PATRIAE, AND THE ATTORNEY GENERAL AS THE GUARDIAN OF THE STATE'S NATURAL RESOURCES

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I. INTRODUCTION

The emergence of a new and pressing environmental problem is usually followed by a chorus of calls for new legislation. Such laws may take years to develop, are watered down by business lobbyists, and are susceptible to the shifting political winds of Washington. Even after their enactment, the effectiveness of these laws is undercut as polluters find loopholes through which to avoid accountability. Superfund is one example.¹

While the passing of new legislation serves the important function of codifying society's stance on the environment, common law remedies are immediately available to the states to address environmental problems. This is too often overlooked in the "new prob-

^{1.} See Allan Kanner, Toxic Tort Litigation in a Regulatory World, 41 WASHBURN L.J. 535 (2002); Allan Kanner, Rethinking Superfund, 20 NAT'L ASS'N ENVIL. PROF'LSNEWS 19 (1995).

lems—new laws" paradigm, and thus common law remedies should be resurrected to further the policy goals of environmental enforcement. A state's Attorney General ("AG") may bring actions to redress environmental harm under both the public trust² and *parens patriae* doctrines.³

Under the public trust doctrine, state AGs can sue, as trustee, for damages to natural resources that are held in the public trust.⁴ To recover damages, the AG must demonstrate that the public trust has been violated by an "unreasonable interference with the use and enjoyment of trust rights."⁵ Some states allow for the recovery of natural resource damages ("NRD") to any natural resource,⁶ while others only allow for the recovery of damages to natural resources that the state government actually owns.⁷ States vary as to what is encompassed by the public trust.

AGs can also bring *parens patriae* suits to recover for damages to a state's natural resources. *Parens patriae* ("parent of the country") allows a state government to sue to redress injury to a state's sovereign and quasi-sovereign interests, including the environment.⁸

Policy arguments support the AG's use of public trust and *parens patriae* actions to recover for damages to natural resources. This litigation strategy should have broad based appeal across political ideologies because the notion that a responsible party should pay for the damage it causes is neither a liberal nor a conservative idea. Furthermore, litigation by the state AG, when used in conjunction with a contingency fee arrangement with private litigators,⁹ requires little resources or regulatory schemes by the state. This cost-shifting incentive is especially beneficial to states, many of whom are currently ex-

^{2.} See infra Part III.

^{3.} See infra Part IV.

^{4.} See WILLIAM H. RODGERS, HORNBOOK ON ENVIRONMENTAL LAW 176 (1977 & Supp. 1984) (stating that the public trust doctrine can be invoked offensively by the government to collect damages to trust property).

^{5.} Id. at 175.

^{6.} EDWARD H.P. BRANS, LIABILITY FOR DAMAGE TO PUBLIC NATURAL RESOURCES 52-53 (2001).

^{7.} See id. at 53 (citing State v. Dickinson Cheese Co., 200 N.W.2d 59 (N.D. 1972); Commonwealth v. Agway Inc., 232 A.2d 69 (Pa. Super. Ct. 1967)). In both cases, state claims for the loss of fish failed because of the state's lack of property interest in the fish.

^{8.} Carter H. Strickland Jr., *The Scope of Authority of Natural Resource Trustees*, 20 COLUM. J. ENVTL. L. 301, 318 (1995).

^{9.} See generally Allan Kanner & Tibor Nagy, The Use of Contingent Fees in Natural Resource Damage and Other Parens Patriae Cases, 19 BNA TOXICS L. REP. 745 (2004).

periencing deep budget cuts.¹⁰ Also, AGs can pick and choose which cases and industries to target, so that environmental policy can be balanced against other policy considerations of the state.

II. SUPERFUND'S SHORTCOMINGS

Superfund,¹¹ despite its noble intent to make polluters pay to cleanup hazardous wastes, has been a failure.¹² It has achieved very little actual cleanup, while producing an archive of studies and risk assessments.¹³ Businesses have been excessively drawn into litigation and ordered to carry out frivolous and unproductive measures.¹⁴ The environment and the public have not received adequate cleanups, the original goal of Superfund.¹⁵ Ironically, but not surprisingly, the only study commissioned by the Superfund Congress concerned toxic tort claims, and the resulting study concluded that federal legislation was not needed.¹⁶

One problem is that Superfund long ago abandoned the simple idea of cleanup in favor of the development of complex remediation plans.¹⁷ Superfund morphed into a risk management statute that attempted to manage waste instead of simply cleaning it up. Polluters, who were given extraordinary power under Superfund to investigate their pollution, have focused on risk management remedies instead of returning polluted land to its prepollution state.¹⁸ Such risk assess-

^{10.} CTR. ON BUDGET & POLICY PRIORITIES, A BRIEF OVERVIEW OF STATE FISCAL CONDITIONS AND THE EFFECTS OF FEDERAL POLICIES ON STATE BUDGETS 1 (2004), *available at* http://www.cbpp.org/10-22-03sfp4.pdf.

^{11.} Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601-9675 (2000).

^{12.} See, e.g., Kanner, Rethinking Superfund, supra note 1, at 19.

^{13.} Robert W. McGee, *Superfund: It's Time for Repeal After a Decade of Failure*, 12 UCLA J. ENVTL. L. & POL'Y 165, 170 (1993) ("Much of the Superfund budget is being consumed by repetitive feasibility studies, administrative costs, and litigation rather than actual cleanup expenditures.").

^{14.} See *id.* at 172-75. The joint and several liability approach to Superfund cases has led to an explosion in litigation in which the EPA has pursued big companies with deep pockets while ignoring the less wealthy waste generators, who are often the most culpable for the problems.

^{15.} Id. at 175.

^{16.} STAFF OF S. COMM. ON ENVTL. & PUB. WORKS, 97TH CONG. REPORT ON CERCLA LEGAL REMEDIES 1, (Comm. Print 1982). An exception was made to liberalize state discovery rules which determine the trigger for running of statute of limitations. See Allan Kanner & Eunice Trevor, Federal Expansion of the State Statute of Limitations in Hazardous Materials Cases, 29 THE BARRISTER 34 (1988).

^{17.} See McGee, supra note 13, at 168-70.

^{18.} Michael Weisskopf, Administrative Costs Drain 'Superfund;' Few Toxic Waste Sites Actually Cleaned Up, WASH. POST, June 19, 1991, at A1.

ment "remedies" include capping the waste at levels polluters desire or determining that doing nothing is less risky than attempting a cleanup.¹⁹

Superfund also has a poor response time. In some cases, there is a seven-year gap between a site being listed on the National Priorities List ("NPL") and the beginning of any remediation.²⁰ Polluters are able to delay the process through the use of feasibility studies. It is not uncommon for three or four feasibility studies to be undertaken before a cleanup starts.²¹

The poor response time and bureaucratic nature has resulted in a bad track record for Superfund. In its first seven years, less than twenty NPL sites were cleaned up.²² By 1991, only sixty-four sites had been cleaned up.²³ Clearly, in the interests of environmental protection and compensation, a new approach with ancient roots should be tried by the states.

III. THE PUBLIC TRUST DOCTRINE

A. Introduction

The public trust doctrine refers to the duty of sovereign states to hold and preserve certain resources, including wildlife, for the benefit of its citizens.²⁴ Described simply, the doctrine provides that natural resources belong to the whole public; private owners may not deprive the public of access. The state has legal authority to pursue causes of action for damages and injunctive relief against parties responsible for the pollution of natural resources.²⁵ If properly used, especially by the state AG, complete relief for the state citizenry is often possible.²⁶

^{19.} It can be said that site remediation was nevertheless costly to the responsible businesses. For the most part, nothing has been spent on natural resource damages.

^{20.} See McGee, supra note 13, at 169.

^{21.} See James Bovard, The Real Superfund Scandal, 89 CATO INST. POL'Y ANALYSIS13 (1987).

^{22.} Id.

^{23.} See Weisskopf, supra note 18.

^{24.} See, e.g., Darren K. Cottriel, The Right to Hunt in the Twenty-First Century: Can the Public Trust Doctrine Save an American Tradition?, 27 PAC. L.J. 1235, 1261 (1996).

^{25.} There might be an exception relating to some transaction costs, such as the costs of suit.

^{26.} Distinctly, and beyond the scope of this paper, a state may also bring an action in its proprietary capacity to recover damages to its property. *See, e.g.*, Submerged Lands Act of 1953, 43 U.S.C. §§ 1301-1315 (2000) (granting title to the state to all lands lying beneath navigable waters within three miles of the coastline). *See* Askew v. Am. Waterways Operators, Inc., 401 U.S. 325 (1973) (regarding state legislation of water pollution).

The state's right to this relief is rooted in the common law's public trust doctrine, which provides that public lands, waters, and other resources are held in trust by the government for the benefit of its citizens.²⁷

Historically, the purpose of the public trust doctrine was to protect water resources for navigation and commerce when waterways were the principal means of transportation and a source of food.²⁸ Thus, the doctrine originally evolved to allow recovery by the State in cases involving discharges into navigable waterways and tidelands.²⁹

B. History

The theory of the public trust is an ancient legal doctrine.³⁰ It evolved from Roman law into English common law, and was passed on to the American colonies. From there, the doctrine has evolved through a series of court decisions. In the early United States, it protected beaches and navigable waterways so that commerce could proceed unimpeded.³¹ In the last fifty years, however, both the scope and the purpose of the public trust doctrine have changed.

1. Roman Law

The idea of the public trust dates back to early Roman law³² or even earlier.³³ The public's interest in and right to certain communi-

^{27.} Matthews v. Bay Head Improvement Ass'n., 471 A.2d 355, 358 (N.J. 1984) ("The public's right to use the tidal lands and waters encompasses navigation, fishing, and recreational uses, including bathing, swimming, and other shore activities."); Borough of Neptune City v. Borough of Avon-by-the-Sea, 294 A.2d 47, 54 (N.J. 1972); Arnold v. Mundy, 6 N.J.L. 1, 12 (N.J. 1821); Van Ness v. Borough of Deal, 393 A.2d 571, 573 (N.J. 1978). Many bodies of water are thus deemed quasi-public property, giving the sovereign special prerogatives at the expense of private parties. Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892) (certain lands are held by the state in trust for the people, and legislative actions are void or voidable if the court finds they violate the trust); Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988) (public trust extends to all tidal waters, not just navigable waters).

^{28.} Mary Kyle McCurdy, Public Trust Protection for Wetlands, 19 ENVTL L. 683, 683-84 (1989).

^{29.} As a practical matter, public trust is akin to standing, and a separate claim for public nuisance, trespass, strict liability, or unjust enrichment must be proven.

^{30.} See Susan Morath Horner, *Embryo, Not Fossil: Breathing Life into the Public Trust Doctrine in Wildlife*, 35 LAND & WATER L. REV. 23, 31-35 (2000) (describing the public trust doctrine as having roots in early Roman civil law).

^{31.} DENNIS J. COYLE, PROPERTY RIGHTS AND THE CONSTITUTION: SHAPING SOCIETY THROUGH LAND USE REGULATION 224 (1993); Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 636 (1986).

^{32.} Lazarus, supra note 31, at 633.

tarian goods and benefits went unquestioned.³⁴ As stated by Justinian:

[T]he following things are by natural law common to all—the air, running water, the sea, and consequently the sea-shore. No one therefore is forbidden access to the sea-shore . . . for these are not, like the sea itself, subject to the law of nations. . . Again, the public use of the banks of a river, as of the river itself, is part of the law of nations; consequently every one is entitled to bring his vessel to the bank, and fasten cables to the trees growing there, and use it as a resting-place for the cargo, as freely as he may navigate the river itself. . . . But they cannot be said to belong to any one as private property, but rather are subject to the same law as the sea itself, with the soil or sand which lies beneath it.³⁵

Stated in other words, private property rights do not necessarily encompass the entire material world, and much of that nonprivate world is a valuable adjunct to the world of private property.

In addition to public goods, the Romans also recognized the ancient right of the sovereign to take private property for public use, or eminent domain.³⁶ The Romans also provided for land use controls, such as housing and construction restrictions.³⁷ Later, as more modern notions of property emerged, these goods and advantages became the property of the state held for the benefit of all.³⁸ Finally, the rights-based notion grew to encompass various public responsibilities.³⁹

37. Jonathan P. Whalen, *The Qualitative vs. Quantitative Approach to Nonconforming Uses Under Section 52-61 of the New York City Zoning Resolution: The Toys Case*, 62 ALB. L. REV. 323, 323 (1998).

38. See Gerald Torres, Who Owns the Sky, 18 PACE ENVTL L. REV. 227, 241-42 (2001) ("If a thing were set aside for public use by public functionaries or political community, it was categorized as *res publicae*. Public buildings and the furniture within them are examples of this category of property.").

^{33.} See Horner, supra note 30, at 31 (noting that some commentators believe that the public trust doctrine may have roots in ancient Greece).

^{34.} See J. Stevens, The Public Trust: A Sovereign's Ancient Prerogative Becomes the People's Environmental Right 14 U.C. DAVIS L. REV. 195, 196-98 (1980).

^{35.} J. INST. 35 § 2.1.1 (J. B. Moyle trans., 5th ed. 1913).

^{36.} In the United States, the Fifth Amendment to the Constitution imposes an obligation on the national government to exercise due process of law in taking private property, as well as an obligation to pay for it: "No person shall... be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

^{39.} See Carol Rose, The Comedy of the Commons: Custom, Commerce, and Inherently Public Property, 53 U. CHI. L. REV. 711, 774 (1986) ("The 'public' in question was the 'public at large;" sometimes it acted through organized governments, but it was also capable of acting through the medium of the customs and habits of a civilized citizenry.").

2. Early English Law

In the eleventh and twelfth centuries, English villages were largely feudal and had "common" land for grazing livestock.⁴⁰ The modern day conception of the common as a public right does not accurately describe the medieval commons. In the medieval commons system, either by a common law right as a freehold tenant or through usage and grants, a villager was entitled to pasture limited numbers of specific animals on the land not otherwise used by the feudal lord.⁴¹ The villager also had the right to cut wood, to fish, and to cut peat or turf for fuel.⁴² Even from the beginning, the use of the commons was regulated: The villages determined the type and number of animals permitted in the commons, the time of year they could be loose, how long they might graze, and when they must be removed.⁴³

In addition, the English allowed the king to declare lands to be "royal forests," so that they could be managed to conserve various types of game.⁴⁴ The "forest" was a land use classification rather than a vegetation description; it contained the mix of habitats that "forest" animals required.⁴⁵ Forest law protected both particular places, by prohibiting habitat-altering activities, and the game species that lived there, by prohibiting hunting—in the language of the time, forest law protected "the vert and Venison" (the vegetation and the game):⁴⁶

[B]y the Lawes of the Forest, no man may cut downe his woods, nor destroy any coverts, within the forest, without the ... license of

^{40.} Fred P. Bosselman, *Limitations Inherent in the Title to Wetlands at Common Law*, 15 STAN. ENVTL. L.J. 247, 273-74 (1996).

^{41.} Lynda L. Butler, The Commons Concept: An Historical Concept with Modern Relevance, 23 WM. & MARY L. REV. 835, 855 (1982).

^{42.} Id.; Bosselman, supra note 40, at 276.

^{43.} Butler, *supra* note 41, at 853.

^{44.} JOHN MANWOOD, A TREATISE ON THE LAWES OF THE FOREST ch. IV, at §§ 1-2 (William S. Hein & Co. 2003) (1598).

^{45.} John Manwood defined the forest as "a certaine Territorie of woody grounds and fruitfull pastures, privileged for wild beasts and fowles... to rest and abide in, in the safe protection of the king, for his princely delight and pleasure, which Territorie of ground... is [legally defined] ... for the preservation and continuance of which said place ... there are certaine particular Lawes, Privileges and Officers." *Id.* at ch. I, § 1; *see also* E. P. THOMPSON, WHIGS AND HUNTERS 28-32 (1975); G. J. TURNER, 18 SELECT PLEASE OF THE FOREST ix (G. J. Turner ed. & trans., Selden Society Publishers) (1901).

^{46.} MANWOOD, *supra* note 44, at ch. I, § 1. The "vert"—"every plant, that doth grow within the Forest and beare greene leafe"—was protective to preserve the "Venison"—a term that at the time meant flesh of any of the animals of the chase. In Manwood's flowery phrasing, "therefore you shall understand, that even as the old Foresters & good Woodmen, doe ... by this generall word Venison, unde rstand every beast of Forest and Chase, as a word of art proper to beasts of Forest, and beasts of Chase, and to none other." *Id.* at ch. VI, § 1; ch. V, § 1.

the Lord chief Justice in Eyre of the Forest, although that the soile, wherein those woods do grow, bee a mans owne freehold.⁴⁷

Similarly,

Hawking and Hunting in forests are pastimes of delights and pleasure, ordayned and appointed chiefly for the recreation of Kings and Princes, and therefore they are not be used in Forests by everie common person, but onely by such, as are Earles, Barons, and Noble men of the Realme, being thereunto licensed or authorised by the King.⁴⁸

Forest law thus was a pervasive body of law that conserved limited game species.

Legal restrictions were not, however, limited solely to places suitable as wildlife habitats. The English government imposed a wide variety of hunting and habitat altering restrictions to conserve wildlife. In 1285, for example, Parliament enacted the Statute of Westminster II which set closed seasons on the taking of salmon.⁴⁹ A statute enacted in 1393 strengthened these restrictions and also restricted habitat alteration by mandating that all dams include weirs "of reasonable wideness" to permit the fish to reach upstream spawning areas.⁵⁰ Similarly, a 1692 statute for "better preserving the red and black game of grouse" prohibited the burning of "grig, ling, heath, furze, goss, or fern" from February through June.⁵¹ Lawmakers also

50. Justices of the Peace Shall be Conservators of the Statutes Made Touching Salmons, 1393, 17 Rich. 2, c. 9 (Eng.).

^{47.} Id. at ch. VIII, § 2; see also Thomas A. Lund, British Wildlife Law Before the American Revolution: Lessons from the Past, 74 MICH. L. REV. 49, 60-62 (1975) (arguing that the forest laws were intended at least in part to create "wildlife rights").

^{48.} MANWOOD, supra note 44, at ch. XVIII, § 1.

^{49.} Statute of Westminster II, 1285, 13 Edw., c. 47 (Eng.). The statute is not unique. *See, e.g.*, The Penalty for Unlawfully Hunting the Hare, 1523, 14 & 15 Hen. 8, c. 10 (Eng.); To Avoid Destroying of Wild-Fowl, 1533, 25 Hen. 8, c. 11, § 2 (Eng.); An Act . . . for the Preservation of the Game in Pheasants and Partridges, and against the Destroying of Hares with Hare -Pipes and Tracing Hares in the Snow, 1604, 2 Jam. 1, c. 27, § 6 (Eng.).

^{51.} An Act for the More Easy Discovery and Conviction of Such as Shall Destroy the Game of this Kingdom, 1692, 4 Wm. & M., c. 23, § 9 (Eng.). When the statute prohibiting the burning of heath proved insufficient to deter illegal habitat destruction, Parliament prohibited unlicensed persons from selling fern ashes. An Act for the Better Prese rvation of the Game, 1706, 6 Ann., c. 16, § 10 (Eng.). See also An Act for the Preventing the Burning or Destroying of Goss, Furze or Ferne, in Forests or Chaces, 1755, 28 Geo. 2, c. 19, § 3 (Eng.).

relied upon bag limits,⁵² gear restrictions,⁵³ and prohibitions on commerce to conserve and to allocate wildlife.⁵⁴

Although the commons system lasted for centuries, abuses of the system by the wealthier landlords were frequent. The unfortunate poor tenant was denied his remedy at law for the illegal abuses of the more powerful landowners. This ultimately led to the enclosure of most of the common land by the mid-nineteenth century.⁵⁵

"After centuries of lapse, the doctrine that certain lands always belong to the sovereign was revived in England during the early seventeenth century to augment the declining fortunes of the Crown."⁵⁶ In many of the debates over the extent of royal power, the public trust was raised as an issue.⁵⁷

C. The American Experience

When colonists arrived in America, they brought the doctrine from England, "although they changed its beneficiary from the monarchy to the public as a whole."⁵⁸ As with many of the common law doctrines taken from England and modified to fit New World needs, the public trust doctrine was unclear and its application varied:

^{52.} See, e.g., An Act for Preservation of Spawn and Fry to Fish, 1558, 1 Eliz., c. 17, § 2 (Eng.).

^{53.} *See, e.g.*, No Man Shall Fasten Nets to Any Thing over Rivers, 1423, 2 Hen. 6, c. 15 (Eng.); An Act for the Preservation of Fishing in the River Severn, 1678, 30 Car. 2, c. 9 (Eng.).

^{54.} The English also addressed their natural environment in other ways. In 1306, King Edward decreed "all but smith to eschew the obnoxious material [i.e., coal] and return to the fuel of old." *See* ALLAN KANNER, ENVIRONMENTAL AND TOXIC TORT TRIALS 1-2, n.3 (2d. ed. 2001) (citation omitted).

^{55.} Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1391 (1993). The enclosure movement:

in England took place in waves during the period 1450-1849. The earliest enclosures were carried out unilaterally by manorial lords; the later ones, by act of Parliament. In essence, an enclosure erased some or all of the preexisting rights in common lands in a specific village, laid out new roadways, and repartitioned the affected territory into private parcels that were larger and more compact than open-field strips, but smaller than the open fields themselves.

Id.

^{56.} Sarah C. Smith, A Public Trust Argument for Public Access to Private Conservation Land, 52 DUKE L.J. 629, 639 (2002).

^{57.} Carol M. Rose, *Takings, Public Trust, Unhappy Truths, and Helpless Giants: A Review of Professor Joseph Sax 's Defense of the Environment Through Academic Scholarship: Joseph Sax and the Idea of the Public Trust, 25* ECOLOGY L.Q. 351, 351 (1998) (alluding to the role of the public trust in debates on the royal prerogative).

^{58.} Smith, *supra* note 56, at 639 (citing to Lazarus, *supra* note 31, at 636) (stating that the nineteenth century jurists specifically included *jus publicum*, the rights of the general public, in their division of water rights).

Indeed, the scope of the public trust doctrine is subject to considerable debate. Many scholars acknowledge the public trust doctrine but maintain that the reach of the doctrine should be fixed. They argue that sudden shifts in the doctrine's application cannot inhere in a title because abrupt changes in the doctrine cannot be consistent with settled rules of state law. Critics of an evolving public trust doctrine are correct that sudden shifts in a doctrine argue against its characterization as a background principle. But it is inconsistent to recognize the public trust doctrine as a background principle on one hand and then limit its application to a "traditional scope" on the other. Controlled evolution is inherent in the very definition of the public trust doctrine; the fundamental purpose of the doctrine is to meet the public's changing circumstances and needs. Just as what constitutes nuisance has changed over time, so too has the public trust doctrine slowly been "molded and extended" to satisfy the needs "of the public it was created to benefit." Careful, predictable expansions of the doctrine, therefore, are not novel legislative decrees, but constitute a firmly embedded exercise of state duty.⁵⁹

Beginning with Massachusetts Bay in 1694, the colonies adopted restrictions on killing or capturing wildlife.⁶⁰ By the American Revolution, every colony except Georgia had established limitations on killing deer.⁶¹ As the population increased, so did legislative output; gear restrictions, bag limits, and licensing requirements soon followed.⁶²

Legislatures also routinely restricted land use to conserve wildlife habitats.⁶³ The most common examples were statutes requiring mill owners to install fishways in their milldams.⁶⁴ For example, when Essex Company was incorporated by the Massachusetts legislature in

^{59.} Zachary C. Kleinsasser, *The Law and Planning of Public Open Space: Boston's Big Dig and Beyond*, 32 B.C. ENVTL AFF. L. REV. 421, 433-34 (2005) (citation omitted).

^{60.} Shannon Peterson, Bison to Blue Whales: Protecting Endangered Species Before the Endangered Species Act of 1973, 22 ENVIRONS L. & POL'Y J. 71, 73 (1999).

^{61.} See Thomas A. Lund, Early American Wildlife Law, 51 N.Y.U. L. REV. 703, 720 n.139 (1976).

^{62.} See Dean Lueck, Property Rights and the Economic Logic of Wildlife Institutions, 35 NAT. RESOURCES J. 625, 633 (1995).

^{63.} See, e.g., John F. Hart, Colonial Land Use Law and Its Significance for Modern Ta kings Doctrine, 109 HARV. L. REV. 1252, 1294-95 (1996).

^{64.} See, e.g., Curtis v. Hurlburt, 2 Conn. 309 (1817); Eastman v. Curtis, 1 Conn. 323 (1815); Cottrill v. Myrick, 12 Me. 222 (1835); Vinton v. Walsh, 26 Mass. (9 Pick.) 87 (1829); Stoughton v. Baker, 4 Mass. 522 (1808); Sickles v. Sharp, 13 Johns. 497 (N.Y. Sup. Ct. 1816); State v. Glen, 52 N.C. 321 (1859); Fagan v. Armistead, 33 N.C. (1 Ired.) 433 (1850); Hart v. Hill, 1 Whart. 124 (Pa. 1835); Boatwright v. Bookman, 24 S.C.L. (Rice) 447 (S.C.L. 1839).

1845, it was required to provide fish passage facilities in the dam it sought to construct on the Merrimack River.⁶⁵

After the American Revolution, the rights of the sovereign passed to the governments of the individual colonies, not the central federal government.⁶⁶ Originally emphasizing water-related resources,⁶⁷ the public trust doctrine has expanded to include nearly all natural resources.⁶⁸

Traditionally, the states managed fish and wildlife as heirs of the king's common law powers by conveyance through the colonial governments.⁶⁹ This idea, known as the state ownership doctrine, can be traced to that amalgam of common and international law that **in**-formed the early legal developments in this country.

In Arnold v. Mundy,⁷⁰ the court found that the State of New Jersey held the land beneath navigable waters in trust for its citizens because the king had done the same.⁷¹ Relying upon Blackstone's *Commentaries*⁷² and Vattel's *The Law of Nations*,⁷³ the court con-

67. See Lazarus, supra note 31, at 636-40.

68. Sharon M. Kelly, Note, *The Public Trust and the Constitution: Routes to Judicial Overview of Resource Management Decisions in Virginia*, 75 VA. L. REV. 895, 897 (1989) ("In recent years, these uses have been expanded to include hunting, swimming, recreational boating, aesthetics, climate, scientific study, environmental and ecological quality, open space, wildlife habitat preservation, and water allocation.").

69. Robin Kindus Craig, Comment, Of Fish, Federal Dams, and State Protections: A State's Options Against the Federal Government for Dam-Related Fish Kills on the Columbia River, 26 ENVTL L. 355, 360 (1996) ("Under the wildlife laws of the United States, management of fish and wildlife is the states'—not the federal government's—prerogative. As early as 1895, the United States Supreme Court held that the power to regulate wild animals passed from England through the colonial governments to the states.").

70. 6 N.J.L. 1 (N.J. 1821). New Jersey was the first state in the country to consider the applicability of the public trust doctrine and has applied the doctrine expansively. "[The state's natural] resources are vital for the economic, recreational, and aesthetic benefits central to the health and well being of the citizens of this State." New Jersey Council on Environmental Quality, N.J. Stat. Ann. § 13:1DD-1 (2003). "[T]he discharge of petroleum products and other hazardous substances within or outside the jurisdiction of this State constitutes a threat to the economy and environment of this State." New Jersey Spill Compensation and Control Act, N.J. Stat. Ann. § 58:10-23.11a (2003).

^{65.} THEODORE STEINBERG, NATURE INCORPORATED 174-75 (1991); see also Peter M. Molloy, Nineteenth Century Hydropower: Design and Construction of Lawrence Dam, 1845-1848, 15 WINTERTHUR PORTFOLIO 315 (1980).

^{66.} In *Martin v. Waddell*, 41 U.S. 367, 416 (1842), the Supreme Court held that the English public trust doctrine had survived the American Revolution: "[W]hen the people of New Jersey took possession of the reins of government, and took into their own hands the powers of sovereignty the prerogatives and regalities which before belonged either to the crown or the parliament, became immediately and rightfully vested in the state."

^{71.} Arnold, 6 N.J.L. at 42.

^{72.} WILLIAM BLACKSTONE, 2 COMMENTARIES *261.

cluded that this meant that the oysters growing on those lands were also owned by the state in trust.⁷⁴ In a subsequent decision, the federal circuit, again relying upon Blackstone and Vattel, held that state ownership-in-trust meant that oysters were not items of commerce and hence, a New Jersey statute prohibiting nonresidents from harvesting oysters did not violate either the Commerce Clause or the Privileges and Immunities Clause.⁷⁵

Meanwhile, the law regarding conflicts over land use was evolving. Such conflicts were at first easy to resolve. Usually, the common law remedy of nuisance was sufficient to settle private disputes.⁷⁶ Initially, the strength of the concept of property rights, and the Lockean notion that if a person had paid for something, it was his to do with as he wished, overrode any suspicion that the public might be better served if certain activities were prohibited or restricted.⁷⁷ However, as American cities grew, public controls became necessary. Cities used their *police power* to enact ordinances restricting certain activities, such as tanneries,⁷⁸ candle makers,⁷⁹ or slaughterhouses with their attendant odors and refuse,⁸⁰ to particular parts of town. Common law remedies to redress land use abuses continued to evolve.⁸¹

77. Raymond R. Coletta, *Reciprocity of Advantage and Regulatory Takings: Toward a New Theory of Takings Jurisprudence*, 40 AM. U. L. REV. 297, 361 (1990) ("The *laissez faire* philosophies of Locke, Smith, and Bentham contributed to this perception of the absolute and individualistic nature of private property. Property bespoke individual rights which tolerated only minimal interference by the state.").

80. See Gardenshire, 221 P. at 229.

81. Most controls of land use come from government regulation, but some arise at common law. One is the concept of nuisance. Another is the notion of waste, which can arise when pe ople share interests and rights in a resource. Waste is committing acts upon the land that are harmful to the rights of the party not in possession. A tenant who cuts down all the trees in a landlord's yard, for example, would be guilty of waste. Waste can be affirmative (cutting down the trees) or permissive (allowing a roof to deteriorate so that rain damages the interior of the house). The remedy for waste can be money damages, an injunction to stop the conduct that is causing the harm, or some combination of the two. *See, e.g.,* Lynda L. Butler, *Defining a Water Ethic Through Comprehensive Reform: A Suggested Framework for Analysis,* 1986 U. IIL. L REV. 439, 445 (1986).

^{73.} EMMERICH DE VATTEL, THE LAW OF NATIONS 120 (1758).

^{74.} Arnold, 6 N.J.L. at 62.

^{75.} Corfield v. Coryell, 6 F. Ca. 546, 550-53 (C.C.E.D. Pa. 1823). *See* Martin v. Waddell, 41 U.S. 367 (1842), Pollard v. Hagan, 44 U.S. (3 How.) 212 (1845), Smith v. Maryland, 59 U.S. 71, 73 (1855), McCready v. Virginia, 94 U.S. 391 (1876), and Manchester v. Massachusetts, 139 U.S. 240 (1890) (tracing subsequent developments).

^{76.} See, e.g., Woodring v. Forks Twp., 28 Pa. 355, 361 (1857).

^{78.} See Gardenshire v. State, 221 P. 228, 229 (Ariz. 1923).

^{79.} See St. Louis v. Polar Wave Ice & Fuel Co., 296 S.W. 993, 994 (Mo. 1927).

The public trust doctrine was static throughout the nineteenth century. The shorelines and land underlying navigable rivers continued to be held in the public trust.⁸² This limited the action of a private property owner on these lands to those not interfering with the public trust.⁸³ The nineteenth century public trust was one of negative rights, preventing harm but imposing no affirmative duties on the landowner or state.

Just before the turn of the century, *Illinois Century Railroad Co. v. Illinois*⁸⁴ changed the nature of the public trust by establishing affirmative duties of the states with respect to the public trust. In 1869, the State of Illinois granted some submerged Chicago shorefront lands in Lake Michigan to the Illinois Central Railroad Company.⁸⁵ Four years later, regretting its gift, the state repealed the grant.⁸⁶ The state then filed suit to quiet the title so that the chain of ownership would be clearly recorded.⁸⁷ Understandably, the railroad company objected. The state retaking title to land that was privately owned seemed to raise the constitutional question of a violation of due process.⁸⁸ However, the United States Supreme Court cleverly avoided the constitutional question by finding the original grant of land to be invalid because it violated public trust obligations in Illinois.⁸⁹ This case established the central tenet in public trust litigation: that property held in trust for public use must not be constrained.⁹⁰

The Supreme Court held that submerged lands under Lake Michigan were owned by the State of Illinois and held in trust for the people of the state for their common use and enjoyment and could not be transferred.⁹¹ The Supreme Court stated that the land was:

^{82.} Charles F. Wilkinson, The Headwaters of the Public Trust: Some Thoughts on the Source and Scope, 19 ENVTL L 425, 454-55 (1989).

^{83.} See COYLE, supra note 31, at 224-25 (arguing that the public trust doctrine has been applied beyond its original commercial intentions to include preservation and environmental motives).

^{84. 146} U.S. 387 (1892).

^{85.} Id. at 448.

^{86.} Id. at 449.

^{87.} Id. at 439.

^{88.} Id. at 418.

^{89.} Id. at 464-65.

^{90.} See Jose L. Fernandez, Untwisting the Common Law: Public Trust and the Massachusetts Colonial Ordinance, 62 ALB. L. REV. 623, 645 (1998).

^{91.} *Ill. Cent. R.R. Co.*, 146 U.S. at 453. The Court held that because the state holds submerged lands in trust for the people, it cannot convey those lands without some clear benefit to the trust:

[d]ifferent in character from that which the state holds in lands intended for sale.... It is a title held in trust for the people of the State, that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties.⁹²

In effect, the Supreme Court held that the state could not revoke the grant of submerged land because the company never really had title to them in fee simple; its title was always limited by the public trust.⁹³ In other cases in which states have conveyed trust lands to private owners, the courts reasoned that the public trust property interests consist of two bundles of rights, the *jus privatum* (private right) and the *jus publicum* (public right).⁹⁴ These cases concluded that the state could transfer the private right only in strict subordination to the public trust easement created by the public right.⁹⁵ Overall, the effect of *Illinois Central* has been profound. The case has been relied upon hundreds of times by state courts applying the pub-

Id. at 452-54 (emphasis added).

95. See Oakland Water-Front Co., 50 P. at 286; Cal. Fish Co., 138 P. at 87.

The trust devolving upon the state for the public, and which can only be discharged by the management and control of property in which the public has an interest, cannot be relinquished by a transfer of the property. The control of the state 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 A grant of all the lands under the navigable waters of a state has never been adjudged to be within the legislative power; and any attempted grant of the kind would be held, if not absolutely void on its face, as subject to revocation. The state can no more abdicate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties, except in the instance of pa rcels mentioned for the improvement of the navigation and use of the waters, or when parcels can be disposed of without impairment of the public interest in what remains, then it can abdicate its police powers in the administration of government and the preservation of the peace. In the administration of government the use of such powers may for a limited period be delegated to a municipality or other body, but there always remains with the state the right to revoke those powers and exercise them in a more direct manner, and one more conformable to its wishes. So with trusts connected with public property, or property of a special character, like lands under navigable waters; they cannot be placed entirely beyond the direction and control of the state.

^{92.} Id. at 452.

^{93.} Id. at 455-56.

^{94.} City of Oakland v. Oakland Water-Front Co., 50 P. 277, 285 (Cal. 1897); People *ex inf.* Webb v. Cal. Fish Co., 138 P. 79, 86 (Cal. 1913).

lic trust doctrine to public resources, including wildlife.⁹⁶ Some states have adopted the doctrine legislatively or constitutionally.⁹⁷

Until Professor Joseph L. Sax published his groundbreaking article on the public trust, the concept of *Illinois Central* lay dormant, confined to waterways.⁹⁸ Professor Sax argued that the principle of public trust extends far beyond the traditional realms of waterways and parklands. He claimed that "[p]ublic trust problems are found whenever government regulation comes into question, and they occur in a wide range of situations in which diffuse public interests need protection against tightly organized groups with clear and immediate goals."⁹⁹ Therefore, the government has an additional affirmative duty to protect the public resources that are part of the public trust.¹⁰⁰ Since the article was written, United States judges have broadened the geographic protections and widened the range of activities under the public trust.¹⁰¹

In *Geer v. Connecticut*,¹⁰² the United States Supreme Court applied the public trust doctrine to the taking of wildlife. The issue in *Geer* was whether the State of Connecticut, consistent with the Commerce Clause, could forbid interstate transportation of game within its borders.¹⁰³ In affirming that power, the Supreme Court observed that, at common law, wildlife, having no owner, is considered to be-

^{96.} E. Pearson, *Illinois Central and the Public Trust Doctrine in State Law*, 15 VA. ENVTL. LAW 713, 714 (1996); *see, e.g.*, Cal. Trout, Inc. v. State Water Res. Control Bd., 255 Cal. Rptr. 184, 211-12 (Cal. Ct. App. 1989) (applying public trust doctrine to fish); Wade v. Kramer, 459 N.E. 2d 1025 (Ill. App. Ct. 1984) (applying public trust doctrine to wildlife).

^{97.} See G. Meyers, Variation on a Theme: Expanding the Public Trust Doctrine Wildlife, 19 ENVTL L. 723, 730-31 (1989); see, e.g., ALASKA CONST. art. VIII, § 3; LA. CONST. art. IX §§ 1, 7; N.C. GEN. STAT. § 113-133.1 (2000).

^{98.} See Rose, supra note 57, at 352 (arguing that Professor Sax "ushered in the ... most recent major revival of the public trust concept" by "unhook[ing] it from its traditional moorings on or around water bodies and appl[ying] it to dry land" (citing Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970))).

^{99.} Sax, supra note 98, at 556.

^{100.} Id. at 556-57.

^{101.} In the 1980s, it appeared that the public trust expansion was ending, and that contra ction was in sight. See Lazarus, supra note 31, at 713-14 (arguing that recent Supreme Court cases, including Kaiser Aetna v. United States, 444 U.S. 164 (1979), presaged the beginning of the end for the "environmental" public trust doctrine). The Supreme Court, however, seems to have avoided a repudiation of an environmental interpretation of the public trust doctrine. See Phillips Petroleum Co. v. Mississippi, 484 U.S. 475 (1988) (holding that states have the right to determine the extent of their public trusts).

^{102. 161} U.S. 519 (1896), overruled on other grounds by Hughes v. Oklahoma, 441 U.S. 322 (1979).

^{103.} Id. at 522.

long in common to all citizens of a state.¹⁰⁴ This principle of governmental control of wildlife was carried over into American society upon colonization.¹⁰⁵ The *Geer* Court further reasoned:

Whilst the fundamental principles upon which the common property in game rests have undergone no change, the development of free institutions had led to the recognition of the fact that the power or control lodged in the State, resulting from this common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of the people, and not as a prerogative for the advantage of the government as distinct from the people, or for the benefit of private individuals as distinguished from the public good.¹⁰⁶

This state power was, the Supreme Court reasoned, an equitable property held "in trust for all the people of the State."¹⁰⁷ Proponents of "states' rights" seized upon the opinion's broad language and its conflation of state regulatory power with concepts of property, claiming that states owned the wildlife within their borders.¹⁰⁸ Under the then prevalent constitutional theory, state and federal governments occupied mutually exclusive spheres. If states owned the wildlife within their borders, the federal government had only a very limited role in the conservation of that wildlife.¹⁰⁹

The *Geer* holding remained law for nearly a century, until the Supreme Court reconsidered *Geer*'s constitutional interpretation in *Hughes v. Oklahoma*.¹¹⁰ While overruling *Geer* as to the constitutionality of state prohibitions against interstate shipping, *Hughes* pre-

Id.

106. Id. at 529.

107. Id. at 534 (quoting Magner v. The People, 97 Ill. 320, 333 (1881)).

^{104.} *Id.* at 527-28. The Supreme Court stated, with regard to the chain of title at the close of the nineteenth century:

[[]The] attribute of government to control the taking of animals ferae naturae, which was recognized and enforced by the common law of England, was vested in the colonial governments.... It is also certain that the power which the colonies thus possessed passed to the states with the separation from the mother country, and remains in them at the present day, in so far as its exercise may not be incompatible with, or restrained by, the rights conveyed to the federal government by the constitution.

^{105.} Id. at 528-30.

^{108.} Proponents of the state ownership doctrine ignored the Supreme Court's careful qualification that the state power extended only "so far as its exercise may not be incompatible with, or restrained by, the rights [sic] conveyed to the Federal government by the Constitution." *Id.* at 528.

^{109.} See generally MICHAEL J. BEAN & MELANIE J. ROWLAND, THE EVOLUTION OF NATIONAL WILDLIFE LAW 12-17 (3d ed. 1983).

^{110. 441} U.S. 322 (1979).

served the trust responsibility set forth in *Geer*.¹¹¹ With respect to the continued viability of the state ownership theory, the *Hughes* court stated that "[t]he whole ownership theory, in fact is . . . but a fiction expressive in legal shorthand of the importance to its people that a State have power to preserve and regulate the exploitation of an important resource."¹¹² After *Hughes*, the trust responsibility that accompanied state ownership remained.¹¹³

The doctrine was later extended beyond navigable waterways by statute¹¹⁴ and by the courts¹¹⁵ to cover other public lands. This created more affirmative environmental duties relative to other natural resources. Several courts have taken the small step of using the doctrine to protect fish and waterfowl in trust waters. In one case, an oil spill killed a number of birds on the Potomac River.¹¹⁶ When the federal government and State of Virginia sued the polluter, the defendant moved for summary judgment on the basis that neither government *owned* the birds in question.¹¹⁷ However, the court found that the public trust doctrine nevertheless gave them a duty to protect the public's interest in the nation's wildlife resources.¹¹⁸ Other courts have gone further and protected inland wild animals, nonsubmerged public land, and subsurface waters.¹¹⁹ Over the last twenty years, courts have held that the public has an easement that protects other

^{111.} Id. at 338.

^{112.} Id. at 334 (quoting Toomer v. Witsell, 334 U.S. 385, 402 (1948)).

^{113.} See, e.g., Clajon Produce Corp. v. Petera, 854 F. Supp. 843, 851 (D. Wyo. 1994) (concluding that, after *Hughes*, the state's role in governing and conserving wildlife remains unchanged); State v. Fertterer, 841 P.2d 467, 470 (Mont. 1992) (holding that state holds wildlife "in its sovereign capacity for the use and benefit of the people generally"), *overruled on other grounds by* State v. Gatts, 928 P.2d 114 (Mont. 1996); O'Brien v. Wyoming, 711 P.2d 1144, 1148 (Wyo. 1986) (stating that "by W.S. 23-1-103, all wildlife in Wyoming is declared to be the property of the state").

^{114. &}quot;[I]t is the policy of this State to restore, enhance and maintain the chemical, physical, and biological integrity of its waters, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial and other uses of water." Water Pollution Control Act, N.J. STAT. ANN. § 58:10A-2 (2003).

^{115.} See Lazarus, supra note 31, at 649.

^{116.} In re Steurt Transp. Co., 495 F. Supp. 38, 39 (E.D. Va. 1980).

^{117.} Id.

^{118.} Id. at 40.

^{119.} See, e.g., Nat'l Audubon Soc'y v. Super. Ct. of Alpine County, 658 P.2d 709, 720-21 (Cal. 1983), cert. denied, 464 U.S. 977 (1986) (court applied doctrine to non-navigable waters); Gould v. Greylock Reservation Comm'n, 215 N.E. 2d 114, 121 (Mass. 1966) (court held that rural park lands were part of the public trust); see also Cynthia Carlson, Making CERCLA Natural Resource Damage Regulations Work: The Use of The Public Trust Doctrine and Other State Remedies, 18 ENVTL. L. REP. NEWS & ANALYSIS 10,299, 10,302 (1988).

interests in trust resources, including wildlife habitat, water conservation, and public access.¹²⁰

The scope of protected natural resources today is generally broad. Particular resources, such as rivers, the sea, and the seashore are especially important to the community's well being and are retained for public use.¹²¹ Many bodies of water are thus deemed quasipublic property, giving the sovereign special prerogatives at the expense of private parties.¹²² Under the public trust doctrine, the public retains an easement to use trust resources for certain public purposes.¹²³

D. State Responsibility Today Under the Public Trust Doctrine

1. Duties of the State

The state's role as sovereign over trust lands imposes certain environmental duties that it owes to the public and are thus enforceable by the public.¹²⁴ Under the public trust doctrine, the state "may not destroy or relinquish its control over public resources except under

^{120.} Marks v. Whitney, 491 P.2d 374, 380 (Cal. 1971); United Plainsman Ass'n v. N.D. State Water Conservation Comm'n., 247 N.W. 2d 457, 462-63 (N.D. 1976); Borough of Neptune City v. Borough of Avon-by-the-Sea, 294 A.2d 47, 54-55 (N.J. 1972); Carlson, *supra* note 119, at 10,302.

^{121.} Nat'l Audubon Soc'y, 658 P.2d at 718; see also Joseph L. Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 MICH. L. REV. 471, 475 (1970); Charles F. Wilkinson, The Public Trust Doctrine in Public Land Law, 14 U.C. DAVIS L. REV. 269, 315 (1980).

^{122.} Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 460 (1892) (certain lands are held by the state in trust for the people, and legislative actions are void or voidable if the court finds they violate the trust); Phillips Petroleum Co. v. Mississippi, 484 U.S. 469, 484-85 (1988) (public trust extends to all tidal waters, not just navigable waters).

^{123.} See Whitney, 491 P.2d at 381; see also Carlson, supra note 119, at 10,302 (1988); H. Kenison, et al., State Actions for Natural Resource Damages: Enforcement of the Public Trust, 17 ENVTL L. REP. NEWS & ANALYSIS 10,434 (1987); F. Halter & J. Thomas, Recovery of Da mages by States for Fish and Wildlife Losses Caused by Pollution, 10 ECOLOGY L.Q.5 (1982).

^{124. &}quot;The State has not only the right but also the affirmative fiduciary obligation to ensure that the rights of the public to a viable marine environment are protected, and to seek compensation for any diminution in that trust corpus." State Dep't of Envtl. Prot. v. Jersey Cent. Power & Light Co., 308 A.2d 671, 674 (N.J. Super. Ct. Law Div. 1973), *aff'd*, 336 A.2d 750 (N.J. Super. Ct. App. Div. 1975), *rev'd on other grounds*, 351 A.2d 337 (N.J. 1976). "The state has an affirmative duty to take the public trust into account in the planning and allocation of water **e**-sources, and to protect public trust uses whenever feasible." *Nat'l Audubon Soc'y*, 658 P.2d at 728. This duty includes the power of the state to reconsider any diversions that were previously authorized in accordance with public trust values. *Id.*

certain, very narrow circumstances."¹²⁵ Although states have broad discretion implementing fiduciary obligations imposed by the public trust, states are not free to alienate or extinguish the trust.¹²⁶

The public trust imposes upon the government an "affirmative obligation" to protect resources.¹²⁷ At the most basic level, "the public trust doctrine holds that government must act as a fiduciary in its management of the resources which constitute the corpus of the trust."¹²⁸ Public trust resources:

are protected by the trust against unfair dealing and dissipation, which is classical trust language suggesting the necessity for procedural correctness and substantive care.... The public trust doctrine demands fair procedures, decisions that are justified, and results that are consistent with protection and perpetuation of the **e**source.¹²⁹

At least one state court has found that the public trust in natural resources is an active trust. This means that the government is required to affirmatively protect and preserve the trusts. In 1927, the Wisconsin Supreme Court ruled that:

The trust reposed in the state is not a passive trust; it is governmental, active, and administrative.... [T]he trust, being both active and administrative, requires the lawmaking body to act in all cases where action is necessary, not only to preserve the trust, but to promote it.... A failure so to act, in our opinion, would have amounted to gross negligence and a misconception of its proper duties and obligations in the premises.¹³⁰

Under the public trust doctrine, the state as trustee of natural resources arguably is endowed with duties akin to an ordinary trustee.¹³¹ "In theory, a private trust protects a corpus intended for the benefit of an individual or group from . . . shortsighted and biased

^{125.} D. Musiker et al., *The Public Trust Parens Patriae Doctrines: Protecting Wildlife in Uncertain Political Times*, 16 PUB. LAND L. REV. 87, 89 (1995); *accord Sax, supra* note 120, at 489-91.

^{126.} Ill. Cent. R.R. Co., 146 U.S. at 452-54; see also, M. Blumm et al., Renouncing the Public Trust Doctrine: The Validity of Idaho House Bill 794, 24 ECOLOGY L.Q. 461, 493 (1997).

^{127.} Seth Macinko, Public or Private?: United States Commercial Fisheries Ma nagement and the Public Trust Doctrine, Reciprocal Challenges, 33 NAT. RESOURCES J. 919, 951 (1993) (citing M. Mantell, Frontier Issues, in MANAGING NATIONAL PARK SYSTEM RESOURCES: A HANDBOOK ON LEGAL DUTIES, OPPORTUNITIES, AND TOOLS 235, 244 (M. Mantell ed., 1990)).

^{128.} Id. at 952 (citing G. Cook, *The Public Trust Doctrine in Alaska*, *in* RECENT DEVELOPMENTS IN WILDLIFE AND FISHERIES LAW IN ALASKA 29 (1992)).

^{129.} RODGERS, supra note 4, at 171-72.

^{130.} City of Milwaukee v. State, 214 N.W. 820, 830 (Wis. 1927).

^{131.} See Slocum v. Borough of Belmar, 569 A.2d 312, 317 (N.J. Super. Ct. Law Div. 1989) (holding that state has duties applicable to any other trustee).

control of one or more beneficiaries."¹³² Under traditional trust principles, the heart of a trust is the discretionary duties imposed upon the trustee; delegation of these discretionary duties to the beneficiaries would defeat the purposes of the trust and render it a nullity.¹³³ According to the Restatement, the "duty of the trustee is not only to take and keep control of the trust assets, but to take and keep exclusive control."¹³⁴ "The trustee ... has exclusive control of the trust property, subject only to limitations imposed by law or the trust instrument."¹³⁵

The state cannot abdicate its duty to preserve and protect the public's interests in wildlife resources. This duty is vested exclusively in the state. The state must consider diffuse and competing common needs when making decisions relating to the protection of wildlife, such as the decision to allow or prohibit hunting and trapping.

In his widely cited 1970 law review article, Professor Joseph Sax developed the modern theory of the public trust doctrine as a tool to protect the public interest from the "insufficiencies of the democratic process."¹³⁶ Sax states that:

When a state holds a resource which is available for the free use of the general public, a court will look with considerable skepticism upon *any* governmental conduct which is calculated *either* to reallocate that resource to more restricted uses *or* to subject public uses to the self-interest or private parties.¹³⁷

Based on this premise, it follows, *inter alia*:

The state, as trustee, must prevent substantial impairment of the wildlife resource so as to preserve it for the beneficiaries—current and future generations. Under the public trust doctrine, the state must: (1) consider the potential adverse impacts of any proposed activity over which it has administrative authority; (2) allow only activities that do not substantially impair the state's wildlife **e**-sources; (3) continually monitor the impacts of an approved activity on the wildlife to ensure preservation of the corpus of the trust; and

^{132.} Memorandum from Steven Shareff, Senior Attorney, National Legal Research Group, Inc., to Stephen S. Joiner (Feb. 4, 1998), http://www.nlrg.com/samples/shareff.pdf.

^{133.} See 76 AM. JUR. 2D Trusts § 51 (2005); see also RESTATEMENT (SECOND) OF TRUSTS § 171 (1959).

^{134.} See RESTATEMENT (SECOND) OF TRUSTS supra note 133, at § 175 cmt. f.

^{135.} Cont'l Bank & Trust Co. v. County Club Mobile Estates, 632 P.2d 869, 872 (Utah 1981).

^{136.} Sax, supra note 121, at 521.

^{137.} Id. at 490.

(4) bring suit under the parens patriae doctrine to enjoin harmful activities and/or to recover for damages to wildlife.¹³⁸

2. Different State Approaches to the Public Trust

States can generally define the extent of the public trust doctrine as it is applied in their state. For example, *California v. United States*¹³⁹ held that a state has the right to define the nature and extent of its property under the common law relating to water interests.¹⁴⁰ As a result of this freedom to define the extent of the doctrine, states understandably vary in their approaches to the public trust doctrine. Some have an expansive view while other states have a restrictive view.

a. The Expansive View

New Jersey is one example of a state that has taken an expansive view of the public trust. *Hudson City Water Co. v. McCarter* forbade a private diversion of water from a stream by a company contracted to sell water to New York City without the consent of the State of New Jersey. The Supreme Court, in *Hudson*, stated:

We are of the opinion, further, that the constitutional power of the state to insist that its natural advantages shall remain unimpaired by its citizens is not dependent upon any nice estimate of the extent of present use or speculation as to future needs ... and there are benefits from a great river that might escape a lawyer's view. But the state is not required to submit even to an aesthetic analysis. Any analysis may be inadequate. It finds itself in possession of what all admit to be a great public good, and what it has it may keep and give no one a reason for its will.¹⁴¹

Instead of simply cataloging the things and activities that are protected by the public trust, New Jersey has conceptualized the trust differently. The Supreme Court of New Jersey views the public trust as

^{138.} Musiker, *supra* note 125, at 96 (citations omitted); *see, e.g.*, Nat'l Audubon Soc'y v. Super. Ct. of Alpine County, 658 P.2d 709, 709 (Cal. 1983), *cert. denied*, 464 U.S. 977 (1986).

^{139. 438} U.S. 645 (1978).

^{140.} However, once water, such as the groundwater, is properly reduced to private ownership, it may become a commodity and may be protected under the dormant interstate commerce clause. Any subsequent regulation by the state (as distinct from the assertion of state property power or power over the public domain) is subject to the antidiscrimination principles of the dormant commerce clause. *See generally* Christine A. Klein, *The Environmental Commerce Clause*, 27 HARV. ENVIL L. REV. 1 (2003).

^{141. 209} U.S. 349, 356-57 (1908) (holding that its vast underground waters which feed its streams and inland lakes are "a great public good . . . [that] . . . it may keep and give no one a reason for its will").

a flexible concept, changing with the needs of the population.¹⁴² In *Borough of Neptune City v. Borough of Avon-By-The-Sea*, the court held that the public trust doctrine forbids municipalities from discriminating between residents and nonresidents when charging user fees for the beach—access must be provided equally to all.¹⁴³ Using this kind of reasoning, a court is free to go beyond fishing and navigation activities to find a broader recreational interest in the public trust. Traditionally protecting the wet sand of a beach, the public trust doctrine has been extended to dry sand.¹⁴⁴

California has taken a similar approach. The California Supreme Court has extended the public trust inland from the shore in a series of cases. From its original definition in terms of commerce, navigation, and fishing,¹⁴⁵ the court broadened the doctrine. First, two cases established the primacy of the public trust in tidelands, even in circumstances where those lands were legally sold to private owners under state authorization.¹⁴⁶ Second, the next expansion of the public trust doctrine in California occurred in a pair of cases in which the California Supreme Court held that the shores of both Clear Lake and Lake Tahoe were part of the public trust.¹⁴⁷ Consequently, by extension, all inland lakes were included in the public trust.¹⁴⁸

^{142.} See Borough of Neptune City v. Borough of Avon-by-the-Sea, 294 A.2d 47, 54-55 (N.J. 1972) (noting that "[t]he public trust doctrine, like all common law principles, should not be considered fixed or static, but should be molded and extended to meet changing conditions and needs of the public it was created to benefit").

^{143.} Id. at 55.

^{144.} See Van Ness v. Borough of Deal, 393 A.2d 571, 574 (N.J. 1972) (holding that dry beach is part of the New Jersey public trust, even when the beach has been substantially improved by a private owner).

^{145.} See Marks v. Whitney, 491 P.2d 374, 380 (defining these terms to include "the rights to fish, hunt, bathe, swim, and use for boating or general recreation purposes the navigable waters of the state").

^{146.} See City of Los Angeles v. Venice Peninsula Props., 644 P.2d 792, 794 (Cal. 1982) (describing how the owner traced title to a Mexican grant that was affirmed by federal patent processes); City of Berkeley v. Super. Ct. of Alameda County, 606 P.2d 362, 363 (Cal. 1980) (stating that the private company had purchased the land from the state in a sale that was authorized for the benefit of the public trust); COYLE, *supra* note 31, at 131-32 (discussing the importance of *Berkeley* and *Venice Peninsula* in setting new public trust precedent).

^{147.} California v. Super. Ct. of Lake County, 625 P.2d 239, 252 (Cal. 1981) (holding that an owner of land along the shorelines of navigable nontidal waters in this case, Clear Lake, had title to land between the high and low water marks, but that the title was subject to the public trust); California v. Super. Ct. of Placer County, 625 P.2d 256, 260 (Cal. 1981) (holding that boundaries between public and private lands should be determined with reference to the lake 's current condition, in this case, Lake Tahoe).

^{148.} COYLE, supra note 31, at 133.

The most recent extension of the public trust came at the government's expense. In *National Audubon Society v. Superior Court*¹⁴⁹ the court was faced with Los Angeles County's intake of vast amounts of water from Mono Lake, dangerously depleting it.¹⁵⁰ The court held that all tributaries are part of the public trust on the ground that, because the public trust already protects navigable waterways, it makes sense to protect the waterways from upstream degradation as well.¹⁵¹ If tributaries are part of the public trust because of their impact on navigable waterways, there is no scientific barrier preventing a declaration that the entire watershed is part of the public trust.¹⁵² The tributaries themselves are formed by water flowing over the land into small streams.¹⁵³ Eventually the California public trust doctrine has the potential to break free from its water-based origins to apply to all natural resources, as foreseen by Professor Sax.¹⁵⁴

Many states, including those that have recently examined the issue, have significantly broadened the trust to include a wide range of activities.¹⁵⁵ In some states, the trust has been extended to include wildlife¹⁵⁶ and parklands.¹⁵⁷ Several states have found that the public trust includes a right to recreation.¹⁵⁸ For example, the public trust in

154. See Sax, supra note 121, at 545.

155. See, e.g., Larman v. State, 552 N.W. 2d 158, 161 (Iowa 1996) (stating that the public trust doctrine encompasses recreational uses); State v. Longshore, 5 P.3d 1256, 1262 (Wash. 2000) (declaring that the public trust in Washington includes "incidental rights" such as boating and swimming as well as the right to navig ation).

156. Wade v. Kramer, 459 N.E. 2d 1025, 1027-29 (Ill. App. Ct. 1984) (recognizing that wildlife is part of the Illinois public trust, but reasoning that the legislature has the authority to determine when public need for transportation overrides the public interest in wildlife, and refusing to stop the construction of a bridge that would cause some environmental damage).

157. Lazarus, supra note 31, at 649.

158. Gion v. City of Santa Cruz, 465 P.2d 50, 58-60 (Cal. 1970) (holding that the California public trust recreational interest is superior to the private property interest). *But see* Burch v. Gombos, 98 Cal. Rptr. 2d 119, 125 (Cal. Ct. App. 2000) (noting that enactment of Civil Code Section 1009 and amendments to Civil Code Section 813 were in reaction to *Gion* and "largely abrogated its holding"). *See also* Gerwitz v. City of Long Beach, 330 N.Y.S. 2d 495, 511-12 (N.Y. 1972) (holding that the New York public trust recreational interest is superior to a municipal interest).

^{149.} Nat'l Audubon Soc'y v. Super. Ct. of Alpine County, 658 P.2d 709, 709 (Cal. 1983) cert. denied, 464 U.S. 977 (1986).

^{150.} Id. at 711.

^{151.} Id. at 720-21.

^{152.} John Alton Duff & Kristen Michele Fletcher, Augmenting the Public Trust: The Secretary of State's Efforts to Create a Public Trust Ecosystem Regime in Mississippi, 67 Miss. L.J. 645, 677-78 (1998).

^{153.} See M. J. SELBY, HILLSCOPE MATERIALS AND PROCESSES 214-18 (2d ed. 1993) (explaining how rainfall runs across and through the ground to reach streams and rivers).

Wisconsin includes the right to sail, swim, hunt, and enjoy scenic beauty.¹⁵⁹ In a more recent case, Washington courts affirmed expansive access rights in the Washington public trust, but acknowledged that the court must balance the benefits of allowing access with protection of the environment.¹⁶⁰ In that case, the court held that the public trust rights of access do not include the right to use jet—skis that are harmful to water and wildlife.¹⁶¹

Some states have even adopted legislation or constitutional amendments declaring that all publicly held natural resources are subject to the public trust.¹⁶² These few codifications of the public trust notwithstanding, it primarily remains a common law doctrine applicable to all land, not just land owned by the state, and will likely continue to develop on a case-by-case basis in each state.

b. The Restrictive View

Some states have chosen to limit their public trusts to basic uses such as navigation and fishing. For example, Massachusetts took a restrictive interpretation of the right to walk along beaches.¹⁶³ Faced with the question of whether the public trust access right to walk along beaches included the right to recreate at the beach, the justices concluded that the right of access was a right of passage only and did not extend to recreational activities while on the public trust land.¹⁶⁴ Maryland has similarly rejected a chance to extend the public trust to rights of public access.¹⁶⁵ States are split between limited access, such as that allowed in Maryland and Massachusetts, and a more broad right of access.

3. What Counts as Public Trust Property?

Public natural resource law is in a state of constant evolution. The reason for this evolution is a growing understanding of the nature

^{159.} Hixon v. Pub. Serv. Comm'n, 146 N.W. 2d 577, 582 (Wis. 1966).

^{160.} See Weden v. San Juan County, 958 P.2d 273, 283-85 (Wash. 1998) (upholding a San Juan County ordinance which denied public access to certain recreational boating vehicles that were harmful to the environment).

^{161.} Id.

^{162.} See Horner, supra note 30, at 58-72 (describing the varying approaches that Louisiana, Pennsylvania, Hawaii, Alaska, and Florida have taken in codifying the public trust).

^{163.} See Opinion of the Justices to the House of Representatives, 313 N.E. 2d 561, 566 (Mass. 1974) (holding that the Massachusetts public trust doctrine does not include the right to walk on the beach for bathing).

^{164.} Id.

^{165.} Dep't of Natural Res. v. Mayor & Council of Ocean City, 332 A.2d 630, 638 (Md. 1975) (rejecting an extension of Maryland's public trust doctrine to include recreational interests).

and importance of different types of natural resources. One new resource of critical importance that is coming under the domain of the public trust doctrine is groundwater.

a. The Constant Evolution of the Public Trust Doctrine

As discussed in section III.D.2(a), *infra*, courts continue to expand the number of resources held under the public trust. The trust rights in a particular resource tend to increase over time. For example, the early trust rights in navigable waters were navigation, commerce, and freedom from impeding navigation.¹⁶⁶ These trust rights in navigable waters evolved over time "to recreational uses, including bathing, swimming, and other shore activities."¹⁶⁷ Other state courts have further expanded the trust rights in navigable waters to preserve tidelands for scientific study, open space, as a marine habitat, and for aesthetic beauty.¹⁶⁸ As summarized by one commentator:

In its early form, the public trust doctrine applied to submerged lands, the foreshore and navigable waters and protected the public's rights and interests in navigation, fishing, and commerce. Since the 1970s, states and courts have extended the scope of the doctrine to protect other public uses including hunting, boating, swimming, bathing, and other recreational activities. Under the influence of changing public perceptions, states have applied the public trust doctrine to preserve and protect tidelands and other environments that provide food, shelter and habitat for birds and marine life and that enhance the scenery and climate of certain areas. The geographical reach of the doctrine has also been expanded. The public trust doctrine now also encompasses non-navigable waters and streams as well as parks, land, wetlands and wildlife. Thus, compared to its original scope, the public trust doctrine has been expanded considerably.¹⁶⁹

The public trust theory is constantly evolving to address new environmental threats and incorporate advances in science.¹⁷⁰

^{166.} Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 452 (1892).

^{167.} Borough of Neptune City v. Borough of Avon-by-the-Sea, 294 A.2d 47, 54 (N.J. 1972).

^{168.} Marks v. Whitney, 491 P.2d 374, 380 (Cal. 1970).

^{169.} EDWARD H.P. BRANS, LIABILITY FOR DAMAGE TO PUBLIC NATURAL RESOURCES, Kluwer Law Int'l 51 (The Hague: 2001) (citations omitted).

^{170.} See, e.g., Patrick Ryan, Application of the Public Trust Doctrine and Principles of Natural Resource Management to Electromagnetic Spectrum, 10 MICH. TELECOMM. & TECH. L. REV. 285 (2004) (revealing that the public trust doctrine acts as a check and balance against goverment miscalculations, allowing states to modify its scope when necessary). See also infra note 176.

b. Groundwater

The public trust doctrine should encompass a state's groundwater. A defendant polluter may argue that the public trust doctrine does not apply to groundwater because it is not historically a part of the public trust. However, the reasons for a lack of historical foundation are that (1) groundwater is only starting to become a policy concern, and (2) recent advances in science lending greater understanding of the hydrological cycle have emerged. These developments, coupled with the flexible nature of the public trust doctrine, lend credence to the notion that groundwater should be included in the public trust doctrine.

i. Argument Against Expansion of the Public Trust Doctrine

The argument against extending the public trust to groundwater is based on the contention that the public trust doctrine traditionally applies only to surface water: Groundwater is not navigable and thus does not fall within the trust.¹⁷¹ Courts have recognized this distinction and have been reluctant to expand the doctrine to encompass actions affecting groundwater.¹⁷²

It is true, the *historic* foundation of the doctrine concerned navigable waterways, especially in the areas of navigation, fishing, and commerce.¹⁷³ Navigation, fishing and commerce were crucial to the development of early settlements. Thus, early courts applied the public trust doctrine only to navigable waterways.¹⁷⁴ However, given the elasticity of the doctrine, the new state interest in groundwater, and advances in groundwater science, it is clear that the public trust should now to encompass groundwater. For example, groundwater systems provide a valuable recharge function for public drinking water. The availability of the same is, in turn, an important component of economic development.

ii. Flexibility of the Public Trust Doctrine

The public trust doctrine is an inherently flexible doctrine due to the constant evolution of the state interests protected by the doctrine. Stated plainly, what society overlooks today might be treasure tomor-

^{171.} Rettkowski v. Dep't of Ecology, 858 P.2d 232, 239 (Wash. 1993).

^{172.} See *id*. (holding that the public trust doctrine should not be extended to the groundwater at issue in the case).

^{173.} See Ralph W. Johnson, Public Trust Protection for Stream Flows and Lake Levels, 14 U.C. DAVIS L. REV. 233, 240 (1980).

^{174.} See Shively v. Bowlby, 152 U.S. 1 (1894).

row. While this undoubtedly hurts the effort to concretely define the public trust, it also creates room for the doctrine to expand to reflect society's new interests. While courts traditionally focus on commerce, navigation, and fishing, they have implied that the doctrine is not limited to these three uses.¹⁷⁵

Consider how the importance of tidelands themselves has been expanded under the public trust. Beyond commerce, fishing, and navigation, courts are recognizing a new value of tidelands. According to the *Marks* court:

The public uses to which tidelands are subject are sufficiently flexible to encompass changing public needs. In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another. There is a growing public recognition that one of the most important public uses of the tidelands—a use encompassed within the tidelands trust—is the 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. It is not necessary to here define precisely all the public uses which encumber tidelands.¹⁷⁶

Thus, the public trust doctrine was expanded to include tidelands to reflect the new concerns of society: environmentalism and preservation. The reason that the public trust doctrine has not expanded yet to deal with the looming groundwater crisis is explained by one scholar:

Lawyers, being scientifically illiterate for the most part, have to our knowledge never even asked courts to treat stratospheric ozone and the global climate as natural resources . . . [T]he public trust doctrine has not yet achieved wide application even in the field of traditional natural resources, such as water rights.¹⁷⁷

iii. The New Interest in Groundwater

One half of America's population use groundwater as their primary source of drinking water.¹⁷⁸ Those who live in areas with lim-

^{175.} Erik Swenson, Public Trust Doctrine and Groundwater Rights, 53 U. MIAMI L. REV. 363, 363-64 (1999).

^{176.} Marks v. Whitney, 491 P.2d 374, 380 (Cal. 1970) (citations omitted).

^{177.} Bruce Ledewitz & Robert Taylor, *Law and the Coming Environmental Cata strophe*, 21 WM. & MARYENVTL L. & POL'Y REV. 599, 619-20 n.96 (1997) (citations omitted).

^{178.} Purdue Univ. Dep't of Agricultural and Biological Engineering, The Importance of Groundwater, *available at* http://pasture.ecn.purdue.edu/~agenhtml/agen521/epadir/grndwtr/ importance.html (last visited Sep. 14, 2005).

ited precipitation rely heavily on groundwater.¹⁷⁹ Only three percent of the world's freshwater is located in reservoirs, lakes, and streams while the remaining ninety-seven percent is groundwater.¹⁸⁰ In addition, groundwater can be used for irrigation purposes and to produce geothermal energy.¹⁸¹

The public interest in groundwater is relatively new. In 1950, the United Nations created the World Meteorological Association ("WMO") to monitor (among other focuses) the world's supply of drinking water. Recently, the agency has been focusing on what it believes is a major threat to future populations: the pollution of groundwater resources. The WMO reports that:

Deep groundwater is relatively free from pollutants in many places and is excellent for drinking, domestic use and industrial purposes. But once an aquifer is contaminated, remedial measures can be long and costly, even impossible. The slow penetration of pollutants has been called a "chemical time bomb." It threatens humankind.¹⁸²

As the public trust doctrine expands to encompass new resources, the courts should recognize the growing importance of groundwater. The state's assertion of trust authority over groundwater will deter the resource's would-be polluters from contributing to a "chemical time bomb."

iv. Advances in Groundwater Science

Advances in groundwater science have led to a richer understanding of the interaction between groundwater and surface water, an area that has been traditionally covered by the public trust. Historically, the law has treated groundwater and surface water as distinct from one another.¹⁸³ Science, however, has established a firm interrelationship between groundwater and surface water.¹⁸⁴ The hydrologic cycle refers to the constant movement of water from the atmosphere to the earth's surface via evaporation, precipitation, and other processes.¹⁸⁵ In some places, the aquifers surrounding streams are at a higher elevation than the stream itself and produce ground-

^{179.} Id.

^{180.} Id.

^{181.} Id.

^{182.} World Meteorological Ass'n, Groundwater: The Invisible Resource, *available at* http://www.wmo.ch/web-en/Wdwfea.html (last visited Sept. 14, 2005).

^{183.} See A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 4.11 (1997).

^{184.} C.W. FETTER, APPLIED HYDROGEOLOGY 5, 45-48 (2d ed. 1988).

^{185.} See id. at 4-6 (discussing the main aspects of the hydrologic cycle).

water discharge into the stream.¹⁸⁶ Thus, groundwater pollution inevitably results in surface water pollution.

v. Summary

The public trust is an inherently flexible doctrine. It has much room to evolve and react to new social interests or a greater understanding of the world. Both have occurred with groundwater: The impending water crisis has propelled its importance in recent decades and scientific advances have shown the impact that groundwater resources may have on surface water.

E. Codification of the Public Trust Under State Constitutions

The public trust doctrine is being codified in many state constitutions.¹⁸⁷ In some cases, even absent a constitutional provision, state courts have read the public trust into existing constitutional provisions.¹⁸⁸ Thus, the public trust doctrine, enjoying codification, is no longer just an ancient common law doctrine. The trend toward the constitutionalization of the public trust doctrine frees it from the stigma (and restraints therein) of being a theoretical common law doctrine.

1. The Trend Toward Constitutionalization

Article I, section 27 of the Pennsylvania Constitution is an example of the modern codification of the ancient common law public trust doctrine. It states in part:

The people have a right to clean air, pure water, and the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.¹⁸⁹

The Pennsylvania legislature adopted section 27 on April 14, 1970 the world's first International Earth Day.¹⁹⁰

Other states have followed Pennsylvania's lead. For example, the Florida Constitution refers to land held "in trust for all the peo-

^{186.} Id. at 5, 45-48.

^{187.} See, e.g., PA. CONST. art. I, § 27; FLA. CONST. art. X, § 11; HAW. CONST. art. XII, § 4.

^{188.} See, e.g., Save Ourselves, Inc. v. La. Envtl. Control Comm'n, 452 So. 2d 1152, 1158 (La. 1984).

^{189.} PA. CONST. art. I, § 27.

^{190.} Erin Ryan, Public Trust and Distrust: The Theoretical Implications of the Public Trust Doctrine for Natural Resource Management, 31 ENVTL. L. 477, 478 (2001).

ple."¹⁹¹ Hawaii's constitution marks land held "as a public trust for native Hawaiians and the general public."¹⁹² Other state constitutional provisions maintain that at least parts of the state's navigable waters are public.¹⁹³

State constitutions have also expanded the public trust beyond navigable waters. According to one commentator:

In the earliest of these provisions, New York constitutionally created the Adirondack forest preserve in 1895. Within the last decade, environmental advocates have borrowed and expanded on this idea to constitutionally create the "Alabama Forever Wild Land Trust," the "Great Outdoors Colorado Program," and the North Carolina "State Nature and Historic Preserve." Amendments to several other state constitutions also have dedicated funds or otherwise authorized the state to acquire and preserve land of particular aesthetic, recreational, or historic value.¹⁹⁴

Sometimes, judges read the public trust doctrine into a state's constitution absent a new constitutional provision. For example, the Louisiana Supreme Court held that the state's environmental regulatory framework, in addition to statutes, is also based on the state's constitution and the public trust doctrine.¹⁹⁵ The court read the public trust doctrine in Louisiana's constitution, which says that, "[t]he natural resources of the state ... shall be protected The legislature shall enact laws to implement this policy."¹⁹⁶ Some courts have found that the public trust doctrine restrains state action by maintaining that the doctrine is constitutional in character.¹⁹⁷

These constitutional law decisions will likely continue because these provisions give activists and public interest groups standing which they do not generally have in public trust cases.¹⁹⁸ Over time, this precedent can be expected to expand.

195. Save Ourselves, Inc. v. La. Envtl. Control Comm'n, 452 So. 2d 1152, 1158 (La. 1984).

196. LA. CONST. art. IX, § 1.

^{191.} FLA. CONST. art. X, § 11.

^{192.} HAW. CONST. art. XII, § 4.

^{193.} See, e.g., ALA. CONST. art. I, § 24; MINN. CONST. art. II, § 2; S.C. CONST. art. 14, §§ 1 & 4; WIS. CONST. art. IX, § 1.

^{194.} Barton H. Thompson, *Environmental Policy and State Constitutions: The Potential Role of Substantive Guidance*, 27 RUTGERS L.J. 863, 871 (1996) (citations omitted).

^{197.} See, e.g., Webb v. Cal. Fish Co., 138 P. 79, 87 (Cal. 1913) (holding that tidelands are held in public trust by the state, and that the California state constitution commits the execution of the public trust to the legislature).

^{198.} See Life of the Land v. Land Use Comm'n, 623 P.2d 431, 441 (Haw. 1981) (relying on public trust clause of the Hawaiian Constitution to grant standing to an environmental activist group).

2. The Effect of Constitutionalization

One important effect of constitutionalization is that it gives credence to the notion that the public trust doctrine is constantly evolving. This makes it even harder to argue that the resource in question is not part of the public trust simply because it has not been historically covered by the doctrine.

The nature of a constitution is to expand to account for social changes—to respond to new problems in society. As Chief Justice Marshall observed, "[i]n considering this question, then, we must never forget, that it is a *Constitution* we are expounding."¹⁹⁹ Marshall further observed, "[l]et the end be legitimate, let it be within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consist with the letter and spirit of the constitution, are constitutional."200 Woodrow Wilson wrote, "the Constitution . . . is not a mere lawyers' document: it is a vehicle for life, and its spirit is always the spirit of the age."²⁰¹ Justice Blackmun summarized the modern adherence to this notion, writing that, "[t]hese precepts of breadth and flexibility and ever-present modernity are basic to our constitutional law."202 Today, again, we are expounding a *Constitution*. The same principles that governed McCulloch's case in 1819 govern modern cases. There can be no other answer.²⁰³ By attaching the public trust doctrine to state constitutions with "breadth and flexibility," the public trust doctrine is greatly expanded.

F. Elements for State Recovery of Damages Under the Public Trust Doctrine

In recent years, states have used the public trust doctrine to recover damages for injury to a broad range of public resources.²⁰⁴ To recover damages, the government must demonstrate that the public trust has been violated by an unreasonable interference.²⁰⁵ This is derived from the classic test of *Illinois Central*, which finds that the pub-

^{199.} McCulloch v. Maryland, 17 U.S. 316, 407 (1819) (emphasis in original).

^{200.} Id. at 421.

^{201.} W. WILSON, CONSTITUTIONAL GOVERNMENT IN THE UNITED STATES 69 (1911).

^{202.} Regents of Univ. of Cal. v. Bakke, 438 U.S. 265, 408 (1978) (Blackmun, J., concurring).

^{203.} Id. (emphasis in original).

^{204.} See Meyers, supra note 97, at 731 (regarding the subsequent judicial expansion of the doctrine to include fish and wildlife); Lazarus, supra note 31, at 658-60.

^{205.} See RODGERS, supra note 4; Carlson, supra note 119, at 10,302.

lic trust has been violated when there has been a substantial impairment of public use.²⁰⁶

1. Trust Rights

The threshold factors to be considered in a state public trust case are whether the resource is public, and to which public use it is committed.²⁰⁷ Another factor to consider is the right of the trust in protecting and perpetuating the resource.²⁰⁸

2. Unreasonable Interference with Use and Enjoyment

After establishing a trust right in a public resource, the state must show that there has been unreasonable interference with the use and enjoyment of the trust right to recover.²⁰⁹ This can be construed as an unreasonable "obstruction or hindrance"²¹⁰ with the use of or "exercise of a right"²¹¹ held in trust.

3. Standard of Liability

There is no set or real standard of liability in public trust doctrine cases.²¹² This is because claims based on the doctrine are usually resolved by balancing competing interests.

4. Standing to Recover Damages

The court in *Maryland Department of Natural Resources v. Amerada Hess Corp.* allowed the State of Maryland to sue Amerada Hess for the recovery of damages arising out of an oil spill in Baltimore Harbor.²¹³ The defendant moved to dismiss the state's claim on the grounds that the state did not have a property interest in the waters of the state and therefore could not sue for damages to the harbor.²¹⁴ The defendant acknowledged that the state was the trustee of the water, but asserted that a "mere trustee" lacked the proprietary interest in the resource necessary to sustain an action for damage at common

^{206.} Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 452-53 (1892).

^{207.} See RODGERS, supra note 4, at 172 ("The recurring questions call for an identification of the resources impressed with the trust and the public uses encumbering them.").

^{208.} See *id*. (explaining that the public trust demands fair procedures, decisions that are justified, and results that are consistent with protecting and perpetuating the resource).

^{209.} See RODGERS, supra note 202.

^{210.} BLACK'S LAW DICTIONARY 818 (7th ed. 1999) (interference).

^{211.} Id. at 550 (enjoyment).

^{212.} See RODGERS, supra note 4, at 175.

^{213.} Md. Dep't of Nat. Res. v. Amerada Hess Corp., 350 F. Supp. 1060 (D. Md. 1972).

^{214.} Id. at 1062.

law.²¹⁵ The court rejected the defendant's argument, reasoning that "if the State is deemed to be the trustee of the waters, then, as trustee, the State must be empowered to bring suit to protect the corpus of the trust i.e., the waters for the beneficiaries of the trust i.e., the public."²¹⁶

In *State v. City of Bowling Green*, the Ohio Supreme Court upheld the State of Ohio's right, as trustee, to recover damages for a fish-kill allegedly resulting from the negligent operation of a municipal sewage treatment plant.²¹⁷ The court reasoned that every state holds a "property" interest in wildlife on behalf of its citizens and concluded that the state had an obligation to protect the trust property and to "recoup the public's loss occasioned by the negligent acts of those who damage such property."²¹⁸

Some state courts adopt a more narrow reading regarding a trustee's right to recover damages, allowing only recovery of damages to resources that the government actually owns. For example, in *State v. Dickinson Cheese Co.*, the North Dakota Supreme Court rejected the state's claim for damages to fish killed by a release of whey into the Heart River.²¹⁹ The court concluded that the State of North Dakota did not have a sufficient property interest in the fish in their wild state to support a civil action for damages.²²⁰ A Pennsylvania court similarly concluded that the State of Pennsylvania could not recover da mages for fish killed by a company's release of chemicals into French Creek, because the state did not own the fish.²²¹ Other states implement the public trust in a more proactive way than just calculating damages.²²²

^{215.} Id. at 1066.

^{216.} Id. at 1067.

^{217. 313} N.E. 2d 409, 411 (Ohio 1974).

^{218.} Id.

^{219. 200} N.W. 2d 59, 61 (N.D. 1972).

^{220.} Id.

^{221.} Commonwealth v. Agway, Inc., 232 A.2d 69, 71 (Pa. Super. Ct. 1967).

^{222. &}quot;The state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." Nat'l Audubon Soc'y v. Super. Ct. of Alpine County, 658 P.2d 709, 728 (Cal. 1983), *cert. denied*, 464 U.S. 977 (1986). This duty includes the power of the state to reconsider any diversions that were previously authorized in accordance with public trust values. *Id.*; *see also* Matthews v. Bay He ad Improvement Ass'n, 471 A.2d 355, 365 (N.J. 1984).

G. Defenses

1. Not Part of the Historic Public Trust

A party will not be held liable for damages to natural resources if it has a valid defense. The most obvious defenses to a claim for NRD are negative defenses by which a defendant asserts that either the resource is not held in the public trust or the right asserted in the resource is not a trust right.²²³ This will probably be an area of substantial litigation in the future. As courts continue to increase the number and types of resources and trust rights encompassed by the public trust, defendants will resist the expansion, arguing that it is unreasonable for courts to expand certain trust rights. A plaintiff's response to such a defense is that the trend has been to expand the doctrine.²²⁴

2. Statute of Limitations

Defendants are protected from liability once the statute of limitations has tolled. However, some states, recognizing the growing importance of their natural resources (particularly groundwater), have passed legislation extending the statute of limitations for claims brought by the state for compensation for damages to natural resources. In New Jersey, for example, many NRD claims were set to expire if not brought to court by the end of 2001.²²⁵ The state legislature responded by passing a four-year extension of the statute of limitations.²²⁶

Defendants may also attempt to employ the laches defense. In equity, the "doctrine of laches bars relief to those who delay the assertion of their claims for an unreasonable time."²²⁷ A successful laches defense consists of three affirmative elements: "(1) a substantial delay by a plaintiff prior to filing suit; (2) a plaintiff's awareness that [the harm was occurring]; and (3) a reliance interest resulting from the defendant's continued development of good-will during this period of delay."²²⁸ While defendants might be able to show a substantial delay by the trustees in filing suit, there may be difficulty in show-

^{223.} See, e.g., Puerto Rico v. SS Zoe Colocotroni, 628 F.2d 652, 671 (1st Cir. 1980) (rejecting defendant's argument that states have no trust right in wildlife).

^{224.} See supra Parts III(D)(2)(a) & 3(a).

^{225.} Michael R. Rodburg & Richard F. Ricci, *Top Ten Reasons Why New Jersey Businesses Should Be Concerned About Natural Resource Damages*, THE METRO. CORPORATE COUNSEL (April 2003), *available at* http://www.lowenstein.com/new/TMCC0403.pdf.

^{226.} Id.

^{227.} NAACP v. NAACP Legal Def. & Educ. Fund, Inc., 753 F.2d 131, 137 (D.C. Cir. 1985).

^{228.} Id.

ing that the trustee had full awareness that the harm was occurring particularly with regard to the extent of the harm. This is especially true in instances of groundwater contamination, where the damage is not ascertainable without an extensive study.

3. Implicit Consent

Some defendants may argue that public policy supports a defense of implicit consent by the state. Under this argument, damage to natural resources is a natural consequence of economic development. Thus, by establishing a regulatory scheme which allows for development that inevitably damages natural resources, the state, as public trustee, is giving its implied consent to those damages.

This argument may also arise with regard to the issue of monetary damages. Defendants may argue that the state taxes derived from the activity causing NRD should be deducted from the monetary damages awarded to the state. Otherwise, the suit may result in a windfall for the plaintiff state trustee by recovering more from the defendants than the actual da mages.

4. Multiple Sources of Pollution

When there are multiple sources of pollution, common law principles of joint and several liability generally apply.²²⁹ The effect of common law joint and several liability is "to excuse one defendant from paying any portion of the judgment if the plaintiff collects the full amount from the other."²³⁰ Joint and several liability, however, does not apply when there is a state statute that clearly abrogates the common law principle.²³¹ While the state technically has no burden of allocation, a court may use its equitable discretion to allocate liability (the cost of which is indirectly borne by the state).²³²

^{229.} Lynda J. Oswald, *New Directions in Joint and Several Liability Under CERCLA*?, 28 U.C. DAVIS L. REV. 299, 311 (1995) (Courts have begun "to impose joint and several liability more frequently in such cases by finding that the harm created by multiple polluters was indivisible.").

^{230.} Smith v. Lightning Bolt Prods. Inc., 861 F.2d 363, 374 (2d Cir. 1988) (citing Velazquez v. Water Taxi, Inc., 49 N.Y.2d 762, 764 (N.Y. 1980)).

^{231.} See United States v. Texas, 507 U.S. 529, 534 (1993) ('[T]o abrogate a common-law principle, the statute must 'speak directly' to the question addressed by the common law.") (citations omitted).

^{232.} CERCLA provides some guidance here. Despite CERCLA's common law joint and several liability, Congress recommended that "[i]n resolving contribution claims, the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate." 42 U.S.C. § 9613(f)(1) (2000).

The work of proving who is responsible for what in a case with multiple defendants can be very costly and time consuming. For this reason, many states may find that the risk of using public funds to pursue public trust doctrine cases, in which recovery is not guaranteed, is not justified. However, if the state contracts with an outside litigation firm on a contingency basis, the burden of this risk is shifted from the state to the private sector. The advantages of this relationship are discussed later.

5. CERCLA Defenses Not Applicable

A defendant otherwise liable for damages under CERCLA will not be held liable if he can:

establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—(1) an act of God; (2) an act of war; (3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant ... if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned ... and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions 233

The traditional defenses to damages to natural resources under CERCLA, however, are not available to defendants under public trust actions.²³⁴

H. Valuation and Remedies

Once liability has been established and affirmative defenses overcome, the factfinder must then turn to the issues of valuation and remedies. Damages for restoration, repair, replacement, and loss of use are the most common remedies in public trust NRD cases.²³⁵

^{233. 42} U.S.C. § 9607(b).

^{234.} See M. STUART MADDEN, LAW OF ENVIRONMENTAL AND TOXIC TORTS 673-76 (2d ed. 2001).

^{235.} See New Mexico v. Gen. Elec. Co., 335 F. Supp. 2d 1185 (D.N.M. 2004); New Mexico v. Gen. Elec. Co., 335 F. Supp. 2d 1266 (D.N.M. 2004); New Mexico v. Gen. Elec. Co., CIV 99-1118 BSJ/KBM & CIV 99-1254 BSJ/ACT (consolidated) (D.N.M.).

1. Compensatory Damages: Restoration, Repair, and Replacement

The basic principle of compensatory damages is to restore the plaintiff to his rightful position.²³⁶ From an economic standpoint, the purpose of compensatory damages is to force tortfeasors to take account of their inflicted harm.²³⁷ Value is generally considered the measure of the rightful position.²³⁸ Value, as applied to damages to a state's natural resources, can be measured as the cost of restoration or the cost of replacing the resource(s).

The right of a state to recover compensatory damages for the destruction of natural damages is well established.²³⁹ However, the determination of damages itself is not free from controversy. Environmental losses are unique—their value cannot often be translated into a dollar amount. According to the National Oceanic and Atmospheric Administration, "[t]here will always be controversy where intangible losses have to be evaluated in monetary terms."²⁴⁰ This belief is echoed by another NRD expert, who notes that "the most daunting task facing trustees ... is the determination of damages."²⁴¹

The choice between choosing restoration/repair or replacement often depends on state law. In some circumstances, punitive damages may be appropriate.²⁴²

a. Market Valuation

The diminution in value, or full value in the case where the natural resource is entirely destroyed, is a matter of market valuation. Under this approach, the court attempts to place a dollar amount on the damage to the natural resource and award the trustee that

^{236.} DOUGLAS LAYCOCK, MODERN AMERICAN REMEDIES 15-16 (3d ed. 2002).

^{237.} Id. at 17.

^{238.} Id. at 19.

^{239.} See Dep't of Envtl. Prot. v. Jersey Cent. Power & Light Co., 336 A.2d at 750, 759 (N.J. Super. Ct. 1975) (New Jersey Court of Appeals held that the state, as public trustee, had a right to seek compensatory damages for a fish kill caused by the defendant's release of toxic pollutants); see also Md. Dep't of Natural Res. v. Amerada Hess Corp., 350 F. Supp. 1060 (D. Md. 1972); Maine v. M/V Tomano, 357 F. Supp. 1097 (S.D. Me. 1973).

^{240.} Report of the National Oceanic and Atmospheric Administration Panel on Contingent Valuation, 58 Fed. Reg. 4601, 4611 (Jan. 15, 1993) (codified at 15 C.F.R. pt. 990).

^{241.} Richard B. Stewart, et al., *Evaluating the Present Natural Resource Damages Regime: The Lawyer's Perspective, in* NATURAL RESOURCE DAMAGES: A LEGAL, ECONOMIC, AND POLICY ANALYSIS 163 (Richard B. Stewart ed., 1995).

^{242.} See infra Part III(H)(2).

amount in monetary compensation.²⁴³ Industry prefers this approach, as market valuation is relatively easy to measure and promotes economic efficiency.²⁴⁴

There is no standard formula for determining the value of a resource. With regard to injury to privately held resources, courts look at the diminution in property value to determine damages.²⁴⁵ This, of course, is not feasible in many public trust cases where the resource, for example, groundwater, may have little effect on the value of the property. There are other common methods of market valuation:

For injuries to animals, damages have been set historically at the animal's market value. Common-law decisions addressing damage to productive trees customarily use diminution in land value as the measure of damages. Market value was used recently when the State of Washington sought recover under parens patriae for damages to a public salmon fishery.²⁴⁶

The main criticism of market valuation is that it does not reflect the true value of the resource. Natural resources also have existence and intrinsic value not reflected in market valuation.²⁴⁷

Existence value emphasizes the value society places on the existence of natural resources apart from any "pragmatic" use which may be derived from them.²⁴⁸ Three types of existence value include option value, vicarious value, and intertemporal value.²⁴⁹ One commentator explains these three forms of existence value:

Existence value has three distinct subparts. First, humans may place their own 'option value' on the preservation of natural resources. While I have never visited Yosemite National Park, I might want to do so someday and, therefore, I value its preservation. Retaining the option of future use intuitively has an economic importance. Second, humans may obtain 'vicarious value' from natural resources. Even if I never intend to visit Yosemite National Park, I may still value its preservation. The knowledge that a given natural environment is protected is valuable to some Americans, and vicarious appreciation of nature, therefore, has a demonstrable economic value. Third, preservation of natural resources may have 'intertemporal value.' Even if I have no interest in visiting Yosem-

249. Id. at 285-86.

^{243.} Frank B. Cross, Natural Resource Damage Valuation, 42 VAND. L REV. 269, 302-03 (1989).

^{244.} Id. at 303.

^{245.} Id.

^{246.} Id. (citations omitted).

^{247.} Id. at 309.

^{248.} Id. at 285.

ite National Park, I may want my offspring and their descendants to have the chance to see the park. $^{\rm 250}$

Existence value, which examines the value of a resource's existence to mankind, is complemented by the somewhat more controversial intrinsic value, which determines the resource's value based on its nature, independent of the interests of humans. According to ecological ethicists and philosophers, all living things possess an equal right to live and blossom, and modern capitalist methods of evaluation do not account for this value.²⁵¹ To the extent that market valuation does not account for existence or intrinsic value, it does not accurately reflect the full value of a resource.

Another problem arises with market valuation: It does not accurately reflect the need for conservation because the appraisal value of natural resources is limited to its current value, rather than its future value. In *Decatur County AG-Services, Inc. v. Young*, a farmer's crop of beans was destroyed by the defendant's negligent pesticide spraying.²⁵² It was the farmer's practice to hold the beans for one year before selling them.²⁵³ The price of the beans when first harvested was \$7 per bushel—the price at the farmer's intended date of sale was \$10 per bushel.²⁵⁴ The court awarded damages according to the \$7 price, holding that "damages are computed at the time of harvest, when a market value first exists."²²⁵

The application of this line of thinking to a commodity such as groundwater is disturbing. As was discussed above, a crisis surrounding water shortages looms, and is even beginning to take hold in some western states.²⁵⁶ Yet, the current price of water is relatively cheap.²⁵⁷ With the tremendous public policy interest in preserving this precious resource for the well-being of future citizenry, should not this interest in preservation be reflected by assessing the value of the water by its potential future value rather than its current value? In May 2000,

^{250.} Id.

^{251.} Arne Naess, *The Shallow and the Deep, Long-Range Ecology Movement: A Summary*, 16 INQUIRY 95, 96 (1973), *available at* http://www.alamut.com/subj/ideologies/pessimism/Naess_deepEcology.html.

^{252. 426} N.E. 2d 644 (Ind. 1981).

^{253.} Id. at 645.

^{254.} Id. at 645, 647 n.3.

^{255.} Id. at 647.

^{256.} Henry Brean, Western States to Miss Drought Plan Deadline, LAS VEGAS REVIEW-JOURNAL, March 31, 2005, at B4.

^{257.} See Steven D. Barnes, Conserve Water Now or Pay Up in the Future, ORLANDO SENTINEL, May 30, 2005, at F1.

Fortune magazine declared that "[w]ater promises to be to the 21st century what oil was to the 20th century: the precious commodity that determines the wealth of nations."²⁵⁸

Defendants, of course, respond to this argument by citing the hornbook propositions that, for a damage award to be upheld, it must be reasonably foreseeable to the plaintiff. However, as the Supreme Court noted, "[t]he most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of the uncertainty which his own wrong has created."²⁵⁹ Whether the courts apply this reasoning to the growing litigation over groundwater spoliation will undoubtedly be a matter for controversy in the coming years.

b. Cost of Repair or Restoration

In many cases, the natural resources are not just destroyed They are destroyed and toxic substances are left behind. Such substances have the potential of harming human health or other natural resources. In such cases, damages should not be limited to the diminution in value approach. The state should be able to recover the costs of full restoration and all consequential damages that result.

Defendants may contend that, in a situation where a natural resource is valued at \$1 million, the state should not be able to recover \$3 million, as this results in a windfall. But this objection is nearsighted, as there is actually no windfall. The public and natural resources are affected or potentially affected by the hazardous waste, and thus, the diminution in value approach is no guide to damages.

At the same time, some courts have been reluctant to award restoration where the cost of restoration grossly exceeds the value of the resource. For example, in *Puerto Rico v. SS Zoe Colocotroni*, the First Circuit found that a \$6 million restoration award in an oil spill case was "disproportionately expensive" compared to the resource damaged and the award was therefore inappropriate.²⁶⁰ According to the court, the focus in determining such a remedy should be on the steps a reasonable and prudent sovereign or agency would take to mitigate the harm done by the pollution.²⁶¹

^{258.} Shawn Tully, Water, Wa ter Everywhere, FORTUNE, May 15, 2000, at 342, 343.

^{259.} Bigelow v. RKO Radio Pictures, Inc., 327 U.S. 251, 265 (1946).

^{260. 628} F.2d 652, 675-77 (1st Cir. 1980).

^{261.} Id. at 675.

c. Cost of Replacement

Given the large costs associated with restoration, some courts may calculate damages according to the cost of replacement. Under this scenario, the trustee, at the defendant's expense, creates a comparable site rather than repairing the damaged one. This was the approach adopted by a federal court in *United States v. Board of Trustees of Florida Keys Community College.*²⁶² In that case, the college erected a beachfront structure that destroyed one-half of an acre of a fish habitat. In light of evidence that restoration would be very expensive, the court ordered the defendant to create a similar habitat on its property.²⁶³

Recovery of replacement costs also has its shortcomings. Replacement costs have little value when a polluter destroys a unique resource. Also, it is not feasible when the resources destroyed are finite resources such as groundwater and subterranean aquifers.

2. Punitive Damages

While remote, there is nonetheless a possibility of punitive damages in some public trust cases. Situations in which punitive damages might be appropriate are those in which the unreasonable interference was longstanding,²⁶⁴ where the defendant was marked by indifference,²⁶⁵ or where the injury was the result of an intentional business choice.²⁶⁶

3. Loss of Use During Period of Damage

"Loss of use" damages refer to damages that compensate the public for its loss of use of the resource during the period it was da maged.²⁶⁷ Awarding damages for loss of use is an established aspect of American remedies.²⁶⁸ "Loss of use" damages are also utilized in cases involving damages to natural resources.²⁶⁹ For example, in cases

^{262. 531} F. Supp. 267 (S.D. Fla. 1981).

^{263.} Id. at 275.

^{264.} See, e.g., Nichols v. Burke Royalty Co., 576 P.2d 317, 322 (Okla. Ct. App. 1977).

^{265.} Id.

^{266.} See, e.g., Atlas Chem. Indus., Inc. v. Anderson, 524 S.W. 2d 681, 689 (Tex. 1975).

^{267.} See generally Allan Kanner & Tibor Nagy, Measuring Loss of Use Damages in Natural Resource Dama ge Actions, 30 COLUM. J. ENVTL. L. 417 (2005).

^{268.} See United States v. Hatahley, 257 F.2d 920 (10th Cir. 1958) (considering loss of use damages for Native Americans whose horses were killed by the United States government).

^{269.} See In re Montaux Oil Transp. Corp. v. S.S. Mut. Underwriting Ass'n, Ltd., No. 90 CIV 5702, 1996 WL 340000, at *2 (S.D.N.Y. June 19, 1996) (holding loss of use damages are recoverable under the Clean Water Act); Gen. Elec. Co. v. U.S. Dep't of Commerce, 128 F.3d 767, 770 (D.C. Cir. 1997) (holding loss of use da mages are recoverable under CERCLA).

involving National Parks, the Park System Resource Protection Act defines damages to natural resources as the compensation for both restoration and the value for loss of use.²⁷⁰ There are two aspects of use value: consumptive and nonconsumptive uses.²⁷¹

a. Consumptive Uses

While use value refers to the worth of resources to those people who use them, consumptive use value relates to those people who consume the resource.²⁷² For instance, a fisherman deprived of fishing on a contaminated lake for six months loses six months worth of consumptive use value. It is entirely plausible that loss of consumptive use during the period of damage, since it accurately portrays the full damages suffered by the public as a whole, and by extension the trustee, should be included in market valuation and compensatory damages.

b. Nonconsumptive Uses

Lost nonconsumptive use value during the time of damage relates more to the aesthetic and recreational uses of a resource rather than the consumption of the resources.²⁷³ An example is lost tourist revenue for whitewater rafting operators during a time when remedial projects are undertaken. The losses incurred from a loss of nonconsumptive use during the period of restoration probably even exceed the loss of consumptive use.²⁷⁴

I. Summary

The underlying theory behind the public trust doctrine is that the government holds important resources in trust for its citizens. Exactly what is held in the public trust varies from state to state. It can be limited, however, as some courts have narrowed the public trust doctrine's application to cases where government actually owns the damaged resources. Applied to NRD claims, the doctrine gives gov-

^{270. 16} U.S.C. § 19jj(b)(1)(A) (2000).

^{271.} Steven Edwards, In Defense of Environmental Economics, 9 ENVTL. ETHICS 73, 79 (1987).

^{272.} Id.

^{273.} Id.

^{274.} William W. Shaw, *Problems in Wildlife Valuation in Natural Resource Management*, in VALUATION OF WILDLIFE RESOURCE BENEFITS 221, 225 (G. Peterson & A. Randall eds., 1984) (citing studies that show that 20 million Americans spent more than 478 million days engaged in consumptive use sport hunting in 1975 compared to the 49 million Americans that spent 1.6 billion days participating in wildlife observation).

ernments, primarily the states, a cause of action for damages for unreasonable interference with the use and enjoyment of the public resources that government holds in trust. The forms of relief available, as evidenced by the case law, are injunctive relief, monetary damages, or other equitable relief. There is no defined standard of liability in public trust cases.

IV. PARENS PATRIAE

A. Overview

Parens patriae refers to the government's role as guardian for persons legally unable to act for themselves, such as juveniles and the insane.²⁷⁵ Originally, parens patriae was used to protect people under a legal disability to act for themselves.²⁷⁶ Subsequently, courts have expanded the doctrine to encompass the government's power to sue to redress injury to "quasi-sovereign" interests.²⁷⁷ A "quasisovereign" interest is a direct and independent interest of the state, and not merely an attempt by the state to recover for the benefit of individuals.²⁷⁸ Actions to vindicate states' sovereign and quasisovereign interests are sometimes referred to as parens patriae actions,²⁷⁹ though the Latin label is not always used.²⁸⁰ Whatever the label, a state may recover costs or damages incurred because of behavior that threatens the health, safety, and welfare of the state's citi-

^{275.} Alfred L. Snapp & Son, Inc. v. Puerto Rico *ex rel* Barez, 458 U.S. 592, 600 (1982); Hawaii v. Stanford Oil Co. of Cal., 405 U.S. 251, 257 (1972).

^{276.} Note, *The Original Jurisdiction of the United States Supreme Court*, 11 STAN. L. REV. 665, 671 n.47 (1959); *see* Late Corp. of the Church of Jesus Christ of Latter-Day Saints v. United States, 136 U.S. 1, 57-58 (1890).

^{277.} Note, State Protection of its Economy and Environment: Parens Patriae Suits for Damages, 6 COLUM. J. L. & SOC. PROBS. 411, 412-13 (1970).

^{278.} Georgia v. Tenn. Copper Co., 206 U.S. 230, 237 (1907); Oklahoma ex rel. Johnson v. Cook, 304 U.S. 387, 393-94 (1938).

^{279.} See, e.g., Alfred L. Snapp & Son, Inc., 458 U.S. at 600-01.

^{280.} The doctrinal labels used to support states' actions on behalf of their citizenry vary. Sometimes no doctrinal labels are used. *See, e.g.,* Wyandotte Transp. Co. v. United States, 389 U.S. 191 (1967) (cause of action for costs of cleanup). Sometimes the state's action is framed as one brought by the trustee of property for the benefit of the public. State v. City of Bowling Green, 313 N.E.2d 409 (Ohio 1974) (cause of action for damages describing *parens patriae*); *Alfred L. Snapp & Son, Inc.,* 458 U.S. at 608-09 (cause of action to protect economic interests of a class of workers).

zenry.²⁸¹ Suits may be for damages or equitable relief.²⁸² A line of case has allowed *parens patriae* suits for NRD by states.²⁸³

A state's interests that may suffer damages can be sovereign, quasi-sovereign, or proprietary. As explained more fully below, the state's sovereign interest is its interest in seeing that its laws are obeyed and enforced, and that the health and well-being, both physical and economic, of its residents is protected. Behavior that violates criminal laws, civil laws, or other regulatory provisions compromises the very sovereignty of the state and can be subjective of a civil action brought in the state's name. But the state does more than merely enforce its laws—a state's quasi-sovereign interests include its interest in its citizens' health, safety, and welfare as well as in a healthful environment. A state's proprietary interests are those that the state asserts on its own behalf as might any other legal entity.

Everyone has an ongoing duty to refrain from impinging upon the state's sovereign and quasi-sovereign interests. These interests are only infrequently the object of civil litigation. This is most likely due to the fact that, fortunately, breaches of duty on a scale warranting civil state involvement are rare. *Parens patriae* actions are not necessarily appropriate for isolated acts of misbehavior and harm. Because *parens patriae* interests are infrequently litigated, this section presents the background and scope of *parens patriae* actions and the interests they protect. Understanding the nature and scope of the state's interests in *parens patriae* cases is critical to understanding the full implications of the doctrine in future cases.

American courts uniformly recognize a state's authority to sue, as *parens patriae*, to vindicate the state's and its citizens' interests. The *parens patriae* doctrine in the United States generally follows the same principles in federal and state courts. State court cases discuss-

^{281.} See, e.g., LA. CONST. pmbl. (The state exists to "promote the health, safety . . . and welfare of the people.").

^{282.} See, e.g., Kansasv. Colorado, 206 U.S. 46, 117 (1907).

^{283.} See, e.g., Idaho v. S. Refrigerated Transp., Inc., No. 88-1279, 1991 WL 22479, at *5 (D. Idaho Jan. 24, 1991) (allowing state *parens patriae* negligence action as alternative to CERCLA claim for damages to fish); State v. M/V Tamano, 357 F. Supp. 1097 (D. Me. 1973) (damages for harm to coastal waters and marine life caused by oil spill); Romualdo P. Eclavea, Annotation, *States Standing to Sue on Behalf of Citizens*, 42 A.L.R. FED. 23, § 6 (1979) (collecting authorities); *see also* Feather River Lumber Co. v. United States, 30 F.2d 642, 644 (9th Cir. 1929) (cost of replanting recoverable from negligent starter of fire that destroyed young growth in public forest); Spokane Int'l Ry. Co. v. United States, 72 F.2d 440, 443 (9th Cir. 1934).

ing *parens patriae* regularly rely on federal precedents.²⁸⁴ Federal doctrine is therefore a natural starting place to describe the *parens patriae* doctrine.

B. The Parens Patriae Doctrine in Federal Court

The United States Supreme Court reviewed parens patriae's modern history in Alfred L. Snapp & Son, Inc. v. Puerto Rico.²⁸⁵ In that case, Puerto Rico sought to bring suit in its capacity as parens patriae against numerous individuals and companies in the Virginia apple industry.²⁸⁶ The complaint alleged that the defendant had violated federal statutes and regulations by "failing to provide employment for qualified Puerto Rican migrant farm workers, by subjecting those Puerto Rican workers that were employed to working conditions more burdensome than those established for temporary foreign workers, and by improperly terminating employment of Puerto Rican workers."²⁸⁷ Puerto Rico alleged that this discrimination against Puerto Rican farm workers deprived:

the Commonwealth of Puerto Rico of its right "to effectively participate in the benefits of the Federal Employment Service System of which it is a part" and thereby caused irreparable injury to the Commonwealth's efforts "to promote opportunities for profitable employment for Puerto Rican laborers and to reduce unemployment in the Commonwealth."²⁸⁸

Puerto Rico's actions prompted the Supreme Court to review the entire line of *parens patriae* cases with regard to standing and development of quasi-sovereign interests.

1. Parens Patriae Standing

To have *parens patriae* standing, the state must assert an interest related to its sovereignty.²⁸⁹ An "easily identified" sovereign interest consists of "the exercise of sovereign power over individuals and entities within the relevant jurisdiction [which] . . . involves the power to . . . enforce a legal code, both civil and criminal."²⁹⁰ Thus, the

290. Id.

^{284.} See, e.g., State ex rel. Ieyoub v. Bordens, Inc., 684 So. 2d 1024, 1026 (La. Ct. App. 1996) (citing Alfred L. Snapp & Son, Inc. v. Puerto Rico ex rel. Barez, 458 U.S. 592 (1982)), writ denied, 690 So. 2d 42 (La. 1997).

^{285. 458} U.S. at 600.

^{286.} Id. at 597.

^{287.} Id. at 598.

^{288.} Id.

^{289.} Id. at 601.

state's power to enforce civil and criminal codes is an interest that may be protected through *parens patriae* actions.²⁹¹

Parens patriae standing cannot be based on proprietary interests or private interests pursued by the state as a nominal party. According to the Supreme Court in *Alfred L. Snapp & Son, Inc.*:

Not all that a State does, however, is based on its sovereign character. Two kinds of nonsovereign interests are to be distinguished. First, like other associations and private parties, a State is bound to have a variety of proprietary interests. A State may, for example, own land or participate in a business venture. As a proprietor, it is likely to have the same interests as other similarly situated proprietors. And like other such proprietors it may at times need to pursue those interests in court. Second, a State may, for a variety of reasons, attempt to pursue the interests of a private party, and pursue those interests only for the sake of the real party in interest. Interests of private parties are obviously not in themselves sovereign interests, and they do not become such simply by virtue of the State's aiding in their achievement. In such situations, the State is no more than a nominal party.²⁹²

2. Development of Quasi-sovereign Interests

In addition to sovereign interests, the Supreme Court recognizes a class of "quasi-sovereign" state interests that can support *parens patriae* actions. In this recognition, however, it is less clear what constitutes a "quasi-sovereign" interest than a sovereign interest. Quasisovereign interests were defined by the Supreme Court in *Alfred L. Snapp & Son, Inc.* as "not sovereign interests, proprietary interests, or private interests pursued by the State as a nominal party."²⁹³

Quasi-sovereign state interests lie in the "well-being of the populace."²⁹⁴ The Supreme Court developed this concept through example and counter-example rather than through deductive reasoning. "A quasi-sovereign interest must be sufficiently concrete to create an actual controversy between the State and the defendant. The vagueness of this concept can only be clarified by turning to individual cases."²⁹⁵

^{291.} The Supreme Court recognized a second sovereign interest of less relevance here —the demand for recognition from other sovereigns, which usually involves the maintenance and re cognition of borders.

^{292. 458} U.S. at 601-02.

^{293.} Id. at 602.

^{294.} Id.

^{295.} Id.

In *Louisiana v. Texas*²⁹⁶ Louisiana unsuccessfully sought to enjoin a quarantine maintained by Texas officials, which placed limitations on trade between Texas and the port of New Orleans. The Supreme Court labeled Louisiana's interest as that of a quasi-sovereign *parens patriae* interest, and made the distinction between the state's sovereign and proprietary interests:

Inasmuch as the vindication of the freedom of interstate commerce is not committed to the State of Louisiana, and that State is not engaged in such commerce, the cause of action must be regarded, not as involving any infringement of the powers of the State of Louisiana, or any special injury to her property, but as asserting that the State is entitled to seek relief in this way because the matters complained of affect her citizens at large.²⁹⁷

Although Louisiana was denied relief, a line of cases developed in which states were permitted to represent the interests of their citizens in enjoining public nuisances, including the discharge of sewage,²⁹⁸ flooding,²⁹⁹ water pollution,³⁰⁰ diversion of water,³⁰¹ and air pollution.³⁰²

In the first of these cases, *Missouri v. Illinois*,³⁰³ the Court expressly tied *parens patriae* standing to protection of the health and comfort of a state's citizens. "[I]t must surely be conceded that, if the health and comfort of the inhabitants of a State are threatened, the State is the proper party to represent and defend them."³⁰⁴ Later, in *Georgia v. Tennessee Copper Co.*,³⁰⁵ a state's quasi-sovereign interest was extended beyond public health to include interests in the land on which citizens reside and in the air they breathe.³⁰⁶

The Supreme Court in *Alfred L. Snapp & Son, Inc.* stated that these early nuisance cases were premised on the threat of injury to the public health and comfort. After surveying many *parens patriae* cases, the Supreme Court summarized the doctrine as follows:

^{296. 176} U.S. 1 (1900).

^{297.} Id. at 19.

^{298.} Missouri v. Illinois, 180 U.S. 208 (1901).

^{299.} North Dakota v. Minnesota, 263 U.S. 365 (1923).

^{300.} New York v. New Jersey, 256 U.S. 296 (1921).

^{301.} Wyoming v. Colorado, 259 U.S. 419 (1922); Kansas v. Colorado, 206 U.S. 46 (1907); Kansas v. Colorado, 185 U.S. 125 (1902).

^{302.} Georgia v. Tenn. Copper Co., 206 U.S. 230 (1907).

^{303. 180} U.S. 208 (1901).

^{304.} Id. at 241.

^{305. 206} U.S. 230 (1907).

^{306.} Id. at 237.

This summary of the case law involving *parens patriae* actions leads to the following conclusions. In order to maintain such an action, the State must articulate an interest apart from the interests of particular private parties, *i.e.*, the State must be more than a nominal party. The State must express a quasi-sovereign interest. Although the articulation of such interests is a matter for case-by-case development—neither an exhaustive formal definition nor a definitive list of qualifying interests can be presented in the abstract—certain characteristics of such interests are so far evident. These characteristics fall into two general categories. First, a State has a quasi sovereign interest in the health and well-being—both physical and economic—of its residents in general.³⁰⁷

While AGs can include public health interests to establish *parens patriae* status, the interests qualifying as quasi-sovereign interests have been further extended. "*[P]arens patriae* interests extend well beyond the prevention of such traditional public nuisances."³⁰⁸ In *Pennsylvania v. West Virginia*,³⁰⁹ Pennsylvania was held to be a proper party to represent its residents' interests in maintaining access to natural gas produced in West Virginia:

The private consumers in each State ... constitute a substantial portion of the State's population. Their health, comfort and welfare are seriously jeopardized by the threatened withdrawal of the gas from the interstate stream. This is a matter of grave public concern in which the State, as the representative of the public, has an interest apart from that of the individuals affected. It is not merely a remote or ethical interest, but one which is immediate and recognized by law.³¹⁰

The state's quasi-sovereign interest in its citizens' economic wellbeing was recognized in *Georgia v. Pennsylvania Railroad Co.*³¹¹ Georgia alleged that railroads had conspired to fix freight rates in a manner that discriminated against Georgia shippers in violation of federal antitrust laws.³¹² The Court equated unlawful trade barriers with the pollution and nuisance cases:

If the allegations of the bill are taken as true, the economy of Georgia and the welfare of her citizens have seriously suffered as the result of this alleged conspiracy.... [Trade barriers] may cause

^{307.} Alfred L. Snapp & Son, Inc. v. Puerto Rico ex rel. Barez, 458 U.S. 592, 607 (1982), writ denied, 690 So. 2d 42 (La. 1997).

^{308.} Id. at 605.

^{309. 262} U.S. 553 (1923).

^{310.} Id. at 592.

^{311. 324} U.S. 439 (1945).

^{312.} Id. at 443.

a blight no less serious than the spread of noxious gas over the land or the deposit of sewage in the streams.³¹³

Furthermore, the defendants' alleged wrong:

limits the opportunities of [the state's] people, shackles her industries, retards her development, and relegates her to an inferior economic position among her sister States. These are matters of grave public concern in which Georgia has an interest apart from that of particular individuals who may be affected.³¹⁴

This issue has also arisen in the context of the tobacco litigation. Although many states filed actions against the tobacco industry, only one tobacco case expressly analyzed a state's authority, as sovereign, to maintain a cause of action for harm to the health, safety, and welfare of its people.³¹⁵ That case sustained the state's authority.³¹⁶ In the Texas tobacco case, federal Judge David Folsom posed the question "whether the State could maintain this action [against the defendants in] . . . common law in the absence of any statutory provision."³¹⁷ Relying on *Alfred L. Snapp & Son, Inc.*, Judge Folsom concluded "that the State could bring such an action."³¹⁸

Judge Folsom first noted that the Supreme Court had approved actions by states to protect quasi-sovereign interests and that these "interests can related [sic] to either the physical or economic wellbeing of the citizenry."³¹⁹ He then found that the state had a sufficient interest to maintain an action in its quasi-sovereign capacity.

First, it is without question that the State is not a nominal party to this suit. The State expends millions of dollars each year in order to provide medical care to its citizens under Medicaid. Furthermore, participating in the Medicaid program and having it operate in an efficient and cost-effective manner improves the health and welfare of the people of Texas. If the allegations of the complaint are found to be true, the economy of the State and the welfare of its people have suffered at the hands of the Defendants It is clear to the Court that the State can maintain this action pursuant to its quasi-sovereign interests found at common law.³²⁰

Judge Folsom's ruling has implications for other AG actions. He held that a defendant's alleged wrongdoing would give rise to a viable

^{313.} Id. at 450.

^{314.} Id. at 451.

^{315.} State v. Am. Tobacco Co., 14 F. Supp. 2d 956 (E.D. Tex. 1997).

^{316.} Id. at 962.

^{317.} Id.

^{318.} Id.

^{319.} Id.

^{320.} Id. at 962-63 (citations omitted).

cause of action absent any statutory authorization.³²¹ The state's quasi-sovereign interests, standing alone, give it the authority to prosecute an action.

3. The Quasi-sovereign Interest in Natural Resources

Governmental interests in natural resources have been recognized as "quasi-sovereign" since the turn of the century. In 1907, the Supreme Court upheld the State of Georgia's standing as parens patriae to enjoin a Tennessee mining company's discharge of air pollution that was allegedly injuring privately owned forests, crops, and orchards in Georgia.³²² Concerns about pollution were also tied to more general concerns about health.³²³ The State of Georgia, which did not own the injured property, presented its argument for damage to the Supreme Court as if it were a dispute between private parties.³²⁴ The Supreme Court, observing that the state owned very little of the property alleged to be damaged, recast the state's claim as a suit for injury to resources owned by Georgia in its capa city of "quasisovereign."³²⁵ The Supreme Court held that Georgia had established that a private company's industrial pollutants "threaten damage on so considerable a scale to the forests and vegetable life, if not to health, within the plaintiff state as to make out a case."³²⁶ That is, as phrased in Oklahoma ex rel. Johnson v. Cook, to maintain a parens patriae suit, 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."³²⁷ Justice Oliver Wendell Holmes wrote that:

In that capacity 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.³²⁸

Justice Holmes' reference to the right to "breathe pure air" is made in a context that establishes health as an interest that the state may clearly defend through *parens patriae* actions. If harm to "the forests and vegetable life" could be defended through such actions, it follows, *a fortiori*, that health could be protected by *parens patriae* ac-

324. Id.

- 326. Id.
- 327. 304 U.S. 387, 396 (1938).
- 328. Tenn. Copper Co., 206 U.S. at 237.

^{321.} Id. at 962.

^{322.} Georgia v. Tenn. Copper Co., 206 U.S. 230, 237 (1907).

^{323.} Id. at 238-39.

^{325.} Id.

tions. Thus, although pollution often causes aesthetic damage and is a common trigger for *parens patriae* actions, the underlying reason for recognizing causes of action against polluters is because pollution threatens the health and safety of the citizenry.

More recently, in *Maine v. M/V Tamano*, a federal district court upheld the State of Maine's suit as *parens patriae* to recover damages from defendant's discharge of 100,000 gallons of oil into Casco Bay after hitting an outcrop.³²⁹ The state sought three categories of damages: (1) damages to property that it owned, such as state parks and submerged lands; (2) third-party damage claims and clean-up costs pursuant to a state statute; and, (3) damages as *parens patriae* for injury to "all of the natural resources lying in, on, over, under and adjacent to its coastal waters."³³⁰

The vessel owner moved to dismiss the state's claim as to the third category of damages, arguing that the State of Maine was really seeking to recover for injuries to individual citizens and lacked a sufficiently independent interest in its coastal waters and their marine life to permit a *parens patriae* suit.³³¹ The court rejected this argument, observing that Maine's sovereign interest in its coastal waters and resources was amply supported by state and federal common law.³³² The court concluded that Maine had an interest apart from the affected individuals, reasoning that an injury to Maine's coastal water and marine life would seriously harm the environment of the state and the recreational opportunities and welfare of its citizens.³³³

In State Department of Environmental Protection v. Jersey Central Power and Light Co.,³³⁴ the state of New Jersey brought an action against the defendant public utility company engaged in the generation and distribution of electricity within the state. The state, as *parens patriae*, sought damages for the death of a large number of menhaden fish, allegedly caused by the sudden flow of cold water into a stream in connection with the defendant's operation of a nuclear power plant.³³⁵ Affirming the lower court's judgment in favor of the

^{329. 357} F. Supp. 1097 (S.D. Me. 1973).

^{330.} Id. at 1098-99.

^{331.} Id. at 1099.

^{332.} Id. at 1100-01.

^{333.} *Id.* at 1101; *see also In re* Oswego Barge Corp., 439 F. Supp. 312, 322 (N.D.N.Y. 1977) (upholding New York's claim as *parens patriae* to recover costs of cleaning oil spilled in the St. Lawrence Waterway).

^{334. 308} A.2d 671 (N.J. Super. Ct. 1973), aff'd 336 A.2d 750 (N.J. Super. Ct. 1975), rev'don other grounds, 351 A.2d 337 (N.J. 1976).

^{335.} Jersey Central Power and Light Co., 336 A.2d at 752-53, 759.

state, the court rejected the defendant's contention that the state did not have a proprietary right to the fish in its waters sufficient to support an action for compensatory damages for the destruction thereof.³³⁶ The court said that "[t]he state has not only the right but also the affirmative fiduciary obligation to ensure that the rights of the public to a viable marine environment are protected, and to seek compensation for any diminution in that trust corpus."³³⁷ In addition, the court said that "absent some special interest in some private citizen, it is questionable whether anyone but the state could be considered the proper party to sue for recovery of damages to the environment."³³⁸ The court further stated that, "[b]oth parties agree that the State has an interest which gives it standing to sue under *parens patriae* doctrine for injunctive relief from pollution in navigable waters which causes injury to fish."³³⁹ The court held that the State of New Jersey had standing to seek both an injunction and da mages.³⁴⁰

The state's interest in protecting its environment is either part of its greater interest in protecting the health and safety of its citizenry or a severable interest that the state may protect. State and federal courts recognize states' authority to sue as *parens patriae* for many threats to public health, safety, and welfare. These include damage to coastal or harbor waters and marine life,³⁴¹ discharge of sewage into public waters,³⁴² the diverting of water from an interstate stream,³⁴³ changes in drainage which increase the flow of water in an interstate stream,³⁴⁴ the threat of being forced to accept low level radioactive waste,³⁴⁵ refusal of medical clinics to provide sign language interpreters at medical examinations of deaf patients,³⁴⁶ schemes constituting

^{336.} Id at 758-59.

^{337.} Id. at 759.

^{338.} Id.

^{339.} Id. at 758.

^{340.} Id. at 758-59.

^{341.} Id. at 750; Maine v. M/V Tamano, 357 F. Supp. 1097 (S.D. Me. 1973); Md. Dep't of Natural Res. v. Amerada Hess Corp., 350 F. Supp. 1060 (D. Md. 1972).

^{342.} Missouri v. Illinois, 180 U.S. 208 (1901); New York v. New Jersey, 256 U.S. 296 (1921).

^{343.} Kansas v. Colorado, 206 U.S. 46 (1907).

^{344.} North Dakota v. Minnesota, 263 U.S. 365 (1923).

^{345.} Nebraska v. Cent. Interstate Low-Level Radioactive Waste Comm'n, 834 F. Supp. 1205, 1210-11 (D. Neb. 1993), *aff'd*, 26 F.3d 77 (8th Cir. 1994).

^{346.} People v. Mid Hudson Med. Group, P.C., 877 F. Supp. 143 (S.D.N.Y. 1995).

common law fraud, $^{\rm 347}$ and restraints on the commercial flow of natural gas. $^{\rm 348}$

C. The Parens Patriae Doctrine in State Court

The *parens patriae* principles, developed primarily in federal court litigation and approved by the United States Supreme Court, have been endorsed by the states. While many states lack case law directly addressing *parens patriae* authority to sue, there are no states in which the principle of *parens patriae* has been deemed not a part of the state's law.

In *Minnesota v. Ri-Mel, Inc.*,³⁴⁹ the state alleged wrongdoing by health clubs and their owners. In approving the state's standing as *parens patriae*, the Minnesota appellate court stated:

Although there is no express statutory authority for the attorney general's action for restitution on behalf of injured club members, common law has recognized that under the doctrine of parens patriae a state may maintain a legal action on behalf of its citizens, where state citizens have been harmed and the state maintains a quasi-sovereign interest. It is also established that Minnesota has a quasi-sovereign interest in protecting the economic health of its citizens.³⁵⁰

The court further identified a factor supporting *parens patriae* actions not emphasized by the Supreme Court in its review of *parens patriae* cases in *Alfred L. Snapp & Son, Inc.* Citing *Minnesota v. Standard Oil Company*,³⁵¹ the court took into account the likelihood of successful lawsuits by individuals.³⁵² The court viewed *parens patriae* actions as a way for the state to represent a group of harmed citizens whose individual harms might not lead them to bring an action.

Minnesota has an added incentive to bring the action as *parens patriae* to assure its citizens the full benefit of the legislation and . . . individuals with small overcharges would likely not avail themselves of their individual remedy because of the burden of pursuing the action. Minnesota has a similar incentive to bring an action on behalf of club members as *parens patriae*, because the injured club members may not avail themselves of their remedy under the Club Contracts Act because of the economic burden of suing on a small

^{347.} Alaska v. First Nat'l Bank of Anchorage, 660 P.2d 406, 421 (Alaska 1982) (collecting cases).

^{348.} Pennsylvania v. West Virginia, 262 U.S. 553 (1923).

^{349. 417} N.W. 2d 102 (Minn. Ct. App. 1987).

^{350.} Id. at 112 (citations omitted).

^{351. 568} F. Supp. 556 (D. Minn. 1983).

^{352.} Ri-Mel, Inc., 417 N.W. 2d at 112.

claim. The clubs' closings affected the economic interests of more than 16,000 citizens, and Minnesota does have a quasi-sovereign interest in protecting their economic health.³⁵³

In Selma Pressure Treating Co. v. Osmose Wood Preserving Co. of America,³⁵⁴ the State of California alleged that the defendant unlawfully disposed of hazardous waste. The court held that the state has a legally cognizable property interest in the waters of the state.³⁵⁵ The state court expressly relied on "a line of cases [that] recognize and protect the State's parens patriae interest in the air, land, and waters of its territory."³⁵⁶

D. Summary

In summary, whether brought in state or federal court, the interest sought to be protected in a *parens patriae* action must differ from that of an ordinary individual owner or tort victim. The facts must show that the state has an interest independent of the private interests of its citizens. In addition, the cases should involve behavior that adversely affects a substantial number of the state's citizens.

It is important to clarify that the doctrine of *parens patriae* is generally understood to grant a state standing to sue but does not, in and of itself, create a cause of action.³⁵⁷ Where natural resources have been injured, states most frequently use public nuisance as the underlying cause of action.³⁵⁸ In contrast, the public trust doctrine provides its own theory of recovery.

In addition, the doctrine of *parens patriae* may provide states with standing to sue for damage to a broader range of resources than the public trust doctrine, because the former doctrine does not require the resources to be associated with property that is owned by the state. For example, in *Georgia v. Tennessee Copper Co.*, although

^{353.} Id.

^{354. 271} Cal. Rptr. 596 (Cal. Ct. App. 1990).

^{355.} Id. at 605.

^{356.} Id.

^{357.} See Hawaii v. Standard Oil Co. of Cal., 405 U.S. 251, 259 (1972) (holding that the claim cannot be resolved simply by reference to the general principle of *parens patriae*; injury must be compensable under statute).

^{358.} See Georgia v. Tenn. Copper Co., 206 U.S. 230 (1907) (enjoining copper companies from discharging noxious gas on nuisance theory); see also Missouri v. Illinois, 180 U.S. 208 (1901) (granting Missouri standing to sue Illinois under nuisance theory for sewage discharges into the Mississippi River); In re Oswego Barge Corp., 439 F. Supp. 312 (N.D.N.Y. 1977) (granting New York standing to recover oil spill cleanup costs as parens patriae under nuisance theory).

the State of Georgia was able to bring a successful *parens patriae* case to enjoin a copper company from discharging air pollutants that were destroying privately owned forests, the action may have failed if it had been brought under the public trust doctrine because the lands involved were not owned by the state.³⁵⁹

The underlying theory behind the *parens patriae* doctrine is that the state should be permitted to recover for damages to its "quasisovereign" interests. The quasi-sovereign interests continually expand and can be quite broad, varying from state to state. Applied to NRD claims, the *parens patriae* doctrine provides that governmental interests in natural resources are "quasi-sovereign" and distinct from interests of any individuals who could be affected. The doctrine gives governments the standing to sue for damages to natural resources. A state relying on this doctrine, however, must pursue an independent cause of action.

V. PUBLIC POLICY ARGUMENTS

Undoubtedly, the use of the AG's office to enforce a state's environmental values has public policy implications. But one must resist the temptation to argue that the AG is stepping on the toes of the legislature in doing so. In essence, when bringing actions for NRD under the public trust doctrine or as *parens patriae*, the AG is simply fulfilling his or her duty to uphold the laws of the state. The AG, as the enforcer of the state's laws, is the perfect candidate to pursue the state's interests as trustee of the public trust and *parens patriae* over sovereign and quasi-sovereign state interest.

Actions by the AG should not be considered partisan political maneuvers. The assertion of public trust rights by states is consistent with both liberal and conservative ideas of stewardship, sustainability, and property (albeit public property) rights in an environmental context.

Other incentives exist which make this AG-centered approach attractive on public policy grounds. The first is the cost-shifting incentive. Rather than costly bureaucratic regulatory schemes, litigation by the AG's office is comparably cheaper, especially if the AG contracts with an experienced plaintiffs' attorney under a contingency fee arrangement. Se cond, if an AG chooses to hire a plaintiffs' firm to take cases on a contingency fee basis, the firm can pursue the actions beyond the term of a particular AG. This "endurance incen-

^{359.} See Tenn. Copper Co., 206 U.S. at 230.

tive" decreases a defendant's motive to delay as long as possible. The third incentive is the "pick and choose" incentive. AGs can pick which cases and industries to target, and side-step those that involve particularly sensitive political issues which may be better handled at the legislative level. In this sense, an AG can immediately take on those cases which pose less controversy and, without delay, begin to collect damages for injury to natural resources and to clean-up the environment.

A. The Cost-shifting Incentive

The AG approach provides benefits to the citizenry of the state with little cost to them. This is especially true when the litigation is assigned to an experienced plaintiffs' attorney on a contingency fee basis. The cost of the litigation falls upon the parties doing the litigating, thus requiring very little public money. In a time when many states are struggling to raise revenue for even the most basic social services,³⁶⁰ the cost-shifting aspect of the AG approach should appeal to a broad base of policy makers.

Governmental litigation is favored the most in nations that have the tightest budgetary constraints, like the United States and states therein.³⁶¹ Faced with tough budget decisions, state environmental programs are suffering deep budget cuts.³⁶² Also, given the massive federal budget deficit, federal cuts are likely to shift much of the burden of environmental enforcement to the states.³⁶³ According to one source, "total money for state assistance grants for environmental services has been cut by eight percent, or \$300 million.³⁶⁴ About nineteen percent was cut from the Clean Water State Revolving Fund, a major program which provides financial assistance to states to ensure safe water."³⁶⁵ Therefore, it stands that things are only going to get worse for the policy makers regarding their financial ability to provide the level of environmental protection and cleanup demanded by their constituents. Using the AG to pursue public trust and *parens*

^{360.} Elizabeth C. McNichol, Ctr. on Budget & Policy Priorities, *Using Income Taxes to Address State Budget Shortfalls* (2003), *at* http://www.cbpp.org/2 -11-03sfp.pdf.

^{361.} See THOMAS F. BURKE, LAWYERS, LAWSUITS, AND LEGAL RIGHTS 179 (1st ed. 2002).

^{362.} See, e.g., Jenny Hunsperger, State Budget Crisis Hinders Dam Safety, HATTIESBURG AMERICAN, Dec. 29, 2004.

^{363.} See Laura Kujawski, Federal Budget Situation Worsens, State to Carry Burden, PNN Online News Network, Jan. 4, 2005, available at http://pnnonline.org/article.php?sid=5668.

^{364.} Id.

^{365.} Id.

patriae actions is a solution to this seemingly insurmountable problem looming on the horizon. By contracting with a plaintiffs' attorney, states can pursue polluters at little or no cost to the state.

B. The Endurance Incentive

Environmental assessments, lawsuits, and the collection of damages can take years. Often one single lawsuit may outlast the term of a particular AG in the state. A new AG's administration may bring with it new priorities and wish to allocate the resources of the AG's office in different ways. Thus, it is conceivable that many lawsuits will be "dropped" when a new AG takes over. By contracting with a plaintiffs' attorney, this is less likely to happen. The AG approach makes it possible for the state to pursue NRD with greater endurance.

The importance of this endurance is not to be understated. The credible threat of endurance provided by the AG approach gives industry the incentive to settle the case, rather than delay until an election cycle produces results favorable to them. When faced with an opponent with the resources to "go the distance," as many plaintiffs' firms have, industry will likely want to settle its claims with the state.

C. The Pick and Choose Incentive

Undoubtedly, some environmental issues are more controversial than others, generating passion on both sides of the issue. Logging in the Pacific Northwest is a good example, where the issue is often framed in terms of "the environment versus jobs."³⁶⁶ Given the controversy surrounding these issues, an argument can be made that they are better left up to the legislature. Under the AG approach, the AG can avoid such cases, and "pick and choose" cases which enjoy a broad political appeal, avoiding a political fight while helping to clean up the environment and gain revenue for cash—strapped states.

VI. CONCLUSION

An environmental crisis is looming, especially with regard to access to water for drinking and irrigation. States, many of whom are suffering serious budget cuts, need to find a way to address this problem absent the emergence of a costly new regulatory scheme. The public trust doctrine and *parens patriae* provide state AGs with an ef-

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^{366.} See Philip Dawdy, *Election 2004: On the Tree Stump*, SEATTLE WEEKLY, Oct. 24, 2004 at 18.

fective means to deter would-be polluters and collect for damages to natural resources. As commodities, such as drinking water, become strained, courts should expand the public trust doctrine to include more natural resources. Alternatively, a state has standing under *parens patriae* to sue for damages to any natural resources in which a "quasi-sovereign" interest can be shown. By contracting with private attorneys on a contingency fee basis, the state can regulate and protect its resources while shifting the cost of doing so onto other parties.