysis.[114] The primary significance of the majority opinion is that, compared with the lead opinions in *Defenders* and *Steel Co.*, it "broaden[ed] the concepts of injury and redressability enough to provide reasonable protection for public values" while retaining a private law, dispute-resolution model of the judicial role.[115]

In sum, while *Defenders* grounded a strict, private law concept of standing in Article III, *Laidlaw* suggested that the Court was struggling to reconcile this rigid test with the need to recognize and vindicate public values expressed through environmental laws. *Laidlaw*'s impact on suits against government defendants was unclear, however, because it involved an action against a polluter, whereas *Defenders* involved a suit by regulatory beneficiaries against an agency. Further, *Laidlaw* turned on a discrete local injury, whereas the *Defenders* plaintiffs sought recognition of a diffuse, internationally important harm. Thus, a high probability existed that in cases mirroring those aspects of *Defenders*, plaintiffs could not prove standing. *Massachusetts* was such a case.

Harm, and "Mere" Permit Exceedances, 69 U. CIN. L. REV. 159 (2000); Emily Longfellow, Friends of the Earth v. Laidlaw Environmental Services*: A New Look at Environmental Standing*, 24 ENVIRONS ENVTL. L. & POL'Y J. 3, 5 (2000) ("While the Court does not return to the initial receptive welcome it gave environmental plaintiffs in the early 1970s, *Laidlaw* signals that plaintiffs will no longer be denied access to court due to an overly stringent application of standing.").

112 *Laidlaw*, 528 U.S. at 182–83.

113 *Id.* at 186.

114 *Id.* at 198 (Scalia, J., dissenting).

115 Farber, *supra* note 51, at 10,520.

C. Environmental Standing in the Court: Some Pre- Massachusetts *Conclusions*

To a large extent, "the Court's standing doctrine and its environmental jurisprudence have evolved together."[116] Despite the major role played by environmental law in the development of standing since the 1970s, some commentators contend that the Court has failed to adequately address the significance of environmental law's development for other areas of law.

Commenting on the unprecedented insight into Court deliberations provided by the release of Justice Blackmun's papers, Professor Richard Lazarus observes that, "wholly absent from both the public and now private documents is any significant awareness by any member of the Court of the distinctive nature of environmental law and the import of its emergence on other intersecting areas of law."[117] He also observes that "[t]he vast majority of environmental law cases before the Supreme Court are . . . focused on jurisdictional disputes between competing lawmaking authorities."[118]

For most of the roughly 35-year history of modern statutory environmental law, the Court has "seize[d] on the kinds of jurisdictional disputes that dominate much of environmental law without any appreciation for how and why the disputes are raised."[119] For example, Professor Jody Freeman notes that in deciding *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*,[120] which involved a controversial environmental law question (although it is best known for its approach to judicial review of agency decisions), the Court "fail[ed] to engage meaningfully with the environmental implications of the case."[121] Thus, when addressing potentially ground-breaking

116 Cannon, *supra* note 58, at 381 (noting that "[m]any if not most of the Court's important standing decisions over the past thirty years have come in environmental cases").

117 Lazarus, *supra* note 99, at 257.

118 *Id.* at 241–42, 247 ("The vast majority of environmental law cases before the Supreme Court are . . . focused on jurisdictional disputes between competing lawmaking authorities.").

119 *Id.* at 248.

120 Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984).

121 Jody Freeman, *The Story of* Chevron*: Environmental Law and Administrative Discretion*, *in* ENVIRONMENTAL LAW STORIES 171, 195 (Richard J. Lazarus & Oliver A. Houck eds., 2005).

problems in environmental disputes, the Court has generally focused on non-environmental aspects of the cases and, it seems, sought to limit the extent to which environmental law creates changes in other areas of law. Thus, the apparent disconnect between an ecologically attuned worldview and standing doctrine may result from an inadequate synthesis of the unique features of environmental law into the intersecting doctrine of standing.

Further, certain Justices, most notably Justice Scalia, exhibit a nearly overt hostility to environmental values.[122] They "have worked to narrow standing as a way of limiting access to the courts for those purporting to represent the 'public interest.'"[123] Their view of standing can be understood as a "reject[ion of] an ecological world view" or, perhaps more importantly for development of constitutional law, an effort "to limit [the ecological world view's] implications for institutional arrangements between branches of government, between state and federal governments, and between governments and individual property owners."[124] Given the rise of global environmental problems and the internationally significant context of *Defenders*, one can add the relationship of global concerns to domestic agency decisions to the list of institutional implications of environmental litigation that the *Defenders* majority sought to limit. Thus, Justice Scalia's opinion seems an effort to cabin the impact of environmental law and values by limiting the ability to challenge environmentally deleterious agency decisions. To put it more forcefully, as Justice Blackmun wrote in *Defenders*, Justice Scalia's opinion "amounts to a slash-

122 For example, commenting on *Defenders* in a systematic assessment of the Court's environmental cases, Jonathan Cannon observes:

> [I]n the world evoked by Justice Scalia in [*Defenders*], effects of actions are presumed to be discrete, limited to particular locales and indeed individual creatures. Justice Scalia's rhetorically heightened castigation of the various 'nexus' theories seemed intended to marginalize, if not reject entirely, injury arguments based on the genetic commons or on ecosystem effects and the interdependence model that those arguments assume.

Cannon, *supra* note 58, at 384; *see also* Farber, *supra* note 93, at 1251–52.

123 Cannon, *supra* note 58, at 380.

124 *Id.* at 407.

and-burn expedition through the law of environmental standing."[125]

Defenders' impact on the theory underlying environmental standing is fundamentally important.[126] It limited the potential for environmental cases to have a transformative impact on other areas of the law by demanding conformity with an ill-fitting and unnecessary concept of judicial authority.[127]

Several years after *Defenders*, retired D.C. Circuit Judge Patricia Wald characterized that case as a "jurisprudential wonder" and stated that "it is truly time to reconceptualize environmental standing. . . . [S]urely the incorporation into our law of more realistic notions of which affected persons or communities have the right to protest environmental violations

125 Lujan v. Defenders of Wildlife, 504 U.S. 555, 606 (1992) (Blackmun, J., dissenting). Interestingly, Justice Blackmun closed his opinion with a quotation from *Marbury v. Madison*, the most foundational case relied upon by Justice Scalia for his more restrictive view: "[T]he very essence of civil liberty certainly consists in the right of every individual to claim the protection of the laws, whenever he receives an injury." *Id.* (quoting Marbury v. Madison, 5 U.S. (1 Cranch) 137, 163 (1803)).

126 *See, e.g.*, Weinberg, *supra* note 101, at 12 ("The distortion of . . . Article III in environmental litigation will, if unchecked, greatly hamstring enforcement of laws aimed at safeguarding public health . . . ."). The practical impact of *Defenders* on citizen suits is unclear. One commentator argued:

> Jurisdictional hurdles erected by the Supreme Court have fundamentally altered the concept of the citizen suit . . . . [T]he environmental citizen plaintiff must have the resources and capacity to extensively research and allege proof of a direct and personalized injury, that the injury is ongoing, and that the form of relief is recognized by the Supreme Court.

Cassandra Stubbs, *Is the Environmental Citizen Suit Dead? An Examination of the Erosion of Standards of Justiciability for Environmental Citizen Suits*, 26 N.Y.U. REV. L. & SOC. CHANGE 77, 130 (2000–2001). On the other hand, a study of citizen enforcement actions between 1995 and 2000 concluded that small local groups and franchises brought the majority of citizen enforcement actions in the study period and that "citizens are acting as private attorneys general in accordance with Congress' intent." Kristi M. Smith, *Who's Suing Whom?: A Comparison of Government and Citizen Suit Environmental Enforcement Actions Brought Under EPA-Administered Statutes, 1995–2000*, 29 COLUM. J. ENVTL. L. 359, 385, 395 (2004). All in all, the impact of Justice Scalia's restrictive view of environmental standing appears to have been limited by district and circuit courts, at least in cases of concrete localized harm. Stubbs, *supra*, at 98–106. *Laidlaw* essentially condoned this reading of *Defenders*. *See* Smith, *supra*, at 104.

127 *Cf.* Craig, *supra* note 50, at 184 ("[T]he manufacture of . . . standing [based on the most easily concretely established injury] . . . distracts the courts, the regulators, and—most importantly—the general public from the more fundamental purposes of the pollution control statutes.").

is subject to rethinking."[128] Discussing a mismatch between competing visions of litigation as dispute resolution and a forum for the defense of public values, particularly as it relates to suits against industry, Professor Daniel Farber noted that "[t]he messiness of th[e] compromise [between the two visions] is nowhere more clear than in environmental law."[129] Despite the promise of *Laidlaw* and its recognition that injury-in-fact may include "changes in the relationship between the individual and a natural resource[,]" Farber did not see *Laidlaw* as sufficiently transformative to signal "the dawning of a new day for environmental litigation."[130] *Laidlaw*, despite its role in checking the dramatic narrowing of standing threatened by *Defenders*, did not signal any greater attention to the systemic importance of environmental law. Instead, it softened *Defenders* by contextualizing the inquiry into injury-in-fact. Jonathan Cannon has similarly concluded that *Laidlaw* "revive[d] in some limited measure the ecological model" of injury rejected in *Defenders*, but it was "by no means a reprise of *SCRAP*."[131]

In 2005, after noting the Court's apparent inattention to the significance of environmental law for standing doctrine, Professor Lazarus observed:

> The real disconnect is . . . between the Court's precedential touchstone for identifying the requisite injury for Article III standing and the kinds of causal connections sought to be vindicated by modern environmental protection law. It is incumbent upon the Court itself to bridge that gap and return to Article III's basic requirement of ensuring an adequately adversarial judicial proceeding, lest the Constitution be unfairly read as presenting an insurmountable obstacle to the enforcement of important federal environmental mandates.[132]

In important respects, *Massachusetts* serves as an answer to Lazarus' call.

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128 Patricia M. Wald, *Environmental Postcards From the Edge: The Year That Was and the Year That Might Be*, 26 ENVTL. L. REP. 10,182, 10,186 (1996).

129 Farber, *supra* note 51, at 10,521.

130 *Id.* at 10,516, 10,522.

131 Cannon, *supra* note 58, at 386; *see also* Lopez, *supra* note 111, at 162 ("[T]he Court did little to quell the confusion regarding the standing of citizen suit plaintiffs.").

132 Lazarus, *supra* note 99, at 260.

IV
MASSACHUSETTS: STANDING FOR A GLOBAL ENVIRONMENTAL ISSUE

In *Massachusetts*, the Court held that the plaintiffs have standing, the CAA authorizes the EPA to regulate carbon dioxide emissions from new vehicles, and EPA's reasons for declining to regulate were insufficient.[133] Although both the jurisdictional analysis and the holdings on the merits are explicitly grounded in domestic law, the globally significant context of the case pervades the majority's reasoning.

The Supreme Court reviewed a decision by the D.C. Circuit Court of Appeals that upheld EPA's denial of the rulemaking petition.[134] In an opinion by Judge Randolph, the D.C. Circuit observed that the Article III standing question in *Massachusetts* presented a "highly unusual circumstance—encountered for the first time in this court" because the constitutional jurisdictional question and the merits were so closely united.[135] Accordingly, Judge Randolph proceeded to the merits and determined that, assuming the EPA had authority to regulate carbon dioxide, it properly declined to exercise such authority. Judge Sentelle concurred in the result, but concluded that "the petitioners have not demonstrated the element of injury necessary to establish standing under Article III."[136] He reasoned that the petitioners' allegations amounted to a statement that global warming "is harmful to humanity at large. Petitioners are or represent segments of humanity at large. This would appear to me to be neither more nor less than the sort of general harm eschewed as insufficient to make out an Article III controversy by the Supreme Court and lower courts."[137]

In dissent, Judge Tatel applied an analysis similar to the approach Justice Stevens would adopt for the Supreme Court

133 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438 (2007).

134 *Id.* at 1451, *rev'g*, 415 F.3d 50 (D.C. Cir. 2005).

135 Massachusetts v. Envtl. Prot. Agency, 415 F.3d 50, 56 (D.C. Cir. 2005), *rev'd* 127 S. Ct. 1438 (2007).

136 *Id.* at 59 (Sentelle, J., concurring).

137 *Id.* at 60. A 2006 comment discussing the justiciability of global warming issues cited the D.C. Circuit's opinion in *Massachusetts* as illustrating the dangers of petitioners' failure to particularize their injury. Blake R. Bertagna, *"Standing" Up for the Environment: The Ability of Plaintiffs to Establish Legal Standing to Redress Injuries Caused by Global Warming*, 2006 BYU L. REV. 415, 437 (2006).

majority.[138] In Judge Tatel's view, petitioners had standing, the EPA had authority to regulate, and the EPA improperly declined to regulate.[139]

A. Recognition of Scientific Consensus

Justice Stevens' opinion for the majority begins with recognition that "[r]espected scientists believe" that increases in carbon dioxide are related to corresponding increases in global temperatures.[140] He explains the significance of the problem by quoting the petition for certiorari, which "[c]all[ed] global warming 'the most pressing environmental challenge of our time.'"[141] The Court also notes that when the relevant CAA provisions were enacted, "the study of climate change was in its infancy."[142] The closing of the initial section of the opinion reveals the Court's motivation in hearing the case: "Notwithstanding the serious character of th[e] jurisdictional argument and the absence of any conflicting decisions construing [CAA] § 202(a)(1), *the unusual importance of the underlying issue persuaded us to grant the writ*."[143]

Before addressing the threshold issue of standing, the Court recounts both the domestic and international history pertaining to the recognition of anthropogenic climate change and efforts to regulate greenhouse gases. The Court notes that Congress enacted the Global Climate Protection Act in 1987 and quotes Congress' determination that "'necessary actions must be identified and implemented in time to protect the climate.'"[144] Likewise, Justice Stevens' opinion emphasizes the growth of international scientific consensus on climate change issues, observing that "the scientific understanding of climate change progressed" as reflected in the IPCC reports commissioned by the UN.[145] The Court notes that "[d]rawing on expert opinions from across the globe, the IPCC concluded [in 1990] that

138 *Massachusetts*, 415 F.3d at 64–66 (Tatel, J., dissenting).

139 *Id.*

140 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438, 1446 (2007).

141 *Id.*

142 *Id.* at 1447.

143 *Id.* (emphasis added).

144 *Id.* at 1448 (quoting 15 U.S.C. § 2901 (2006)).

145 *Id.*

emissions resulting from human activities are substantially increasing the atmospheric concentrations of . . . greenhouse gases [which] will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface."[146] As the Court explains, the coalescence of scientific consensus drove legal action: "[r]esponding to the IPCC report, the United Nations convened the 'Earth Summit' in 1992," at which the first President Bush signed the UNFCCC, which the Senate subsequently ratified by unanimous vote.[147] Justice Stevens also notes the second IPCC report, written in 1995, after which the UNFCCC signatories drafted the Kyoto Protocol.[148]

The Court highlights the connection between domestic understanding and the international consensus, noting that a National Research Council report requested by the White House, "drawing heavily on the 1995 IPCC report, concluded that [g]reenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise."[149]

B. Standing

In its standing analysis, the majority first characterizes the question presented as "the proper construction of a congressional statute, a question eminently suitable to resolution in federal court."[150] Citing the CAA's citizen suit provision, the Court notes congressional authorization for the suit and explains, by quotation from Justice Kennedy's concurrence in *Defenders*, that "'Congress has the power to define injuries and

146 *Id.* (internal quotations omitted).

147 *Id.*

148 *Id.* at 1449. Despite significant United States involvement in its negotiation, the Senate unanimously declared its opposition to entry into the Kyoto Protocol. Jehl, *supra* note 21. President Bush decided to withdraw from Kyoto and not seek ratification in 2001. *Id.*

149 *Massachusetts*, 127 S. Ct. at 1450 (internal quotations omitted); *see also* NAT'L RESEARCH COUNCIL, *supra* note 7. Nonetheless, after concluding that it lacked authority to regulate carbon dioxide, the EPA stated that it would decline to exercise such authority if it existed because of "residual uncertainty" in the National Research Council report and, among other considerations, a concern that "unilateral EPA regulation of motor-vehicle greenhouse gas emissions might also hamper the President's ability to persuade key developing countries to reduce greenhouse gas emissions." *Massachusetts*, 127 S. Ct. at 1451.

150 *Id.* at 1453.

articulate chains of causation that will give rise to a case or controversy where none existed before.'"[151] Quoting further, the Court observes that "it does not matter how many persons have been injured by the challenged action, [but] the party bringing suit must show that the action injures him in a concrete and personal way."[152] The Court then states that *Defenders* "holds that a litigant must demonstrate that it has suffered a concrete and particularized injury that is either actual or imminent, that the injury is fairly traceable to the defendant, and that it is likely that a favorable decision will redress that injury."[153] The Court regards as "critical" that "[w]hen a litigant is vested with a procedural right, that litigant has standing if there is some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant."[154]

After this statement of background standing principles that suggests a doctrine amenable to ecological models, Justice Stevens observes that "[o]nly one of the petitioners needs to have standing to permit us to consider the petition for review"[155] and begins a novel analysis of the "considerable relevance that the party seeking review here is a sovereign State and not, as it was in [*Defenders*], a private individual."[156] Massachusetts, the Court states, has a "well-founded desire to preserve its sovereign territory" from sea level rise attributable to global warming.[157]

151 *Id.* (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 580 (1992) (Kennedy, J., concurring)).

152 *Id.*

153 *Id.* (quoting *Defenders*, 504 U.S. at 560–61).

154 *Id.* (citing *Defenders*, 504 U.S. at 572 n.7).

155 *Id.* at 1453–54 (citing Rumsfeld v. Forum for Academic & Institutional Rights, Inc., 547 U.S. 47, 52, n. 2 (2006)).

156 *Id.* at 1454.

157 *Id.* (citing Alden v. Maine, 527 U.S. 706, 715 (1999)). The Court focuses primarily on *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907), a case involving cross-boundary air pollution, for support. Justice Stevens writes that "[w]ell before the creation of the modern administrative state, we recognized that States are not normal litigants for the purposes of invoking federal jurisdiction." *Massachusetts*, 127 S. Ct. at 1454. As a quasi-sovereign, "'the State has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air.'" *Id.* (quoting *Georgia*, 206 U.S. at 237). The Court also ties Massachusetts' standing to the federalism embedded in the Constitution:

These two factors, the CAA's citizen suit provision[158] and Massachusetts' status as a state, underlie the most obvious innovation of *Massachusetts*: that the Commonwealth "is entitled to special solicitude in [the Court's] standing analysis."[159] After explaining these two bases of his analysis, Justice Stevens reasons that, "[w]ith that [special solicitude] in mind, it is clear that petitioners' submissions as they pertain to Massachusetts have satisfied the *most demanding standards* of the adversarial process."[160] The Court then separately explains injury, causation, and redressability.[161]

The Court's injury analysis begins with recognition of globally significant impacts of global warming, and then zeros in on a concrete, particularized injury. Quoting from the National Research Council report and an expert declaration, Justice Stevens recites that scientists believe global warming is causing:

> [T]he global retreat of mountain glaciers, reduction in snow-cover extent, the earlier spring melting of rivers and lakes, the accelerated rate of rise of sea levels during the 20th century relative to the past few thousand years . . . severe and

> When a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, it cannot negotiate an emissions treaty with China or India, and in some circumstances the exercise of its police powers to reduce in-state motor-vehicle emissions might well be pre-empted.

Id. (citing Alfred L. Snapp & Son, Inc. v. Puerto Rico *ex rel.* Barez, 458 U.S. 592, 607 (1982)). The state cedes these "sovereign prerogatives" to the federal government, and "Congress has ordered [the] EPA to protect Massachusetts (among others) by prescribing [CAA automobile emissions standards]." *Id.*

158 *See* 42 U.S.C. § 7607(b)(1) (2006).

159 *Massachusetts,* 127 S. Ct. at 1455. The creation of "special solicitude" is likely to produce extensive academic commentary. It is useful to bear in mind that in shaping the standard, the Court explicitly combined two factors—citizen suit authorization and status as a state. It is not clear that states will be able to call upon the standard without benefit of a citizen suit provision. Thus, it is not clear whether special solicitude will impact standing beyond environmental litigation.

160 *Id.* (emphasis added).

161 *Id.* at 1455–59. The Court's special solicitude for Massachusetts begs the question whether the remainder of its standing analysis has application to private plaintiffs. In Part V.A, *infra*, I argue that the analysis does change environmental standing doctrine for private plaintiffs because it embraces an ecological model. It is beyond the scope of this Article to assess whether private plaintiffs in cases outside of environmental law will benefit.

> irreversible changes to natural ecosystems . . . and an increase in the spread of disease.[162]

The opinion then observes that "rising seas have already begun to swallow Massachusetts' coastal land."[163] The Court holds that "[b]ecause the Commonwealth owns a substantial portion of the state's coastal property, it has alleged a particularized injury *in its capacity as a landowner*."[164]

Similarly, the majority's causation analysis acknowledges that the domestic greenhouse gas emissions constitute only a portion of the problem, yet recognizes a cognizable claim based on the U.S. contribution to global emissions. The Court reasons that "EPA's refusal to regulate [carbon dioxide] emissions 'contributes' to Massachusetts' injuries," and rejects the argument that, because the impact of such regulation is an incremental step, it is insufficient to create standing, stating that "accepting that premise would doom most challenges to regulatory action."[165] Further, the Court recognizes that regulation of new vehicle emissions would not address the entire domestic contribution, but rejects as "erroneous" EPA's "assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum."[166]

Further, contrary to the implication arising from the plurality view in *Defenders*, the Court accepts that, although the United States is only one of the relevant global actors, actions by federal environmental agencies can sufficiently redress the harm to support standing. The majority reasons that merely because "developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century" does not destroy redressability, noting that "a reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere."[167]

Having concluded that the plaintiffs demonstrated standing sufficient to pursue the case, the Court swiftly determines that

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162 *Massachusetts*, 127 S. Ct. at 1455–56 (internal citations and quotations omitted).

163 *Id.* at 1456.

164 *Id.* (emphasis added).

165 *Id.* at 1457.

166 *Id.*

167 *Id.* at 1458.

carbon dioxide falls within CAA's definition of a pollutant, then turns to EPA's asserted justifications for declining to regulate even if it had authority.[168] In essence, Justice Stevens rejected EPA's declination because it "rests on reasoning divorced from the statutory text."[169] Importantly, the Court rejected the notion that EPA's decision was shielded from review as a political determination because "while the President has broad authority in foreign affairs, that authority does not extend to the refusal to execute domestic laws."[170] Further, the Court rejected as irrelevant EPA's "prefer[ance] not to regulate greenhouse gases because of some residual uncertainty," reasoning that "[i]f the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming, EPA must say so."[171] Thus, the Court held, "EPA has offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change" as required by its duty to determine whether carbon dioxide endangers public health or welfare under the CAA.[172]

Thus, despite precedent strongly disfavoring standing, an agency determination on an arguably ambiguous statute, and a slate of agency rationales for inaction, the Court sided with environmental interests on every point. Not surprisingly, this produced strong dissents and a flurry of commentary.

C. The Chief Justice's Dissent: Revealing the Magnitude of the Court's Decision

Chief Justice Roberts issued a fifteen-page dissent, joined by Justices Scalia, Thomas, and Alito.[173] Reporter Linda Greenhouse characterized the opinion as "a declaration of his deepest jurisprudential beliefs and highest priorities [that] offered the most revealing portrait in the 18-month history of

168 *See id.* at 1459–62.

169 *Id.* at 1462.

170 *Id.* at 1463. The Court also observed that "EPA has made no showing that it issued the ruling in question here after consultation with the State Department." *Id.*

171 *Id.*

172 *Id.*

173 *Id.* at 1462 (Roberts, C.J., dissenting).

the Roberts court of the new chief justice at work."[174] The passion of this dissent suggests the importance of the majority's standing analysis. Chief Justice Roberts' scathing opinion accuses the majority of "sleight-of-hand" and chides that the Court's reasoning amounts to "[e]very little bit helps, so Massachusetts can sue over any little bit."[175] Chief Justice Roberts accuses the majority of failing to take a separation of powers based "core component of standing . . . seriously."[176]

Chief Justice Roberts' view is overstated and does not address, among other things, the need for administrative law mechanisms that make agencies directly accountable not only to regulated entities, which are usually politically powerful, but also to regulatory beneficiaries, which are more diffuse and perhaps less politically influential. The impassioned-to-hyperbolic tone of some initial academic commentary[177] supporting Chief Justice Roberts' view highlights how completely the majority refutes efforts (previously lead primarily by Justice Scalia) to entrench an exceedingly narrow standing doctrine as a constitutional requirement. Similarly, the incredulous tone of Justice Scalia's dissent (joined by Chief Justice Roberts and Justices Thomas and Alito) suggests that the majority opinion contains a deep concern over the potential impacts of global warming and the United States' failure to combat it: "The Court's alarm over global warming may or may not be justified, but it ought not distort the outcome of this litigation."[178] These two components of the dissents—alarm over the fundamental changes that may flow from the Court's opinion and a sense that the result was driven by more than rote administrative law analysis—highlight the importance of the majority's opinion and the need to look deeper to understand its implications.

174 Linda Greenhouse, *For the Chief Justice, a Dissent and a Line in the Sand*, N.Y. TIMES, Apr. 8, 2007, § 4, at 12.

175 *Massachusetts*, 127 S. Ct. at 1470 (Roberts, C.J., dissenting).

176 *Id.* (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992)).

177 *E.g.*, Ronald A. Cass, Massachusetts v. EPA: *The Inconvenient Truth About Precedent*, 93 VA. L. REV. In Brief 75, 75 (2007), http://www.virgnialawreview.org/inbrief/2007/05/21/cass.pdf ("[i]n their eagerness to promote government action to address global warming, the Justices stretch, twist, and torture administrative law doctrines"); Arnold W. Reitze, Jr., *Controlling Greenhouse Gas Emissions From Mobile Sources*—Massachusetts v. EPA, 37 ENVTL. L. REP. 10,535, 10,537 (2007) ("[t]he majority opinion . . . [holds that] political issues are justiciable").

178 *Massachusetts*, 127 S. Ct. at 1477–78 (Scalia, J., dissenting).

The Chief Justice presents a much narrower view of standing than the majority; a view that largely mirrors Justice Scalia's opinion in *Defenders*.[179] Upon reading the dissent, it seems that questions pertaining to global warming could never be justiciable in the eyes of these Justices. Chief Justice Roberts writes: "The very concept of global warming seems inconsistent with th[e] particularize[d injury] requirement. Global warming is a phenomenon harmful to humanity at large, and the redress petitioners seek is focused no more on them than on the public generally—it is literally to change the atmosphere around the world."[180]

The dissent maintains that the Court's reliance on "special solicitude" for Massachusetts serves as "an implicit concession that petitioners cannot establish standing on traditional terms."[181] He concludes that the majority employs a "sleight-of-hand" by "failing to link up the different elements of the three-part standing test."[182]

Although the dissent maintains that the alleged loss of coastal land "is pure conjecture"[183] (which indicates a stunning rejection of the scientific consensus on climate change impacts, as well as a narrow view of environmental protection in the face of uncertainty), Chief Justice Roberts maintains that even if the injury exists, "reliance on Massachusetts's loss of coastal land as [petitioners'] injury in fact . . . creates insurmountable problems . . . with respect to causation and redressability."[184] The dissent

179 *See Defenders*, 504 U.S. 555. Thus, for the same reasons as Justice Scalia's opinion in *Defenders*, the view Roberts expresses is neither constitutionally mandated nor appropriate where administrative agencies wield sweeping power to regulate problems of extensive geographic and temporal scope.

180 *Massachusetts*, 127 S. Ct. at 1467 (Roberts, C.J., dissenting) (citations and internal quotations omitted).

181 *Id.* at 1466.

182 *Id.* at 1470.

183 *Id.* at 1467. The dissent asserts that the Court's reliance on certain scientific modeling supplied by petitioners "renders requirements of imminence and immediacy utterly toothless" because of the "century-long time horizon and a series of compounded estimates." *Id.* at 1468. Roberts' efforts to make *Massachusetts* appear as a break from tradition are misleading, however. The dissent's view is supported primarily by Scalia's opinion in *Defenders* and its progeny. *See Defenders*, 504 U.S. 555. That view of standing is the true break from traditional understandings of standing, as discussed in Part V.A, *infra*.

184 *Massachusetts*, 127 S. Ct. at 1468 (Roberts, C.J., dissenting).

would require that petitioners "show a causal connection between that specific injury and the lack of new motor vehicle greenhouse gas emission standards, and that the promulgation of such standards would likely redress that injury."[185] This requirement is an impossible hurdle in a context as scientifically complex as global warming. Further, as Jonathan Cannon notes, "by separating the several elements of the causal chain and demanding particularized proof of each, [Chief Justice Roberts'] analysis necessarily rejects the environmentalists' presumptions of fragility, radiating harm, and serious consequence."[186]

The dissent states that the majority "ignores the complexities of global warming" in its standing analysis, "using the dire nature of global warming itself as a bootstrap for finding causation and redressability."[187] However, Chief Justice Roberts uses the complexity of global warming in an inverse way, relying on it to prevent environmental challenges. He highlights scientific complexity and presents it as an insurmountable obstacle to judicial review of any decision pertaining to global warming unless it imposes a burden on a regulated industry.[188] No doubt exists that industry will have standing to challenge any regulation requiring it to reduce emissions. Yet, potential beneficiaries of such regulations, according to Chief Justice Roberts, would have to "trace their alleged injuries back through th[e] complex [scientific] web to the fractional amount of global emissions that might have been limited with EPA standards" to establish standing.[189] Thus, for the dissenters, not only should the magnitude of the problem prevent demonstration of injury, but the magnitude of the system through which causation and redressability must be understood, as well as the existence of other carbon inputs into the system, should free the executive agencies from any judicial review for failure to redress a global environmental harm.

185 *Id.*

186 Jonathan Z. Cannon, *The Significance of* Massachusetts v. EPA, 93 VA. L. REV. In Brief 53, 56 (2007), http://www.virginialawreview.org/inbrief/2007/05/21/cannon.pdf.

187 *Massachusetts*, 127 S. Ct. at 1468 (Roberts, C.J., dissenting).

188 *See id.* at 1468–69.

189 *Id.* at 1469.

The dissent's view of standing would, as a matter of constitutional law, structure government to disfavor regulation that redresses globally important threats under domestic environmental statutes by making many decisions not to regulate unreviewable while leaving courts open for challenges to regulation. This perversion would, at least in some cases, make the availability of judicial review inversely correlate with the significance of the issue. A discrete permit violation could be justiciable; a declination to exercise authority to limit recognized global harm for the next several centuries would be unreviewable.

Even if Chief Justice Roberts is correct that "[t]he realities make it pure conjecture to suppose EPA regulation of new automobile emissions will *likely* prevent the loss of Massachusetts coastal land,"[190] the fundamental disagreement between the majority and dissent is not factual or scientific. The disagreement is over whether the judicial branch has any role to play in compelling government regulation of factors that contribute to climate change and similarly complex problems. The dissent's view of standing fits only within much simpler and more traditional litigation contexts and sets up a test that no petitioner advocating regulation of greenhouse gas emissions could satisfy.

Chief Justice Roberts states that "petitioner's true goal for this litigation may be more symbolic than anything else,"[191] but that summation is incorrect. What petitioners won was substantive victory concerning CAA interpretation, transformative analysis of justiciability for environmental concerns, and endorsement of climate change science.

For the dissent, political importance, complexity, and uncertainty seem to require judicial abstention. For the majority, it appears that the widespread consensus on the need to take action addressing global warming requires that the EPA be legally accountable through judicial review of the agency's interpretation of the statute and the reasons underlying its decision not to regulate.

190 *Id.* at 1470 (emphasis in original).

191 *Id.*

V
MASSACHUSETTS' GLOBALISM: STANDING, CONSENSUS AND THE IMPACT OF DOMESTIC REGULATION

Richard Lazarus noted shortly after *Massachusetts* was decided, "[i]n its opening paragraph, Justice Stevens's majority opinion makes clear that this is not a routine administrative law case."[192] The opening paragraph relates the global importance of the case.[193] That context affects the majority's view of justiciability as encompassing cases premised on effects to complex systems, its virtual endorsement of the consensus scientific position, and its recognition of the significance of U.S. agency action for global environmental problems.

The Chief Justice's dissent broods over aspects of the majority opinion that may prove fundamentally important to federal courts' future ability to grapple with complex emerging environmental issues. In this respect, *Massachusetts* is important for at least three advances. First, the Court turns toward a more ecologically attuned doctrine of standing for environmental cases. Second, the Court generally accepts the scientific consensus—and at least acknowledges the global legal consensus—that has emerged on the mechanism and threat of climate change. Third, building upon that recognition, *Massachusetts* represents the Court's first acknowledgement of the relationship between domestic environmental regulation and global environmental harms. These three points are interrelated and they suggest that *Massachusetts* may have a transformative impact on certain environmental litigation.

A. Returning Environmental Standing to Its Roots and Recognizing Ecological Systems

Massachusetts is a fundamentally important standing case because it supplants the rigid theoretical construct that *Defenders* imported into environmental litigation. *Massachusetts* moves the Court closer to an earlier, more straightforward vision of access to courts, which turns primarily on the availability of a *legal* claim and remedy. As Jonathan Cannon notes, "The

192 Richard Lazarus, *A Breathtaking Result for Greens*, 24 ENVTL. FORUM, May/June 2007, at 12.

193 *See supra* Part III.A.

Court's opinion also reflects sympathy with environmentalist beliefs and values to an extent rarely, if ever, seen in the Court's environmental cases."[194] Combined, these points suggest that Justice Stevens' opinion draws upon and incorporates core environmental tenants to re-cast the Article III standing analysis for cases in which the harm arises through complex environmental pathways.

1. Embracing an Ecological Model

In certain environmental cases, members of the Court have recognized the significance of environmental values such as the interdependence of ecological systems.[195] Not since the 1970s, however, has the Court shown a willingness to alter general legal principles such as standing on the basis of how such principles interact with environmental problems and concepts. *Massachusetts* adopts such a view.[196] *Massachusetts* reconceptualizes environmental standing to recognize the difficulty, perhaps impossibility, of employing a private law framework (forcefully endorsed by some Justices) when deciding a challenge to agency action impacting complex natural systems.[197]

194 Cannon, *supra* note 186, at 53.

195 *E.g.*, United States v. New Mexico, 438 U.S. 696, 723 n.4 (1978) (Powell, J., dissenting) ("[T]he understanding that the forest includes the creatures that live there is confirmed by the modern view of the forest as an interdependent, dynamic community of plants and animals . . . .").

196 Cannon, *supra* note 186, at 55 (In *Massachusetts*, "standing depended on a view of the facts consistent with the ecological model. And that was the view the Court embraced."). For background on the ecological model, see Cannon, *supra* note 58.

197 An example of some Justices' sense of the foreignness of environmental problems came in Justice Scalia's comment during oral argument: "I'm not a scientist. That's why I don't want to have to deal with global warming, to tell you the truth." Transcript of Oral Argument at 23, Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438 (2007) (No. 05-1120). A hint that some Justices may recognize that environmental harms have been viewed with greater skepticism than other harms came in the following comment by Justice Breyer:

> Now what is it in the law that says that somehow a person cannot go to an agency and say we want you to do your part? Would you be up here saying the same thing if we're trying to regulate child pornography, and it turns out that anyone with a computer can get pornography elsewhere? I don't think so.

Id. at 38–39.

As Chief Justice Roberts points out, the Court concludes that standing exists without demanding that the relationship between injury, causation, and redressability be precisely quantifiable.[198] Thus, the Court recognizes that causation and redressability may be satisfied where the agency action would affect scientifically complex systems that result in injury of large temporal and geographic scales. The majority does not require measurement of when EPA regulation could begin to change the rise in sea levels, nor does it assess how much change could be achieved.[199] It is enough that the injury, causal relationship, and possibility of redress are proven to exist through accepted scientific principles.[200]

Similarly, *Massachusetts* clearly breaks from the restrictive conception of redressabilty announced by Justice Scalia in *Steel Co.*[201] Even if the EPA regulates vehicle emissions upon reconsidering the issue, any directly resulting change in sea level will be small and take years to materialize.[202] This type of redressability is a direct embrace of the systemic ecological model of standing: it accepts that changes to one input of a system may have real, if diffuse, effects on the system as a whole.

The Court's redressability analysis recognizes that the severity of the problem, coupled with its diffuse nature and the narrow statutory question presented, provide circumstances where judicial review will be real, meaningful, and appropriately focused on a critical legal question.

Massachusetts is the type of case that falls within a fair reading of the case or controversy requirement, even though it cannot be confined to the narrow box of *Defenders*. It is a case with a legal injury, and the three-prong approach is appropriately adjusted to reflect growth in our understanding of human-natural interaction. The *Massachusetts* analysis suggests a construct of standing that is far more suitable to environmental law than

198 *Massachusetts*, 127 S. Ct. at 1467 (Roberts, C.J., dissenting).

199 *Id.* at 1457–59 (majority opinion).

200 *See infra* Part IV.B. (discussing the Court's recognition of scientific consensus). In addition, the Court does not link any specific component of its standing analysis to "special solitcitude."

201 Steel Co. v. Citizens for a Better Env't, 523 U.S. 83, 106–09 (1998).

202 Although the reconsideration may trigger additional avenues of regulation, the Court appropriately does not rest its determination on that possibility. *See Massachusetts*, 127 S. Ct. at 1457–58.

Defenders and *Steel Co*.[203] *Massachusetts* signals a change in justiciability theory of significantly broader implication than *Laidlaw*.[204]

Massachusetts recognizes the role of federal agencies in responding to global environmental problems and shapes standing to effectuate review of such actions. For this and other reasons, *Massachusetts* re-opens the possibility of a public law conception of standing for environmental cases. Such a view comports with the understanding of access to courts that prevailed from the founding through the 1970s.

In *Massachusetts*, the Court re-affirms the viability and potential value of the citizen suit. "Congress has . . . authorized this type of challenge to EPA action. That authorization is of critical importance to the standing inquiry: 'Congress has the power to define injuries and articulate chains of causation that will give rise to a case or controversy where none existed before.'"[205] The Court's reinvigoration of the citizen suit and removal of *Defenders*' barriers can bolster environmental interests in a wide range of contexts, unless it is understood to provide relaxed standing solely for state petitioners.

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203 Environmental cases frequently involve public value determinations reflecting evolution of social and legal understanding of the human relationship to the environment.

204 In *Laidlaw*, the Court "contextualized" the requirements of *Defenders* and similar cases by focusing closely on the facts and by accepting the plaintiff's forbearance due to pollution as a cognizable injury. *See* Farber, *supra* note 51, at 10,519. *Massachusetts*, in contrast, wholeheartedly departs from the rigidity of *Defenders* and, thereby, changes the reference point for employing each of the three prongs. In this respect, to the extent that *Laidlaw* reflected a "change in emphasis, from a rule-based approach to a more common-law, case-by-case approach," *id.*, *Massachusetts* can be viewed as a return to a more rule-based approach, albeit a different type of rule (enabling rather than restricting citizen suits). Justice Stevens' approach in *Massachusetts* is also distinguishable from *Laidlaw* in that it focuses on a physical injury, the loss of coastline, rather than a more subjective fear of harm. In this sense, *Massachusetts* may be less interesting in terms of the psychology of injury, *see* Sunstein, *supra* note 34, at 188–89, but such assessments of injury are a distraction wrought by *Defenders'* rigidity more than a legally useful inquiry. *See also* Craig, *supra* note 50, at 184.

205 *Massachusetts*, 127 S. Ct. at 1453 (citing the CAA citizen suit provision, 42 U.S.C. § 7607(b)(1) (2006), and quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 580 (1992) (Kennedy, J., concurring)).

2. Is the Standing Analysis Limited to States?

The most important question arising from the Court's standing decision is whether the less restrictive, more ecologically attuned view of standing will apply only to state plaintiffs, or whether it will apply for all plaintiffs. In environmental cases at least, the better reading—both textually and for policy reasons—supports expanded access for all plaintiffs.[206]

In its reasoning, *Massachusetts* is plainly a rebuke of the more extreme portions of Justice Scalia's opinion in *Defenders*.[207] Justice Stevens accepts as sufficient a theory of injury, causation, and redressability that, as the dissent notes, would not fit neatly within the cramped *Defenders* framework.[208] Rather than constraining this view to the special solicitude afforded to Massachusetts as a state, the change can be understood as a return to the more accommodating view of standing historically embraced by the Court and upon which the early environmental cases of the 1970s rested.[209] Further, *Massachusetts* fits fairly easily within much of the framework of Justice Kennedy's opinion in *Defenders*, which makes his full participation in the majority opinion less than surprising and may undercut the likelihood that even Justice Kennedy will limit the framework to cases brought by states.[210] In stating that the petitioners "satisfied the most demanding standards" of standing, Justice Stevens makes plain that *Massachusetts* affects *Defenders*'

206 Because the Court grounds Massachusetts' injury in physical loss of coastline—"in its capacity as landowner," *Massachusetts*, 127 S. Ct. at 1456—and recognizes causation and redressability without demanding precise computations, *see id.* at 1457–58, there is little in the opinion that could prevent similarly situated private environmental plaintiffs from bringing similar suits—except the "special solicitude" afforded to states in the opinion, which is discussed below.

207 *Cf.* Jonathan H. Adler, *Warming Up to Climate Change Litigation*, 93 VA. L. REV. In Brief 63, 64–66 (2007), http://www.virginialawreview.org/inbrief/2007/05/21/adler.pdf ("The Court purported to adhere to this 'most demanding' standard in evaluating Massachusetts' claims, while actually interpreting *Lujan's* requirements in a most forgiving way . . . .").

208 *Massachusetts*, 127 S. Ct. at 1466 n.1 (Roberts, C.J., dissenting).

209 In this sense, Chief Justice Roberts may be correct that *Massachusetts* is "*SCRAP* for a new generation." *Id.* at 1471.

210 *See id.* at 1453 (citing Lujan v. Defenders of Wildlife, 504 U.S. 555, 580 (1992) (Kennedy, J., concurring)).

framework directly and suggests that the new analysis should not be limited to cases involving state petitioners.[211]

The Court's opinion does not directly address the threshold question of whether this special status is necessary to the standing analysis that follows.[212] If "special solicitude" is necessary for the Court's standing analysis, it may be that "[b]y conferring special litigation status on the state [Attorneys General], the Court diminished the litigation role of private activist groups by comparison."[213] However, there are sound reasons to think that, in environmental cases at least, "special solicitude" does not restrict the remainder of the analysis. For one thing, much of Justice Stevens' standing analysis tracks that of Judge Tatel in the D.C. Circuit, which did not invoke special status for states.[214] More importantly, Justice Stevens grounds Massachusetts' satisfaction of the injury requirement "*in its capacity as a landowner*,"[215] not in its quasi-sovereign capacity.

The Court's analysis is reminiscent of the legal injury approach to standing. Despite articulation of injury-in-fact, the premise of the Court's conclusion that standing exists is the CAA citizen suit provision and the core statutory interpretation issue presented.[216] Essentially, the Court recognizes the "procedural right" in the CAA as the basis for asserting the legal injury.[217] The Court's quotation from Justice Kennedy's concurrence in *Defenders*, particularly the acknowledgement that Congress may articulate new legal claims, supports this view.[218]

211 *Id.* at 1442 (majority opinion).

212 *See* Jody Freeman & Adrian Vermeule, Massachusetts v. EPA: *From Politics to Expertise*, 2008 SUP. CT. REV. (forthcoming) (suggesting that the injury-causation-redressability analysis will likely affect standing for private parties despite the creation of special solicitude); Craig, *supra* note 50, at 196 ("it is unclear whether even the majority intended to change the *Lujan* standing analysis for individual plaintiffs").

213 Dru Stevenson, *Special Solicitude for State Standing:* Massachusetts v. EPA, 112 PENN ST. L. REV. 1, 74 (2007).

214 *See* Massachusetts v. Envtl. Prot. Agency, 415 F.3d 50, 61–67 (D.C. Cir. 2005) (Tatel, J., dissenting), *rev'd*, 127 S. Ct. 1438 (2007).

215 *Massachusetts*, 127 S. Ct. at 1456 (emphasis added).

216 *Id.* at 1453.

217 *Id.*

218 *See id.* Justice Kennedy's likely role in injecting special solicitude into the analysis may also be important. Justice Kennedy's environmental jurisprudence

"Special solicitude" may be an enabler for states in all contexts, but it should not serve as a limitation in environmental citizen suits. The Court embraces a vision of environmental injury, causation, and redressability that recognizes the need for a doctrine to encompass more than private law models of litigation in environmental law. The model of environmental harm and redress embraced by *Massachusetts* does not logically suggest a limited application to governmental beneficiaries of environmental regulation.

By reading Article III to permit litigation of cases relying upon an ecological conception of standing, the opinion favors access to courts and endorses the possibility that private plaintiffs may demand accountability of federal agencies in similar circumstances. On this view, the majority breathes new life into citizen suits.[219]

In sum, *Massachusetts* embraces an ecological, systemic view of injury-causation-redressability that should permit standing for private parties in cases where the harm results from shifts in a complex system. To that extent, its vision of standing recognizes, perhaps for the first time in the Court's jurisprudence, that federal agency actions may contribute in a reviewable way to the creation of redress for global environmental problems that impact U.S. parties.

B. Translating Consensus Into Cognizable Claims

Essential to the Court's transformation of standing into a more environmentally appropriate doctrine is its acceptance of

may be best characterized as "contextualist," although his preference for states' rights must also be recognized. Michael C. Blumm & Sherry L. Bosse, *Justice Kennedy and the Environment: Property, States' Rights, and a Persistent Search for Nexus*, 82 WASH. L. REV. 667, 674 (2007). Given his contextualism, the concreteness of the injury relied upon may help to explain why Justice Kennedy joins completely in the majority opinion. Justice Kennedy's full participation may suggest that the ecological model of standing embraced by *Massachusetts* will be more durable than the rigidity of *Defenders* proved to be. Further, Justice Kennedy's *Defenders* concurrence suggests openness to precisely the type of "nexus" or interconnectedness theory of standing that underlies Justice Stevens' injury-causation-redressability analysis. *See* Lujan v. Defenders of Wildlife, 504 U.S. 555, 579 (1992) (Kennedy, J., concurring).

219 Notably, it directly relies upon the procedural right afforded by the CAA—not merely the APA provision more frequently invoked—to explain the basis of standing. *Massachusetts*, 127 S. Ct. at 1453.

scientific consensus on the question of climate change. As Richard Lazarus noted immediately after the case was decided, "the Court uncharacteristically takes sides in the scientific debate about climate change, strongly suggesting that there is no debate at all."[220] Indeed, debate on the issue has largely been political. In the scientific community, a clear consensus exists concerning the mechanisms of climate change[221] and the reality of the threat it poses.[222] That the Court cut through the political debate to acknowledge the underlying scientific consensus is unusual and, given EPA's reliance on professed uncertainty, very significant. It is not a political move by the Court, as some have suggested,[223] but instead represents a potential shift in environmental judicial review.

The Court rules that to decline rulemaking, the EPA must "form a scientific judgment" as to endangerment or explicitly state that "the scientific uncertainty [on climate change] is so profound [as to] preclude[] EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming."[224] Given the Court's virtual endorsement of the scientific consensus in *Massachusetts*'s opening paragraphs,[225] this leaves essentially no ground to avoid a scientific stance on the issue. Global scientific consensus thus becomes a touchstone for administrative law analysis, a standard against which EPA's future actions may be judged.[226] The Court's endorsement of the scientific consensus—evident in its discussion of the IPCC and National Research Council reports, as well as virtually all of its standing analysis—and its holding the EPA to account for

220 Lazarus, *supra* note 192; *see also* Lisa Schultz Bressman, *Deference and Democracy*, 75 GEO. WASH. L. REV. 761, 802 (2007) (observing that "in its standing analysis, the Court noted the virtual consensus in the scientific community, as well as in the world community, that greenhouse gases contribute to global warming," but that the Court refrained from "expressing its doubt that EPA could show profound scientific uncertainty").

221 *E.g.*, Oreskes, *supra* note 11.

222 *See* IPCC REPORT, *supra* note 7, at 6.

223 *See supra* note 177.

224 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438, 1463 (2007).

225 *See supra* Part III.A.

226 Less clearly, but potentially more importantly, a similar analysis may be applied to the Court's CAA holding: the Court may be understood to read the statute in light of the global and domestic near-consensus that some legal action to redress climate change is necessary. *See infra* Part VI.C.

avoiding endangerment with the question, lay the groundwork for future climate change litigation challenging under-protective regulatory decisions.

In this respect, the impact of *Massachusetts* on other climate change cases has already begun. Perhaps most notably, in *Center for Biological Diversity v. National Highway Traffic & Safety Administration* (*NHTSA*), the Ninth Circuit relied heavily upon the scientific evidence of climate change in requiring NHTSA to reconsider its fuel efficiency standards for light trucks.[227] The court noted, among other things, that the relevance of certain cases relied upon by the agency was "limited by the fact that they were decided two decades ago, when scientific knowledge of climate change and its causes were not as advanced as they are today."[228] On the basis of this scientific consensus concerning climate change, the Court reasoned that "[t]he need of the nation to conserve energy is even more pressing today" than when fuel efficiency standards were first required.[229] Like *Massachusetts*, the *NHTSA* opinion discusses reports of the IPCC and the Natural Resources Council in detail to support its analysis.[230]

In the Endangered Species Act context, the district court in *Natural Resources Defense Council v. Kempthorne* held that the Fish and Wildlife Service erred by failing to consider the impact of climate change in a biological opinion concluding that water diversion planned for the California Bay Delta would not jeopardize a listed species, the Delta smelt.[231] Essentially, the plaintiffs argued that the biological opinion was flawed because it assumed hydrology to be constant over the next twenty years despite strong scientific evidence suggesting that climate change will affect the hydrology through reduced winter snowpack.[232] Not unlike the EPA in *Massachusetts*, the Fish and Wildlife

227 Ctr. for Biological Diversity v. Nat'l Highway Traffic & Safety Admin., 508 F.3d 508 (9th Cir. 2007).

228 *Id.* at 530 (citing *Massachusetts*, 127 S. Ct. at 1447–49). The court cited *Massachusetts* for its discussion of scientific progress in understanding climate change and that the harms resulting from it are "well recognized." *Id.* at 530 n.41.

229 *Id.* at 530.

230 *See id.*

231 Natural Res. Def. Council v. Kempthorne, 506 F. Supp. 2d 322, 387–88 (E.D. Cal. 2007).

232 *Id.* at 369.

Service argued that it "responsibly refused to engage in sheer guesswork, and properly declined to speculate as to how global warming might affect delta smelt."[233]

Unlike *NHTSA*, the *Kempthorne* court did not cite *Massachusetts* nor elaborate on the strength of scientific consensus on climate change. It did, however, conclude that, "[a]t the very least, these studies [in the record] suggest that climate change will be an important aspect of the problem meriting analysis in the [biological opinion]."[234] On this basis, after rejecting an argument that other factors in the biological opinion were sufficient proxies for climate change, the court granted the plaintiffs' summary judgment on the ground that the biological opinion failed to consider the effects of climate change.[235]

The court's endorsement of climate change science in *Massachusetts* may also prove significant in other areas in which scientific consensus urges more robust legal responses. A prime example is global biodiversity loss.

Like climate change, biodiversity loss is a global environmental issue with long-term and wide-ranging potential impacts. Also like climate change, scientific consensus on the reality and significance of biodiversity loss is unequivocal.[236]

The current rate of species loss—100 to 1000 times greater than in pre-human times—probably qualifies as one of five or six mass extinction events over a 570-million-year period.[237] Aside from ethical and aesthetic issues, the current rate of biodiversity loss threatens ecosystem function and ability to achieve sustainable development goals such as poverty elimination.[238]

233 *Id.* (internal quotation omitted).

234 *Id.* (internal quotation omitted).

235 *Id.* at 370.

236 *See, e.g.*, D.U. Hooper et al., *Effects of Biodiversity on Ecosystem Functioning: A Consensus of Current Knowledge*, 75 ECOLOGICAL MONOGRAPHS 3 (2005).

237 *E.g.*, Jim Chen, *Legal Mythmaking in a Time of Mass Extinctions: Reconciling Stories of Origins with Human Destiny*, 29 HARV. ENVTL. L. REV. 279, 284–91 (2005).

238 For example, the parties to the Convention on Biodiversity subsequently agreed "to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth." U.N. Env't Programme, Conference of the Parties to the Convention on Biological Diversity, Strategic Plan for the

Legal consensus on the significance of biodiversity has also progressed.[239] The international community negotiated the Convention on Biological Diversity (CBD)[240] to open it for signature at the 1992 Rio Earth Summit (at the same time as the UNFCCC), and 168 states have signed the Convention.[241] The United States signed, but did not ratify, the CBD, and did not participate in the 2000 Cartagena Protocol to the CBD.[242] Currently, many nations are calling for a multilateral biodiversity science panel, modeled on the IPCC, to raise awareness of, and solidify consensus on, biodiversity science.[243]

Despite the United States' disengagement in recent international biodiversity preservation efforts, the primary domestic biodiversity law—the Endangered Species Act (ESA)—remains one of the strongest national laws for biodiversity preservation.[244] Thus, effectuating the scientific consensus on biodiversity presents a different issue for courts than the question of compelling agencies to address climate change issues in the first instance. Nonetheless, opportunities to consider extra-territorial implications of U.S. biodiversity laws (such as *Defenders* and *Japan Whaling*) have arisen and will undoubtedly arise again. Further, the *Massachusetts* Court's recognition of climate change consensus illuminates the importance for domestic agencies to incorporate climate change

Convention on Biological Diversity, Annex I(11), U.N. Doc. UNEP/CBD/COP/6/20 (2002), *available at* http://www.cbd.int/decisions/default.aspx?m=COP-06&id=7200.

239 One of the earliest multilateral environmental agreements—the Convention on the Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243—seeks to redress biodiversity loss, but has generally been ineffective (at best).

240 U.N. Conference on Environment and Development, Convention on Biological Diversity, June 5, 1992, 31 I.L.M. 818 (1992).

241 List of Parties, http://www.cbd.int/convention/parties/list.shtml (last visited Feb. 18, 2008).

242 *See id.*

243 *See Consultative Process Towards an IMoSEB: International Mechanism on Scientific Expertise on Biodiversity,* http://www.imoseb.net/ (last visited Feb. 17, 2008). *See also,* Lawrence J. Speer, *Nations Call for International Body to Study Threats to Earth's Biodiversity*, 30 BNA Int'l Env't Rep. (BNA) 963 (2007).

244 *See, e.g.*, Holly Doremus, Comment, *Patching the Ark: Improving Legal Protection of Biological Diversity*, 18 ECOLOGY L.Q. 265, 265 (1991) (the ESA is "widely regarded as the strongest legislation ever devised for the protection of nonhuman species").

issues into their regulatory programs, including the need to harmonize biodiversity preservation and climate change policy.[245]

C. Bringing It All Back Home: Global Environmental Concerns Enter U.S. Courts

Massachusetts[246] is the first time that a majority of the Court explicitly recognized the connection between federal environmental regulation and global environmental issues. Indeed, it may be the Court's first significant recognition of the global nature of some environmental concerns.

The Court's conclusion that standing existed in *Masschusetts*, particularly application of the *Defenders* framework, is important not only for its relevance to common domestic environmental litigation. Recognition that an issue of clearly global scope is justiciable may prove very important to the continued engagement of U.S. courts to the most pressing environmental issues because, although domestic concerns remain fundamentally important, "in recent decades a series of inescapably international problems have emerged, including climate change, thinning of the Earth's protective ozone layer, loss of biodiversity, and depletion of fisheries in the world's oceans."[247] In determining whether domestic courts will provide a forum for engaging these issues, standing is a threshold question.[248] In part, this question turns on normative assessments of what constitutes justiciable harm.[249] *Massachusetts*' standing analysis is a major judicial milestone that reflects broader changes in social understanding of the human relationship to environmental systems—"our ever-increasing global interconnectedness [that] spreads the effects of

245 *See generally* J.B. Ruhl, *Climate Change and the Endangered Species Act: Building Bridges to the No-Analog Future*, 88 B.U. L. REV. 1 (2008).

246 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438, 1463 (2007).

247 Daniel C. Esty, *Good Governance at the Supranational Scale: Globalizing Administrative Law*, 115 YALE L. J. 1490, 1554 (2006).

248 *Cf.* Lakshman D. Guruswamy & Brent R. Hendricks, INTERNATIONAL ENVIRONMENTAL LAW IN A NUTSHELL 650 (2d ed. 2003).

249 *See* Albert C. Lin, *The Unifying Role of Harm in Environmental Law*, 2006 WIS. L. REV. 897, 984 ("[H]arm is a normative concept dependent on social judgments about the interests that matter, bound up in social visions of the good and the bad.").

human action—both good and bad—more broadly than ever before."[250]

The *Massachusetts* majority's analysis of standing establishes that the global nature of a problem does not, on its own, defeat standing. Further, the opinion suggests an unprecedented recognition of domestic environmental agencies as actors on global systems. The agencies' authority over global problems is obviously not complete. The Court's recognition that agency actions often impact global systems that, in turn, affect plaintiffs may provide the framework for standing in other globally significant environmental cases (provided statutory authorization exists).

The measure of agency action on the merits suggested by *Massachusetts* is scientific. The Court recited much of the consensus evidence for climate change and directed the EPA to reach a scientific conclusion under the statute.[251] *Massachusetts* is apparently the first time that the Court draws on the widely recognized scientific consensus on a globally significant environmental problem to support its decision overturning domestic agency action. This explicit connection is important because it supports (directly in the case of climate change, indirectly for other issues) the use of such consensus as a background principle to be applied in reviewing environmentally important domestic agency decisions.

In this way, *Massachusetts* begins to suggest a new paradigm for thinking about federal regulation of globally significant environmental issues. *Massachusetts* could be a jumping-off point for greater judicial consideration of domestic regulation of global problems and, perhaps, international regimes addressing those problems. The contours of such a paradigm require further research beyond the scope of this Article, including an assessment of current international regimes, the existence of international environmental norms, and an appropriate framework, if any, for bringing them to bear on domestic regulatory agencies through domestic litigation.[252]

250 *Id.*

251 Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438, 1448–49, 1463 (2007).

252 I will develop this theme further in a future article. Materials from my presentation in February 2008 on this issue, (entitled, "International Consensus & U.S. Climate Change Litigation") are on file with the author.

Massachusetts may be the first step in greater judicial awareness of the global interconnectedness (or "globalism")[253] of environmental systems. This reality, long recognized by scientists, drives the tremendous growth of international environmental law. It seems only a matter of time before globalism becomes commonplace in federal environmental cases. *Massachusetts* may be the first step in a new era of environmental litigation.

VI
CONCLUSION

Standing is the gateway to federal courts, particularly for environmental plaintiffs who depend upon the legal recognition of complex causal pathways to demonstrate harm. Climate change, as a global phenomenon with a multitude of individual causes, epitomizes the difficulty of fitting environmental claims within a narrow conception of litigation appropriate for traditional common law tort or contract claims.

In its standing analysis, *Massachusetts* demonstrates recognition of an environmentally attuned theory of justiciability that gives effect to the more public law function of environmental litigation and depends upon recognition of the scientific basis of understanding climate change. *Massachusetts* also recognizes, for the first time in Supreme Court precedent, that U.S. environmental regulation interacts with broader, global environmental systems that impact domestic concerns.

The case is significant on its own terms, but its potential impact on future environmental litigation may be deeper than apparent from the face of the opinion. To the extent that the features of the case discussed here—ecological standing theory, acceptance of scientific consensus as a measure of agency action, and acknowledgement that decisions affecting global systems create cognizable claims for U.S. courts—portend the future direction of environmental litigation, *Massachusetts* will inaugurate a much more globalist era of judicial review of environmental agency decisions.

253 For an analysis of the term, globalism, see Joseph Nye, *Globalism Versus Globalization*, THE GLOBALIST, Apr. 15, 2002, http://www.theglobalist.com/StoryId.aspx?StoryId=2392.