



Fall 9-1-1988

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Recommended Citation

CERCLA's Natural Resource Damage Provisions: A Comprehensive and Innovative Approach to Protecting the Environment, 45 Wash. & Lee L. Rev. 1417 (1988).

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CERCLA'S NATURAL RESOURCE DAMAGE PROVISIONS: A COMPREHENSIVE AND INNOVATIVE APPROACH TO PROTECTING THE ENVIRONMENT

In 1980 Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to establish federal authority for abating and controlling the serious threat to human health and the environment from improper hazardous waste disposal practices.¹ CERCLA

1. See Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. No. 96-510, §§ 1-308, 94 Stat. 2767 (codified at 42 U.S.C. §§ 9601-9657 (1982 & Supp. IV 1986)(providing for liability, compensation, cleanup, and emergency response for hazardous substances released into environment and cleanup of inactive hazardous waste disposal sites). Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as a last-minute compromise between competing House and Senate bills. See H.R. 7020, 96th Cong., 2d Sess., 126 CONG. REC. 9437-78 (1980)(proposed amendment to Solid Waste Disposal Act); S. 1480, 96th Cong., 1st Sess. (1979), 126 CONG. REC. 14938-48 (1980)(proposed Environmental Emergency Response Act); see also *United States v. Motollo*, 605 F. Supp. 898, 905 (D.N.H. 1985)(noting that Congress enacted CERCLA as compromise legislation after limited debate and under suspension of rules). As a last-minute legislative compromise, CERCLA lacks direct legislative history. See *Motollo*, 605 F. Supp. at 905 (noting that CERCLA lacks direct legislative history). The committee reports that accompanied the competing House and Senate bills, however, indicate that both houses of Congress intended to enact legislation that remedied the inability of existing federal law to address the threat that releases of hazardous chemical wastes pose to human health and the environment. See S. REP. No. 848, 96th Cong., 2d Sess. 10-11 (1980)(noting absence of federal law establishing liability for releases of hazardous substances into environment); H.R. REP. No. 1016, 96th Cong., 2d Sess. 18, reprinted in 1980 U.S. CODE CONG. & ADMIN. NEWS 6119, 6120 (noting that existing law clearly cannot deal with massive problem of hazardous waste disposal practices).

In enacting CERCLA, the House of Representatives and the Senate expressed concern over the magnitude of human health and environmental problems associated with releases of hazardous chemicals. See S. REP. No. 848, *supra*, at 2-10 (detailing problems associated with releases of hazardous substances into environment); H.R. REP. No. 1016, *supra*, at 19-22 (describing problems resulting from improper hazardous waste disposal practices). For example, the Senate Committee on Environment and Public Works noted that more than 90% of the hazardous waste produced in the United States is disposed of in unsound manners, including haphazard land disposal, improper storage of dangerous substances, and illicit dumping. S. REP. No. 848, *supra*, at 3-4. Moreover, the Senate committee reported that unsound hazardous waste disposal practices have damaged human health by causing cancer and aborted pregnancies, have contaminated groundwater, and have damaged natural habitats. *Id.* at 4. Similarly, in reporting on H.R. 7020, the House Committee on Interstate and Foreign Commerce noted that, in 1979, over 30,000 inactive and uncontrolled hazardous waste sites existed in the United States. H.R. REP. No. 1016, *supra*, at 18. The House Committee additionally noted that many of these hazardous waste sites contained large quantities of chemical wastes, involved unsafe designs and disposal methods, and posed substantial threats to human health and the environment. *Id.* at 18-20.

In addition to detailing the nature and magnitude of problems associated with unsound hazardous waste disposal practices, both houses of Congress recognized that existing federal statutes could not resolve the hazardous waste problems. See S. REP. No. 848, *supra*, at 10-11 (1980)(noting absence of federal law establishing liability for releases of hazardous

creates two federal causes of action that federal and state governments

wastes into environment); H.R. REP. No. 1016, *supra*, at 18 (noting that existing law clearly cannot deal with massive problem of hazardous waste disposal practices). In particular, both houses of Congress focused on the inadequacies of the Resource Conservation and Recovery Act of 1976 (RCRA), which provides a comprehensive regulatory program for the treatment, storage, and disposal of hazardous waste. S. REP. No. 848, *supra*, at 10-11; H.R. REP. No. 1016, *supra*, at 22; *see* Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, §§ 1001-8007, 90 Stat. 2795 (1976)(codified at 42 U.S.C. §§ 6901-86 (1982 & Supp. IV 1986)). The House Committee on Interstate and Foreign Commerce noted that the RCRA is prospective, applying to past hazardous waste disposal practices only if an imminent hazard exists. H.R. REP. No. 1016, *supra*, at 22. Moreover, the House committee reported that the RCRA fails to remedy the problems associated with a hazardous waste site if the government cannot locate a financially responsible owner of the site. *Id.* Similarly, the Senate Committee on Environment and Public Works observed that RCRA regulations do not provide a remedy if an owner of an abandoned hazardous waste site is unknown or is unable to pay cleanup costs. S. REP. No. 848, *supra*, at 11. The Senate Committee also observed that RCRA regulations do not address the cleanup of spills, illegal dumping, or general releases of hazardous wastes. *Id.* Accordingly, both houses of Congress sought to remedy the inability of RCRA to deal with the problem of abandoned and inactive hazardous waste disposal sites. *See* H.R. REP. No. 1016, *supra*, at 22 (noting that House Committee intended H.R. 7020 to amend RCRA); S. REP. No. 848, *supra*, at 12 (goal of S. 1480 is to complement RCRA and other federal environmental statutes); *see also* *United States v. Shell Oil Co.*, 605 F. Supp. 1064, 1071 n.1 (D. Colo. 1985) (recognizing that Congress enacted CERCLA in response to inadequacies of RCRA).

In responding to the inability of existing federal law to deal with the problems associated with inactive and abandoned hazardous waste disposal sites, both the House of Representatives and the Senate shared two concerns that survived the final amendments of CERCLA. *See* H.R. REP. No. 1016, *supra*, at 17 (discussing purpose of H.R. 7020); S. REP. No. 848, *supra*, at 12-13 (stating goals of S. 1480); *see also* *United States v. Reilly Tar & Chemical Corp.*, 546 F. Supp. 1100, 1112 (D.Minn. 1982)(noting that Committee Reports accompanying competing congressional bills share two concerns). First, Congress intended immediately to provide the federal government with authority for a prompt and effective response to national problems of hazardous waste disposal. *See* H.R. REP. No. 1016, *supra*, at 22 (declaring that intent of H.R. 7020 is to initiate and establish a comprehensive response and financing mechanism to abate and control problems associated with abandoned and inactive hazardous waste sites); S. REP. No. 848, *supra*, at 12-13 (declaring that goals of S. 1480 include providing ample federal response authority to cleanup hazardous waste disasters and to create fund to finance response action if liable party cannot be found or is unable to pay cost of cleanup); *see also* *Reilly Tar*, 546 F. Supp. at 1112 (noting that Congress intended to provide federal government tools necessary for prompt and effective response to hazardous waste disposal problems). Second, in enacting CERCLA, Congress intended to impose the costs of remedying the harmful conditions associated with hazardous waste sites upon the parties responsible for creating the harmful conditions. *See* H.R. REP. No. 1016, *supra*, at 17-19 (noting that H.R. 7020 is intended to create liability for persons who release hazardous waste); S. REP. No. 848, *supra*, at 12-13 (stating that goals of S. 1480 include assuring that parties who are responsible for any damage, environmental harm, or injury resulting from releases of hazardous waste bear ensuing costs); *see also* *Reilly Tar*, 546 F. Supp. at 1112 (noting that Congress intended that parties responsible for disposal of hazardous waste bear costs and responsibility for harmful conditions they created). *See generally* Eckhardt, *The Unfinished Business of Hazardous Waste Control*, 33 BAYLOR L. REV. 253 (1981)(discussing legislative history of CERCLA); Grad, *A Legislative History of the Comprehensive Environmental Response, Compensation and Liability ("Superfund") Act of 1980*, 8 COLUM. J. ENV. L. 1 (1982)(same).

may bring against a party who owns or operates a facility that releases hazardous substances² into the environment or a party who generates, transports, or contracts to dispose of hazardous substances that eventually escape into the environment.³ First, CERCLA authorizes federal and state governments to respond to actual and threatened releases of hazardous substances and to sue responsible parties for the ensuing response costs.⁴

2. See 42 U.S.C. §§ 9601 (22), (14) (1982 & Supp. IV 1986) (defining terms "release" and "hazardous substances" under CERCLA). CERCLA broadly defines the term "release" to include the following events that cause hazardous substances to escape into the environment: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, leaching, dumping, or disposing into the environment. *Id.* at § 9601 (22). In addition, CERCLA authorizes governments to respond to actual and threatened releases of a wide range of harmful substances. See *id.* at § 9601(14)(defining term "hazardous substances" under CERCLA). CERCLA incorporates by reference the substances that various environmental statutes designate as hazardous or toxic. *Id.*; see *id.* at § 7412 (defining hazardous air pollutants under Clean Air Act); 33 U.S.C. §§ 1317(a), 1321(b)(2)(A) (1982 & Supp. IV 1986)(defining hazardous substances under Federal Water Pollution Control Act); 42 U.S.C. § 6921 (1982 & Supp. IV 1986)(defining hazardous substances under Solid Waste Disposal Act); 15 U.S.C. § 2606 (1982 & Supp. IV 1986)(defining hazardous substances under Toxic Substances Control Act). In addition, CERCLA authorizes the United States Environmental Protection Agency (EPA) to designate additional substances that may present substantial danger to the public health or the environment. 42 U.S.C. § 9602(a) (1982 & Supp. IV 1986).

3. See 42 U.S.C. § 9607(a) (1982 & Supp. IV 1986)(establishing liability for costs of cleaning up releases of hazardous substances and for damages that releases cause to natural resources); *infra* notes 13-36 and accompanying text (discussing CERCLA's liability provisions). Section 107(a) of CERCLA identifies the following four categories of parties who federal and state governments may sue for response costs and damages to natural resources resulting from releases of hazardous substances: 1) the current owner or operator of a facility that releases hazardous substances; 2) the party who owned or operated a facility that had released hazardous substances in the past; 3) parties who contract with third parties for the disposal or treatment of hazardous substances or for the transport for disposal or treatment of hazardous substances; 4) and parties who transport hazardous substances to disposal or treatment facilities. 42 U.S.C. § 9607(a) (1982 & Supp. IV 1986); see *infra* note 4 (discussing types of actions that CERCLA authorizes federal and state governments to take in response to releases of hazardous substances).

4. See 42 U.S.C. §§ 9604(a), 9607(a)(4)(A) (1982 & Supp. IV 1986)(authorizing federal and state government responses to releases of hazardous substances and subsequent recovery of response costs from responsible parties). CERCLA authorizes federal and state governments to undertake two different types of responses to releases of hazardous substances. See *id.* at § 9604(a) (authorizing removal and remedial actions in response to releases of hazardous substances). CERCLA first authorizes federal and state governments to conduct removal actions to protect the public and the environment from the immediate hazards associated with releases of hazardous substances. *Id.* Under CERCLA removal actions include cleaning up or removing the hazardous substances, as well as monitoring, assessing or evaluating the release of hazardous substances. See *id.* at § 9601(23)(defining terms "remove" or "removal" as used under CERCLA). Removal actions under CERCLA also include providing for alternate water supplies, and providing temporary housing to individuals whose health may be in danger as a result of a release of hazardous substances. *Id.*

In addition, CERCLA authorizes federal and state governments to conduct remedial actions. *Id.* at § 9604(a). Under CERCLA the term "remedial action" represents permanent solutions to the environmental contamination that results from releases of hazardous subst-

Second, CERCLA authorizes federal and state governments, acting as public trustees of natural resources, to sue responsible parties for the damages to natural resources resulting from releases of hazardous substances.⁵ By recognizing and expanding the common-law public trust doctrine⁶

ances. *See id.* at § 9601(24)(defining terms "remedy" and "remedial action" as used under CERCLA). Section 101(24) of CERCLA provides that remedial actions include storing, confining, neutralizing or cleaning up the released hazardous substances. *Id.* Section 101(23) provides that remedial actions also include recycling, destroying, or segregating reactive hazardous substances, as well as dredging, excavating, repairing or replacing damaged hazardous substance containers. *Id.* *See generally* City of New York v. Exxon Corp., 633 F. Supp. 609, 617-18 (S.D.N.Y. 1986)(discussing removal and remedial actions under CERCLA); United States v. Reilly Tar & Chemical Corp., 546 F. Supp. 1100, 1117 n.5 (D.Minn. 1982)(same); Note, *Theories of State Recovery Under CERCLA for Injuries to the Environment*, 24 NAT. RESOURCES J. 1101, 1105-06 n.33 (1984) (same)[hereinafter "Note, *Theories of State Recovery*"].

While authorizing federal and state governments to undertake removal and remedial actions in response to releases of hazardous substances, CERCLA authorizes governments to recover the ensuing costs from two sources. First, CERCLA provides that governments may sue various responsible parties to recover the costs that the governments incurred in responding to a release of hazardous substances. 42 U.S.C. § 9607(a)(4)(A) (1982 & Supp. IV 1986). Second, CERCLA establishes a fund, commonly known as the Superfund, to finance federal and state removal and remedial actions. *See id.* at § 9631 (establishing Hazardous Substance Response Fund) replaced by Pub. L. No. 99-499, § 517, 100 Stat. 1615 (1986)(codified at 26 U.S.C. § 9507 (1982 & Supp. IV 1986). If parties responsible for the release of hazardous substances are unknown or are unwilling to pay response costs, governments may file a claim against the fund for the amount the government incurred in cleaning up the release of hazardous waste. *See* 42 U.S.C. §§ 9611(a), 9612 (1982 & Supp. IV 1986) (authorizing President of United States to expend Superfund monies to finance cleanup of hazardous waste sites).

In addition to authorizing federal and state governments to undertake removal and remedial actions in response to releases of hazardous substances and to recover the ensuing costs from responsible parties or from the Superfund, CERCLA authorizes the Attorney General of the United States to force responsible parties to clean up hazardous waste sites and releases. *See id.* at § 9606 (establishing federal authority to secure abatement actions). Section 106(a) of CERCLA authorizes the Attorney General to seek an injunction in federal district court to force a responsible party to clean up a hazardous waste site or a spill of hazardous waste that represents an imminent danger to public health or to the environment. *Id.* *See generally* Note, *Section 106 of CERCLA: An Alternative to Superfund Liability*, 12 B.C. ENVTL. L. REV. 381 (1985)(discussing scope of government's power under § 106 of CERCLA to force responsible parties to clean up hazardous waste sites)[hereinafter "Note, *Section 106*"].

5. 42 U.S.C. § 9607 (a)(4)(c), (f)(1) (1982 & Supp. IV 1986); *see infra* notes 13-36 and accompanying text (discussing CERCLA's natural resource damage provisions).

6. *See* W. RODGERS, ENVIRONMENTAL LAW § 2.16, at 170-77 (1977)(discussing common-law public trust doctrine). The public trust doctrine is a legal fiction that evolved from Roman and common-law notions that the public possesses inalienable rights in natural resources that are too important to be subject to private ownership. *See* Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IDAHO L. REV. 631, 656 (1987)(noting that principles of public trust doctrine are judicially created methods to justify treating differently governmental transactions that involve natural resources); Note, *The Public Trust Doctrine as a Basis for Environmental Litigation in Louisiana*, 27 LOY. L. REV. 469, 469 (1981)(noting that public trust doctrine

in CERCLA's natural resource damage provisions, Congress provided federal and state officials with a broad federal cause of action to restore and preserve all natural resources that suffer damages from releases of hazardous substances.⁷ Moreover, in enacting the Superfund Amendments and Reauthorization Act of 1986,⁸ Congress reaffirmed and clarified its intent to create a federal cause of action for restoring natural resources that suffer damages from releases of hazardous substances.⁹

Pursuant to CERCLA, the United States Department of the Interior (DOI) has promulgated natural resource damage assessment regulations that federal and state governments may employ to measure natural resource damages under CERCLA.¹⁰ By adopting the common-law approach to measuring property damage, the DOI regulations inhibit the federal and state governments' ability to restore natural resources that suffer damages from releases of hazardous substances.¹¹ To preserve Congress' intent to restore or replace natural resources that suffer damages from releases of

is judge made, evolving from Roman and common-law principles). Accordingly, the common-law public trust doctrine recognizes that the government holds certain natural resources in trust for the benefit of the public. W. ROGERS, *supra*, § 2.16, at 171. The doctrine provides that governments must protect the public resources against unfair dealing and dissipation. *Id.* at 172. Historically, courts applied the public trust doctrine to protect the public's interest in navigable waterways and tidal lands. *Id.*; see *infra* notes 76-77 and accompanying text (discussing early United States Supreme Court cases applying public trust doctrine). Moreover, courts had limited the doctrine to protect a limited variety of public uses, including navigation, commerce, and fishing. W. ROGERS, *supra*, § 2.16, at 172. Courts, however, have expanded the public trust doctrine to protect additional natural resources and public uses. *Id.*; see *infra* notes 77-89 and accompanying text (discussing judiciary's expansion of public trust doctrine). See generally 1 V. YANNAKONE & B. COHEN, ENVIRONMENTAL RIGHTS AND REMEDIES § § 2:1-14, at 11-60 (1972)(discussing historical development and application of public trust doctrine); Sax, *The Public Trust Doctrine in Natural Resource Law: Affective Judicial Intervention*, 68 MICH. L. REV. 471 (1970)(analyzing public trust doctrine as source of important environmental law).

7. See *infra* notes 90-127 and accompanying text (discussing Congress' recognition and expansion of public trust doctrine).

8. Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1615 (codified in scattered sections of 42 U.S.C. § § 9601-9657 (1982 & Supp. IV 1986)).

9. See H.R. REP. NO. 253, 99th Cong., 1st Sess., pt. 4, at 50 (1985), *reprinted in* 1986 U.S. CODE CONG. & ADMIN. NEWS 2835, 3080 (noting that restoration or replacement of damaged natural resources is primary purpose of CERCLA's natural resource damage provisions); *infra* notes 105-127 and accompanying text (discussing Congress' intent, in enacting and amending CERCLA, to authorize governments to recover cost of restoring natural resources that suffer damages from releases of hazardous substances).

10. See Natural Resource Damage Assessment Regulations, 43 C.F.R. § 11 (1987); *infra* notes 90-127 and accompanying text (discussing United States Department of Interior's (DOI) natural resource damage assessment regulations).

11. See Kenison, Buchholz & Mulligan, *State Actions for Natural Resource Damages: Enforcement of the Public Trust*, 17 ENVT. L. REP. (ENVT. L. INST.) 10434, 10434 (1987)(contending that DOI damage assessment regulations limit scope and nature of state governments role in preserving and protecting natural resources); see also *infra* notes 128-148 and accompanying text (criticizing DOI's damage assessment regulations).

hazardous waste, the United States Court of Appeals for the District of Columbia should strike certain provisions of the DOI's damage assessment regulations as arbitrary or capricious or otherwise not in accordance with the law.¹²

I. CERCLA'S NATURAL RESOURCE DAMAGE PROVISIONS

CERCLA contains several sections that govern the scope of a federal or state government's action against parties who damage natural resources by releasing hazardous substances into the environment.¹³ Section 107 contains provisions that establish and outline liability under CERCLA for natural resource damages.¹⁴ Section 107(a)(4)(C) establishes liability for any injury, destruction or loss of natural resources resulting from releases of hazardous substances.¹⁵ Section 107(f) declares that federal and state governments, acting on behalf of the public as trustees for natural re-

12. See 42 U.S.C. § 9631 (1982 & Supp. IV 1986)(providing that United States Court of Appeals for the District of Columbia is only court that has jurisdiction to review regulations that government promulgates under CERCLA); see also The Administrative Procedure Act (APA), Pub. L. No. 89-554, 80 Stat. 378, § 706 (codified at 5 U.S.C. § 706 (1982)) (providing scope of review when party challenges federal agency's action); *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 843 (1984) (defining proper scope of judicial review of federal agency's interpretation of statutory provisions). *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 415-16 (1971) (discussing scope of judicial review of agency actions). Section 706 of the APA directs an appellate court to invalidate or set aside federal agency actions that are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. 5 U.S.C. § 706(2) (1982). Section 706 also directs an appellate court to set aside an agency action that violates a constitutional right or that exceeds the statutory authority of an agency. *Id.* Several states and environmental interest groups have challenged the validity of several provisions of the DOI's damage assessment regulations, including the DOI's rule requiring federal and state trustees to use the lesser of restoration costs and diminution in use value as the measure of damages to natural resources. See *Ohio v. Department of Interior*, No. 86-1529 (D.C. Cir., consolidated with *National Wildlife Fed'n v. Department of Interior*, No. 86-1575, July 13, 1987); see also *infra* notes 129-148 and accompanying text (criticizing DOI's damage assessment regulations).

13. See *infra* notes 14-36 and accompanying text (discussing CERCLA's natural resource damage provisions).

14. See 42 U.S.C. § 9607(a), (f) (1982 & Supp. IV 1986)(establishing liability for damages to natural resources resulting from release of hazardous substances).

15. 42 U.S.C. § 9607(a)(4)(C) (1982 & Supp IV 1986). Section 107 of CERCLA creates two exceptions to liability for any injury, destruction or loss of natural resources resulting from releases of hazardous substances. See *id.* at § 9607(f). First, section 107(f) bars liability for damages to natural resources that governments have authorized through a permit or license proceeding as irreversible and irretrievable commitments of natural resources. *Id.* Second, section 107(f) prohibits a government trustee from recovering damages for injuries to natural resources if the injuries and the release of hazardous substances that caused the injuries occurred before Congress enacted CERCLA. *Id.*; see *infra* note 24 (noting that CERCLA creates three limited affirmative defenses to liability under CERCLA). See generally Warren & Zackrisson, *Natural Resources Damages Provisions of CERCLA*, NAT. RESOURCES & ENV'T 18, 21-48 (1985)(discussing exceptions to liability for natural resource damages under CERCLA).

sources, may assert a claim for natural resource damages under CERCLA.¹⁶ Accordingly, section 107(f) requires the President of the United States and the governor of each state to designate officials who will act on behalf of the public as trustees for natural resources.¹⁷ Section 107(f) also requires the designated federal and state trustees to assess the extent of natural resource damages from the release of hazardous substances and to recover the natural resource damages from responsible parties.¹⁸ Moreover, section 107(f) provides that damage assessments may not limit liability for natural resource damages to the cost of restoring or replacing the damaged resources.¹⁹ Section 107(f), however, requires a government trustee to use natural resource damage awards to restore, replace, or acquire the equivalent of the damaged natural resources.²⁰

Section 101 of CERCLA defines two terms that govern the scope of federal and state governments' claims for natural resource damages.²¹ Section 101(16) broadly defines the term "natural resources" to encompass a wide variety of natural objects that federal, state, and local governments either own, manage, or control.²² Additionally, section 101(32) defines the

16. 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986). In addition to authorizing federal and state governments to assert claims for natural resource damages, section 107(f) of CERCLA authorizes foreign governments and Indian tribes to seek recovery for natural resource damages under CERCLA. *Id.* Moreover, courts have interpreted CERCLA to authorize local governments to assert natural resource damage claims under CERCLA. See *City of New York v. Exxon Corp.*, 633 F. Supp. 609, 617-18 (S.D.N.Y. 1986) (holding that City of New York is proper plaintiff to bring claim for natural resource damages under CERCLA); *Mayor of Boonton v. Drew Chemical Corp.*, 621 F. Supp. 663, 667 (D.C.N.J. 1985) (holding that municipalities have standing under CERCLA to sue for natural resource damages). CERCLA does not, however, authorize private persons to assert claims for natural resource damages. See 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986) (stating that responsible parties are liable only to Indian tribes and federal, state, and foreign governments for natural resource damages); *United States v. Southeastern Pennsylvania Transp. Auth.*, No. 86-1094 (E.D. Pa. July 2, 1986) (WESTLAW, FedCTs library, Allfeds file) (holding that private cause of action for damages to natural resources does not exist under CERCLA); see also Habicht, *The Expanding Role of Natural Resource Damage Claims Under Superfund*, 7 VA. J. NAT. RESOURCE L. 1, 8 (1987) (noting that CERCLA does not grant private persons right to claim damages for injury to natural resources).

17. 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986).

18. 42 U.S.C. § 9607(a)(4)(C), (f)(1) (1982 & Supp. IV 1986). In addition to authorizing government trustees to recover natural resource damages, section 107 authorizes the trustees to recover the reasonable costs of assessing natural resource damages and the interest on the amount of damages that the trustees eventually recover. *Id.* at § 9607(a).

19. *Id.* at § 9607(f)(1).

20. *Id.*; see *infra* notes 105-127 and accompanying text (interpreting language of CERCLA's natural resource damage provisions to mandate recovery of costs of restoring damaged natural resources).

21. See 42 U.S.C. § 9601 (1982 & Supp. IV 1986) (defining terms used under CERCLA); *infra* notes 22-24 and accompanying text (discussing terms "natural resources" and "liability" as used under CERCLA).

22. 42 U.S.C. § 9601(16) (1982 & Supp. IV 1986). Section 101(16) of CERCLA defines the term "natural resources" to include land, fish, wildlife, biota, air, water, ground water, drinking water supplies and other such resources belonging to, appertaining to, managed

term "liability" as the standard of liability that exists under section 311(c) of the Federal Water Pollution Control Act (FWPCA).²³ Because courts have interpreted section 311 of the FWPCA to create strict liability, CERCLA holds responsible parties strictly liable for the damages that releases of hazardous substances inflict on a wide range of natural resources.²⁴

by, held in trust by, or otherwise controlled by the United States or any state or local government. *Id.*

23. *See id.* at § 101(32)(defining term "liability" under CERCLA); The Federal Water Pollution Control Act (FWPCA), Pub. L. No. 87-88, § 331, 86 Stat. 816 (codified as amended at 33 U.S.C. § 1251 (1982)) (defining term "liability" under FWPCA); *see also infra* note 24 and accompanying text (discussing courts interpretation of liability under the FWPCA and CERCLA).

24. *See United States v. LeBeouf Bros. Towing Co.*, 621 F.2d 787, 789 (5th Cir. 1980) (noting that FWPCA embraces standard of strict liability); *Steuart Transp. Co. v. Allied Towing*, 596 F.2d 609, 613 (4th Cir. 1979)(noting that legislative history of FWPCA indicates that FWPCA embodies standard of strict liability). *See generally* Note, *Liability Without Fault Under the Federal Water Pollution Control Act*, 19 NAT. RESOURCES J. 687, 692 (1979) (reviewing cases that interpret § 311 of FWPCA to create strict liability). Although CERCLA's statutory language does not explicitly provide for strict liability, CERCLA's legislative history indicates that Congress intended to create a standard of strict liability under CERCLA. *See New York v. Shore Realty Corp.*, 759 F.2d 1032, 1042 (2d Cir. 1985)(noting Congress' intent to create strict liability under CERCLA). In considering legislation to abate and control problems associated with releases of hazardous waste, both houses of Congress passed bills that provided for strict liability. *See* S. 1480, 96th Cong., 2d Sess. § 4(a), 126 CONG. REC. 30908 (1979)(creating strict liability standard); H.R. 7020, 96th Cong., 2d Sess. §§ 3071(a)(1)(D), 126 CONG. REC. 26,779 (1979)(same). As part of a compromise, however, sponsors of both bills agreed to remove strict liability language from CERCLA and to insert a reference to liability under the FWPCA. *See* 126 CONG. REC. 30,932 (1980)(statement of Sen. Randolph)(noting that, by specifying standard of liability under § 311 of FWPCA, sponsors of CERCLA kept strict liability in compromise); *Shore Realty*, 759 F.2d at 1042 n.13 (noting compromise that eliminated strict liability provision from CERCLA). Although sponsors of the Senate and House bills agreed to remove the term strict liability from CERCLA, the sponsors nonetheless conceded that CERCLA provides for strict liability. *See* 126 CONG. REC. 30,932 (1980)(statement of Sen. Randolph)(noting that standard of strict liability exists under CERCLA). Moreover, courts have determined that CERCLA embraces a standard of strict liability. *See, e.g., J.V. Peters & Co., Inc. v. Administrator, EPA*, 767 F.2d 263, 266 (6th Cir. 1985) (noting that CERCLA imposes strict liability); *Shore Realty*, 759 F.2d at 1042 (noting that Congress intended to impose standard of strict liability under CERCLA); *United States v. Dickerson*, 640 F. Supp. 448, 451 (D.Md. 1986)(holding that CERCLA imposes strict liability, subject to very limited defenses). In sum, the legislative history of CERCLA and court interpretations of CERCLA and section 311 of the FWPCA provide that CERCLA embraces a standard of strict liability.

Although CERCLA embraces a standard of strict liability, CERCLA does not embrace a standard of absolute liability. *See Shore Realty*, 759 F.2d at 1042 (noting that strict liability under CERCLA is not absolute). Section 107(b) of CERCLA provides that acts of nature, war, and of certain third parties constitute affirmative defenses to liability under CERCLA. 42 U.S.C. § 9607(b) (1982 & Supp. IV 1986). In establishing a third party defense, section 107(b) excludes liability for release of hazardous substances resulting from acts of strangers, but not for acts and omissions of an employee or an agent of a CERCLA defendant or of one whose act or omission occurs in connection with a contractual relationship with the defendant. *Id.*; *see supra* note 15 (discussing specific exceptions to liability for damages to natural resources resulting from releases of hazardous substances).

While section 101 of CERCLA defines two terms that govern the scope of liability for natural resource damages, section 301(C) of CERCLA contains provisions that govern the scope of a government trustee's natural resource damage assessments.²⁵ Section 301(c) requires the President of the United States to promulgate two types of regulations for assessing natural resource damages under CERCLA.²⁶ Section 301(c) first requires the President to create standard procedures for simplified assessments that require only minimal field observation to assess natural resource damages (type A regulations).²⁷ Additionally, section 301(c) requires the President to establish standard alternative procedures for conducting case-by-case assessments of short-term and long-term damages to natural resources (type B regulations).²⁸ Moreover, section 301(c) states that the federal regulations must identify the best available procedures for determining both direct and indirect natural resource damages from releases of hazardous substances.²⁹ Section 301(c) also provides that the federal regulations must consider the factors that may affect natural resource damage assessments, including replacement value, use value, and the ability of the ecosystem or the resource to recover without any government action.³⁰ If a government trustee measures natural resource damages in accordance with the regulations that the President promulgates pursuant to section 301(c), CERCLA provides that the trustee's damage assessment has the force and effect of a rebuttable presumption in any action that the trustee brings against a responsible party under CERCLA.³¹

Realizing that the costs of establishing liability under CERCLA might exceed the costs of cleaning up hazardous waste sites, Congress recently amended CERCLA by adding provisions that authorize and govern settlements of CERCLA actions.³² In enacting these new settlement provisions,

25. See 42 U.S.C. § 9651(c) (1982 & Supp. IV 1986) (requiring President of the United States to promulgate rules for measuring natural resource damages under CERCLA); *infra* notes 26-31 and accompanying text (discussing § 301(c) of CERCLA).

26. 42 U.S.C. § 9651(c) (1982 & Supp. IV 1986).

27. *Id.* at § 9651(c)(2). The legislative history of CERCLA indicates that Congress intended governments to use type A damage assessment regulations when minor releases of hazardous substances damage natural resources. See S. REP. NO. 848, 96th Cong., 2d Sess. 86 (1980) (stating that simplified type of regulation is necessary to deal effectively with damage assessment in "minor" releases of hazardous substances).

28. 42 U.S.C. § 9651(c)(2) (1982 & Supp. IV 1986). The legislative history of CERCLA indicates that Congress intended governments to use type B regulations if large or unusually destructive releases occur and to guide site-specific damage assessments. See S. REP. NO. 848, 96th Cong., 2d Sess. 86 (1980) (discussing difference between type A and Type B natural resource damage assessments).

29. 42 U.S.C. § 9651(c)(2) (1982 & Supp. IV 1986).

30. *Id.*

31. *Id.* at § 107(f).

32. See 131 CONG. REC. S1208 (1985) (statements of Sen. Domenici) (noting CERCLA case in which United States Environmental Protection Agency estimates that site clean up will cost \$10.5 million and that total litigation costs will exceed \$35 million); *infra* notes 33-36 and accompanying text (discussing CERCLA's settlement provisions governing natural resource damage claims).

Congress created specific guidelines for settling government claims for natural resource damages.³³ Specifically, Congress enacted a provision that requires the federal government to notify the designated federal natural resource trustee if settlement negotiations address liability for a release of hazardous substances that damaged natural resources.³⁴ The new provision permits the federal trustee to include a covenant not to sue for natural resource damages in a proposed settlement offer.³⁵ The new provision, however, prohibits the federal trustee from agreeing to the covenant unless the responsible party has agreed to protect and restore the damaged natural resources.³⁶

II. THE DEPARTMENT OF INTERIOR'S NATURAL RESOURCE DAMAGE ASSESSMENT REGULATIONS

Pursuant to section 301(c) of CERCLA, the DOI promulgated natural resource damage assessment regulations on August 1, 1986.³⁷ The DOI regulations provide that federal and state governments that bring natural resource damage claims do not have to comply with the damage assessment regulations.³⁸ In accordance with CERCLA's mandate, however, the DOI regulations provide that federal and state trustees must comply with the DOI regulations to obtain a rebuttable presumption that the trustees' damage assessment is correct.³⁹ To ensure that all damage assessment procedures are appropriate, necessary, and sufficient to assess damages

33. See Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, § 122(j), 100 Stat. 1615 (codified at 42 U.S.C. § 9622(j))(1982 & Supp. IV 1986)(establishing guidelines for settling natural resource damage claims).

34. *Id.*

35. *Id.*

36. *Id.*

37. See Natural Resource Damage Assessments, 43 C.F.R. § 11 (1987). By Executive Order 12,316, the President of the United States delegated the responsibility to promulgate natural resource damage assessment regulations to the Secretary of the United States Department of the Interior. See 42 U.S.C. § 9651(c) (1982 & Supp. IV 1986)(requiring the President of the United States to promulgate natural resource damage assessments); Exec. Order No. 12,316 § 8(c), 46 Fed. Reg. 42,237 (1981)(delegating President's authority to promulgate natural resource damage assessments to DOI); see also *supra* notes 25-31 and accompanying text (discussing § 301(c) of CERCLA). On May 28, 1987, the DOI proposed to amend the DOI's natural resource damage assessment regulations to conform to changes necessitated by the Superfund Amendments and Reauthorization Act of 1986. See 52 Fed. Reg. 12886 (1987) (proposing changes to DOI's natural resource damage assessment regulations); Pub. L. No. 99-499, 100 Stat. 1615 (1986). The DOI issued a final rule that adopted the proposed amendments on February 28, 1988, noting that the final rule became effective on March 22, 1988. See 53 Fed. Reg. 5166 (1988)(presenting final amendments to natural resource damages assessment regulations).

38. 43 C.F.R. § 11.10 (1987).

39. See *id.* at § 11.10 (stating that DOI's damage assessment regulations are not mandatory); 42 U.S.C. § 9607(f)(2)(C) (1982 & Supp. IV 1986)(stating that trustee damage assessments that comply with regulations promulgated pursuant to § 301(c) of CERCLA have force and effect of rebuttable presumption that damage assessment is correct).

for injuries to natural resources, the DOI regulations set forth a multi-phase approach to assessing natural resource damages under CERCLA.⁴⁰

The first phase of the DOI's damage assessment regulations, termed the "Preassessment Phase," requires the government trustee to conduct a preassessment review of the effects of a release of hazardous substances on natural resources.⁴¹ The Preassessment Phase regulations require the trustee to conduct a rapid review of readily available information to determine whether the trustee should conduct a damage assessment.⁴² The regulations prohibit the trustee from conducting a natural resource damage assessment if the preassessment review reveals that a release of hazardous substances could not have caused an injury to a natural resource or that planned response actions sufficiently will remedy the injury to natural resources.⁴³

If the government trustee's preassessment review justifies the expense of conducting a natural resource damage assessment, the second phase of the DOI's damage assessment process, termed the "Assessment Plan Phase," requires the government trustee to prepare an assessment plan.⁴⁴ To ensure that the trustee assesses natural resource damages in a planned, systematic and cost-effective manner, the Assessment Plan Phase regulations require the trustee to prepare a detailed damage assessment plan that identifies the scientific and economic methods that the trustee intends to use to measure natural resource damage.⁴⁵ The regulations provide that

40. 43 C.F.R. § 11.13 (1987)(presenting general overview of DOI's damage assessment regulations); *infra* notes 41-65 and accompanying text (discussing DOI's multi-phase damage assessment regulations).

41. *See* 43 C.F.R. §§ 11.20-.25 (1987)(DOI's Pre-Assessment Phase regulations). In addition to requiring a trustee to conduct a pre-assessment review, the DOI's Pre-Assessment Phase regulations requires government officials who investigate releases of hazardous substances to notify federal and state trustees when a release has injured or is likely to injure a natural resource. *Id.* at § 11.20. Moreover, the Pre-Assessment Phase regulations authorize natural resource trustees to request an immediate response action if a release of hazardous substances threatens to cause an irreversible loss of natural resources. *See id.* at § 11.21 (authorizing natural resource trustees to request immediate response actions to releases of hazardous substances).

42. *Id.* at § 11.23(a). The DOI's Pre-Assessment Phase regulations explain that the trustee's pre-assessment review of available data should ensure that a reasonable probability exists that the trustee will make a successful natural resource damage claim before the trustee incurs the expense of conducting a full damage assessment. *Id.* at § 11.23(b).

43. *See id.* at § 11.23(e)(presenting criteria that trustee's pre-assessment review must meet before trustee conducts natural resource damage assessment).

44. *See id.* at § 11.30-.35 (presenting DOI's Assessment Plan Phase regulations); *infra* notes 45-46 and accompanying text (discussing DOI's Assessment Plan Phase regulations).

45. 43 C.F.R. § 11.30-.32 (1987)(reviewing required contents of trustee's assessment plan). In addition to requiring the trustee to prepare a detailed damage assessment plan, the Assessment Plan Phase regulations require the trustee to notify potentially responsible parties of the trustee's intent to conduct a damage assessment and to invite the parties to participate in the damage assessment process. *Id.* at § 11.32(a)(2). Moreover, the regulations require the trustee to invite interested members of the public to review and comment on the trustee's assessment plan. *Id.* at § 11.32(c).

the proper economic measure of natural resource damage is the lesser of the difference in the natural resources' use value before and after the damage and the costs of restoring the resource to its original condition.⁴⁶

The third phase of the DOI's damage assessment process, termed the "Injury Determination Phase," requires the trustee to determine whether a release of hazardous substances has injured one or more natural resources.⁴⁷ While the definitional section of the DOI regulations define "injury" as a measurable adverse change in the chemical or physical quality or viability of a natural resource,⁴⁸ the Injury Determination Phase regulations present scientific methods that trustees must use to determine whether a release of hazardous substances has injured a specific type of natural resources.⁴⁹ Moreover, the regulations require the trustee to conduct two essential inquiries to ensure that only assessments involving well-documented injuries proceed through the final phases of the DOI's damage assessment process.⁵⁰ The regulations first require the trustee to employ specific scientific methods to determine whether an injury has occurred to a natural resource.⁵¹ If the trustee determines that an injury has occurred, the regulations require the trustee to determine whether the injury most likely resulted from a release of hazardous substances.⁵² If the trustee determines that a natural resource has not suffered an injury or fails to identify a connection between a release of hazardous substances and an injured natural resource, the Injury Determination Phase regulations prohibit the trustee from continuing the damage assessment.⁵³

46. *Id.* at § 11.35(2); *see infra* notes 54-65 and accompanying text (discussing DOI regulations explaining methods for ascertaining cost of restoration and value of damaged natural resources); *infra* notes 127-149 and accompanying text (criticizing DOI's damage assessment regulations).

47. *See* 43 C.F.R. § 11.62 (1987) (presenting DOI's Injury Determination Phase regulations).

48. *Id.* at § 11.14(v) (defining term "injury" as used under DOI's damage assessment regulations).

49. *See id.* at § 11.62 (establishing guidelines for determining whether releases of hazardous substances have injured different categories of natural resources). Section 11.62 of the DOI's damage assessment regulations present scientific methods for determining whether releases of hazardous substances have injured surface water resources, groundwater resources, air resources, geologic resources, and biological resources. *Id.* at § 11.62(b)-(f).

50. *See id.* at § 11.61 (presenting general description and purpose of Injury Determination Phase regulations); *infra* notes 51-52 and accompanying text (discussing two inquiries that natural resource trustee must undertake when determining whether release of hazardous substances has injured natural resources).

51. *See* 43 C.F.R. § 11.61(c) (1987).

52. *Id.* at § 11.61(a). To determine whether an injury to a natural resource resulted from a release of hazardous substances, the DOI's Injury Determination Phase regulations require the trustee to determine the route through which the hazardous substances travelled from the source of the release to the injured resource. *Id.* at § 11.61(c)(3). The DOI regulations provide the trustee with detailed scientific methods for determining the exposure pathways of releases of hazardous substances. *See id.* at § 11.63 (presenting methods for analyzing hazardous substance exposure pathways).

53. *Id.* at § 11.61(e)(3).

If the trustee determines that a release of hazardous substances has injured a natural resource, the fourth phase of the DOI's damage assessment regulations, termed the "Injury Quantification Phase," requires the trustee to quantify the injury to the natural resource.⁵⁴ To quantify the natural resource injuries, the regulations require the trustee to determine the extent that the natural resources' injuries reduce the level of services that natural resources provide to the environment and to the public.⁵⁵ The regulations first require the trustee to measure the level of services that the injured resources provided to the environment and the general public before the release of the hazardous substances.⁵⁶ The regulations next require the trustee to compare the pre-release level of resource services to the level of services that the resources currently provide to the environment and the general public.⁵⁷ The regulations provide that the decrease in total services represent the basis for determining the dollar value of natural resource damages resulting from releases of hazardous substances.⁵⁸

After the trustee measures the decrease in the total services that the injured natural resources provide to the public and the environment, the fifth phase of the DOI's damage assessment process, termed the "Damage Assessment Phase," requires the trustee to estimate the dollar value of the lost services.⁵⁹ The Damage Assessment regulations require the trustee to assess damages in accordance with the economic method of measuring damages that the trustee selected in the Assessment Plan phase.⁶⁰ If the trustee determined that the cost of restoring the injured natural resource was the proper economic measure of damages, the DOI regulations require the trustee to calculate only the costs of restoring the injured resources' services to the level of services that the resource provided before the release of hazardous substances.⁶¹ Alternatively, if the trustee determined that the

54. *See id.* at § 11.70-.73 (presenting DOI's Injury Quantification Phase regulations).

55. *Id.* at § 11.71(a).

56. *Id.* at § 11.72. To determine the quantity and quality of services that the injured resource provided in its pre-injury state, the Injury Determination Phase regulations require the trustee to study historical data that describe the health of the local ecosystem prior to release of hazardous substances. *See id.* at § 11.72 (presenting methods for determining level of services that injured resource provided prior to release of hazardous substances).

57. *See id.* at § 11.71 (presenting DOI's Injury Quantification Phase regulations).

58. *See id.* at § 11.70(b) (noting that purpose of Injury Quantification Phase is to determine appropriate amount of compensation for natural resource damages).

59. *See id.* at § 11.80(b) (stating that purpose of Damage Determination phase is to estimate dollar value of natural resource damages).

60. *Id.* at § 11.80(c); *see supra* notes 44-46 and accompanying text (discussing DOI's Assessment Plan phase regulations).

61. 43 C.F.R. § 11.81(c) (1987). If the government trustee intends to restore damaged natural resources, the Damage Assessment regulations require the trustee to develop a restoration plan to ensure that the trustee uses only cost-effective procedures to restore the injured natural resources. *Id.* at § 11.82(a), (b). The regulations require the trustee to describe all management actions or resource acquisitions that are necessary to restore the injured resources and to provide sufficient detail to allow an informed choice of the most cost effective alternative method of restoring or replacing damaged natural resources. *Id.*

reduction in the natural resources' use value was the proper economic measure of damages, the Damage Phase regulations require the trustee to calculate damages by determining the value of the lost public uses of the resource.⁶² The regulations require the trustee to consider only committed public uses⁶³ of the resources' services and prohibit the trustee from considering purely speculative public uses of the injured resources.⁶⁴ After the trustee identifies the appropriate public uses, the regulations require the trustee to use either a market price method or a land appraisal method to estimate the monetary value of the lost public uses.⁶⁵

The final phase of the DOI's natural resource damage assessment process, termed the "Post-Assessment Phase," requires the trustee to prepare a Record of Assessment (ROA) before filing suit against potentially responsible parties.⁶⁶ The Post-Assessment Phase regulations state that the ROA constitutes the administrative record of the damage assessment process for purposes of judicial or administrative review.⁶⁷ In review, if a government trustee desires to obtain the rebuttable presumption that the government's damage assessment is correct, the trustee must adhere to the DOI's complex multi-phase damage assessment process that requires the

62. See *id.* at § 11.83 (presenting methods for determining use values of damages to natural resources). Section 11.83(b) of the DOI's Damage Determination phase regulations defines the term "use value" as the value to the public of recreational or other public uses of natural resources. *Id.* at § 11.83(b); see *infra* note 65 (discussing methods for estimating lost use value).

63. See 43 C.F.R. § 11.14(h) (1987)(defining term "committed use" under DOI damage assessment regulations). Section 11.14(h) of the DOI's damage assessment regulations defines the term "committed use" as a current public use or a planned public use that is part of a currently documented legal, administrative, or financial commitment. *Id.*

64. *Id.* at § 11.84(2); see also *supra* note 63 (presenting DOI's definition of term "committed use").

65. See 43 C.F.R. § 11.83(c) (1987)(presenting methods for determining dollar value of lost public uses). If the government trustee determines that a market for the damaged resource is reasonably competitive, the DOI Damage Determination phase regulations require the trustee to estimate the dollar value of the lost public uses by measuring the diminution in the market price of the damaged resources. *Id.* at § 11.83(c)(1). If the trustee determines that a reasonably competitive market does not exist, the DOI regulations require the trustee to use an appraisal method for determining the dollar value of lost public uses. See *id.* at § 11.83(c)(2) (explaining appraisal method for determining lost use value). If the trustee determines that the neither the market price method or the appraisal method is an appropriate, the regulations allow the trustee to employ less traditional methods of determining the economic value of lost public uses. See *id.* at § 11.83(d)(describing factor income, travel cost, hedonic, contingent valuation, and unit value methods of determining dollar value of lost public uses resulting from releases of hazardous substances).

66. See *id.* at § 11.90 (DOI's Post-Assessment Plan phase regulations); *infra* note 67 (discussing details of Record of Assessment).

67. 43 C.F.R. § 11.90 (1987). The Post-Assessment Phase regulations require the trustee to include within the ROA the trustee's preassessment screen determination, the assessment plan, documentation supporting the determinations that the trustee reached in the Injury Determination Phase, and a record of the public comment received during the damage assessment process. *Id.*

trustee to proceed in a cost-effective manner and to establish a well-documented account of the damage assessment.⁶⁸

III. DO THE DOI REGULATIONS CONTRAVENE CERCLA'S NATURAL RESOURCE DAMAGE PROVISIONS?

Since Congress enacted CERCLA in 1980, state governments have brought numerous suits under CERCLA to recover damages for injuries to natural resources resulting from releases of hazardous substances.⁶⁹ Although these lawsuits have required courts to address several procedural issues,⁷⁰ the lawsuits have not required courts to address several substantive issues that question the permissible scope of state claims for natural resource damages.⁷¹ In particular, courts have not determined whether liability under CERCLA for natural resource damages extends to natural resources that state or federal governments do not own, control, or manage for the benefit of the public.⁷² Additionally, courts have not had the opportunity to determine whether the DOI's damage assessment regulations violate CERCLA's natural resource damage provisions. Specifically, courts have not determined whether the DOI's rule that requires government trustees to select the lesser of the difference in the value of the natural resource before and after the damages and the cost of restoring the damaged resource as the measure of damages violates CERCLA's natural

68. See *id.* at § 11.91(c) (stating that government trustee must adhere to DOI damage assessment regulations to obtain rebuttable presumption that trustee's damage assessment is correct); *supra* notes 37-67 and accompanying text (discussing DOI's damage assessment regulations).

69. See Habicht, *supra* note 16, at 1 (noting increase in number of CERCLA lawsuits for damages to natural resources); Breen, *CERCLA's Natural Resource Damage Provisions: What Do We Know So Far?*, 14 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,304, 10,304 n.2 (1984) (presenting list of cases that involve claims for natural resource damages under CERCLA); Note, *Theories of State Recovery*, *supra* note 4, at 1103 (noting increase in CERCLA claims for damages for injury to natural resources).

70. See, e.g., *Idaho v. Howmet Turbine Component Co.*, 814 F.2d 1376, 1380 (9th Cir. 1987) (holding that CERCLA does not require state to file 60-day notice of lawsuit if state intends to sue responsible party for natural resource damages); *United States v. Wade*, 14 *Envtl. L. Rep. (Envtl. L. Inst.)* 20435, 20436 (E.D. Pa. Feb. 2, 1984) (holding that CERCLA does not require state to formulate restoration plan before filing complaint for natural resource damages); *United States v. Reilly Tar and Chemical Corp.*, 546 F. Supp. 1100, 1114 (D.Minn. 1982) (holding that CERCLA precludes liability for natural resource damages only if all releases of hazardous substances and damages occurred prior to date Congress enacted CERCLA).

71. See *infra* notes 72-73 and accompanying text (discussing substantive issues that courts have not addressed under CERCLA's natural resource damage provisions).

72. See Breen, *supra* note 69, at 10306 (noting that issue of whether CERCLA requires a connection between government regulation and damaged resource awaits judicial interpretation); cf. ANDERSON, MANDELKER & TARLOCK, *ENVIRONMENTAL PROTECTION: LAW AND POLICY* 573 (1984) (questioning whether CERCLA prevents natural resource damage claims for injury to natural resources on private property).

resource damage provisions.⁷³ In resolving these substantive issues, courts should recognize that Congress expanded the common-law public trust doctrine in CERCLA's natural resource damage provisions to create a comprehensive federal cause of action that authorizes governments to act on behalf of the environment and the public if releases of hazardous substances injure or destroy natural resources.⁷⁴

A. CERCLA's Natural Resource Damage Provisions: Expanding the Public Trust Doctrine

1. The Public Trust Doctrine

The public trust doctrine recognizes that governments act as trustees of certain natural resources and thus are responsible for preserving the resources for the benefit of the public.⁷⁵ Early United States Supreme Court decisions embraced the public trust doctrine by holding that state governments hold title in tidelands and lands under navigable waters in trust for the use and benefit of the public.⁷⁶ Although courts originally invoked the public trust doctrine to protect the public's right to use water resources for navigation, commerce, and fishing, courts have expanded the doctrine to require governments to protect the public's interest in using

73. See Habicht, *supra* note 16, at 11 (noting that courts have not had opportunity to implement DOI's damage assessment regulations). Prior to the promulgation of the DOI's natural resource damage provisions, two federal district courts adopted conflicting interpretations of how to measure natural resource damages under CERCLA. In *Idaho v. Bunker Hill Co.* the United States District Court for the District of Idaho determined that CERCLA embraces traditional tort rules for calculating damages. *Idaho v. Bunker Hill Co.*, 635 F. Supp. 665, 667 (1986). Accordingly the court held that, under CERCLA, the appropriate measure of damages to natural resources is the lesser of the difference in the resources' value before and after the damages and the cost of restoring the damaged resources to their original condition. *Id.* In contrast, in *United States v. Reilly Tar & Chemical Corporation*, the United States District Court for the District of Minnesota determined that, until the DOI promulgates damage assessment regulations, criteria in section 301(c) of CERCLA and existing case law on measuring natural resource damages govern damage assessments under CERCLA. *United States v. Reilly Tar & Chemical Corp.*, 546 F. Supp. 1100, 1120 n.6 (D.Minn. 1982). Because section 301(c) of CERCLA and the case law cited by the *Reilly Tar* court recognize that the cost of restoring damaged natural resources constitutes a proper measure of damages to natural resources, the *Reilly Tar* court tacitly rejected the common-law rule for calculating damages. See *id.* (citing *Puerto Rico v. SS Zoe Colocotroni*, 628 F.2d 652 (1st Cir. 1980)); *Puerto Rico v. SS Zoe Colocotroni*, 628 F.2d 652, 674 (1st Cir. 1980) (refusing to limit damages to natural resources to market value of damaged resources).

74. See *infra* notes 90-127 and accompanying text (discussing Congress' recognition and expansion of public trust doctrine in CERCLA's natural resource damage provisions).

75. See Note, *The Public Trust Doctrine: A New Approach to Environmental Preservation*, 81 W. VA. L. REV. 455, 455 (1979) (discussing common-law public trust doctrine); *supra* note 6 (same).

76. See *Shively v. Bowlby*, 152 U.S. 1, 16 (1894) (holding that state holds tidelands in trust for certain public purposes); *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387, 452 (1892) (holding that state holds title to soils under navigable waters in trust for state's citizens).

water resources for recreational and ecological purposes.⁷⁷ Moreover, courts have expanded the geographical reach of the public trust doctrine beyond water resources to other natural resources, including public lands and wildlife.⁷⁸

In addition to expanding the geographical reach of the public trust doctrine and the variety of public uses that enjoy public trust protection, courts have found that governments, as trustees of certain natural resources, have an affirmative duty to protect and preserve the resources for the benefit of the public.⁷⁹ Moreover, some courts have determined that the governments' duty to protect and preserve public trust resources affords the governments a right to sue persons who damage natural resources.⁸⁰ For example, in *In re Steuart Transportation Company*⁸¹ the United States District Court for the Eastern District of Virginia considered

77. See *Neptune City v. Avon-by-the-Sea*, 61 N.J. 296, 309, 294 A.2d 47, 54-55 (1972)(expanding public trust doctrine to protect public's interest in recreational uses, including bathing and swimming); *Marks v. Whitney*, 6 Cal. 3d. 251, 259, 98 Cal. Rptr. 790, 796, 491 P.2d 374, 380 (1971)(expanding public trust doctrine to include protection of public in preserving tidelands in natural state for purposes of scientific study, open space, and providing food and habitat for birds and marine life).

78. See *Light v. United States*, 220 U.S. 523, 537 (1911) (expanding public trust doctrine to include protection of public lands); *Geer v. Connecticut*, 161 U.S. 519, 522 (1896)(extending public trust doctrine to include protection of wildlife).

79. See *Light v. United States*, 220 U.S. 523, 537 (1911) (holding that public trust doctrine imposes duty on state governments to protect and preserve resources for public's common heritage); *National Audubon Society v. Superior Court of Alpine County*, 189 Cal. Rptr. 346, —, 33 Cal. 3d. 419, —, 658 P.2d 709, 724 (1983)(public trust doctrine affirms duty of state to protect peoples' common heritage of streams, lakes, marshlands, and tidelands), *cert. denied*, 104 S. Ct. 413 (1984); *In re Steuart Transportation Co.*, 495 F. Supp. 38, 40 (E.D.Va. 1980)(holding that, under public trust doctrine, state government has right and duty to protect and preserve public's interest in natural resources); see also *District of Columbia v. Air Florida, Inc.*, 750 F.2d 1077, 1083 (D.C. Cir. 1984)(noting that courts have expanded public trust doctrine into source of positive state duties to protect public's common heritage of natural resources). Since 1970, three different categories of plaintiffs have brought claims under the public trust doctrine to protect natural resources: 1) private citizens suing the government for allegedly violating the doctrine; 2) private citizens suing other private parties for allegedly violating the doctrine; and 3) governments suing private parties for allegedly violating the doctrine. See Lazarus, *supra* note 6, at 645-646 (identifying three categories of public trust doctrine plaintiffs). In reviewing private citizen claims against governments, courts generally have held that private citizens may maintain actions against governments that fail to protect the public's interest in natural resources. *Id.*

80. See *Maryland v. Amerada Hess Corp.*, 350 F. Supp 1060, 1066 (D.Md. 1972)(holding that state government, as trustee of water resources, has power to bring suit to protect waters for benefit of public); *State v. Jersey Central Power & Light Co.*, 125 N.J. Super. 97, —, 308 A.2d 671, 673-74 (N.J.L.Div. 1973)(holding that state having fiduciary duties of trustee may bring suit to protect corpus of trust), *rev'd on other grounds*, 69 N.J. 102, 351 A.2d 337 (1976); *In re Steuart Transportation Co.*, 495 F. Supp. 38, 40 (E.D.Va. 1980)(holding that state government has right under public trust doctrine to recover damages to waterfowl); *infra* notes 81-88 and accompanying text (discussing United States District Court for Eastern District of Virginia's holding in *In re Steuart Transportation*).

81. 495 F. Supp. 38 (E.D.Va. 1980).

whether the Commonwealth of Virginia had a right to sue an oil transport company for the loss of migratory waterfowl after an oil spill.⁸² In *Steuart* the Steuart Transportation Company claimed that Virginia could not maintain an action for damage to the migratory birds because Virginia did not own the birds.⁸³ The Commonwealth of Virginia contended that the right to recover for the loss of migratory birds did not depend upon ownership, but upon the Commonwealth's sovereign right to protect the public interest in preserving wildlife resources.⁸⁴ Although the district court agreed that Virginia did not own the migratory birds, the court determined that the public trust doctrine supported Virginia's claim for damages to the birds.⁸⁵ The *Steuart* court reasoned that, under the public trust doctrine, the Commonwealth of Virginia had the right and duty to protect and preserve the public's interest in natural wildlife resources.⁸⁶ The district court explained that the Commonwealth's right to bring suit did not derive from ownership of the resources but from a duty that the Commonwealth owes to the public.⁸⁷ Accordingly, the district court denied Steuart's motion for summary judgment.⁸⁸ Thus, as *Steuart* illustrates, the judiciary has expanded the common-law public trust doctrine from a primarily negative restraint on a state's ability to alienate water resources to a source of

82. In re Steuart Transp. Co., 495 F. Supp. 38, 39 (E.D.Va. 1980). In *Steuart* the Commonwealth of Virginia claimed that the Steuart Transportation Company was responsible for an oil spill that killed approximately 30,000 migratory birds. *Id.* In addition to filing a claim for damage to the migratory birds, Virginia filed claims for statutory penalties and for the costs that Virginia incurred in cleaning up the oil spill. *Id.*

83. *Id.*

84. *Id.* In *Steuart* the Commonwealth of Virginia claimed that the right to protect the public interest in preserving wildlife resources derives from the public trust doctrine and the doctrine of *parens patriae*. *Id.* The doctrine of *parens patriae*, similar to the public trust doctrine, recognizes a state's role as sovereign and as guardian of its people to protect the interests of those citizens who legally are incapable of protecting their own interests. See Note, *Theories of State Recovery*, *supra* note 4, at 1109 (discussing *parens patriae* doctrine). To establish standing under the *parens patriae* doctrine, the state must base its claim on the protection of a quasi-sovereign interest. *Alfred L. Snapp & Son, Inc. v. Puerto Rico*, 458 U.S. 592, 600-01 (1982). The Supreme Court has defined quasi-sovereign interests as a "set of interests" that the state has in protecting the well-being of its citizens. *Id.* at 602. Moreover, the Supreme Court has ruled that a state has a quasi-sovereign interest in pollution-free air and water. *Georgia v. Tennessee Copper Co.*, 206 U.S. 230, 238 (1907). See generally Note, *State Protection of Its Economy and Environment: Parens Patriae Suits for Damages*, 6 COLUM. J.L. & SOC. PROBS. 411 (1970)(analyzing doctrine of *parens patriae* as source of environmental law).

85. In re Steuart Transp. Co., 495 F. Supp. 38, 40 (E.D.Va. 1980). In addition to determining that the public trust doctrine supports Virginia's claim for damages to migratory waterfowl, the district court in *Steuart* determined that the doctrine of *parens patriae* provided separate support for Virginia's claim. *Id.*; see *supra* note 84 (defining doctrine of *parens patriae*).

86. *Steuart*, 495 F. Supp. at 40.

87. *Id.*

88. *Id.*

positive state duties to protect the public interest in preserving a variety of natural resources.⁸⁹

2. CERCLA's Natural Resource Damage Provisions Recognize the Public Trust Doctrine

CERCLA's natural resource damage provisions recognize the powers and duties that courts have imposed upon state governments under the public trust doctrine.⁹⁰ Section 107(f) of CERCLA authorizes state governments to sue responsible parties who release hazardous substances that damage natural resources.⁹¹ By authorizing a state government to bring natural resource damage claims on behalf of the public as trustee of natural resources, section 107(f) implicitly recognizes a state government's affirmative duty under the public trust doctrine to protect and preserve natural resources for the benefit of the public.⁹²

Moreover, CERCLA's legislative history indicates that Congress intended to structure CERCLA's natural resource provisions in accordance with the public trust doctrine.⁹³ In reporting S. 1480 to the Senate floor, the Senate Committee on Environment and Public Works noted that the

89. See *District of Columbia v. Air Florida, Inc.*, 750 F.2d 1077, 1083 (D.C. Cir. 1984)(noting that public trust doctrine has evolved into source of positive state duties to preserve natural resources).

90. See Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. No. 96510, §§ 104(a)(4)(C), 107(f), 301(c), 94 Stat. 2767 (codified at 42 U.S.C. §§ 9604(a)(4)(C), 9607(f), 9651(c) (1982 & Supp. IV 1986)(establishing and outlining liability under CERCLA for damages to natural resource); *supra* notes 13-36 and accompanying text (discussing CERCLA's natural resource damage provisions); see also Kenison, Buchholz, & Mulligan, *supra* note 11, at 10,434 (noting that CERCLA recognizes state trusteeship over natural resources); Menefee, *Recovery for Natural Resource Damages Under Superfund: The Role of the Rebuttable Presumption*, 12 Env'tl. L. Rep. (Env'tl. L. Inst.) 15057, 15058 (1982)(noting that role of government claimants in resource damage proceedings under CERCLA is consistent with common-law public trust doctrine); *supra* notes 75-89 and accompanying text (discussing rights and duties that courts have imposed upon states under public trust doctrine).

91. See 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986) (establishing liability for natural resource damages); *supra* notes 14-20 and accompanying text (discussing section 107(f) of CERCLA).

92. See 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986) (requiring state governments to act on behalf of public as trustee of natural resources that are damaged by releases of hazardous substances); *supra* notes 16-20 and accompanying text (discussing § 107(f) of CERCLA); see also Kenison, Buchholz & Mulligan, *supra* note 11, at 10,435 (noting that CERCLA recognizes state governments' underlying interest as public trustee in natural resources); Habicht, *supra* note 16, at 8 (noting that § 107(f) of CERCLA requires state government to bring natural resource damage claims as trustee of public interest in injured natural resource); *supra* notes 79-89 and accompanying text (discussing courts' expansion of public trust doctrine to include affirmative duty to protect public's interest in preserving natural resources).

93. See *infra* notes 94-97 and accompanying text (discussing CERCLA's legislative history pertaining to public trust doctrine); *supra* note 1 (discussing general legislative history of CERCLA).

serious problem of injury to natural resources from releases of hazardous substances required states, as trustees of natural resources, to recover damages for the injuries.⁹⁴ Accordingly, the Senate committee declared that S. 1480 creates liability for natural resource damages to preserve the public trust in natural resources.⁹⁵ Similarly, in reporting on H.R. 85, the House Committee on Merchant Marine and Fisheries explained that the bill's natural resource damage provisions authorize a state to recover for damages to natural resources that the state holds in trust for the benefit of the public.⁹⁶ Thus CERCLA's legislative history and statutory language indicate that Congress, in enacting CERCLA's natural resource damage provisions, implicitly recognized a state government's right and duty under the public trust doctrine to protect and preserve natural resources for the benefit of the public.⁹⁷

3. CERCLA Expands the State Government's Role as Trustee of Natural Resources

CERCLA's natural resource damage provisions merely do not codify the rights and duties that courts have imposed on state governments under the public trust doctrine.⁹⁸ Instead, CERCLA's statutory language and legislative history indicate that Congress intended to expand and strengthen a state government's role as trustee of natural resources.⁹⁹ By extending the geographical reach of the public trust doctrine and by adopting a comprehensive measure of natural resource damages, CERCLA's natural resource damages provisions establish a powerful federal cause of action that authorizes a state government to act on behalf of the environment

94. See S. REP. No. 848, *supra* note 1, at 84 (discussing S. 1480's natural resource damage provisions); S. 1480 § 4(b), 96th Cong., 1st Sess. (1979), 126 CONG. REC. S14,940 (daily ed. Nov. 24, 1980)(establishing liability for injury to, destruction of, or loss of natural resources that result from release of hazardous substances); see also *supra* note 1 (discussing legislative history of CERCLA).

95. See S. REP. No. 848, *supra* note 1, at 84 (discussing legislature's intent in enacting S. 1480); see also *supra* note 1 (discussing legislative history of CERCLA).

96. See H.R. REP. No. 172, 96th Cong., 2d Sess. 401, *reprinted in* 1980 U.S. CODE CONG. & ADMIN. NEWS 6119, 6185 (noting that H.R. 85 authorizes states to recover damages to natural resources that state holds in trust for benefit of state's citizens); H.R. 85 § 103(a)(3), 96th Cong., 1st Sess. (1979), 126 CONG. REC. H9,190 (daily ed. Sept. 19, 1980)(establishing liability for natural resource damages that result from oil spills). See generally Grad, *supra* note 1, at 3-4 (discussing H.R. 85, Oil Pollution Liability and Compensation Act).

97. See *supra* notes 94-97 and accompanying text (discussing CERCLA's recognition of public trust doctrine); see also *supra* notes 77-89 and accompanying text (discussing courts' expansion of public trust doctrine).

98. See *supra* notes 77-89 and accompanying text (discussing courts' expansion of public trust doctrine); *infra* notes 98-127 and accompanying text (discussing Congress' expansion of public trust doctrine in CERCLA's natural resource damage provisions).

99. See *infra* notes 98-127 and accompanying text (discussing Congress' expansion of public trust doctrine in CERCLA's natural resource damage provisions).

and the public if a release of hazardous substances injures natural resources.¹⁰⁰

a. CERCLA Expands the Geographical Reach of the Public Trust Doctrine

CERCLA's natural resource damage provisions build upon the judiciary's expansion of the public trust doctrine's geographical reach.¹⁰¹ The judiciary has expanded the public trust doctrine in a piecemeal fashion to require state governments to protect the public interest in a limited variety of natural resources.¹⁰² In defining the term "natural resources," however, CERCLA greatly expands the geographical reach of the public trust doctrine to address damage to wildlife, fish, biota, air, land, groundwater, and drinking water supplies.¹⁰³ Thus, by adopting a broad definition of natural resources, CERCLA extends a state government's trustee obligations beyond the protection of navigable waters, tidelands, wildlife, and public lands to all natural resources within the state's territory.¹⁰⁴

100. See *infra* notes 102-104 and accompanying text (discussing Congress' expansion of public trust doctrine's geographical reach in CERCLA's natural resource damage provisions); *infra* notes 105-127 and accompanying text (discussing comprehensive measure of natural resource damages that Congress established in CERCLA's natural resource damages provisions).

101. See *infra* notes 102-104 and accompanying text (discussing Congress' expansion of public trust doctrine's geographical reach in CERCLA's natural resource damage provisions); *supra* notes 77-89 and accompanying text (discussing courts' expansion of public trust doctrine's geographical reach).

102. See *supra* notes 77-89 and accompanying text (discussing courts' expansion of public trust doctrine's geographical reach); see also Lazarus, *supra* note 6, at 647 (noting that judicial viewpoints have proliferated remarkably on meaning of public trust doctrine and on what constitutes governmental or private activity inconsistent with trust restrictions); Kenison, Buchholz & Mulligan, *supra* note 11, at 10436 (noting that judiciary has developed common-law public trust doctrine differently in each state); Note, *Defining the Appropriate Scope of Superfund Natural Resource Damage Claims: How Great an Expansion of Liability?*, 5 VA. J. NAT. RESOURCES L. 197, 201 n.39 (1985) (noting that judiciary has expanded public trust doctrine in piecemeal fashion).

103. See 42 U.S.C § 9601(16) (1982 & Supp. IV 1986) (defining term "natural resources" as used under CERCLA); *supra* note 22 and accompanying text (discussing CERCLA's broad definition of term "natural resources").

104. See *supra* notes 75-77 and accompanying text (discussing natural resources that enjoy protection under common-law public trust doctrine); see also Kenison, Buchholz & Mulligan, *supra* note 11, at 10436 (contending that CERCLA extends public trusteeship obligations to all natural resources within state); Special Project, *Developments - Toxic Waste Litigation*, 99 HARV. L. REV. 1458, 1567 (1986) (noting that Congress intended CERCLA's natural resource damage provisions to reach all resources within government's jurisdiction); Note, *supra* note 4, at 1104 n.24 (noting that CERCLA does not require state to own damaged natural resource to file claim for natural resource damages). But see Warren & Jackrison, *supra* note 15, at 20 (contending that CERCLA's natural resource damage provisions require special nexus between government and damaged natural resource); Breen, *supra* note 69, at 10,305-06 (same).

b. CERCLA Establishes a Comprehensive Measure of Damages to Natural Resources

CERCLA's natural resource damage provisions enhance a state government's ability to protect and preserve all natural resources within the state's territory by establishing a comprehensive measure of damages that deviates from the common-law rule for measuring damages.¹⁰⁵ The common-law rule for measuring damages to real property authorizes a plaintiff to recover the lesser of the difference in the commercial or market value of the property before and after the damage and the cost of restoring the damaged property to its original condition.¹⁰⁶ Courts have not agreed whether this common-law damage rule governs a state government's claim under the public trust doctrine to recover damages for injuries to the state's natural resources.¹⁰⁷ CERCLA's statutory language and legislative history, however, indicate that Congress did not intend the common-law damage rule to govern a state government's claim under CERCLA to recover damages for injuries to natural resources resulting from releases of hazardous substances.¹⁰⁸

Although CERCLA fails to provide concise guidelines for measuring natural resource damages, the language of CERCLA's natural resource damage provisions indicate that Congress did not intend to adopt the common-law damage rule that limits damages to the lesser of restoration

105. See *infra* notes 106-127 and accompanying text (discussing CERCLA's comprehensive measure of damages to natural resources).

106. See *Puerto Rico v. SS Zoe Colocotroni*, 628 F.2d 652, 672-73 (1st Cir. 1980) (noting common-law rule for measuring damages to real property); see also RESTATEMENT (SECOND) OF TORTS § 929(1)(a) (1979) (stating common-law rule for measuring damages to real property); Special Project, *supra* note 104, at 1569 (noting that common-law approach to measuring damages to natural resources authorizes plaintiffs to recover lesser of restoration cost and lost value).

107. Compare *Department of Environmental Protection v. Jersey Central Power & Light Co.*, 125 N.J. Super. 97, —, 308 A.2d 671, 674 (1973) (refusing to speculate on monetary value of environmental damages and awarding damages in accordance with market value of fish killed), *rev'd on other grounds*, 69 N.J. 102, 351 A.2d 337 (1976) with *Puerto Rico v. SS Zoe Colocotroni*, 628 F.2d 652, 674 (1st Cir. 1980) (refusing to limit damages to Commonwealth's natural resources to market value of damaged resource). Reflecting the judiciary's disagreement over whether the common-law damage rule governs a state claim under the public trust doctrine, commentators dispute whether CERCLA's natural resource damage provisions adopt the common-law damage rule. Compare Warren & Zackrisson, *supra* note 15, at 49 (arguing that CERCLA adopts common-law damage rule that requires plaintiffs to recover lesser of restoration costs and lost value) with Breen, *supra* note 69, at 10307 (arguing that CERCLA authorizes state governments to recover at least full cost of restoring damaged natural resources); see also *infra* notes 109-127 and accompanying text (contending that CERCLA's natural resource damage provisions establish comprehensive measure of damages that deviates from common-law damage rule).

108. See *infra* notes 109-127 and accompanying text (arguing that CERCLA's natural resource damage provisions establish comprehensive measure of natural resource damages that deviates from common-law damage rule).

cost and lost use value.¹⁰⁹ Section 107(f) of CERCLA contains two provisions that manifest Congress' intent to authorize a state government to recover at least the cost of restoring damaged natural resources.¹¹⁰ First, section 107(f) provides that the measure of natural resource damages is not limited to the cost of restoring or replacing the damaged resources.¹¹¹ Second, section 107(f) requires state governments to use natural resource damage awards to restore, replace, or acquire the equivalent of the damaged natural resources.¹¹² Congress' emphasis on restoration and replacement costs in these statutory provisions indicate that Congress intended to establish the cost of restoring damaged natural resources as the minimal floor of damages under CERCLA.¹¹³ Moreover, by prohibiting government trustees from agreeing not to sue a responsible party for natural resource damages unless the party agrees to protect and restore the damaged resources, CERCLA's natural resource settlement provision indicates that Congress intended to authorize trustees to recover the costs of restoring damaged natural resources.¹¹⁴ Accordingly, CERCLA's statutory language indicates that Congress intended to deviate from the common-law damage rule by authorizing government trustees to recover the costs of restoring a damaged natural resource even if the restoration costs exceed the value of the lost natural resource services.¹¹⁵

The legislative history of Congress' reauthorization of CERCLA in 1986 further indicates that CERCLA's natural resource damage provisions establish a comprehensive measure of damages that deviates from the common-law damage rule.¹¹⁶ Commenting on H.R. 2817, the House Com-

109. See *infra* notes 110-115 and accompanying text (discussing statutory language of CERCLA that rejects common-law damage rule); *supra* note 106 and accompanying text (discussing common-law damage rule).

110. 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986); see *supra* notes 16-20 and accompanying text (discussing § 107(f) of CERCLA); *infra* notes 111-127 and accompanying text (discussing CERCLA's intent to authorize state governments to recover at least cost of restoring damaged natural resources).

111. See 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986) (stating that measure of natural resource damages "shall not be limited by the sums which are used to restore or replace such resources").

112. *Id.*

113. See Breen, *supra* note 69, at 10307 (arguing that language in § 107(f) of CERCLA indicates that Congress intended to guarantee government trustees cost of restoring damaged natural resources).

114. See Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, § 122 (j)(2), 100 Stat. 1615 (codified at 42 U.S.C. § 9622(j)(2)) (1982 & Supp. IV 1986)) (governing settlements of natural resource damage claims); *supra* notes 32-36 and accompanying text (discussing CERCLA's natural resource settlement provision). Although section 122(j)(2) of CERCLA pertains to federal governments trustee responsibilities in settling natural resource damage claims, the section's emphasis on restoration nonetheless illustrates Congress' intent to restore injured natural resources.

115. See *supra* notes 109-114 and accompanying text (analyzing statutory language of CERCLA's natural resource damage provisions).

116. See The Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub.

mittee on Merchant Marine and Fisheries declared that the primary purpose of CERCLA's natural resource damage provisions is to restore or replace damaged natural resources.¹¹⁷ The House Committee noted that section 107(f) of CERCLA establishes two categories of natural resource damages.¹¹⁸ The House Committee explained that CERCLA authorizes state governments to recover both the cost of restoring the damaged natural resources and the value of the lost public uses of the damaged resources.¹¹⁹ If the total amount of damages exceeds the costs needed to restore the injured resources, the House Committee maintained that the trustee should use the excess funds to acquire the equivalent of the damaged resources.¹²⁰ Thus, in light of the House Committee's comments, CERCLA's natural resource damage provisions deviate from the common-law damage rule by authorizing state governments to recover both, as opposed to the lesser of, the cost of restoring injured resources and the value of the lost resource services.¹²¹

Moreover, in commenting on Congress' reauthorization of CERCLA's natural resource damage provisions, both House and Senate leaders agreed that CERCLA establishes a comprehensive measure of damages that deviates from the common-law damage rule.¹²² The Chairman of the House Committee on Merchant Marine and Fisheries declared that the cost of restoring damaged natural resources constitutes the basic measure of damages under CERCLA.¹²³ The Chairman further noted that CERCLA authorizes government trustees to recover the value of lost uses between the release of hazardous substances and the completion of the restoration project.¹²⁴ The Chairman stressed, however, that the primary purpose of CERCLA's natural resource damages provisions is to make whole the natural resources that suffer injury from releases of hazardous subst-

L. No. 99-499, 100 Stat. 1615 (codified in scattered sections of 42 U.S.C §§ 9601-9657 (1982 & Supp. IV 1986)); *infra* notes 117-127 and accompanying text (discussing SARA's legislative history).

117. H.R. REP. No. 253, pt. 4, 99th Cong., 1st Sess. at 50, *reprinted in* 1986 U.S. CODE CONG. & ADMIN. NEWS 3068, 3080.

118. *See* H.R. REP. No. 253, *supra* note 117, at 50 (explaining measure of damages under CERCLA's natural resource damage provisions); 42 U.S.C § 9607(f) (1982 & Supp. IV 1986)(outlining liability for natural resource damages).

119. H.R. REP. No. 253, pt. 4, *supra* note 117, at 50. The Senate Committee explained that a trustee may recover the value of lost public and private uses of damaged resources from the time of the release of hazardous substances to the time the trustee restores the damaged resource to its original condition. *Id.*

120. *Id.*

121. *See supra* notes 117-120 and accompanying text (discussing House Committee comments on CERCLA's natural resource damage provisions).

122. *See infra* notes 123-127 and accompanying text (discussing House and Senate leader's comments on CERCLA's natural resource damage provisions).

123. *See* 131 CONG. REC. H9613 (daily ed. Oct. 8, 1986)(statements of Rep. Jones)(commenting on CERCLA's natural resource damage provisions).

124. *Id.*

ances.¹²⁵ Similarly, the Chairman of the Senate Committee on Environment and Public Works agreed that the cost of restoring damaged natural resources constitutes the minimum measure of damages under CERCLA.¹²⁶ Accordingly, CERCLA's statutory language and legislative history indicate that CERCLA's natural resource damage provisions expand the public trust doctrine by establishing a powerful federal cause of action that authorizes state governments to protect and preserve natural resources and to compensate the public for its losses when a release of hazardous substances injures a natural resource that is located within the state's territory.¹²⁷

B. *The DOI Regulations Contravene Congress' Intent to Establish a Comprehensive Federal Cause of Action for Damages to Natural Resources*

The DOI regulations adopt a narrow approach to measuring natural resource damages that contravenes Congress' intent in enacting CERCLA to establish a comprehensive measure of natural resource damages and to restore natural resources that suffer injuries from releases of hazardous substances.¹²⁸ In enacting CERCLA's natural resource damage provisions, Congress intended to establish a comprehensive measure of damages that deviates from the common-law damage rule.¹²⁹ The DOI's damage assessment regulations, however, adopt the common-law damage rule by limiting a state government's damage recovery to the lesser of the cost of restoring damaged resources and the value of lost public uses of the resources.¹³⁰ Thus, by adopting the common-law damage rule, the DOI regulations explicitly contravene Congress' intent to establish a comprehensive measure of natural resource damages that authorizes state governments to recover

125. See *id.* (commenting on CERCLA's natural resource damage provision that requires government trustees to use damage awards only to restore damaged natural resources).

126. See 132 CONG. REC. S14,930-31 (daily ed. Oct. 3, 1986)(colloquy of Sen. Baucus and Sen. Stafford, Chairman of Senate Committee on Environment and Public Works). In discussing CERCLA's natural resource damage provisions, the Chairman of the Senate Committee on Environment and Public Works maintained that it is unreasonable to construe CERCLA as requiring government trustees to recover the lesser of natural resource restoration costs and the value of lost natural resource services. *Id.*

127. See *supra* notes 105-126 and accompanying text (discussing CERCLA's comprehensive measure of damages to natural resources).

128. See *supra* notes 37-65 and accompanying text (discussing DOI damage assessment regulations); *supra* notes 116-127 and accompanying text (discussing Congress' intent in enacting CERCLA's natural resource damage provisions).

129. See *supra* notes 116-127 and accompanying text (discussing Congress' intent in enacting CERCLA's natural resource damage provisions).

130. See *supra* notes 46, 59-65 and accompanying text (discussing DOI regulations that require government trustees to select lesser of restoration cost and lost use value as measure of natural resource damages under CERCLA); see also Special Project, *supra* note 104, at 1569 (noting that DOI damage assessment regulations adopt common-law approach of taking lesser of restoration cost and lost value).

restoration costs and the value of lost public uses if releases of hazardous substances injure the state's natural resources.

In addition to contravening Congress' intent to establish a comprehensive measure of natural resource damages, the DOI's damage assessment regulations contravene Congress' intent to restore natural resources that suffer injuries from releases of hazardous substances.¹³¹ In establishing a comprehensive measure of natural resource damages, Congress' foremost intent was to restore injured natural resources, regardless of the resources' value to the public.¹³² The DOI's damage assessment regulations, however, authorize state trustees to recover the cost of restoring injured natural resources only if restoration costs are less than the value of the lost public uses of the injured resources.¹³³ In most instances of injury to natural resources, the cost of restoring the natural resources to their original condition exceeds the value of lost public uses of natural resources.¹³⁴ In practice, therefore, the DOI damage assessment regulations will inhibit state governments from recovering sufficient funds to restore damaged natural resources.¹³⁵ Accordingly, by limiting a state government's natural resource damage recovery to the lesser of the cost of restoring natural resources and lost use value, the DOI damage assessment regulations contravene Congress' intent to establish a comprehensive measure of natural resource damages and to restore natural resources that suffer injuries from releases of hazardous substances.¹³⁶

By contravening Congress' intent to establish a comprehensive measure of damages and to restore natural resources, the DOI damage assessment regulations reject CERCLA's recognition that natural resources have a value independent of their value to society.¹³⁷ The difference between

131. See *supra* notes 105-127 and accompanying text (discussing Congress' intent, in enacting CERCLA, to restore injured natural resources).

132. See *supra* notes 110-115, 117, 123, 126 and accompanying text (noting that Congress intended restoration costs as minimum measure of damages under CERCLA's natural resource damage provisions).

133. See 43 C.F.R. § 11.35(b)(2) (1987)(requiring government trustees to recover lesser of restoration cost and diminution of public use value); see also notes 37-68 and accompanying text (discussing DOI's damage assessment regulations).

134. See Breen, *supra* note 69, at 10307 (noting that cost of restoring injured natural resources often yields value much higher than lost public use value); see also *City of Harrisonville v. W.S. Dickey Clay Mfg. Co.*, 61 F.2d 210, 213 (8th Cir. 1932)(refusing to award cost of repairing damage to stream due to pollution because decrease in rental value attributed to polluted stream is substantially less than cost of restoring stream), *rev'd on other grounds*, 289 U.S. 334 (1933); *Ewell v. Petro Processors of Louisiana, Inc.*, 364 So. 2d 604, 609 (Ct. App. La. 1978)(refusing to award cost restoring wetland because cost greatly exceeded market value of wetland).

135. See 132 CONG. REC. S14929 (daily ed. Oct. 3, 1986) (statements of Sen. Baucus)(noting that DOI's requirement to select lesser of restoration costs and lost use value will result in far less resource restoration than Congress intended).

136. See *supra* notes 128-135 and accompanying text (criticizing DOI's damage assessment regulations).

137. See *infra* notes 144-148 and accompanying text (discussing CERCLA's view that natural resources have value independent of resources' value to society).

CERCLA's and the DOI's measures of natural resource damages illustrates two competing views of society's relationship to the environment.¹³⁸ The traditional view, implicit in the DOI regulations' adoption of the common-law damage rule, maintains that a natural resource's true value is the value of the services that the natural resource provides to society (DOI view).¹³⁹ Under the DOI view, natural resources exist primarily for human use and consumption and, consequently, when a party damages a natural resource, society is the injured party.¹⁴⁰ Accordingly, the DOI view provides that a party who damages a natural resource adequately compensates society for the damage by paying the value of the services that the resource had provided to society.¹⁴¹ Moreover, to achieve a cost effective allocation of social resources, the DOI view does not require a party injuring a natural resource to pay the cost of restoring damaged natural resources unless the restoration cost is less than the lost use value of the natural resource.¹⁴² In review, by valuing natural resources in terms of the resources' value to society, the DOI's view of society's relationship to the environment fails to provide state governments with sufficient funds to restore natural resources that have important ecological value but little social value.¹⁴³

In contrast, a second view of society's relationship to the environment, implicit in CERCLA's natural resource damage provisions, does not limit the value of natural resources to the resources' use value to society (CERCLA view).¹⁴⁴ By providing that the cost of restoring injured natural

138. See *infra* notes 139-148 and accompanying text (discussing two competing views of society's relationship with environment).

139. See Yang, *Valuing Natural Resource Damages: Economics for CERCLA Lawyers*, 14 *Envtl. L. Rep. (Envtl. L. Inst.)* 10311, 10313 (1984) (stating that value of resource is value of services that resource provides to users of resource).

140. See G. MILLER, *LIVING IN THE ENVIRONMENT* 453 (1985) (observing that under traditional human-centered view of nature, humans are source of all value and that nature exists only for human use); Note, *Commonwealth of Puerto Rico v. SS Zoe Colocotroni: State Actions for Damage to Non-Commercial Living Natural Resources*, 9 *B.C. ENVTL. AFF. L. REV.* 397, 429 (1980) (stating that, if defendant damages state's natural resources, people of state are injured party).

141. See 43 *C.F.R.* § 11.35(b)(2) (1987) (requiring government trustees to recover lesser of restoration costs and lost use value); Yang, *supra* note 139, at 10312 (stating that proper measure of natural resource damages is based on value of direct flow of services from resources to public).

142. See Note, *supra* note 102, at 220 (stating that, if cost of restoring natural resource is higher than aggregate value of all services society receives from resource, charging defendant for restoration cost is misallocation of social resources).

143. See A. LEOPOLD, *A SAND COUNTY ALMANAC* 214 (1966) (noting that system of environmental conservation based on economics tends to ignore, and eventually to eliminate, natural objects that lack commercial value but are essential to health of environment).

144. See Katz, *Searching for Intrinsic Value: Pragmatism and Despair in Environmental Ethics*, 9 *ENVTL. ETHICS* 231, 233 (1987) (noting that non-human-centered view of environment recognizes that exclusive human-center goals do not justify environmental policies); *infra* notes 145-149 and accompanying text (discussing CERCLA's view of society's relationship with nature).

resources constitutes the minimum measure of damages under CERCLA, and by requiring state governments to use damage awards to restore the environment, Congress implicitly recognized that natural resources have a value independent of any use value to society.¹⁴⁵ Thus, if a party damages a natural resource, the CERCLA view recognizes that the environment is an injured party.¹⁴⁶ The CERCLA view consequently requires a party who damages a natural resource to compensate the environment by paying the cost of restoring the injured resource, regardless of the resource's use value to society.¹⁴⁷ In review, by recognizing that natural resources have a value independent of the resources' value to society, the CERCLA view of society's relationship to the environment ensures that state governments will recover sufficient funds to restore damaged natural resources that

145. See *supra* notes 105-127 and accompanying text (discussing Congress' intent to establish comprehensive measure of natural resource damages); see also Stone, *Should Tress Have Standing? Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 450-458 (1972)(explaining view that natural objects have intrinsic value).

146. See Varner, *Do Species Have Standing?*, 9 ENVTL. ETHICS 57, 61 (1987)(discussing view that natural objects have rights and that damages to natural objects, rather than to society, triggers operation of law). By recognizing that natural resources suffer legally cognizable injuries when releases of hazardous substances damages natural resources, CERCLA's natural resource damage provisions embrace one commentator's suggestion that the law should regard natural objects as holders of legal rights. See Stone, *supra* note 145, at 456 (proposing to give legal rights to natural objects in environment); see also *Sierra Club v. Morton*, 405 U.S. 727, 741-42 (1971)(Douglas, J., dissenting)(contending that contemporary concern for protecting nature's ecological equilibrium should lead to conferral of standing upon environmental objects to sue for their own preservation). The commentator observed that under common law, natural objects do not have legal rights because 1) natural objects lack standing to sue on their own behalf, 2) the merits of cases involving injury to natural objects do not include damages to the objects themselves, and 3) natural objects are not the beneficiaries of damage awards. Stone, *supra* note 145, at 459-64. CERCLA's natural resource damage provisions arguably provide natural resources with legal rights. See *supra* notes 13-36 and accompanying text (discussing CERCLA's natural resource damage provisions). Under CERCLA's natural resource damage provisions, state governments may recover the cost of making a damaged resource whole, taking into account damages to the resources themselves. See *supra* notes 110-115, 117, 123, 126 and accompanying text (noting that Congress intended to establish cost of restoring environment as minimum measure of damages under CERCLA); see also Stone, *supra* note 145, at 480-81 (suggesting that courts require party who injures natural object to pay cost of restoring object to its original condition). Moreover, CERCLA's natural resource damage provisions require state governments to use damage awards to restore the environment, rendering the environment the direct statutory beneficiary of CERCLA. See 42 U.S.C. § 9607(f) (1982 & Supp. IV 1986)(requiring government trustees to use natural resource damage awards to restore damaged natural resources). Thus, under CERCLA, natural resources arguably attain legal rights and state governments, in bringing natural resource damage claims, act as guardians of the natural resources' rights. See *supra* notes 17-20 and accompanying text (discussing state government's role, as under CERCLA, as public trustee of natural resources).

147. See Stone, *supra* note 145, at 475 (suggesting that court should require party who injures natural objects to pay cost of making the environment whole); *supra* notes 110-127 and accompanying text (discussing Congress' intent in CERCLA to require parties who damage natural resources pay cost of restoring resource to its original condition).

have important ecological value but little use value to society.¹⁴⁸

IV. CONCLUSION

In enacting CERCLA Congress established liability for damages to natural resources resulting from releases of hazardous substances.¹⁴⁹ Congress expanded the common-law public trust doctrine in CERCLA's natural resource damage provisions to establish a broad federal cause of action that allows state governments to restore the environment and to compensate the public for its losses when releases of hazardous substances damage natural resources.¹⁵⁰ By adopting the common-law damage rule, the DOI's natural resource damage assessment regulations contravene Congress' intent to establish a comprehensive measure of natural resource damages and to ensure complete restoration of damaged natural resources.¹⁵¹ The DOI's failure to follow Congress' intent is unfortunate because Congress, through CERCLA, has expressed a willingness to incorporate an environmental ethic in federal law.¹⁵² This ethic recognizes that the environment has a value independent of its value to society and thus condemns actions that destroy the integrity and stability of the environment.¹⁵³ As environmental problems worsen, the need for society to adopt a new ecologically responsible ethic becomes imperative. Adopting Congress' recognition, in CERCLA, that natural resources have inherent value would be a prudent and innovative step toward solving our nation's environmental problems.¹⁵⁴ By striking the DOI's adoption of the common-law damage rule as arbitrary or capricious or otherwise not in accordance with the law, the D.C. Circuit would preserve Congress' intent to restore natural resources that suffer damages from releases of hazardous substances.¹⁵⁵ More importantly, the D.C. Circuit would lend judicial support to an innovative

148. See *supra* notes 110-127 and accompanying text (discussing Congress' intent to adopt comprehensive measure of damages in CERCLA's natural resource damage provisions).

149. 42 U.S.C. § 9607(a)(4)(c) (1982 & Supp. IV 1986); *supra* notes 13-36 and accompanying text (discussing CERCLA's natural resource damages provisions).

150. See *supra* notes 98-127 and accompanying text (discussing Congress' expansion of public trust doctrine in CERCLA's natural resource damage provisions).

151. See *supra* notes 37-68 and accompanying text (discussing DOI's damage assessment regulations); *supra* notes 128-136 and accompanying text (discussing DOI's contravention of Congress's intent in enacting CERCLA's natural resource damages provisions).

152. See *supra* notes 144-148 and accompanying text (discussing CERCLA's non-human-centered view of man's relationship to environment).

153. *Id.*; see also A. LEOPOLD, *supra* note 143, at 224-25 (declaring need for new land ethic that holds that actions are right if they tend to preserve integrity, stability, and beauty of biotic community).

154. See *supra* notes 144-148 and accompanying text (discussing CERCLA view of society's relationship to environment).

155. See *supra* note 12 (discussing standard of judicial review under APA for challenges to federal agency decisions and actions); *supra* notes 110-127 and accompanying text (discussing Congress' intent to adopt comprehensive measure of damages in CERCLA's natural resource damage provisions).

approach to protecting the environment which recognizes that the environment, and not just society, suffers legal injuries when hazardous substances damage natural resources.¹⁵⁶

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156. See *supra* notes 144-48 and accompanying text (discussing CERCLA view of society's relationship to environment).