

CITIZEN SUITS AND SUSTAINABILITY

JOHN C. DERNBACH*

Sustainable development is a means of reconciling and furthering national and international goals for environmental protection, economic development, social development or human rights, and peace and security. It requires supportive governance at the international level as well as, and perhaps more importantly, at the national level.¹ Sustainable development was first endorsed by the nations of the world at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro. There, countries endorsed a global plan of action for sustainable development, called Agenda 21, and agreed to carry it out.² They also adopted a set of twenty-seven principles, known as the Rio Declaration, to guide implementation of that plan.³ In September 2002, at the World Summit on Sustainable Development, the world's nations reaffirmed their commitment to this plan of action and these principles.⁴

United States environmental law reflects sustainable development in some ways. Agenda 21 specifically recommends that nations adopt a number of statutes that are part of United States environmental law. These include, for example, requirements for an environmental impact statement before the government takes action that may significantly affect the environment,⁵ for public reporting of environmental releases of toxic pollutants,⁶ and for controls on air

* Professor of Law, Widener University School of Law. Carl Bruch and Zygmunt Plater provided helpful comments on an earlier draft. Thanks to Marianne Tyrrell, Class of 2004, for editorial assistance. Librarians Pat Fox and Ed Sonnenberg located difficult sources. Please send comments or questions to john.c.dernbach@law.widener.edu.

1. John C. Dernbach, *Sustainable Development as a Framework for National Governance*, 49 CASE W. RES. L. REV. 1 (1998) [hereinafter *Framework*].

2. *Report of the United Nations Conference on Environment and Development, Agenda 21*, U.N. Doc. A/CONF.151.26 (1992), available at <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc> (last modified Jan. 22, 2003) [hereinafter *Agenda 21*] (last visited Sept. 9, 2003).

3. *Report of the United Nations Conference on Environment and Development, Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/5/Rev.1, 31 I.L.M. 874 (1992), available at <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm> (June 3-14, 1992) [hereinafter *Rio Declaration*].

4. *See Report of the World Summit on Sustainable Development, The Johannesburg Declaration on Sustainable Development*, at 2, U.N. Doc. A/CONF.199/20 (2002), available at http://www.johannesburgsummit.org/html/documents/summit_docs/131302_wssd_report_reissued.pdf

5. *Compare Rio Declaration*, Principle 17, *supra* note 3, (“Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.”) with Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2)(C) (2000) (requiring an environmental impact statement before every major federal action significantly affecting human environment). *See also* James McElfish, *Back to the Future*, 12 ENVTL. F. 14, 14 (1995) (explaining how NEPA could be used to foster sustainable development).

6. *See infra* note 78.

pollution, water pollution, and hazardous waste.⁷ On the other hand, sustainable development raises many hard issues that have thus far been mostly ignored in United States environmental laws. These include population, climate change, and production and consumption of materials and energy. In addition, sustainable development is not an organizing principle or objective for United States environmental law.⁸ Because the transition to sustainability is likely to take at least two generations, or until 2050,⁹ moreover, sustainable development would have us act on a much longer time horizon than laws and policies ordinarily operate.

A sustainable society is not a gauzy, idealistic utopia in which human nature has been perfected, and people are nice to each other. Rather, it is a society populated by real people whose economic and social activity protects and even restores the environment, whether they care deeply about the environment or not. It is also a society that does not have large-scale poverty.¹⁰ That is still a tall order, but it is not about perfecting human nature. The idea, rather, is that social, economic, and legal institutions will help keep society on a sustainable track.

Then, as now, we will need laws that provide categorical protection to air, water, and other environmental resources. Those laws will need to specify nondiscretionary duties for both government agencies and private actors. No matter how incentive-driven our laws ultimately become, private actors, and particularly economic actors, cannot be expected to do the right thing without some authoritative (i.e., governmental) specification of what is prohibited, required, or allowed. Then, as now, government agencies will have a primary role in enforcing those legal duties. No matter how many model corporations and individuals there are, there will always be those who ignore the laws.

Sustainable development would move our environmental goals from damage control toward restoration. It would move our economic goals in environmental protection from reducing costs toward creating opportunities. And it would

7. *Compare Agenda 21*, *supra* note 2, chs. 9 (air pollution), 18 (pollution of freshwater), and 20 (hazardous waste) with Clean Water Act, 33 U.S.C. §§1251-1387 (2000), Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901-6992(k) (2000), and Clean Air Act, 42 U.S.C. §§ 7401-7671(q) (2000).

8. E. Donald Elliott & Mohamed Tarifi, *Integrating Sustainable Development into U.S. Law and Business*, 33 ENVTL. L. REP. 10,170, 10,172 (2003) (“No fair minded observer could conclude that U.S. environmental law and policy as they currently exist make sustainable development an organizing focus or central design goal.”).

9. NATIONAL RESEARCH COUNCIL, *OUR COMMON JOURNEY: A TRANSITION TOWARD SUSTAINABILITY* 3 (1999)

10. John C. Dernbach, *Sustainable Development: Now More Than Ever*, in *STUMBLING TOWARD SUSTAINABILITY* at 45 (John C. Dernbach ed., 2002). This, of course, is not a complete description of a sustainable society. But it does describe two key elements. Because sustainable development is directed against widespread environmental degradation and large-scale poverty, it follows that a sustainable society would be a society in which these do not exist.

have us protect quality of life in all communities, not just reducing aggregate emissions or impacts.

My purpose here, however, is not to comprehensively assess the similarities and differences between environmental law and sustainable development.¹¹ Rather, my objective is to see what we can learn about sustainable development, and the progress we in the United States have already made or not made, by looking at citizen suits under United States environmental law.¹² I propose to focus on four aspects of these citizen suits: the manner in which they allow access to U.S. courts, the rules concerning standing to sue, the purposes of the laws that have provisions authorizing citizen enforcement, and the extent to which we would want such provisions in a world that has reached some form of sustainable development.

Citizen suits are an important part of an environmentally sustainable legal system because they provide access to justice for persons injured by violations of environmental laws. The law of standing requires plaintiffs to allege injury to their uses of the environment as a result of the defendant's use or misuse of the environment. It thus suggests, in rough terms, competition between sustainable uses and unsustainable uses. But the environmental laws being enforced in citizen suits tend to be based on a damage control model of environmental protection, largely to reduce economic and social costs. In a sustainable society, by contrast, economic development could help drive both greater environmental protection and greater social well-being. Moreover, environmental protection in a sustainable society would be based on the full range of laws and policies that affect the environment, not just environmental regulation. Yet even these laws would need to include citizen suit provisions of some kind, because citizen involvement is necessary for sustainable development.

I. ACCESS TO JUSTICE

Citizen suits help foster sustainable development because they permit public access to the court system to challenge government and private decisions that fail to protect the environment or social well-being. The foundational action principle of sustainable development is integrated decision-making.¹³ The basic

11. For such an assessment, see Dernbach, *supra* note 10.

12. By citizen suits, I mean primarily those filed under Section 304 of the Clean Air Act, 42 U.S.C. § 7604, and similar provisions under federal and state environmental laws. Of course, a great variety of other laws provide for citizen access to both administrative and judicial forums. See Frances Irwin & Carl Bruch, *Public Access to Information, Participation, and Justice*, in STUMBLING TOWARD SUSTAINABILITY, *supra* note 10, at 511, 515-17 (summarizing other statutes providing such access). While this article focuses on citizen suits, some of the examples cited are based on other statutes providing a right of public access to administrative or judicial procedures.

13. See John C. Dernbach, *Achieving Sustainable Development: The Centrality and Multiple Facets of Integrated Decisionmaking*, 10 IND. J. GLOBAL LEGAL STUD. 247, 249 (2003).

idea is that environmental protection should be considered and fostered in all development decisions.¹⁴

Public access to decision-making processes is another key principle of sustainable development. Principle 10 of the Rio Declaration indicates that public access requires public participation in decision-making, public access to information, and public access to justice:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.¹⁵

Public participation, access to information, and access to justice are fundamental to governance in the United States, but they are also fundamental to the integrated decision-making that sustainable development requires. Public participation and lawsuits, based at least in part on publicly available information, are likely to bring environmental, social, and economic information and perspectives into decision-making processes that might not otherwise consider them. They may also lead to decisions that achieve specific environmental or social goals. Thus, public participation, access to information, and access to justice enhance the likelihood of integrated decision-making.

The availability of environmental information can influence decision-making processes in various ways. For instance, the required public disclosure of releases of toxic chemicals has led companies to reduce their releases of these chemicals.¹⁶

14. "In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it." *Rio Declaration*, Principle 4, *supra* note 3. "Principle 4 reflects the emphasis on integration, interrelation and interdependence of environment and development, which forms the backbone of sustainable development." See *Rio Declaration on Environment and Development: Application and Implementation*, Report of the Secretary General, U.N. Commission on Sustainable Development, 5th Sess., U.N. Doc. E/CN.17/1997/8, ¶ 31 (1997).

15. *Rio Declaration*, Principle 10, *supra* note 3. One of the four major sections of Agenda 21 is entitled, "Strengthening the Role of Major Groups." It specifically describes the roles that women, children and youth, indigenous people, nongovernmental organizations, workers and their trade unions, business and industry, the scientific and technological community, and farmers need to play in achieving sustainable development. Agenda 21, *supra* note 2, chs. 23-32. For international perspectives on implementation of Principle 10, see ENVTL. L. INST., THE NEW "PUBLIC": THE GLOBALIZATION OF PUBLIC PARTICIPATION (Carl Bruch ed., 2002); ELENA PETKOVA ET AL., CLOSING THE GAP: INFORMATION, PARTICIPATION, AND JUSTICE IN DECISION-MAKING FOR THE ENVIRONMENT (2002).

16. Lynn R. Goldman, *Toxic Chemicals and Pesticides*, in STUMBLING TOWARD SUSTAINABILITY,

Similarly, the required disclosure of environmental impacts of major federal actions significantly affecting the quality of the human environment, through the National Environmental Policy Act, forces decision-makers to consider these impacts more seriously. Environmental information may also affect consumer behavior, steering some consumers toward or away from certain products.¹⁷

It is not enough that decision-makers be required by law to consider or further environmental goals. Access to administrative and judicial redress is also essential for sustainable development. Often, as we know, government and private decision-makers do not follow the law. To the extent that it is available, administrative and judicial review helps ensure integrated decision-making, and thus enhances the likelihood that decision-makers will fulfill their legal obligations.

Citizen suits under state and federal environmental law provide access to justice for citizens and organizations who claim in good faith that government or private decision makers have not complied with environmental laws. Governmental enforcement decisions are ordinarily discretionary; when the government does not enforce a particular law, its failure to do so is rarely subject to judicial review.¹⁸ Citizen suit provisions, however, provide the public with an opportunity to engage in enforcement of environmental laws in cases that the government has decided not to prosecute.¹⁹ Citizen suits provisions empower individuals and organizations to act as “private attorneys general,” seeking injunctive relief and sometimes civil penalties on behalf of the government under circumstances when the government has been unwilling or unable to enforce environmental laws.²⁰ By enlisting persons outside the government in

supra note 10, at 403, 415-16.

17. Robert L. Fischman, *Forestry*, in *STUMBLING TOWARD SUSTAINABILITY*, *supra* note 10, at 327, 342-43 (describing two sustainable forest certification programs that provide consumers with information about practices where wood products originated); Hale E. Sheppard, *Timber Certification: An Alternative Solution to the Destruction of Chilean Forests*, 14 J. ENVTL. L. & LITIG. 301 (1999) (recommending forest certification program). *See also* Paul R. Kleindorfer & Eric W. Orts, *Informational Regulation of Environmental Risks*, 18 RISK ANALYSIS 155, 157 (1998) (“informational disclosure opens up the traditional bilateral relationship between the regulator and the regulated to include other social institutions, most importantly, economic markets and public opinion”).

18. *See Heckler v. Chaney*, 470 U.S. 821 (1985) (governmental refusal to prosecute presumed to be unreviewable unless Congress has provided criteria for review of that refusal).

19. Citizen suit provisions are ordinarily coupled with procedural requirements for public notification of permit applications, public participation in the permit application process, public access to government files, required disclosure of information about the formulation of policies and regulations, and required public disclosure of environmental information about certain facilities. *See, e.g.*, ENVTL. L. INST., *PUBLIC PARTICIPATION IN ENVIRONMENTAL REGULATION* (1991) (summarizing and explaining these procedures).

20. *See, e.g.*, 33 U.S.C. § 1365 (2000) (Clean Water Act citizen suit provision); 42 U.S.C. § 7604 (2000) (Clean Air Act citizen suit provision). *See also* *Bennett v. Spear*, 520 U.S. 154, 165 (1997).

enforcement efforts, citizen suit provisions increase the overall level of resources available for enforcement of environmental laws and increase the likelihood that enforcement action (by either the government or others) will be undertaken against violators.²¹ Citizen suit provisions also help make environmental law more responsive to the needs and problems of individual communities. They indicate that all parts of society, not just the government, have a responsibility for the quality of life in our communities. More generally, citizen suit provisions reinforce the importance of the rule of law, an essential element of a just and sustainable society.

But citizen suits and related provisions are only part of the larger picture concerning public participation, public information, and access to justice in the United States. In *Stumbling Toward Sustainability*,²² a comprehensive assessment of United States sustainable development efforts in the ten years since the Earth Summit, Frances Irwin and Carl Bruch provide an assessment of United States efforts relevant to Principle 10.²³ They conclude that laws and institutions concerning citizen access, that were already in place at the time of the Earth Summit provided a strong foundation for sustainable development efforts.²⁴ Although there were modest changes in these laws and institutions in the past decade, "the most significant change is widespread access to information through the Internet."²⁵ In the early 1990s, the Internet was almost in its infancy, but its use has expanded rapidly, and now includes a wide variety of governmental and nongovernmental sites that provide environmental information.

Irwin and Bruch also make recommendations for what the United States should do over the next decade. Among other things, they recommend that the United States develop and use sustainable development indicators. Such indicators would measure not only economic performance but also performance in addressing poverty, improving human health, and protecting the environment.

The Court stated that the "obvious purpose" of citizen suit provision in the Clean Water Act is to encourage enforcement by so-called 'private attorneys general'--evidenced by its elimination of the usual amount-in-controversy and diversity-of-citizenship requirements, its provision for recovery of the costs of litigation (including even expert witness fees), and its reservation to the Government of a right of first refusal to pursue the action initially and a right to intervene later.

Id.

21. See David R. Hodas, *Enforcement of Environmental Law in a Triangular Federal System: Can Three Not be a Crowd When Enforcement Authority is Shared by the United States, the States, and Their Citizens?*, 54 MD. L. REV. 1552, 1617-25 (1995) (describing role of citizen suits under federal Clean Water Act).

22. STUMBLING TOWARD SUSTAINABILITY, *supra* note 10.

23. See Irwin & Bruch, *supra* note 12, at 511-39.

24. *Id.* at 519.

25. *Id.* at 531.

Sustainable development indicators should also include indicators concerning public access to information, decision-making, and justice.²⁶ They also recommend that the United States government foster a continuing dialogue with citizens on sustainable development.²⁷

Irwin and Bruch specifically address citizen suits. There were some backward steps over the past decade concerning citizen suits, they conclude, including Supreme Court decisions that limit suits against states and limit suits for wholly past violations.²⁸ In such cases, United States law falls short of what sustainable development might ultimately require. They recommend that Congress strengthen citizen suit provisions in environmental laws by ensuring that they are written to address past as well as present violations, that states adopt comparable citizen suit provisions, and that the state and federal governments provide expanded opportunities for citizen groups to seek administrative and judicial review.²⁹ On the other hand, this country thus far “has been an international leader in promoting transparency, participation, and accountability, both generally and in the environmental context.”³⁰ They thus recommend that the United States preserve and enhance its leadership role.

II. STANDING TO SUE

The standing doctrines articulated by the United States Supreme Court reflect some aspects of sustainable development but not others. To begin with, sustainable development is anthropocentric, not biocentric. While sustainable development has been criticized for that approach,³¹ the underlying premise is that human well-being requires environmental protection. Similarly, standing in environmental cases is based on injury to humans. To have standing, a plaintiff must show “injury in fact.”³² The relevant standard “is not injury to the

26. Irwin & Bruch, *supra* note 12, at 532-33. They also recommend publication of an annual report on the state of the nation’s environment. *Id.* at 533-34. In 1969, Congress required the Council on Environmental Quality (CEQ) to issue such a report. That requirement was eliminated in 1995. Federal Reports Elimination and Sunset Act, Pub. L. No. 104-66, §§ 3003(a) & (c), 109 Stat. 707, 734-35 (1995) (eliminating reporting requirements that are contained in U.S. House of Representatives, Reports to be Made to Congress, H.R. DOC. NO. 103-7 (1993)). The CEQ reporting requirement is in 42 U.S.C. § 4344(7) (2000).

27. STUMBLING TOWARD SUSTAINABILITY, *supra* note 10, at 536. Other recommendations include adoption of a “new generation” of access principles, more useful public delivery of data, and international leadership on citizen access. *Id.* at 534-39.

28. *Id.* at 532. See, e.g., *infra* note 78.

29. See Irwin & Bruch, *supra* note 12, at 537.

30. *Id.* at 511.

31. See, e.g., DONALD WORSTER, THE WEALTH OF NATURE: ENVIRONMENTAL HISTORY AND THE ECOLOGICAL IMAGINATION 153-55 (1993).

32. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992); *Sierra Club v. Morton*, 405

environment but injury to the plaintiff.”³³ Humans can get standing, but trees cannot.³⁴ Thus, environmental cases are not about the environment vs. humans, but humans vs. other humans.

Moreover, standing is based on injury to human quality of life—the same broad perspective that is recognized in sustainable development. The recognition that human quality of life is dependent on social, economic, and environmental values—that we experience all of these together as a whole and not as discrete pieces—is central to sustainable development.³⁵ Similarly, the Supreme Court recognizes a broad range of injuries to plaintiffs; it has not limited plaintiffs to economic injury. “Aesthetic and environmental well-being, like economic well-being, are important ingredients of the quality of life in our society,” the Court stated in *Sierra Club v. Morton*.³⁶ Thus, plaintiffs have been held to properly allege injury in fact when, for instance, they aver that they use an area and that the challenged activity lessens its aesthetic and recreational value to them or that they would use the area if the challenged activity were not occurring.³⁷

Because sustainable development is about development *and* environmental protection, not development *or* environmental protection, it presupposes human uses of the environment that are not damaging to the environment, and may even

U.S. 727, 734 (1972). Many citizen suit provisions also require plaintiffs to show some kind of injury. See, e.g., 33 U.S.C. § 1365(a) & (g) (2000) (authorizing citizen suits by any citizen, and defining a citizen as “a person or persons having an interest which is or may be adversely affected”).

33. *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 181 (2000).

34. *Morton*, 405 U.S. at 734-35. *Id.* at 741-42 (Douglas, J., dissenting) (arguing that inanimate natural objects should have standing and proposing that courts should consider appointing a guardian to protect their interests). *Id.* at 750 n.8. In his dissent, Justice Douglas cited Christopher D. Stone, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450 (1972), which argues the case for this proposition in greater detail. *Id.* at 741. See also Christopher D. Stone, *Should Trees Have Standing? Revisited: How Far Will Law and Morals Reach? A Pluralist Perspective*, 59 S. CAL. L. REV. 1 (1985) (further elaborating the moral basis for this position). See generally RODERICK FRAZIER NASH, *THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS* (1989) (history of idea that nature has rights).

35. See, e.g., *Rio Declaration*, Principle 1, *supra* note 3 (“Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.”); PRESIDENT’S COUNCIL ON SUSTAINABLE DEVELOPMENT, *SUSTAINABLE AMERICA: A NEW CONSENSUS FOR PROSPERITY, OPPORTUNITY, AND A HEALTHY ENVIRONMENT FOR THE FUTURE* iv (1996) (“A sustainable United States will have a growing economy that provides equitable opportunities for satisfying livelihoods and a safe, healthy, high quality of life for current and future generations.”).

36. *Sierra Club v. Morton*, 405 U.S. at 734.

37. *Laidlaw*, 528 U.S. at 183; *Lujan*, 504 U.S. at 562-63 (1992). See also *Am. Soc’y for the Prevention of Cruelty to Animals v. Ringling Bros. & Barnum & Bailey Circus*, 317 F.3d 334 (D.C. Cir. 2003) (former elephant handler who alleged strong personal attachment to elephants held to have standing in suit alleging mistreatment of elephants by defendant circus under Endangered Species Act because he would suffer emotional or aesthetic injury from seeing mistreated elephants).

be restorative. Somewhat similarly, a properly framed environmental citizen suit involves competing human uses of the same environmental resource. Ordinarily, the plaintiffs claim to be using a particular resource in a protective manner.³⁸ When humans get standing under these circumstances, they are saying, at least to some degree, that their use of the environment is sustainable.

The claim to be using the environment—in some specific manner that would be adversely affected by the challenged action—is a key to getting standing. It will not do for a plaintiff to allege an interest in keeping an area untrammelled by humans, particularly when that plaintiff does not physically use the area for any purpose. The court has enforced the requirement for specific use of the affected area in elaborating the “injury in fact” test. Thus, the “injury in fact” must be “(a) concrete and particularized and (b) actual or imminent, not conjectural.”³⁹ Claims by organization members to have visited an affected area and to intend to revisit the area are insufficient to establish imminent injury when these members lack specific plans to do so.⁴⁰ In addition, affidavits of environmental organization members who claim to use an unspecified part of a large area, only part of which would be affected by mining authorized by the challenged government action, are not specific enough to withstand a motion for summary judgment.⁴¹ To obtain standing, moreover, plaintiffs are required to show, not only injury in fact, but also that the injury is fairly traceable to the defendant’s conduct and that the court is likely to be able to redress the injury if it decides the case favorably to the plaintiffs.⁴² Both of these requirements require specific and demonstrable connections between the affected resource, the plaintiffs’ use of the resource, the relief sought, and the challenged activity.

38. *But see* *Bennett v. Spear*, 520 U.S. 154, 160-61 (1997), in which two irrigation districts and the operators of two ranches used the citizen suit provision of the Endangered Species Act to challenge a biological opinion issued by the U.S. Fish and Wildlife Service under that Act. The biological opinion identified certain requirements for protecting the population of two endangered sucker species, including maintenance of certain reservoirs at certain levels. The Court held that they were injured in fact by the loss of available water, that their loss was fairly traceable to the government’s action, and that the injury was redressable by a favorable judicial ruling. *Id.* at 167-72. The Court also held that the plaintiffs fall within the “zone of interests” sought to be protected by the statute “notwithstanding that the interests they seek to vindicate are economic rather than environmental.” *Id.* at 161. The citizen suit provision of the Endangered Species Act allows “any person” to file such a lawsuit, the Court reasoned, and thus it does not apply only to persons with claims supporting environmental protection. *Id.* at 161-66; 16 U.S.C. § 1540(g)(1)(A) (2000). Even in a case like this, however, it is still possible to see elements of sustainability vs. unsustainability. The parties, simply, may be representing different orientations toward sustainability than they would in a conventional environmental citizen suit.

39. *Lujan*, 504 U.S. at 560 (citations omitted).

40. *Id.* at 564.

41. *Lujan v. Nat’l Wildlife Fed’n*, 497 U.S. 871, 882-89 (1990).

42. *Lujan*, 504 U.S. at 560-61.

Environmental plaintiffs are ordinarily challenging a use of the environment that is claimed to be degrading or destructive. Challenged uses include pollution of waterways,⁴³ mining,⁴⁴ destruction of endangered species,⁴⁵ and failure to publicly report environmental releases of toxic pollutants.⁴⁶ Whether environmental plaintiffs use the language of sustainability or not, their claim about the challenged activity is that, to a significant degree, the activity is not sustainable.

Standing law thus teaches us that we should not view environmental cases only in terms of alleged violations of environmental law; we should also view these cases through the interests of the plaintiffs. To see the value of this perspective, it is useful to review the Supreme Court's decision in *Tennessee Valley Authority v. Hill*,⁴⁷ which held that the Endangered Species Act prohibited closure of a proposed federal dam. This case is widely viewed as the paradigm deep ecology case involving nature vs. humans.⁴⁸ From the perspective of the primary legal issue in that case, this perspective is understandable. Section 7(a)(2) of the Endangered Species Act prohibits federal actions that would "jeopardize the continued existence of any endangered species."⁴⁹ The district court found that closure of the proposed Tellico Dam would have precisely that effect on the snail darter, a listed endangered species under that Act.⁵⁰ Because, as the Supreme Court noted, Section 7(a)(2) "admits of no exception,"⁵¹ the Court concluded that

43. *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 174-77 (2000).

44. *Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. at 879.

45. *Lujan*, 504 U.S. at 558-59.

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

47. 437 U.S. 153 (1978).

48. See, e.g., J.B. Ruhl, *The Co-Evolution of Sustainable Development and Environmental Justice: Cooperation, Then Competition, Then Conflict*, 9 DUKE ENVTL. L. & POL'Y F. 161, 173 (1999) (describing the Supreme Court's decision in that case as "the absolute high point of Deep Ecology in environmental law").

49. 16 U.S.C. § 1536(a)(2) (2000).

50. *Hill v. Tenn. Valley Auth.*, 419 F. Supp. 753, 757 (E.D. Tenn. 1976), *rev'd*, 549 F.2d 1064 (6th Cir. 1977), *aff'd*, 437 U.S. 153 (1978) (finding that it is highly probable that closure of the Tellico Dam and the consequent impoundment of the river behind it will jeopardize the continued existence of the snail darter). The district court also stated, "Almost all of the known population of snail darters will be significantly reduced if not completely extirpated, either due to the impoundment itself or the snail darter's potential loss of reproductive ability if it is unable to adapt to a new environment." *Id.* The court explained that the snail darter required flowing water, high levels of oxygen, and a clear gravel substrate—conditions that existed in the Little Tennessee River where it lived but would not exist in the reservoir to be created by the dam. *Id.* at 756-57. The district court made similar findings concerning the snail darter's habitat. *Id.* These findings were not contested before the Supreme Court. 437 U.S. at 171 n.17.

51. *Hill*, 437 U.S. at 173. Justice Powell wrote a dissenting opinion that Justice Blackmun joined, arguing that twelve years of congressional appropriations for the Tellico Project indicated

the Act prohibited closure of the dam.⁵² Thus, if the case is framed in terms of the statutory violation, it is easy to characterize it as the little fish against the expensive dam.⁵³ Indeed, this characterization of the case is widespread and deeply held, and has been used to attack the Endangered Species Act in Congress and elsewhere.⁵⁴

This characterization, however, ignores the context in which the battle against the dam was fought, and particularly ignores the plaintiffs. The plaintiffs in that case were not snail darters but humans and human organizations whose standing to sue was not contested by the defendants.⁵⁵ In truth, the Endangered Species Act was invoked, not only to protect the snail darter, but also to protect community values and economic activity from the disruption and loss that the dam would cause. Those who objected to the project claimed that the region provided significant recreational, cultural, and agricultural resources that could be profitably developed without the dam.⁵⁶ The Little Tennessee River, on which the dam was being built, was one of the last free-flowing rivers in the area, and a significant resource for canoeing, trout fishing, and hiking, particularly because of its proximity to the Great Smoky Mountains National Park.⁵⁷ More than 200 archeological sites exist in the reservoir area, including Cherokee burial mounds and villages and “the site of the first British fort west of the Appalachians.”⁵⁸ In addition, some 25,000 acres of high quality agricultural land, a significant part of

congressional intent to exempt the project from the Endangered Species act. *Id.* at 195-211. Justice Rehnquist also dissented, saying that the district court properly exercised its discretion in refusing to issue an injunction even though it found a violation of the statute. *Id.* at 211-13.

52. See also Robert V. Percival, *Environmental Law in the Supreme Court: Highlights from the Marshall Papers*, 23 ENVTL. L. REP. 10,606, 10,621 (1993) (quoting memorandum by Chief Justice Burger, who authored the majority opinion in *Tennessee Valley Authority v. Hill*, to Justice Stevens in another case. Here, he said, “we do not have a ‘Snail Darter’ kind of statute but rather a typically ‘fuzzy’ one in which Congress ‘ducked’ the issue.”).

53. That is precisely how the Supreme Court framed the question: “It may seem curious to some that the survival of a relatively small number of three-inch fish among all the countless millions of species extant would require the permanent halting of a virtually completed dam for which Congress has expended more than \$100 million.” *Hill*, 437 U.S. at 172.

54. Ruhl, *supra* note 48, at 176.

55. *Hill v. Tenn. Valley Auth.*, 419 F. Supp. at 754 (identifying plaintiffs as The Association of Southeastern Biologists, the Audubon Council of Tennessee, Inc., Hiram G. Hill, Jr., Zygmunt J.B. Plater, and Donald S. Cohen). It is true that this case was litigated at a time when the Supreme Court’s standing jurisprudence was perhaps more permissive toward plaintiffs than it is now. The plaintiffs here, however, would almost certainly have satisfied the injury in fact, causation, and redressability requirements that have been stated in recent cases.

56. UNITED STATES GEN. ACCOUNTING OFFICE, THE TENNESSEE VALLEY AUTHORITY’S TELLICO DAM PROJECT—COSTS, ALTERNATIVES, AND BENEFITS 21-26 (1977) [hereinafter GEN. ACCOUNTING OFFICE].

57. *Id.* at 21-22.

58. *Id.* at 22-25.

which would be inundated by the dam, were located in the project area.⁵⁹ The coalition that carried the case was thus composed primarily of farmers and sportsmen, not simply environmentalists. Many of them were fighting the project even before the discovery of the snail darter.⁶⁰

The Tellico project was also dogged by serious questions about whether its benefits exceeded its costs. Cost-benefit analysis is the standard economic tool relied on by Congress to determine the economic feasibility of water resources projects.⁶¹ In 1977, before the Supreme Court's decision, the General Accounting Office (GAO) issued a report concluding that neither the project nor any reasonable alternative was supported by then-applicable methods of cost-benefit analysis.⁶² Nor was the dam itself particularly costly. Only \$5 million of the total \$103.2 million then obligated had actually been spent on the concrete dam and spillway that was at the center of the controversy.⁶³ Another \$25.5 million had been spent for land acquisition, and \$35.7 million had been spent on roads, bridges, and other facilities to replace existing routes that would be flooded by the dam.⁶⁴ About half the money already expended, GAO concluded, could provide some benefit if the project was not completed.⁶⁵

After the Supreme Court's decision, Congress quickly amended the Endangered Species Act to allow exceptions to the protection provided by Section 7(a)(2).⁶⁶ The amended Act allows for petitions for exemption, and establishes a seven-member Endangered Species Committee to decide whether these petitions should be granted.⁶⁷ The Committee may grant an exemption only if, among other things, it determines that "there are no reasonable and prudent alternatives to the agency action" and that "the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with

59. GEN. ACCOUNTING OFFICE, *supra* note 56, at 25-26.

60. Zygmunt J.B. Plater, *In the Wake of the Snail Darter: An Environmental Law Paradigm and its Consequences*, 19 U. MICH. J.L. REFORM. 805, 806-16 (1986). See also GEN. ACCOUNTING OFFICE, *supra* note 56, at 19 ("Since 1964, various individuals and groups, including some area residents, fishermen, and environmentalists, have challenged the Tellico reservoir project in favor of river-based development.").

61. GEN. ACCOUNTING OFFICE, *supra* note 56, at 27.

62. *Id.* at 37.

63. *Id.* at 7, 10.

64. *Id.* at 10.

65. *Id.* at 12.

66. Pub. L. No. 95-632, § 3, 92 Stat. 3752 (1978).

67. 16 U.S.C. §§ 1536(e)-(h) (2000). The Committee is comprised of the Secretary of Agriculture, Secretary of the Army, Chairman of the Council of Economic Advisors, Administrator of the Environmental Protection Agency, Secretary of the Interior, and Administrator of the National Oceanic and Atmospheric Administration. *Id.* § 1536(e)(3). The Committee is sometimes referred to as the "God Squad" because it can, under the right circumstances, lawfully decide to authorize the extinction of a species.

conserving the species or its critical habitat, and such action is in the public interest.”⁶⁸

The Endangered Species Committee unanimously denied an exemption for the Tellico project because it failed to meet either of these criteria.⁶⁹ With respect to available alternatives, the Committee concluded that a river development alternative to the dam project was both reasonable and prudent.⁷⁰ The river development alternative was based on agriculture, forestry, recreation, industry, and other development opportunities available on the Little Tennessee River as a free-flowing river.⁷¹ The Committee also found that the benefits of completing the Tellico project did not clearly outweigh the benefits of the river development alternative. The benefits of the Tellico project were estimated to be \$6.5 million annually, with yearly capital, maintenance, and operating costs of \$3.2 million. The annual benefits of the river development alternative were estimated to be \$5.1 million, with only \$2.3 million annually for capital, maintenance, and operating expenses.⁷²

There were, then, two dominant visions for human use of the Little Tennessee River. One involved a dam and the other did not, but both had significant monetized benefits. The river development alternative also had benefits that could not be calculated in dollar terms, the Committee concluded. Benefits of that alternative “which cannot be measured in dollar terms include preservation of archaeological, cultural and historic sites; preservation of customary fish and wildlife values, including trout fishing; and the ecological, esthetic, and scenic values associated with preservation of the snail darter.”⁷³ George Schultze, Chairman of the Council of Economic Advisors and a member of the Committee, put the point even more starkly: “The interesting phenomenon is that here is a project that is ninety-five percent complete, and if one takes just the cost of finishing it against the benefits and does it properly, it doesn’t pay, which says something about the original design.”⁷⁴ Unhappily, a rider to a public works appropriations bill eventually settled the issue on behalf of the Tellico Dam,⁷⁵ and

68. 16 U.S.C. §§ 1536(h)(1)(A)(i) & (ii).

69. ENDANGERED SPECIES COMM., *Application for Exemption for Tellico Dam and Reservoir Project* (Feb. 7, 1979) [hereinafter *Application for Exemption*] (on file with author).

70. *Id.* at 2-3.

71. *Id.*

72. *Id.* at 3. When measured against the money that had already been spent, though, the costs of both the Tellico project and the river development alternative exceeded their benefits. Endangered Species Committee, Transcript of January 23, 1979 Public Meeting at 31-32 [hereinafter Transcript] (statement of George L. Schultze).

73. *Application for Exemption*, *supra* note 69, at 3.

74. Transcript, *supra* note 72, at 31.

75. Energy and Water Development Appropriation Act, 1980, Pub.L. No. 96-69, 93 Stat. 437, 449-50 (1979).

as far as anyone then knew, extinction of the snail darter.⁷⁶ But the case was not about fish versus humans.

Standing law forces us to understand that real people with real problems in real places bring environmental cases. This is particularly true in cases like this one where standing was not even litigated. In fact, it can be argued that standing law helps ensure that environmental disputes are about humans vs. other humans. Plaintiffs must not merely allege injury in fact, causation, and redressability; they must also be able to prove these things.⁷⁷ Without question, these are burdensome requirements for environmental plaintiffs. But they are not wholly negative, even for environmental plaintiffs, because they ensure identification and recognition of the human interests underlying environmental claims. We cannot properly understand environmental cases, especially cases like this one, unless we recognize the human interests and injuries underlying the legal claims on which relief is sought. This is not to say that the Supreme Court's standing decisions are entirely consistent with sustainability. Indeed, many of that court's recent standing decisions seem to move in the wrong direction, making it harder for citizens to successfully challenge governmental failure's to

76. The snail darter was later discovered elsewhere, and its status under the Endangered Species Act was changed. *See* Final Rule Reclassifying the Snail Darter (*Percina tanasi*) From an Endangered Species to a Threatened Species and Rescinding Critical Habitat Designation, Endangered Species Act, 49 Fed. Reg. 27,510 (July 5, 1984) (codified at 50 C.F.R. § 17.11 (2002)).

77. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

enforce the law.⁷⁸ Despite such failings, standing law continues to reflect significant aspects of sustainability.

III. PURPOSES OF ENVIRONMENTAL LAW

We often say that the purpose of environmental law is to protect the environment. But it is much more complicated than that. To begin with, environmental law has never been aimed simply at protecting the environment. As Celia Campbell-Mohn has explained, environmental law has at least nine major purposes, the most prominent of which is protection of human health.⁷⁹ Environmental law also has objectives that are plainly essential to sustainable development, including intergenerational equity and protection of the resource base upon which society rests.⁸⁰ Other goals of environmental law include efficiency, national security, preservation for aesthetics or recreation, community stability, biocentrism, and pursuit of scientific knowledge and technology.⁸¹ With

78. Irwin & Bruch, *supra* note 12, at 528-30. For instance, in *Steel Co. v. Citizens for a Better Environment*, 523 U.S. 83 (1998), the plaintiff environmental group sent a notice to a company under the citizen suit provision of the Emergency Planning and Community Right-to-Know Act, alleging a failure to file required reports under that Act, and stating its intention to file a lawsuit within 60 days. *Id.* at 87-88. The Act requires specified industrial facilities to publicly disclose, on an annual basis, their releases of toxic pollutants. Emergency Planning and Community Right to Know Act, 42 U.S.C. § 11023 (2000). This requirement is consistent with sustainable development because it provides the public with information about toxic pollutants and because it encourages these companies to reduce their releases of such pollutants. Goldman, *supra* note 16, at 415-16. Indeed, Agenda 21 specifically recommends that countries consider adopting such laws. *Agenda 21*, *supra* note 2, ¶ 19.61(c). In response to the 60-day notice, the company promptly filed the required reports, and the environmental group filed suit anyway, requesting a civil penalty assessment and declaratory relief.

The Supreme Court held that the group lacked standing because its injuries could not be redressed by a favorable decision. Civil penalties, the Court reasoned, would be paid to the U.S. government and not to the plaintiff; a declaratory judgment would not achieve anything that had not already been achieved. *But see* *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 185-86 (2000) (holding that the assessment of civil penalties may redress a plaintiff's injury to "the extent that they encourage defendants to discontinue current violations and deter them from committing future ones"). Thus, if the government does not initiate an enforcement action to require filing of these reports, a citizen suit can be avoided by simply filing the reports if a citizen ever sends a 60-day notice under the act. The Court suggested that it might have decided the case differently if Congress had authorized some financial recovery for plaintiffs. *Steel Co.*, 523 U.S. at 106. Thus, Congress might be able to address this issue. Yet even as incentives have become increasingly popular in environmental law, this decision removes an incentive to proactively file the required form.

79. Celia Campbell-Mohn, *Objectives and Tools of Environmental Law*, in ENVIRONMENTAL LAW: FROM RESOURCES TO RECOVERY § 4.1 at 110 (Celia Campbell-Mohn et al. eds., 1993).

80. *Id.* §§ 4.1(E)(F), at 119-24.

81. *Id.* §§ 4.1(B)-(D), (G)-(I), at 108.

the possible exception of national security, citizen suit plaintiffs are seeking to enforce one or more of these objectives.

To more fully understand the extent to which sustainable development concepts are embedded in environmental law, it is useful to organize those nine purposes under the four broad sustainable development goals. The Figure below shows one way to do so:

Environmental Protection	<ul style="list-style-type: none"> • Preservation for Aesthetics or Recreation • Biocentrism • Sustainability of Resource Base
Economic Development	<ul style="list-style-type: none"> • Efficiency • Pursuit of Scientific Knowledge and Technology
Social Well-Being/Equity	<ul style="list-style-type: none"> • Protection of Human Health • Intergenerational Equity • Community Stability
Peace and Security	<ul style="list-style-type: none"> • National Security

This Figure obviously suggests that the purposes of environmental law cover each of the four basic purposes of sustainable development. The point here is not that sustainable development is perfectly reflected in environmental law. The point, rather, is that environmental law is not, and probably never has been, simply about environmental protection. The social, economic, and security objectives of sustainable development are also reflected, to at least some degree, in our environmental laws.⁸²

Nor are these economic, social, environmental, and security objectives discrete. Some of these nine purposes of environmental law fit into more than one of the four sustainable objectives. If we reduce the pollutants to which humans are exposed, for instance, we are also reducing the pollutants to which species and ecosystems are exposed. Efficient use of natural resources may be economically beneficial, but it also protects those resources. I use a version of this figure as an in-class exercise on the first day of environmental law. Students invariably find that it is virtually impossible to label any one of these nine

82. Reasonable people can disagree about the specific sustainable development objective under which each of the environmental law goals is placed. It can be argued, for instance, that intergenerational equity is directed at least as much toward environmental protection as social development. The point of the figure, however, is that most of the goals of environmental law are primarily or substantially based on economics, security, or social well-being.

purposes as being “just economic” or “just environmental.” Any action furthering one of sustainable development’s four major objectives usually affects, and often furthers, at least one of the other objectives.

A possible exception is the biocentric objective of environmental law, which is perhaps best reflected in the Endangered Species Act.⁸³ Because biocentrism seeks to protect natural systems based on their “inherent value beyond their usefulness to humans,”⁸⁴ it is easy (but, as already suggested, inaccurate) to conclude that the Endangered Species Act is only about environmental protection. It is more accurate to say that protection of species can, and often does, contribute to human well-being and even economic development. A growing literature on the economic value of “nature’s services” attests to this.⁸⁵ In addition, as previously noted, the Endangered Species Act now allows exceptions to the categorical protection previously afforded to listed endangered species.⁸⁶ Thus, even the Endangered Species Act contains, explicitly and implicitly, non-environmental goals.

What conclusions can we draw from this?

First, it is impossible to protect the environment without also addressing the social, economic, and even security implications of environmental protection. The argument that sustainable development is somehow impure because it includes non-environmental factors is ultimately an argument against anything that has ever been done for environmental protection. The history of environmental laws in the United States reflects shifting combinations of environmental, social, economic, and national security goals.⁸⁷ We are more likely to get environmental protection if we can show that social and economic goals will be furthered, or at least not be adversely affected. We are less likely to get environmental protection when we cannot show that. The environment has almost never, if ever, been protected for environmental reasons alone.

Moreover, to be honest with ourselves, this conclusion is true of the future as well. If we humans cannot see the links between the environment and our own interests—including our economic and social interests—we are not going to

83. See Endangered Species Act, 16 U.S.C. §§ 1531-1544 (2000).

84. Campbell-Mohn, *supra* note 79, § 4.1(H)(1).

85. See, e.g., SELLING FOREST ENVIRONMENTAL SERVICES: MARKET-BASED MECHANISMS FOR CONSERVATION AND DEVELOPMENT (Stefano Pagiola et al. eds., 2002); ELSEVIER SCIENCE B.V., *Introduction to the Special Issue on the Dynamics and Value of Ecosystem Services: Integrating Economic and Ecological Perspectives*, 41 *ECOLOGICAL ECON.* 367 (2002); James Salzman et al., *Protecting Ecosystem Services: Science, Economics, and Law*, 20 *STAN. ENVTL. L.J.* 309 (2001); Robert Costanza et al., *The Value of the World’s Ecosystem Services and Natural Capital*, 387 *NATURE* 253 (1997).

86. 16 U.S.C. §1536(h) (2000).

87. See RICHARD N.L. ANDREWS, *MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF AMERICAN ENVIRONMENTAL POLICY* (1999).

protect the environment. Enlightened self interest, not altruism, is the path to lasting environmental protection.

Second, a close look at the *environmental goals* of environmental law makes clear that what we call environmental protection is more often simply damage control.⁸⁸ We reduce ambient emissions of pollutants, for instance, but these same pollutants continue to accumulate in ecosystems, albeit at slower rates. We protect listed endangered species, but not unlisted endangered species, and not ecosystems.⁸⁹ In the short run, damage control is a necessary and important strategy, particularly for widespread and difficult problems. But it is difficult to imagine a sustainable society based on a damage control model for environmental protection. Thus, sustainable development provides a challenge to the environmental goals contained in existing environmental laws.

Somewhat similarly, sustainable development provides a challenge to the *social sustainability* of public health and related goals under environmental laws. Environmental justice, which is aimed largely at eliminating the inequitable distribution of environmental pollutants and polluting facilities on the poor and people of color, is easily brought within the rubric of sustainable development.⁹⁰ For the most part, environmental justice is not about justice for the environment, but rather about justice for humans living in particular environments.

Third, sustainable development would employ economic development, not as a factor to be neutralized or countered, but rather as a powerful force on behalf of protection of natural resources and the environment. Ultimately, sustainable development is an effort to change the dynamic and direction of our economic life.⁹¹ To achieve that, industrial and other economic activity need to become an agent of sustainable development.⁹² Quite plainly, this will not be an easy task. But there is evidence that a transition may already be underway. Many corporations and businesses are engaged in pollution prevention or energy conservation activities for economic as well as environmental reasons, for example. Many companies are also beginning to incorporate some sustainable

88. See, e.g., Dennis D. Hirsch, *Globalization, Information Technology, and Environmental Regulation: An Initial Inquiry*, 20 VA. ENVTL. L.J. 57, 57 (2001). "The main function of our environmental laws is to reduce the harmful effects that economic activity has on human health and the environment." *Id.* See also Charles T. Driscoll et al., *Acidic Deposition in the Northeastern United States: Sources and Inputs, Ecosystem Effects, and Management Strategies*, 51 BIOSCIENCE 180, 195-96 (2001) (describing "acidified soils, lakes, and streams" that continue to cause stress or death for terrestrial and aquatic organisms as continuing and serious problems despite reduction in sulfur dioxide emissions since 1970).

89. The growing use of habitat conservation plans provides a partial exception. See A. Dan Tarlock, *Biodiversity and Endangered Species*, in STUMBLING TOWARD SUSTAINABILITY, *supra* note 10, at 311, 321-23.

90. Gerald Torres, *Environmental Justice: The Legal Meaning of a Social Movement*, 15 J.L. & COM. 597, 618-21 (1996).

91. Maurice Strong, Address at Dickinson University (Feb. 26, 1997).

92. DAVID WALLACE, SUSTAINABLE INDUSTRIALIZATION 58 (1996).

development practices into their activities, though they have not yet been able to operationalize sustainability.⁹³

To put the case more strongly, sustainable development is less about reducing economic costs than about maximizing certain kinds of economic opportunity. Much of the debate about legal and policy measures to address climate change, for example, has been framed in terms of how to reduce the costs of such measures. This is a necessary part of the debate, but it ignores entirely another economic aspect of the issue. To a large degree, as state efforts to reduce greenhouse gas emissions have already demonstrated, control measures can create jobs, foster the development of new technologies, reduce the costs of providing energy, and provide other economic benefits.⁹⁴ Much of the motivation for such measures at the state level, in fact, is provided by the economic opportunities they provide.⁹⁵

Fourth, and finally, moving the economy in this direction will permit the realization of more ambitious environmental goals. The growing use of economic instruments such as emissions trading and emissions fees or taxes provides evidence. Economic instruments are not simply less expensive; their generally lower cost makes it possible to set and attain environmental goals that would not otherwise be achievable. The acid precipitation provisions of the 1990 Clean Air Act amendments provide some indication of how this would work. The nation's sulfur dioxide emissions from utility coal-fired power plants were cut by nearly a third over a decade—a goal that previously seemed unreachable.⁹⁶ And the establishment and realization of this goal was made possible, in part, by the use of emissions trading. We have not achieved sustainability on the issue, but this experience gives us a sense of how the rest of the journey is likely to go. Sustainable development, in short, would help environmental law move from an implicit goal of damage control to an explicit goal of restoration.⁹⁷ And

93. William L. Thomas, *Business and Industry*, in *STUMBLING TOWARD SUSTAINABILITY*, *supra* note 10, at 541, 541-42.

94. BARRY G. RABE, GREENHOUSE AND STATEHOUSE: THE EVOLVING STATE GOVERNMENT ROLE IN CLIMATE CHANGE 9-10 (2002), available at http://www.pewclimate.org/projects/states_greenhouse.pdf; John Dernbach and the Widener University Law School Seminar on Global Warming, *Moving the Climate Change Debate from Models to Proposed Legislation: Lessons from State Experience*, 30 ENVTL. L. REP. 10,933, 10,974-75 (2000) [hereinafter *Lessons from State Experience*] (last visited Sept. 9, 2003).

95. Such measures can also provide environmental and social benefits. They can reduce emissions of pollutants other than greenhouse gases (such as sulfur dioxide and nitrogen oxides) and reduce the costs of fossil fuels to the poor. *Lessons from State Experience*, *supra* note 94, at 10,974-75.

96. UNITED STATES ENVTL. PROT. AGENCY, *Clean Air Markets—Progress and Results: Questions Currently Being Explored Using C-MAP and GIS*, at <http://www.epa.gov/aimarkets/cmap/types.html> (last modified Oct. 28, 2002).

97. See Joseph L. Sax, *The New Age of Environmental Restoration*, 41 WASHBURN L.J. 1 (2001).

achievement of this goal is impossible without, at a minimum, enlisting economic development on behalf of environmental protection. Integrated decision-making is much more likely to permit environmental restoration than single-minded attention to the environment alone.

Social, economic, environmental, and even security goals are already contained in environmental law. Sustainable development would enable us to achieve these goals more fully and completely.

IV. CITIZEN SUITS IN A SUSTAINABLE WORLD?

If we want to get an idea of the legal structure that would need to exist in a sustainable society, we need to fully understand how limited environmental law is. Environmental law is predominantly regulation.⁹⁸ It is based on statutes and regulations that are administered by government agencies whose mission is based largely on environmental protection. In addition, although these laws have, as we have seen, a variety of other purposes, one purpose is environmental protection. That is, these laws are *intended* to be more or less protective. This environmental law—regulation that is intentionally protective to some degree—is what we teach in environmental law classes, and this is what environmental lawyers practice.

But this is not, by a long shot, the only law or policy that is environmentally relevant. As Richard Andrews points out, “environmental policy includes not just what government says about the environment, not just what is labeled as environmental policy, but everything the government does that affects it.”⁹⁹ This view of environmental law and policy is broader than our current understanding in two respects. First, it extends beyond environmental law to include tax law, property and land use law, public information and education, and various subsidies.¹⁰⁰ Second, it includes laws and policies that have environmental impacts, whether these impacts were intended or not.¹⁰¹

Environmental protection in a sustainable society would need to embrace this broader view of environmental policy. Obviously, harmonizing other laws and policies on behalf of the environment will take time, but there is evidence that it is already occurring. For example, there is growing use of tax law to reduce

98. Dernbach, *supra* note 13, at 278 n.110 (quoting ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY 317 (2d ed. 1998) (“Most governmental environmental protection efforts are regulatory.”). On the other hand, common law causes of action for intentional private nuisance, public nuisance, negligence, trespass, and other common law torts often protect the environment even though they do not involve government regulation.

99. ANDREWS, *supra* note 87, at x.

100. *Framework*, *supra* note 1, at 63-82.

101. ANDREWS, *supra* note 87, at x.

pollution,¹⁰² and growing interest in the use of property law on behalf of environmental protection and community development.¹⁰³

Apart from a broader range of legal and policy instruments, we will need to make much greater use of environmental and social goals to achieve sustainability. While the air quality and water quality standards established under United States environmental law provide enforceable goals against which the success of our air and water quality programs can be measured, there are no analogous goals or standards for many other environmental programs. For instance, there is no enforceable biodiversity conservation goal in United States environmental law and no goal for actually reducing greenhouse gas emissions.

Among other things, targets and timetables would identify priorities that must be addressed, clarify objectives, and help organize a variety of efforts toward common goals.¹⁰⁴ For agriculture, climate change, and many other problems, the transition to sustainability may not be achievable until 2020, 2050, or later.¹⁰⁵ Thus, interim goals will be needed to show short-term progress and build

102. See, e.g., ORG. FOR ECON. CO-OPERATION AND DEV.; ENVIRONMENTALLY RELATED TAXES IN OECD COUNTRIES: ISSUES AND STRATEGIES (2001); CTR. FOR URBAN RESEARCH, RUTGERS UNIV., TAX INCENTIVES FOR POLLUTION PREVENTION IN NEW JERSEY (1997). For proposals to increase the use of such taxes, see, for example, M. JEFF HAMOND ET AL., REDEFINING PROGRESS, TAX WASTE, NOT WORK: HOW CHANGING WHAT WE TAX CAN LEAD TO A STRONGER ECONOMY AND A CLEANER ENVIRONMENT (1997); ERNST U. VON WEIZSÄCKER & JOCHEN JESINGHAUS, ECOLOGICAL TAX REFORM: A POLICY PROPOSAL FOR SUSTAINABLE DEVELOPMENT (1992); Roberta Mann, *Waiting to Exhale?: Global Warming and Tax Policy*, 51 AM. U.L. REV. 1135 (2002).

103. See, e.g., RIGHTS TO NATURE: ECOLOGICAL, ECONOMIC, CULTURAL, AND POLITICAL PRINCIPLES OF INSTITUTIONS FOR THE ENVIRONMENT (Susan Hanna et al. eds., 1996); ERIC T. FREYFOGLE, JUSTICE AND THE EARTH: IMAGES FOR OUR PLANETARY SURVIVAL (1993); Myrl L. Duncan, *Reconceiving the Bundle of Sticks: Land as a Community-Based Resource*, 32 ENVTL. L. 773 (2002).

104. John C. Dernbach, *Targets, Timetables and Effective Implementing Mechanisms: Necessary Building Blocks for Sustainable Development*, 27 WM. & MARY ENVTL. L. & POL'Y REV. 79 (2002) [hereinafter *Targets, Timetables*].

105. See U.K. DEP'T FOR TRANSP. & DEP'T FOR ENV'T, FOOD & RURAL AFFAIRS, OUR ENERGY FUTURE—CREATING A LOW CARBON ECONOMY 3 (2003) (describing policies and measures that would reduce United Kingdom's carbon dioxide emissions by sixty percent by 2050); Eileen Claussen, *Creating, Not Waiting, For a Climate-Friendly Future*, ENVTL. F., Jan./Feb. 2003, at 20, 20 ("We need at least a 50-year goal for reducing U.S. emissions of greenhouse gases to levels that do not interfere with the climate."); Per Pinstrup-Anderson & Rajul Pandya-Lorch, *Food Security and Sustainable Use of Natural Resources: A 2020 Vision*, 26 ECOLOGICAL ECON. 1, 2 (1998) (describing policies that would need to be put in place to ensure adequate nutrition and sustainable use of natural resources for everyone by 2020); David Tilman et al., *Agricultural Sustainability and Intensive Production Practices*, 418 NATURE 671, 676 (2002) (describing and analyzing incentives and policies that will need to be put in place by 2050 to meet food demand from projected larger global population and projected greater global demand for grain in an environmentally sustainable manner). See also OUR COMMON JOURNEY, *supra* note 9.

confidence that long-term objectives are actually achievable. Of course, these targets and timetables would need to be accompanied by mechanisms to ensure their effective implementation.¹⁰⁶

The overall challenge, then, is to put in place institutional mechanisms that will proactively guide public and private behavior over at least two generations to effect even a transition to sustainability. A major challenge for reducing greenhouse gas emissions, for example, is the lack of widely available and cost-effective technologies that do not emit greenhouse gases.¹⁰⁷ Environmental law has been relatively effective at raising the level of performance for many control technologies, but less successful at ensuring that this level of performance continues to rise. Among other things, we will need to put in place institutions and incentives that effectively guide us toward these technologies.¹⁰⁸ Similarly, ecosystem and watershed management in places like the Chesapeake Bay require collaborative multi-jurisdictional management activities that are often different from the regulatory actions (or inactions) to which citizen suits ordinarily respond.¹⁰⁹

As Principle 10 of the Rio Declaration reminds us, though, these laws and policies, to be effective, will require public access to information, public participation, and access to justice. Regular national reporting on environmental and sustainable development indicators needs to be part of a national sustainable development effort, as Irwin and Bruch have suggested, because such information measures progress and influences behavior. Public reporting of information concerning progress toward targets and timetables would encourage both governmental and private efforts, and thus enhance the likelihood that those goals would be met or even exceeded.

More generally, the challenges of sustainable development are too great and too diverse for government alone to meet; all sectors of society need to be actively and continuously engaged. Thus, a major challenge is to develop incentives and mechanisms to engage stakeholders and affected persons and organizations in the development and implementation of laws. To some degree, this challenge needs to be met by applying new tools or expanding the use of

106. *Targets, Timetables*, *supra* note 104.

107. Martin I. Hoffert et al., *Advanced Technology Paths to Global Climate Stability: Energy for a Greenhouse Planet*, 298 *Sci.* 981, 981-82 (2002).

108. *See, e.g.*, Robert M. Sussman, *Climate Change*, ENVTL. F., Jan./Feb. 2003, at 19, 21 (proposing national strategy to significantly reduce carbon intensity of U.S. economy based on short- and long-term goals as well as “strong government programs to manage and guide technology change, share financial risks, and reward private-sector innovation and investment”).

109. Bradley C. Karkkainen, *Environmental Lawyering in the Age of Collaboration*, 2002 *WISC. L. REV.* 555, 568 (describing ecosystem management as requiring “hybrid public-private governance structures that feature broad information sharing, systematic monitoring of environmental conditions and stressors, and collaborative problem-solving”).

existing tools. For example, while publicly available information about products can affect consumer behavior,¹¹⁰ and thus corporate behavior, there is growing interest in engaging investors on behalf of sustainable development.¹¹¹ While voluntary reporting has its merits, it may be appropriate to improve corporate disclosure requirements to encourage pension funds, life insurance companies, and other institutional investors to invest in those corporations that make the greatest progress toward sustainability.¹¹²

Similarly, efforts to address subsidies are likely to require much better public information than is now available. Regulations and subsidies have similar environmental and economic effects. Both regulations and subsidies affect the cost of doing business and have environmental effects. In fact, subsidies are likely to involve greater fiscal costs than the administration and enforcement of environmental regulations.¹¹³ Yet the information available to the public concerning regulations is vastly better than that concerning subsidies. Regulations can be found in the Code of Federal Regulations. Proposed regulations are published in the Federal Register, and their social, environmental, and economic effects are subject to detailed governmental analysis and public comment.¹¹⁴ Subsidies, by contrast, are ordinarily subject to none of these things. In fact, it is extremely difficult to even quantify them in dollar terms. Studies of the cost of fiscal subsidies to fossil fuels, for example, place those costs between \$2.6 and \$121 billion.¹¹⁵ It is highly unlikely that a cost range this uncertain would be considered acceptable for an environmental regulation.

It is, of course, possible to simply abolish or reduce subsidies. But another alternative is to simply treat them like regulations. Under this proposal, there would be a central registry, akin to the Code of Federal Regulations, where basic information about subsidies could be found. In addition, proposed subsidies would be subject to the same kind of public justification requirements to which proposed regulations are subject. Such public disclosure would likely improve

110. See *supra* note 17 and accompanying text.

111. See, e.g., Andrew W. Savitz, *What U.S. Environmental Lawyers Need to Know About Sustainability*, 17 NAT. RESOURCES & ENV'T 98, 98 (2002) (“[A]lthough many companies are starting to embrace sustainability, most are not assessing their business strategies or activities in terms of the societal or financial risks and opportunities associated with this new form of corporate responsibility.”); Thomas, *supra* note 93, at 570 (“Given their stake, financiers, investors, and insurers have an incentive to work with legislators, government, business, the public, and other stakeholders to promote law, regulation, and other policy measures that encourage and reward business sustainability.”).

112. See Benjamin J. Richardson, *Enlisting Institutional Investors in Environmental Regulation: Some Comparative and Theoretical Perspectives*, 28 N.C. J. INT'L L. & COM. REG. 247 (2002).

113. Doug Koplow & John Dernbach, *Federal Fossil Fuel Subsidies and Greenhouse Gas Emissions: A Case Study of Increasing Transparency for Fiscal Policy*, 26 ANN. REV. ENERGY & ENV'T. 361 (2001).

114. *Id.* at 377-81.

115. *Id.* at 368.

governmental decision making about subsidies, engage the public in that decision making, and lead to the reduction or elimination of the most damaging or least effective subsidies.¹¹⁶

The adoption of short- and long-term goals and implementing mechanisms for many problems, requirements for improved public disclosure requirements for corporations, and a registry and public justification process for subsidies are simply examples of the kinds of ways in which we need to think outside the environmental regulation box if we are to make serious progress toward sustainability. But such provisions are not likely to succeed unless citizens are also authorized to play a role in their enforcement. These citizen enforcement mechanisms may or may not look like the citizen suit provisions discussed in this article. But they would need to play the same role.

Thus, for example, legislation establishing a subsidy registry would likely work more effectively if it included provisions allowing citizens to file lawsuits challenging the failure to include specific subsidies in the registry. Lawsuits challenging the government's failure to subject proposed subsidies to public justification requirements should also be permitted.¹¹⁷ Such provisions would enable individuals and organizations to play a backstop role when government fails to enforce the law. Citizen suits also enhance the likelihood that this law would be enforced, and would engage the public as participants in the public processes involving disclosure and review of subsidies. Then, as now, we will need citizen suit provisions.

V. CONCLUSION

Citizen suits have played a critical role in the implementation of United States environmental laws over the past several decades. Citizen suit provisions embody some essential features of the legal system required for sustainable society. If we are to engineer a successful transition to a sustainable society, we will need to have citizen suit provisions or their like, not only for environmental law, but also for the wide variety of other laws whose enactment or modification will be required.

116. Koplow, *supra* note 113, at 383-87.

117. *Cf.* Karkkainen, *supra* note 109, at 573.