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The Public Trust, What's it Worth?

INTRODUCTION

An admiral stood in the control room of his battleship on a fog-shrouded night as a light appeared just off his starboard bow. He instructed his signal man to order the approaching vessel to change its course and proceed 20 degrees to the starboard in order to avoid collision. A flashing light signaled the response: "Immediately proceed 20 degrees to your port." The admiral was incensed. He instructed his signal man to respond: "I am an admiral and you will proceed 20 degrees to your starboard." The response was immediate: "I am an ensign and you must proceed 20 degrees to the port." The admiral was furious. "I am an admiral and this is a battleship and you will proceed 20 degrees to the starboard." The response came back: "I am an ensign, this is a lighthouse, and you will proceed 20 degrees to your port." The admiral turned his ship to the port.

Sometimes rocks appear where they are not expected and where you feel that they shouldn't be. But there they remain and even an admiral is forced to change his course. This article is not a discussion of where the rocks should or shouldn't be, but a discussion of how they arose and how they can be navigated.

Attitudes change quickly and laws soon follow. Companies that wait to change until there is a change in the law usually cannot react quickly enough to respond to these changes. The retroactive effect of many environmental statutes has created tens of millions of dollars in liability. The smart companies noted the change in the public's attitudes and anticipated changes in the law. They saw the lighthouse and knew that the rocks were coming and did not need to be told to change course. The business environment is as harsh as the natural environment—in both either you adapt to changing circumstances or you die.

How Did We Get Here?

Shifting circumstances lead to changes in attitudes. This continent, particularly the United States, is blessed with a cornucopia of resources. The variety of habitats and climates provides a vast wealth of abundance and diversity. The Native Americans, a non-industrial society, recognized the "value" of resources by deifying them. The concept of "owning" any of these resources was alien. Who would be so

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brazen as to claim to own deity? However, the Native American view was simply overwhelmed by European pragmatic concepts of property and ownership.

The European settlers came to this country from a civilization with the tradition of sovereignty. Sovereignty implied total ownership. The sovereign literally owned all—land, resources, people. Settlers were charged to claim the land for an absentee sovereign. As such, much of the land became the “property” of the sovereign. With independence, the focus of “ownership” naturally shifted to the individual.

Our developing nation exploited resources for growth. Those resources that were not “useful” were seen, at best, as nuisances; at worst, as antithetical to growth. Natural resources were seen as “wild” things to be conquered, and in some cases extinguished. The case of *Pierson vs. Post* is a law school staple.¹ It stands for the principle that wildlife becomes property only when it is reduced to one’s exclusive possession. But it also reflects the frontier attitude toward wilderness as an enemy to be conquered and tamed. The feeling of the day was that there was a wild continent for the taking; that in its natural state, the continent’s resources were without value, and that a growing nation would give its rewards to those strong and bold enough to take possession and hold them.

Natural resources were abundant and, following the basic rule of supply and demand, their value was correspondingly reduced. The situation was further complicated when the natural resources in question were not owned by any one person (as in the case of Mr. Pierson’s fox) and, therefore, not subject to the traditional laws that established ownership. But as the country developed, greater inroads were made on habitat, and natural resources became more and more scarce, both in terms of actual numbers and as a ratio to the user population. In response to this growing scarcity, people’s attitudes have changed and the regulatory response has been massive. Governments have evolved into caretakers or trustees of natural resources.

The Emergence of the Trustee Statutes

The implementation of the restoration provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund),² as amended, the Clean Water Act (CWA),³ and the Marine Protection, Research and Sanctuaries Act (MPRSA),⁴

1. *Pierson v. Post*, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805). Wild fox seen as “a pirate,” “ruthless,” and “cunning” whose death was a benefit to society. *Id.* at 180.

2. 42 U.S.C. §§ 9601-75 (1988).

3. 33 U.S.C. §§ 1251-1387 (1988).

4. 16 U.S.C. §§ 1431-45 (1988).

which I will refer to as a group as the "trustee statutes," establishes a demarcation line in the development of how society values natural resources. The intent of Congress to provide for the restoration of natural resources evidences a realization of the potential if not the expectation for their diminution. These statutes also reflect a basic acknowledgment of the value of natural resources. It might be useful to note that society first had to decide to protect natural resources before it began to value the costs associated with their loss. The evolution into this phase has resulted in the development of a body of complex law, lengthy and costly litigation, and the use of controversial valuation methods.

The trustee statutes reflect society's developing awareness that the destruction of natural resources results in a cost to society, a cost that society is no longer willing to accept. The implementation of these statutes results in the internalization of externalities. Previously, we failed to value natural resources that were not "useful" to our development. In essence, society subsidized our industrial development by not requiring companies to pay for the environmental consequences of their activities. This subsidy occurred as a result of the priorities of the times and the law developed as a response to those priorities.

Earlier statutes were mainly concerned with the gross impacts on human health and the environment. As our medical and scientific methods became more sophisticated, we were able to recognize and legislate against more subtle impacts. We began also to realize that similar subtle impacts on our environment could also impact our health and well-being. Finally, we began trying to deal with the health and well-being of not just humans, but the global environment as well. Accordingly, CERCLA and CWA have, as a main focus, responded first to incidents that are harmful to human health and welfare, and then to the environment. But, more importantly, these statutes have begun to emphasize that simply removing a "bad" substance from the environment is not enough: we also need to begin to address impacts which are lessening the public estate. As our scientific measurement methods have improved, economic methods have been pushed to their limit in the effort to place a value on the costs of these impacts to the public estate.

The Public Trust

Let's examine the evolution of the trustee statutes. Since the beginning of our nation's jurisprudence (following the English legal tradition), natural resources have been mainly characterized as *ferae naturae*—a thing of wild or natural disposition that only became owned when reduced to possession. Free-ranging wildlife was seen to be a "wild and noxious beast."⁵ But who owns the beast until it is reduced to pos-

5. Pierson v. Post, 3 Cai. R. at 175.

session? This has been something of an open question that is only recently in the process of being resolved. The law on dealing with trust land is well developed while the law relating to trust resources such as free-ranging wildlife is not. The reality is that the trustee statutes create a new kind of trusteeship without resolving the question of ownership.

The Public Trust Doctrine arose from the recognition that certain interests and rights in some natural resources are so important to every citizen that they must be preserved and protected for the public as a whole.⁶ These resources are to be available to the public free of private uses⁷ and are to be held in trust by the government for the benefit of the public.⁸

Under the basic tenets of trustee law, certain duties are placed upon a trustee. These may include the duty to the beneficiary of the trust to exercise such care and skill as a person of ordinary prudence would exercise in dealing with his or her own property. A trustee may also be under a duty to use reasonable care and skill to make the trust property productive. A trustee of land is normally under a duty to lease it or to manage it so that it will produce income. However, it may be the duty of the trustee merely to hold the land without making it productive, especially if the land is unimproved land. Ordinarily it is the duty of the trustee to invest trust funds so that they will become productive of income.⁹ "The trustee has an ongoing duty to administer and manage the estate so that its value is maximized to the end that creditors receive the greatest possible return and the debtor receives a surplus if possible."¹⁰ "To represent the estate, the trustee must take possession of all property comprising the estate, protect the property of the estate, defend the legal rights and interests of the estate, preserve and even enhance the value of the property of the estate . . ."¹¹

Although there have been cases in which members of the public have been permitted to bring actions enforcing certain public rights in trust properties,¹² because of the public nature of the trust, citizens must normally rely upon the government to protect their interests.¹³

6. C. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. Davis L. Rev. 269, 315 (1980); J. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L. Rev. 471, 484 (1970).

7. Sax, *supra* note 6, at 485.

8. B. Gordon, Comment, *The Emergence of the Public Trust Doctrine as a Public Right to Environmental Preservation in South Dakota*, 29 S.D. L. Rev. 496, 497 (1984) [hereinafter Comment].

9. See *In re McCabe's Estate*, 220 P.2d 614 (Cal. Dist. Ct. App. 1950); *Palisades Trust and Guaranty Co. v. Probst*, 16 A.2d 271 (N.J. Ch. 1940); *Fidelity Union Trust Co. v. McGraw*, 48 A.2d 279 (N.J. Ch. 1946).

10. 1991 Handbook for Trustees and Debtors in Possession § 4.02.

11. *Id.*

12. See *Marks v. Whitney*, 491 P.2d 374, 381 (Cal. 1971).

13. *Superior Public Rights, Inc. v. State Dep't of Natural Resources*, 263 N.W.2d 290, 295 (Mich. Ct. App. 1978).

The trust duties of the government are not merely passive in nature, but require the government to promote, as well as preserve, the trust.¹⁴ It has been stated that the trustee must "protect the resources against loss, dissipation, or diminution and to act with diligence, fairness, and faithfulness in doing so".¹⁵

In order to discharge its obligations, the trustee has been held to have extensive powers over the trust property.¹⁶ The trustee is said to have an easement in the trust property permitting the trustee to control access to the land, to physically invade the property, to dictate the use of the property, to afford public access onto the property, to construct improvements on the property, and even to preserve the land in its natural state as "open space."¹⁷

Traditionally, public uses for trust property have included commerce, navigation, and fishing,¹⁸ recreational purposes, e.g., bathing, swimming, fishing, hunting, boating, et cetera,¹⁹ and "preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area."²⁰

Can Public Estate Be Lost, Sold, or Bought?

The right of the trustee to alter the uses of a trust property generally will be construed narrowly.²¹ In considering different uses of a trust property, the trustee must use a balancing process.²² The trustee has the duty to consider the impact of its use decisions and to protect the trust interests whenever feasible.²³

14. See Comment, *supra* note 8, at 503; *Save Ourselves, Inc. v. Louisiana Env'tl. Control Comm'n*, 452 So. 2d 1152, 1157 (La. 1984); G. Coggins et al., *The Law of Public Rangeland Management I: The Extent and Distribution of Federal Power*, 12 Env'tl. L. 535, 619 (1982).

15. *Marks v. Whitney*, 491 P.2d at 380.

16. *Petition for a Writ of Certiorari to the Supreme Court of the State of California*, at 10-11, *Summa Corp. v. California ex rel. Lands Comm'n*, 466 U.S. 198 (1984) (No. 82-708); *Brief for Amicus Curiae California Land Title Ass'n*, at 10-12, *Summa Corp. v. California ex rel. Lands Comm'n*, 466 U.S. 198 (1984) (No. 82-708); Letter from Edgar B. Washburn, of Washburn, Kemp & Wagenseil, to Louis F. Claiborne, Dept. of Justice, at 8 (July 7, 1982) (re: *City of Los Angeles v. Venice Peninsula Properties*).

17. *City of Los Angeles v. Venice Peninsula Properties*, 644 P.2d 792, 7931 (Cal. 1982), *rev'd*, 466 U.S. 198 (1984) (*rev'd* on other grounds); *Marks v. Whitney*, 491 P.2d at 380; *Sax*, *supra* note 6, at 475.

18. *City of Los Angeles v. Venice Peninsula Properties*, 644 P.2d at 793-94; *Marks v. Whitney*, 491 P.2d at 380; *Sax*, *supra* note 6, at 484.

19. *Marks v. Whitney*, 491 P.2d at 380; see also *National Audubon Soc'y v. Superior Court*, 658 P.2d 709, 719 (Cal. 1983); *City of Los Angeles v. Venice Peninsula Properties*, 644 P.2d at 793-94.

20. *Sax*, *supra* note 6, at 490; *Wilkinson*, *supra* note 6, at 304.

21. J. Stevens, *The Public Trust: A Sovereign's Ancient Prerogative Becomes the People's Environmental Right*, 14 U.C. Davis L. Rev. 195, 223-24 (1980).

22. *National Audubon Soc'y v. Superior Court*, 658 P.2d at 712.

23. *Sax*, *supra* note 6, at 482, 485-86 (there seems to be no general prohibition against such an action, *Marks v. Whitney*, 491 P.2d at 380; *Morse v. Oregon Div'n of State Lands*, 590 P.2d 709, 711 (Or. 1979); *Sax*, *supra* note 6, at 482, 486).

Though there is some authority for the notion that a trustee may never properly grant a private interest in a trust property,²⁴ it has been held that a trustee may authorize a private use of trust property when it is shown that the private use would improve the public trust or that the private use would not substantially impair the trust.²⁵ It has, however, generally been held that a trustee cannot completely divest itself of its control over the trust property, except in certain special circumstances.²⁶ The court in *Illinois Central Railroad Co. v. Illinois* (the landmark case of the Public Trust Doctrine) stated that: "[state control] for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining."²⁷ Another court has stated that: "It [the public trust] is an affirmation of the duty of the state to protect the people's common heritage, . . . surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust."²⁸

One authority has suggested three questions to be considered in deciding whether a particular change in the trust property is proper. First, has public property been disposed of at less than market value under circumstances which indicate that there is no very obvious reason for the grant of a subsidy? Second, has the government granted to some private interest the authority to make resource-use decisions which may subordinate broad public resource uses to that private interest? Third, has there been an attempt to reallocate diffuse public uses either to private uses or to public uses which have less breadth?²⁹

In Roman times, the Public Trust Doctrine held that the air, running water, the sea, and, consequently, the shoreline were things "common to all."³⁰ The English concept of public rights went to the idea that the use of tidelands and navigable waterways were guaranteed to the public for fishing and navigation, and that these rights limited the power of the king (not the government) to alienate the resources involved in the trust.³¹

State authority over natural resources originated not as a function of state police power, but on the basis of "proprietary" right,

24. *Superior Public Rights, Inc. v. Mich. Dep't of Natural Resources*, 263 N.W.2d 290, 295-96 (Mich. Ct. App. 1978).

25. Sax, *supra* note 6, at 486-89; Stevens, *supra* note 22, at 199.

26. 146 U.S. 387, 453 (1892).

27. *National Audubon Soc'y v. Superior Court*, 658 P.2d 709, 724 (Cal. 1983).

28. Sax, *supra* note 6, at 562-63.

29. Comment, *supra* note 8, at 499.

30. *Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 383 (1842); Comment, *supra* note 8, at 499.

31. *Mumford v. Wardell*, 73 U.S. (6 Wall.) 423, 435-36 (1867); *see also Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845) (holding that the state owns tidewaters between high and low water mark, and lands beneath them for its citizens).

viewed as a fundamental attribute of state sovereignty. As early as 1867, courts embraced the rule of state ownership of the land underlying the navigable waters within state boundaries largely without question.³² Ownership and control of *ferae naturae*, an attribute of the English Crown, was deemed to have passed to the colonies, and thereafter to the states, as a result of their attaining independence.³³ Though originally founded on ancient sovereign rights of navigation, the proprietary interest doctrine was eventually applied to living resources with doctrinal abandon.³⁴

As originally conceived, the proprietary interest constituted so fundamental an attribute of sovereignty that laws openly discriminating against out-of-state users were upheld, notwithstanding the dictates of the interstate commerce clause.³⁵ In contrast, federal authority over the flora and fauna inhabiting public lands was held to be subject to ill-defined limits, in deference to states' proprietary rights.³⁶ Federal jurisdiction over state or private lands remained to be tested, but was regarded as, at best, narrowly circumscribed.³⁷

With increasing federal activity, the courts began to seek relief from the rigidity of the doctrine. As a result, the powers reserved to

32. *Geer v. Connecticut*, 161 U.S. 519 (1896)

33. *McCready v. Virginia*, 94 U.S. 391, 394 (1876) (holding that state citizens' property interest in state tidewaters extends to the fish that inhabit them to the extent that the fish "are capable of ownership while running."); *accord* *Port of Seattle v. Oregon & Washington R.R. Co.*, 255 U.S. 56, 63 (1921) ("the character of the state's ownership in the land and in the waters is the full proprietary right").

34. *McCready v. Virginia*, 94 U.S. at 394. The Court upheld a Virginia statute prohibiting non-residents from planting oysters in Virginia waterways, holding that the citizens of a state have a "property right and not a mere privilege or immunity of citizenship" in the tide-waters and their natural resources. *Id.*

35. For example, in *Hunt v. United States*, 278 U.S. 96 (1928) the Supreme Court affirmed the power of the Secretary of Agriculture to order the destruction of deer on federal lands only where it was determined that such action was necessary to prevent "serious injury" to United States lands. *Id.* at 100. By mid-century, however, the federal government's authority under the Property Clause over federal lands and resources was viewed as virtually unlimited. The Property Clause provides, in relevant part: "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States . . ." U.S. Const. art IV, §3.

See *Kleppe v. New Mexico*, 426 U.S. 529 (1976), discussed in M. Plumb, Note, —Constitutional Law—Expansion of Power Under the Property Clause: Federal Regulation of Wildlife. *Kleppe v. New Mexico*, ___ U.S. ___, 96 S. Ct. 2285 (1976), 12 Land & Water L. Rev. 181 (1977); *see generally*, *New Mexico State Game Commission v. Udall*, 410 F. 2d 1197 (1969). For a discussion of the impact of *Udall*, *see* S. Craig, Comment, Regulation of Wildlife in the National Park System: Federal or State?, 12 Nat. Res. J. 627 (1972).

36. *Hunt*, 278 U.S. 96.

37. U.S. Const., amend. X. By the early 1900s, the proprietary interest doctrine was beginning to crumble as a result of its own rigidity. Courts became more consistent in attributing state natural resource authority to the Tenth Amendment's reservation of powers. This shift in analytic approach is apparent in *Lacoste v. Department of Conservation*, 263 U.S. 545 (1923), in which the Court, addressing the validity of a Louisiana statute declaring "the wild, furbearing animals and alligators of . . . [Louisiana] . . . to be the property of the state," *id.* at 547, explicitly reserved the issue of state ownership, and instead found that the taxation scheme in question was an acceptable exercise of the

the states by the Tenth Amendment, and state police power in particular, became an important backdrop in conflicts over the regulation of wildlife.³⁸ The first major collision of state and federal jurisdiction over the environment occurred upon passage of the Migratory Bird Treaty Act.³⁹ Promulgated as a result of an international effort to protect migratory birds,⁴⁰ the Act prohibited hunting or killing of certain species of game birds except under federal permit. The Act was challenged in *Missouri v. Holland*⁴¹ as an encroachment upon matters left exclusively to the states under the Tenth Amendment, based on the doctrine of state ownership of natural resources. The Supreme Court rejected the challenge, holding that the state of Missouri's authority to regulate the taking of migratory birds had been pre-empted by legitimate exercise of the paramount federal treaty-making power.⁴² More importantly, the Court rejected the proprietary interest doctrine as an impossibility, at least with respect to migratory resources, on the premise that ownership begins with possession, and that migratory birds are possessed by no one.⁴³

At the same time that states were exercising authority over natural resources under the ill-fated proprietary interest doctrine, courts were experimenting with what is now becoming a far more versatile tool in the environmental protection arena—the public trust doctrine.⁴⁴ The public trust doctrine, like the proprietary interest doctrine, devolved upon the American colonies from the English Crown,⁴⁵ which was

state's police power. The legitimacy of the state's goal of preserving its natural resources for the benefit of its own residents was not questioned. *Id.*, at 549. See also, *Georgia v. Tennessee Copper Co.*, 206 U.S. 230 (1907). In defining the state's authority over natural resources, the Court describes the state as the final arbiter "as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air." *Id.*

38. 16 U.S.C. §§ 701-718j (1988).

39. The Act was promulgated pursuant to the Convention between the United States and Great Britain for the Protection of Migratory Birds, Aug. 16, 1916, 39 Stat. 1702.

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

41. The Court characterized the protection of migratory birds as a matter of "national interest of very nearly the first magnitude." *Id.* at 435.

42. Specifically, the court noted that:

Wild birds are not in the possession of anyone; and possession is the beginning of ownership. The whole foundation of the State's rights is the presence within their jurisdiction of birds that yesterday had not arrived, tomorrow may be in another State and in a week a thousand miles away.

Id. at 434. Cf., T. Schoenbaum & P. McDonald, *State Management of Marine Fisheries After the Fishery Conservation Act of 1976 and Douglas v. Seacoast Products, Inc.*, 19 Wm. & Mary L. Rev. 17 (1977) (discussing the extension of state jurisdiction over coastal waters beyond the territorial sea as incidental to state police power over migratory fish that only periodically inhabit state waters).

43. J. Sax wrote the preeminent analysis of the public trust doctrine, tracing both its emergence and evolution. See Sax, *supra* note 6. A succinct and more current review of the doctrine is contained in W. Rodgers, Jr., *Environmental Law* § 2.16 (1977).

44. See Sax, *supra* note 6, at 476. This unusual restriction upon the powers of the Crown itself stemmed from precepts of Roman law concerning ownership of and access to the seas, seashore, and waterways. See *id.* at 475.

45. The English Crown inherited the trust restrictions from Roman law. See *id.*

deemed to hold title to certain common properties, namely the seas, seashores and navigable waterways, subject to the public rights of egress and regress to the seas and inland waterways.⁴⁶ This peculiar, subjugated form of ownership was expressed by American courts as a trust relationship between the state and its citizens.

The historical function of the doctrine was to prevent the dissipation of public lands through negligent or improper conversion to private uses.⁴⁷ The specific menace at which it was aimed was the surreptitious management or disposal of public lands by non-accountable, insular administrative bodies.⁴⁸ To this end, courts found, implicit in the states' fiduciary role, a "presumption" that states do not intend to dispose of public lands in a manner that lessens public uses.⁴⁹ In effect, the presumption provides access by judicial review to the decisionmaking process, for the limited purpose of determining whether the challenged action was supported by appropriate and public legislative action.⁵⁰

While judicial formulations of the doctrine have remained invitingly vague, its potential has been suppressed on several planes by its humble origins. Until recently, courts confined the doctrine to the original, very limited class of navigation-related public rights, namely fishing, trading, and navigation.⁵¹ Moreover, it remains applicable only to traditional trust properties: navigable coastal and inland bodies of water, the submerged lands thereof, and the related strip of shoreline lying between the high and low water marks.⁵²

46. See generally, Sax, *supra* note 6, at 492. The purpose of the doctrine is not to preclude a state from granting title to or use of public lands to private parties. Rather, it creates a presumption that, absent a clear expression otherwise, the state does not intend to dispose of public property in a manner that lessens the public uses to which it is put. *Id.* at 516.

47. Sax, *supra* note 6, at 491-92; Rodgers, *supra* note 44, § 2.16 at 67 (Supp. 1984).

48. Sax, *supra* note 6, at 516; Rodgers, *supra* note 44, at 178.

49. *Supra* note 49.

50. Illinois Central R.R. v. Illinois, 146 U.S. 387 (1892); Sax, *supra* note 6, at 475-76.

51. Sax, *supra* note 6, at 556.

52. Rodgers, *supra* note 6, § 2.16 at 174-75 (discussing cases recognizing as protected public "uses" the preservation of tidelands in its original state for study, aesthetic value, and as marine mammal and waterfowl habitat). "[The] triumvirate of public rights (in navigation, commerce, and fishing) is by no means static and includes rights to use and enjoy the public water for a wide variety of recreational purposes." *Id.* at 174.

Still, the courts appear less willing to expand the resources deemed to fall within the trust res. As a result, the doctrine is still generally applied only to submerged lands, shorelands between the high and low water marks, and navigable waters. *Id.* at 173.

It takes no great inferential leap to conclude that public trust protection ought to be extended to all air, water, and land resources, the preservation of which is important to society. Yet, an accurate description of where the courts have gone confines the public trust doctrine to navigable waters, the foreshore and the parklands.

Id. at 177. Nevertheless, it has been used to protect fish and waterfowl found within rivers, lakes, wetlands and shorelands, and is applied without regard to the locus of title to the related lands. *Id.* § 2.16 at 62-63 (Supp. 1984).

However, courts have begun to re-examine the public uses to which our natural resources are now devoted, and which accordingly are susceptible to protection under the doctrine.⁵³ In sympathy with a growing conservation ethos, courts have extracted from the doctrine an obligation to preserve such non-traditional public "uses" as aesthetic quality and habitat conservation—interests that actually restrict the traditional navigational uses.⁵⁴ Courts have been equally receptive to new strategic applications of the doctrine. Once used only to enjoin questionable dispositions of public resources, the doctrine is now wielded offensively as a basis for recovery of damages for injury to natural resources.⁵⁵ In addition, the issue of a state's title has been divorced from the right as trustee to recover for injury to natural resources.⁵⁶ Most significantly, the doctrine has been held to impose an affirmative

53. *Id.* at 64-65. See also, *Marks v. Whitney*, 259, 491 P.2d 374, 380 (Cal. 1971) (acknowledging as protected uses of natural resources the preservation of tidelands for scientific use, wildlife habitat, and as undeveloped "open space" of intrinsic value). This expansion has been a widespread but not uniform phenomenon. Some states have expressly eschewed invoking the doctrine to protect uses beyond those traditionally recognized (ie, fishing, trade, and navigation). ?what is the reference here?

54. *Rodgers*, *supra* note 44, at 176 n.43. See also, *Maryland Dept. of Natural Resources v. Amerada Hess Corp.*, 350 F. Supp. 1060, 1066-67 (D.Md. 1972) (recognizing state's right, as trustee, to recover damages for injury to natural resources); *Maine v. M/V TAMANO*, 357 F.Supp. 1097 (D.Me. S.D. 1972) (recognizing the right of a state, acting in the capacity of trustee over its natural resources for the benefit of its residents, to sue to recover damages for injury to coastal waters and marine life resulting from an oil spill); *In re Steuart Transp. Co.*, 495 F.Supp. 38 (E.D. Va. 1980) (confirming state's authority, as public trustee, to sue for recovery of oil spill cleanup costs); see *Commonwealth of Puerto Rico v. SS Zoe Colocotroni*, 628 F.2d 652, 671 (1st Cir. 1980) (recognizing trusteeship over natural resources as potential basis for recovery of spill-related natural resource damages, though noting that Puerto Rico's statutory natural resource damage provision renders the issue moot); *California Dep't of Fish & Game v. S/S Bournemouth*, 307 F.Supp. 922 (C.D. Cal. 1969) (recognizing states' right to recover for oil spill related loss of natural resources, posed as "maritime tort").

55. See, e.g., *In re Steuart Transp. Co.*, 495 F.Supp. at 39-40. In addition to statutory claims, the state asserted a right to natural resource damages as trustee of migratory birds killed in an oil spill. The transportation company challenged the common law claim on the basis that the state did not own migratory birds, relying in part on *Missouri v. Holland*, 252 U.S. 416 (1920). Virginia responded that its right to recover damages for destruction of the birds was founded not on ownership, but on an ill-defined sovereign right to protect natural resources on behalf of the citizenry. Its argument was based in part on the doctrine of *parens patriae*, a close relative of the public trust doctrine, which holds that the sovereign's role with respect to natural resources is that of guardian. The Court agreed with Virginia, after concluding that the state did not in fact hold a proprietary interest in the birds.

56. See *National Audubon Soc'y v. Superior Court*, 658 P.2d 709, 724-25 (Cal. 1983); see also, H. Kenison et al., *State Actions For Natural Resource Damages: Enforcement of the Public Trust*, 17 *Envtl. L. Rep. (Envtl. L. Inst.)* 10434, 10436 (Nov. 1987).

This obligation may even extend to the citizens of neighboring states, with respect to migratory species. See *Idaho ex. rel. Evans v. Oregon*, 462 U.S. 1017 (1983) (recognizing Idaho's claims against neighboring states for overexploitation of salmon and steelhead trout, species which migrate from the Pacific ocean through Washington and Oregon to spawning grounds in Idaho, where they support substantial sport and subsistence fishing industries). The decision and its implications are examined in L. Sperling, Note, *Idaho Ex. Rel. Evans v. Oregon: Conservation and the Nonconsumptive State Right in Shared Living Resources*, 45 *U. Pitts. L. Rev.* 949 (1984).

duty upon states to preserve natural resources under their trusteeship for the benefit of an expanding class of beneficiaries.⁵⁷

By shifting the nature of state authority over natural resources from proprietary right to fiduciary duty, the public trust doctrine is significantly altering the obligations of the state with respect to environmental management.⁵⁸

Defining the Scope

In United States common law, the Public Trust Doctrine traditionally has been held to cover only certain areas: tidelands;⁵⁹ navigable waters;⁶⁰ the lands underlying navigable waters;⁶¹ and as one authority states, "Traditional public trust law also embraces park lands, especially if they have been donated to the public for specific purposes, and, as a minimum, it operates to require that such lands not be used for non-park purposes."⁶²

The trend in recent years has been to expand the Public Trust Doctrine to protect wildlife, non-navigable waters, and air, not covered traditionally by the doctrine.⁶³ Some states have legislatively declared that the Public Trust Doctrine extends to all natural resources;⁶⁴ this expanded scope of the doctrine is not universally accepted. In the dissenting opinion to *City of Los Angeles v. Venice Peninsula Properties*, it was stated, "[b]y imposing a public trust easement upon properties which are neither tidal, navigable, nor formerly under the public dominion, the majority has removed all heretofore recognized reasonable limitations on the scope of the public trust doctrine."⁶⁵ The broad application of this doctrine would have significant effect on the value of almost all private property and illustrate the close interface between the public trust, private property and concepts of value.

57. See Comment, *supra* note 8.

58. *City of Los Angeles v. Venice Peninsula Properties*, 644 P.2d 792, 793 (Cal. 1982); *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971); Letter from Edgar B. Washburn, of Washburn, Kemp & Wagenseil, to Louis F. Claiborne, Dept. of Justice, at 3 (July 7, 1982) (re: *City of Los Angeles v. Venice Peninsula Properties*). The tideland area has also been described as "the public domain below the low-water mark on the margin of the sea and the great lakes", *Sax, supra* note 8, at 556, and as "all submerged and submersible lands", *Morse v. Oregon Div. of State Lands*, 581 P.2d 520, 524 (Ct. App. Or. 1978).

59. *National Audubon Soc'y*, 658 P.2d at 712, 719-20; *United Plainsmen v. North Dakota State Water Conservation Comm'n*, 247 N.W.2d 457, 461 (N.D. 1976); *Morse v. Oregon Div. of State Lands*, 581 P.2d at 523.

60. *National Audubon Soc'y*, 658 P.2d at 712; *United Plainsmen*, 247 N.W.2d at 461.

61. *Sax, supra* note 8, at 556.

62. *In re Steuart Transp. Co.*, 495 F. Supp. 38, 39-40 (E.D. Va. 1980); *Sierra Club v. Department of Interior*, 398 F. Supp. 284, 287 (N.D. Cal. 1975); *United Plainsmen*, 247 N.W.2d at 463; *Wilkinson, supra* note 6, at 274 n.18.

63. *Stevens, supra* note 22, at 228.

64. 644 P.2d 793, 803 (Cal. 1982) (J. Richardson, dissenting).

65. See *Sierra Club v. Andrus*, 487 F. Supp. 443 (D.D.C. 1980), *aff'd sub nom.*, *Sierra Club v. Watt*, 659 F.2d 203 (D.C. Cir. 1981).

The new scope of the Public Trust Doctrine vests substantial power in the trustee to preserve and protect trust property on behalf of the public. Though traditionally limited to tidelands and navigable waters, as well as the lands beneath them, et cetera, it has been expanded recently to cover certain natural resources. The natural resource trustees created by the trustee statutes may be only under the obligation to assess and recover for damages to the natural resources for purposes of restoration, rehabilitation, or acquisition of the equivalent of such natural resources;⁶⁶ however, this limited authority may have broader import, particularly viewed in the context of other statutes.

Quasi-Sovereign

The broad definition of state natural resources in Section 101(16) of CERCLA, Section 107(f) of CERCLA is a statutory affirmation of the common law quasi-sovereign and public trust doctrines. The courts have frequently applied these common law quasi-sovereign and public trust doctrines to afford recovery to states for injury to or destruction of natural resources within the states.⁶⁷ The common law quasi-sovereign and public trust doctrines in the area of natural resources speak to the issue of trustee responsibilities.⁶⁸ CERCLA affirms the common law quasi-sovereign and public trust doctrines.⁶⁹ These common law doctrines deal with the public nature of the trust.

66. *In re Steuart Transp. Co.*, 495 F. Supp. at 40; *Maine v. M/V Tamano*, 357 F. Supp. 1097, 1101-02 (D.Me. S.D. 1973).

67. The public trust doctrine is broad, but extends to public purposes, see *Summa Corp. v. California ex rel. State Lands Comm'n*, 466 U.S. 198 (1984). This proposition is substantially discussed in the briefs for the *Summa Corp.* case. See Reply Brief of Petitioner, at 4-5, *Summa Corp.* (No. 82-708); Respondent's Brief in Opposition on Petition for a Writ of Certiorari, at 7, 18-22, *Summa Corp.* (No. 82-708); Petition for a Writ of Certiorari to the Supreme Court of California, at 6, *Summa Corp.* (No. 82-708); Memorandum for United States as Amicus Curiae, at 6, *Summa Corp.* (No. 82-708); *City of Los Angeles Petition for Writ of Certiorari to the Supreme Court of the State of California*, at 30-32, *Summa Corp.* (No. 82-708); *City of Los Angeles v. Venice Peninsula Properties*, 644 P. 2d 792 (Cal. 1982); *Stevens*, supra note 22, at 223-24 (trustee must balance interests). See also, *Superior Public Rights, Inc. v. Michigan Dep't of Natural Resources*, 263 N.W.2d 290, 295-96 (Mich. Ct. App. 1977) (trustee may permit private use); *Marks v. Whitney*, 491 P.2d 374, 380-81 (Cal. 1971) (public rights); *Morse v. Oregon Div'n of State Lands*, 581 P.2d 520, 524 (Or. Ct. App. 1978) (can grant private interest).

68. For support of the theory that the public trust doctrine recognizes that certain interests and rights in certain public natural resources are so intrinsically important to every citizen that they must be reserved and protected for the public see *Save Ourselves, Inc. v. Louisiana Envtl. Control Comm'n*, 452 So. 2d 1152, 1154 (La. 1984); *Coggins et al.*, supra note 14, at 617-18 (there may be an active duty to protect such resources); *National Audubon Soc'y*, 658 P.2d 709, 723-24 (Cal. 1983) (private uses are held subject to the public interest); *Martin v. Waddell*, 41 U.S. (16 Pet.) 367 (1842); *United Plainsmen v. North Dakota State Water Conservation Comm'n*, 247 N.W.2d 457, 461 (N.D. 1976) (doctrine covers navigable waters).

69. 206 U.S. 230 (1907). Quoting that "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.* at 237.

In *In re Steuart Transp. Co.*, the court stated that the quasi-sovereign action would go to the State where no private action exists. Also, in *Maine v. M/V Tamano*, the court stated that "if . . . [the State] . . . can establish damage to her quasi-sovereign interests in her coastal waters and marine life, independent of whatever individual damages may have been sustained by her citizens, there is no apparent reason why the present action to recover such damage cannot be maintained."

In other cases dealing with the use of the common law quasi-sovereign and public trust doctrines, it is clear that such actions are only allowed where there is no cause of action for the private citizen. For example, in *Hawaii v. Standard Oil Co.* the court stated that "[the State] must show a direct interest of its own and not merely seek recovery for the benefit of individuals who are the real parties in interest; . . . [and] not a controversy in the vindication of grievances of particular individuals"

The court also noted:

[T]he inhabitants of the State who have suffered injury or who are threatened with injury by the unlawful practices alleged . . . are alone entitled to seek a legal remedy for their injury, and are the proper parties plaintiff in any suit to enforce their rights which are alleged to have been infringed. It has long been settled by the decisions of this Court that a State is without standing to maintain suit for injuries sustained by its citizens and inhabitants for which they may sue in their own behalf.

The cases of *Georgia v. Tennessee Copper Co.*⁷⁰ and *Hudson Water Co. v. McCarter*⁷¹ have been interpreted to say that, under the quasi-sovereign doctrine, all damages relating to all incidents occurring to all natural resources within a State's borders are recoverable by that State.⁷² This proposition is clearly not so. The Court in the *Georgia v.*

70. 209 U.S. 349 (1908). The Court states that a State may bring suit "to protect the atmosphere, the water and the forests within its territory, irrespective of the assent or dissent of the private owners of the land most immediately concerned." *Id.* at 355.

71. Earlier, The Court, in *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387 (1892), held that "such property [in this case, submerged lands] is held by the State, by virtue of its sovereignty, in trust for the public." *Id.* at 455. Later, the California Supreme Court stated in *National Audubon Soc'y v. Superior Court*, 658 P.2d 709 (Cal. 1983) that "the public trust . . . is an affirmation of the duty of the state to protect the people's common heritage . . ." *Id.* at 724. Finally, the United States Supreme Court, in *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988), spoke of the States' right to sue in order to protect "public rights." *Id.* at 483 n.12.

72. These settlements may be partial, have a consent decree pending with the court, or be on appeal: Elliott Bay, \$24.25 million, *United States v. City of Seattle*, No. C90-395, (W.D. WA); New Bedford Harbor, in excess of \$10 million, *United States v. AVX, Inc.*, No. 83-3882-Y (D. MA); Commencement Bay, \$1 million, *United States v. Simpson Tacoma Kraft Co.*, No. C91-5260T (W.D. WA); Exxon Bayway, \$12 million, *United States v. Exxon Corp.*, No. 91-1003, (E.D. NY); \$570,000, *In re Complaint of Ballard Shipping Co.*, No. 89-0685 (D. Rhode Island); Army Creek, \$800,000, *United States v. BP America, Inc.*, No. 91-409 (D. Del.); \$1.45 million, *United States v. M/V Alec Owen Maitland*, No. 90-

Tennessee Copper Co. decision did, in fact, hold that a State could recover in a nuisance action for a discharge of noxious fumes traveling from one State to another and causing damage to the resources of the second State. Also, the Court in *Hudson Water Co. v. McCarter* stated that the State could act as quasi-sovereign when acting as the "representative of the public." Therefore, States do have authority to bring quasi-sovereign and public trust actions for which a private cause of action is not available.

The Wetlands Wrangle

While CERCLA and OPA create specific trusteeships to protect certain natural resources from injury by listed chemicals and oil, there is a broader trend that should be watched. The Courts and the Congress are weaving a web beginning from divergent starting points, creating a broad trust protecting our common resources from all types of injury.

The debate over wetlands has been heated. When distilled to its constituent elements, it is the effort to define the boundary between private property and the public trust. If a wetland is privately owned but happens to also be critical habitat for a public trust natural resource such as a migratory duck, what rights belong to the land owner and what rights to the public as a whole? Trusteeship under the trustee statutes is another facet of the same argument. The company that owned land traditionally had the right to do whatever it wished with its land, including the discharge of chemical by-products onto and into that land. The duck that was killed by the presence of those chemicals as it transited the land was not owned by anyone and no one had the right to recover for damage done to the duck population. No one cared because there were plenty of ducks. With the passage of the trustee statutes the trustees were given the right *and the responsibility* to recover. The property owner was informed that he could not discharge certain chemicals onto his land because of, among other things, the destruction it caused within the duck population. This is only a short step from saying that the landowner may not destroy certain critical habitats because of the adverse effect that destruction would have on a public trust resource.

The Immediate Effect

The trustee statutes for the first time would give competitive status to natural resources that have in the past been underprotected

10081(K), (S.D. FL); \$2 million, *United States v. M/V Elpis*, No. 90-10011-CIV-JLK (S.D. FL); \$12 million, *United States v. Montrose Chemical Co.*, No. 90 3122-AAH (JRX) (C.D. Cal.); \$1.1 billion, *United States v. Exxon*, No. A90-015 CR (D. AK); *Alaska v. Exxon Corp.*, No. 3AN-89-6852.

because of their uncertain legal status. Congressional concern over oil spills and other environmental deprivations has moved us in this direction. In the past three years, the executive branch has joined in by giving new effect to the restoration and valuation aspects of these "environmental" statutes. This has occurred through a steady progression of litigation and negotiation. Restoration settlements have been reached for injury to natural resources that total well over \$1.2 billion.⁷³ The implementation of the restoration provisions of the trustee statutes marks the watershed on how society values natural resources.

What is interesting about these trustee statutes is that we have created a trust without first defining an ownership interest in the subject of the trust. For example, National Oceanic and Atmospheric Administration (NOAA) was made a trustee for the fisheries resources that it manages. These ocean-going resources have traditionally belonged to no one until they were caught, brought into the boat and reduced to exclusive possession. Following this line of logic to its conclusion, NOAA holds these resources in trust for no one. Whether the problem is approached from Quasi-Sovereign or the Public Trust Doctrine framework, the core question that must be addressed is ownership. Resources that are not individually owned should be seen as owned by us all. Each of us, all of us—not the state, not the sovereign—are owners who commonly and indivisibly hold the air, water, and wildlife with state and federal trustees charged with the care of our common property. It is a simple concept, awesome in its application and particularly vital as we carefully reflect upon an expanding user population and ever-diminishing resources. In our society, ownership is the prime indicator of value and that which is valuable will soon be destroyed.

The concept of common ownership of common resources is such a powerful principle because it places things into a simple and clear perspective to which we can all relate. When a truly toxic material is dumped into our rivers or bays, it is destroying resources that we all own. It is just as if the toxics had been dumped in your own backyard. If that were to happen, it would reduce the value of your property and it would confer a benefit on the dumper (a cheap way to dispose of waste). The argument goes that by allowing the dumping of harmful materials in a way that destroys our commonly held property (e.g., birds, fish, oyster beds, water, air, et cetera), we are reducing the value of what we commonly own and we are subsidizing the industries that cause that destruction by providing them with an artificially cheap method of disposal. The subsidy, as it relates to CERCLA-listed substances, is beginning to stop and this is the good news. But the bad news is that all destruction of natural resources cannot stop. If it were

73. M. Hamilton, *Making A Product's Cost Reflect Pollution's Costs*, Washington Post, November 29, 1992, sec. H at 1.

to cease entirely, the economy would slow dramatically, if not halt completely. Almost everything we do has some negative effect on the natural resources that we commonly hold. But the benefits to society, from the very activities that cause the destruction, are perceived as being of greater value. This then is our "Hobson's Choice." But with the issue of ownership resolved, the choice is clearly ours to make.

Pay As You Go

The solution would seem to be that those who damage natural resources should pay the cost to restore them, or that society should make a conscious decision to continue the subsidy. Valuing the destruction and valuing the societal benefit and devising appropriate frameworks for their comparison will require substantial efforts of the economics profession. Many of us, including the current Chairman of DOW Chemical Company Frank Popoff, believe that in most cases we should pay as we go and that the goods that we produce should cost what they actually cost (including their environmental cost).⁷⁴ Thus the goods that are less harmful to our natural resource base will be more competitive. On the other hand, goods that would cost more than our ability or willingness to pay should simply not be produced. This ongoing itemization process would allow citizens to make choices in the marketplace based on the true economic realities and allow us to move away from the command and control system of environmental decisionmaking used today. Once again, things should cost what they cost.

Decisions on the environment should be rational and based on value, not on emotion. The rational is defensible and amenable to long range planning. The emotional is ephemeral and not legally defensible. If we cannot establish a value for natural resources in damage actions, there is likely to be no recovery. Those who cry that the beauty of a beach or marshland is priceless and cannot be valued in crass economic terms may very well be left with a zero value, since judges and juries are not likely to award damages based upon an undefined or unsubstantiated claim. While many may question the wisdom and need for attempting to place a fair value on our resources, it is my view that *only* by logically and rationally establishing fair value (and ownership) for our "priceless" environment can our natural resources be protected and preserved for our future.

Landmark Decision on Valuation

Not surprisingly, the valuation of natural resources was, and continues to be, a hot topic of controversy. This valuation process be-

74. 880 F.2d 432 (D.C. Cir. 1989)

came a target of litigation in *Ohio v. United States Dep't of the Interior*⁷⁵ and *Colorado v. United States Dep't of the Interior*.⁷⁶ Based largely upon a common law argument, the Department of the Interior (DOI) promoted the concept that the measure of damages should be the lesser of the diminution of market value or the cost of restoration or replacement.⁷⁷

The court ruled otherwise, on a practical and statutory interpretation basis:

Although our resolution of the dispute [over use of the lesser of rule] submerges us in the minutiae of CERCLA text and legislative materials, we initially stress the enormous practical significance of the "lesser of" rule. A hypothetical example will illustrate the point: imagine a hazardous substance spill that *kills a rookery of fur seals* and destroys a habitat for seabirds at a sea life reserve. The lost use value of the seals and seabird habitat would be measured by the market value of the fur seals' pelts (which would be approximately \$15 each) plus the selling price per acre of land comparable in value to that on which the spoiled bird habitat was located. Even if, as likely, that use value turns out to be far less than the cost of restoring the rookery and seabird habitat, it would nonetheless be the only measure of damages eligible for the presumption of recoverability under the Interior rule. After examining the language and purpose of CERCLA, as well as its legislative history, we conclude that Interior's "lesser of" rule is directly contrary to the expressed intent of Congress.⁷⁸

In addition, the court indicated that trustees should be able to sum up all reliably calculated use *and passive use* values and not be limited to a hierarchy of use values hinging upon market value.⁷⁹

The DOI rules had failed to make the transition from the traditional concept that the fox could be valued only when reduced to possession, as in the court's example, in the form of a pelt. The court, however, made the transition and required that the value of the fox to the public be measured with regard to the existence of the fox in the wild. In its court-required revisions to the rule, the DOI has proposed that trustees are able to recover the costs of restoration, rehabilitation, replacement, and/or acquisition of equivalent resources and the value of the services lost to the public during the recovery period.⁸⁰ DOI also introduced the term "compensable value" to "encompass all of the pub-

75. 880 F.2d 481, (D.C. Cir. 1989)

76. See 51 Fed. Reg. 27674, 27690 (1986) (to be codified at 43 C.F.R. pt. 11).

77. *Ohio*, 880 F.2d at 442 (emphasis added).

78. *Id.* at 464.

79. 56 Fed. Reg. 19752, 19756 (1991).

80. *Id.* at 19759-60.

lic economic values associated with an injured resource, including use values and passive-use values such as option, existence, and bequest values."⁸¹ In explanation, Interior stated:

The concept of compensable value allows for many different reasons why the public may value natural resources—including reasons not represented by market prices. For example, some individuals might be willing to pay to avoid an injury to a favorite recreation area. Others may be willing to pay to avoid the loss associated with knowing wildlife were injured, even though they will never visit the injured area The term compensable value incorporates a wide spectrum of values, and is intended to address the court's ruling that option and existence values may be included as a part of damages.⁸²

With apologies to my natural resource economist colleagues who may read this article, in its simplest form, valuation of damages for injuries to natural resources is based upon a two-part scheme: 1) the costs of restoration, replacement or acquiring the equivalent of the affected resource; and 2) the determination of lost use and passive use values of the natural resource from the time of injury until restoration. For the purposes of this article, lost use and passive use values include such values as existence and intrinsic values. Such values are established through a variety of methodologies, including: 1) restoration and replacement cost, where restoration and/or replacement costs of injured or destroyed resources are determined; 2) market valuation, where the market price, if available, of the affected resource is determined; 3) behavioral use valuation, using methodologies including travel cost and hedonic valuation; and 4) contingent valuation, using a survey technique to derive the value humans place upon a natural resource.⁸³

Economic valuation of resources that we commonly hold is the first step toward rationalization of the decision-making process for environmental issues. All use and passive use values must be included or natural resources will be consistently undervalued. On the other hand, if the methods used to measure passive use values create inflated numbers, then economic distortions will result and inequities will be meted out upon those whose activities are being judged.

It was with this in mind that, in my capacity as General Counsel of NOAA, I convened a Blue Ribbon Panel on economic valuation of natural resources. Dr. Robert Solo and Dr. Kenneth Arrow, two Nobel

81. *Id.* at 19760.

82. See, F. Cross, *Natural Resource Damage Valuation*, 42 Vand. L. Rev. 269, 297-320 (1989).

83. 58 CFR 10 at 4610.

prize-winning economists, were asked to chair the panel. Drs. Arrow and Solo were selected because of their reputations for both intellectual integrity and capacity. They were in turn asked to select other panel members who provided particular technical and intellectual skills needed to round out the panel. The panel was charged with "providing comments on whether the Contingent Valuation Methodology (CVM) is capable of providing reliable information about lost existence or other passive use values."

The panel's report was a consensus document which concluded that while there were significant reservations and qualifications that "CVM studies convey useful information. We think it is fair to describe such information as reliable by the standards that seem to be implicit in similar contexts . . . Thus, the Panel concludes that CVM studies can produce estimates reliable enough to be a starting point of a judicial process of damage assessment, including lost passive-use values."

Like it or not, the Panel's conclusion that CVM produces a reliable starting point should be the definitive word on the issue of reliability. However, the Panel's clear reservations leave ample room for debate about the method's specific applications. Furthermore, the cost associated with meeting the Panel's new standards for reliability will limit CVM's use to all but the largest of cases.

The effect on state and federal trustees will be significant. CVMs in smaller cases will be discontinued, while in larger matters the failure to use CVM will be seen as a breach of fiduciary duty. DOI's damage assessment regulations will have to provide for the use of CVM. On the other hand, both NOAA and DOI's compensation tables and model will not be able to include passive use because the Panel's standards render unreliable the previous CV studies that would have been used to extrapolate these values.

CONCLUSION

We must attempt to assign correct ownership and values to natural resources, or any to good, for that matter. If this were possible, the market price would automatically reflect the sum knowledge gained from all interactions. The market would reward companies whose practices preserved natural resources. Policy makers could make decisions based on something other than the pure emotion that drives so many current environmental decisions.

To accurately establish the relationship between competing values, it will be necessary to recognize our joint interest in commonly

held property, so that as "owners" we will have incentive to preserve our investment and prevent others from injuring it. Trustees will have to step up to their responsibilities to the citizens who are the beneficiaries of the Trust. We should also remember that inflated damages sought against companies and their shareholders create distortions that will do as much harm as the historical undervaluation of our natural resource base.

As the dust settles from the continued enforcement from CWA, CERCLA, MPRSA and OPA, two inter-related principles are emerging: 1) the protection and restoration of the environment are now costs of doing business; and 2) resources must be valued in order to assure their protection and restoration. The first principle seems to be becoming established throughout the oil and hazardous substances-related industry, but our societal framework has yet to fully grasp the latter. Once used only to prevent surreptitious or ill-conceived dispositions of public resources, the public trust doctrine now imposes an affirmative obligation to preserve the natural resources that we are only now coming to fully value.

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