

UCLA

UCLA Journal of Environmental Law and Policy

Title

Pollution on the Federal Lands II: Water Pollution Law

Permalink

<https://escholarship.org/uc/item/7hj273x6>

Journal

UCLA Journal of Environmental Law and Policy, 12(1)

Author

Glicksman, Robert L.

Publication Date

1993

DOI

10.5070/L5121018813

Copyright Information

Copyright 1993 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at <https://escholarship.org/terms>

Peer reviewed

Pollution on the Federal Lands II: Water Pollution Law

*Robert L. Glicksman**

I.

INTRODUCTION

This is the second in a series of four articles on the laws that control pollution of federal lands and resources.¹ The articles constitute a survey of an aspect of environmental law that has received relatively little attention: the intersection of the two main branches of environmental law, the law of pollution control and the law of public natural resources management.² Pollution of federal lands and resources is a serious, widespread problem that extends to all categories of federal land and resource holdings.³ This Article, like the others in the series, provides an overview of a particular aspect of the federal pollution control laws (in this case, laws that control water pollution), emphasizes the aspects of those laws most important to management of the fed-

* Professor of Law, University of Kansas. J.D., Cornell Law School, 1977; M.A., Harvard University, 1974; A.B., Union College, 1973. I would like to thank Phil Donnellan, John Zoellner, and Becky DeSalme for their valuable research assistance, and the University of Kansas General Research Fund for the financial assistance it lent to this project.

This Article, as well as the remainder of the series of which it is the second part, is adapted from chapter 11 of GEORGE C. COGGINS & ROBERT L. GLICKSMAN, *PUBLIC NATURAL RESOURCES LAW* (1990) [hereinafter *PNRL*] (Copyright 1993 Clark Boardman Callaghan, 375 Hudson Street, New York, New York 10014. All rights reserved. Excerpts reprinted by permission of Clark Boardman Callaghan from *Public Natural Resources Law*, by George Coggins and Robert Glicksman.). My special thanks go to my friend and co-author George Coggins, who conceived of and originated that work, generously invited me to join him as co-author, and helped in the editing of chapter 11.

1. The first article analyzed regulation of activities that contribute to air pollution on the federal lands. See Robert L. Glicksman, *Pollution on the Federal Lands I: Air Pollution Law*, 12 *UCLA J. ENVTL. L. & POL'Y* 1 (1993) [hereinafter *Pollution on the Federal Lands I*]. This Article uses the term federal lands and resources to refer to lands and resources owned or managed by the United States. See *id.* at 2 n.5.

2. See *id.* at 1-7.

3. See *id.* at 5-6.

eral lands and resources, assesses the strengths and weaknesses of current law, and recommends mechanisms for improving the ability of the federal environmental protection and land management agencies to protect those resources from further degradation attributable to pollution.

The activities most likely to generate water pollution on the federal lands are timber management, livestock grazing, road building, mining, and oil and gas development. Many of the activities that may contaminate water resources on the federal lands are governed by the federal Clean Water Act (CWA),⁴ and state law implementing it, and by the recently enacted Oil Pollution Act of 1990 (OPA).⁵ This Article considers the application of these two federal laws, as well as several less important statutes, to private users of the federal lands and to the land management agencies that oversee their activities. It is organized by the major categories of problems likely to generate water pollution, each of which is subject to differing regulatory controls: point sources, nonpoint sources, wetlands development, and oil spills.

The Article concludes in part II that point source pollution of federal water resources is relatively well controlled. The CWA's scheme for regulating point sources of water pollution generally has worked effectively, curbing significant discharges from point sources both on and off the federal lands. Part III of the Article indicates that the federal government has been far less successful in controlling nonpoint sources, which are responsible for the lion's share of contaminants that afflict federal water resources. The CWA vests responsibility for controlling nonpoint sources primarily in the states. The Environmental Protection Agency (EPA) lacks the authority to force states that avoid this responsibility to implement more effective nonpoint source controls. Nevertheless, state water quality standards may impose significant constraints on the discretion of the federal land management agencies to authorize activities, such as timber harvesting and livestock grazing, which may contribute significantly to nonpoint source pollution on the federal lands. Part III also discusses recent innovative approaches to protecting federal resources from nonpoint source pollution, and suggests ways to

4. 33 U.S.C. §§ 1251-1387 (1988). The Clean Water Act (CWA) is officially known as the Federal Water Pollution Control Act; it is sometimes still referred to by that name. See Pub. L. No. 92-500, § 2, 86 Stat. 896 (1972), amended by Pub. L. No. 95-217, § 2, 91 Stat. 1566 (1977).

5. 33 U.S.C. §§ 2701-2761 (Supp. III 1991).

strengthen the federal government's ability to prevent degradation of outstanding national resource waters.

Part IV of the Article discusses control of wetlands development. It concludes that, although the CWA's dredge and fill permit program has protected ecologically sensitive wetlands on the federal lands from development, the scope of that program needs clarification, as does the role of each of the agencies responsible for implementing it: EPA, the Army Corps of Engineers, and the federal land management agencies. Part V discusses the new authorities created by the OPA to prevent contamination of federal resources by oil spills. The OPA's provisions imposing liability on persons responsible for oil spills that cause damage to natural resources are likely to prove most important to federal lands and resources protection. Finally, in part VI, the Article analyzes the CWA's citizen suit provisions as they apply to the Act's controls on point and nonpoint source pollution and wetlands development.

II.

CONTROL OF POINT SOURCES

A. *Scope of the CWA Permit Program for Point Sources*

The CWA is designed "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."⁶ The CWA seeks to achieve that goal primarily through regulation of point sources, which are defined as "any discernible, confined and discrete conveyance[s]."⁷ It is unlawful for any point source to discharge a pollutant into navigable waters without a permit from either EPA or a state authorized to administer its own permit program.⁸ This prohibition is broader than it may appear, because navigable waters include all "waters of the United States," including the territorial seas, whether navigable in fact or not.⁹ Permit holders must comply with technology-based efflu-

6. *Id.* § 1251(a) (1988). The original stated (though obviously impossible) goal of the statute was "that the discharge of pollutants into navigable waters be eliminated by 1985." *Id.* § 1251(a)(1). For a more complete description of the CWA, see generally chapter 12 of ENVIRONMENTAL LAW INSTITUTE, LAW OF ENVIRONMENTAL PROTECTION (Sheldon M. Novick ed., 8th ed. 1992) [hereinafter ELI, LAW OF ENVIRONMENTAL PROTECTION].

7. 33 U.S.C. § 1362(14) (1988).

8. *Id.* §§ 1311(a), 1342(a)-(b). The permit program administered by the Environmental Protection Agency (EPA) is called the National Pollutant Discharge Elimination System (NPDES) permit program.

9. *Id.* § 1362(7).

ent limitations issued by EPA (which vary in stringency depending on the industry and the pollutant),¹⁰ as well as with monitoring and reporting requirements.¹¹ Newly constructed point sources must comply with nationally uniform standards of performance issued by EPA.¹² Publicly-owned sewage treatment plants are subject to effluent limitations,¹³ and industrial users that dispose of their wastes into those treatment plants must comply with "pretreatment" standards.¹⁴ Point sources that violate the effluent limitations or any other permit terms or conditions risk both civil and criminal penalties.¹⁵

Although point sources of water pollution on the federal lands cause fewer problems than "nonpoint sources," the National Pollution Discharge Elimination System (NPDES) permit program nevertheless may apply to several kinds of activities on federal lands, including aspects of mining, oil and gas production, and silvicultural industries. During the early years of EPA's implementation of the CWA, the agency exempted from the permit program a variety of activities that included all silvicultural point source activities and all confined animal feeding operations below a certain size, even though they qualified as point sources under the statutory definition. In *NRDC v. Costle*,¹⁶ the court held invalid a blanket exemption of this sort for activities that constituted point sources.¹⁷ Since that time, both EPA and the courts have interpreted the term "point source" broadly, thereby expanding the scope of the permit program in ways that may affect federal land users.¹⁸

Current EPA regulations require permits for various silviculture-related activities, mining, and other operations common on federal lands that often involve discharges from point as well as

10. *Id.* § 1311(b). Generally, the least stringent controls apply to dischargers of conventional pollutants, such as suspended solids and biological oxygen demanding substances, *id.* §§ 1311(b)(2)(E), 1314(a)(4), and the most stringent to toxic pollutants. *Id.* §§ 1311(b)(2)(C)-(D), 1317(a)(1).

11. *Id.* §§ 1318, 1342(a)(2).

12. *Id.* § 1316. EPA is required to issue these standards for categories of new point sources listed in the statute. *Id.* § 1316(b)(1)(A).

13. *Id.* § 1311(b)(1)(B) (secondary treatment).

14. *Id.* § 1317(b).

15. *Id.* § 1319.

16. 568 F.2d 1369 (D.C. Cir. 1977).

17. The court did not address whether EPA erroneously designated these particular activities as point sources rather than nonpoint sources. *Id.* at 1382.

18. See *infra* notes 21-33 and accompanying text.

nonpoint sources.¹⁹ Among the silvicultural activities designated as point sources are discharges from a discernible, confined, and discrete conveyance relating to rock crushing, gravel washing, log sorting, and log storage facilities.²⁰ One court held that bulldozers and backhoes used in landclearing activities were point sources subject to regulation because they collected material into windrows and piles whose contents ultimately may find their way into surface waters.²¹

Activities involving minerals development also may constitute point sources. EPA has issued a general permit for certain aspects of the oil and gas industry.²² Similarly, EPA has established effluent limitation regulations for many kinds of mining operations.²³ The mining industry generally has been unsuccessful in attacking these regulations as being beyond the scope of EPA's authority. In two cases, mine operators were unable to persuade the courts that their activities were nonpoint sources and therefore not subject to the NPDES permit program.²⁴ In *Sierra Club v. Abston Construction Company*,²⁵ an environmental group brought a citizen suit to enforce the CWA against the

19. Permits are required, for example, for certain concentrated animal feeding operations. 40 C.F.R. § 122.23; *id.* pt. 122, app. B (1992).

20. *Id.* § 122.27(b)(1). The regulations exclude from point source designation nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, and road construction or maintenance from which there is natural runoff. *Id.*

21. *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 922 (5th Cir. 1983).

22. See *NRDC v. EPA*, 863 F.2d 1420 (9th Cir. 1988) (upholding in part, and reversing in part, general permit for oil and gas operations located in the Outer Continental Shelf of the Gulf of Mexico); *American Petroleum Inst. v. EPA*, 787 F.2d 965 (5th Cir. 1986) (remanding to EPA general permit for discharges from offshore drilling rigs in the Alaskan Outer Continental Shelf and the territorial seas); see also *Offshore Oil, Gas Guidelines Will Prevent 264 Million Pounds of Discharges*, *EPA Says*, 23 [Current Developments] *Env't Rep. (BNA)* 2486 (Jan. 22, 1993) (in response to court order in *NRDC v. Reilly*, 781 F. Supp. 806 (D.D.C. 1992), EPA issued effluent limitation guidelines for the offshore oil and gas industry.).

23. These include mining for coal, iron, aluminum, uranium, mercury, titanium, tungsten, nickel, vanadium, antimony, copper, lead, zinc, gold, silver, molybdenum, and platinum ores. 40 C.F.R. pts. 434, 440 (1992).

24. In a third case, *Committee to Save the Mokelumne River v. East Bay Municipal Util. Dist.*, 37 *Env't Rep. Cas. (BNA)* 1159, 1175-76 (E.D. Cal. 1993), *aff'd*, 13 F.3d 305 (9th Cir. 1993), the court held that a mine facility designed to capture contaminated surface water flowing through a mine site, to contain and evaporate the leachate through a pond and recirculation system, and to release acid mine drainage and polluted runoff through a spillway and discharge valve into a river was a point source that required a CWA permit. *Id.*

25. 620 F.2d 41 (5th Cir. 1980).

operators of coal strip mines that had polluted a creek. Although the district court concluded that mining operations may include point as well as nonpoint sources, it dismissed this suit on the ground that since the pollution was carried into the creek by natural forces, there was no point source subject to regulation.²⁶ The court of appeals reversed, holding that surface runoff collected or channeled by the operator constitutes a point source discharge. The court distinguished “[s]imple erosion over the material surface, resulting in the discharge of water and other materials into navigable waters,” from the “collection and subsequent percolation of surface waters in the [mine] pits themselves.”²⁷ The first does not constitute a point source discharge absent some effort by the operator to change the surface, direct the waterflow, or otherwise impede its progress, while the second does.²⁸ The court also classified as point sources basins dug by the miners and designed to collect sediment.²⁹ The court of appeals in *Abston Construction* stated:

Gravity flow, resulting in a discharge into a navigable body of water, may be part of a point source discharge if the miner at least initially collected or channeled the water and other materials. A point source of pollution may also be present where miners design spoil piles from discarded overburden such that, during periods of precipitation, erosion of spoil pile walls results in discharges into a navigable body of water by means of ditches, gullies, and similar conveyances, even if the miners have done nothing beyond the mere collection of rock and other materials. The ultimate question is whether pollutants were discharged from ‘discernible, confined, and discrete conveyance[s]’ either by gravitational or nongravitational means.³⁰

The *Abston Construction* court relied on an earlier case, *United States v. Earth Sciences, Inc.*,³¹ in which the Tenth Circuit Court of Appeals reversed the district court’s dismissal of an enforcement action by the government against the operator of a gold leaching operation. The leaching process involved spraying a toxic substance over a heap of gold ore to separate the gold from the ore. The leachate solution was collected in a fiberglass-lined

26. *Id.* at 43.

27. *Id.* at 44-45.

28. *Id.* at 45.

29. *Id.*

30. *Id.* Miners are not relieved of liability simply because they do not construct the conveyances, “so long as they are reasonably likely to be the means by which pollutants are ultimately deposited into a navigable body of water.” *Id.*

31. 599 F.2d 368 (10th Cir. 1979).

pool called the primary sump, pumped into a processing trailer where the gold was removed, and then pumped back onto the heap or into the primary sump. A reserve sump designed to catch excess leachate overflowed due to a rapid snow melt, causing a toxic solution to leach into a nearby creek.³² The court of appeals concluded that the pollution originated from a point source consisting of the combination of sumps, ditches, hoses, and pumps used in the mine operation's drainage system.³³

More recently, the Ninth Circuit, in *Rybachek v. EPA*,³⁴ dismissed a series of challenges to EPA's effluent limitations for placer mining. The Alaska Miners Association claimed that placer mining did not involve the discharge of a pollutant, because it does not "add" anything to navigable waters;³⁵ therefore placer mining was not subject to the NPDES permit program. The court disagreed, reasoning that material discharged into the water from the bank alongside the streambed is material "added" to the water. Even if the discharged material comes from the streambed itself, "such resuspension may be interpreted to be an addition of a pollutant."³⁶ The court also rejected other challenges to the effluent limitations, concluding that EPA did not improperly fail to consider costs and economic achievability in establishing the effluent limitations for placer mining on the basis of settling ponds technology and the recirculation of process wastewater.³⁷

32. *Id.* at 370.

33. *Id.* at 374.

34. 904 F.2d 1276 (9th Cir. 1990).

35. *Id.* at 1285. The CWA prohibits the discharge of a pollutant without a permit. 33 U.S.C. § 1311(a) (1988). A "discharge of a pollutant" . . . means any addition of any pollutant to navigable waters from any point source." *Id.* § 1362(12).

36. 904 F.2d at 1285 (citing *United States v. M.C.C. of Florida, Inc.*, 772 F.2d 1501, 1506 (11th Cir. 1985), *vacated and remanded on other grounds*, 481 U.S. 1034 (1987), and *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 923 (5th Cir. 1983)).

37. 904 F.2d at 1289-91. Plaintiffs, the Rybacheks, later brought suit in the claims court seeking damages on the ground that the effluent limitations made mining on their property unprofitable. *Rybachek v. United States*, 33 Env't Rep. Cas. (BNA) 1473 (Cl. Ct. 1991). The court dismissed the plaintiffs' claim for damages based on alleged violations of due process because it lacked jurisdiction. But the court also denied the government's summary judgment motion on the Rybacheks' claim that the regulations constituted a taking. The court stated that allegations that mining was the only economically viable use of the land and that the regulations made mining unprofitable raised genuine issues of fact. The application of the law of regulatory takings to public natural resources law is discussed in PNRL, *supra* note *, § 3.03[4]. For another case involving attacks on CWA regulation of mining activities as point sources, see *Miners Advocacy Council, Inc. v. Department of Env'tl. Conservation*, 778 P.2d 1126 (Alaska 1989) (partially upholding and partially rejecting

In the 1987 amendments to the CWA, Congress explicitly excluded from the definition of a point source certain stormwater discharges that were covered as a result of judicial decisions like those in *Abston Construction* and *Earth Sciences*. These amendments exempted from the NPDES permit program stormwater runoff from mining operations or oil and gas exploration, production, or treatment operations, if that runoff is composed entirely of flows from conveyances or conveyance systems used for collecting and transporting precipitation runoff.³⁸ To qualify for the exemption, the runoff flows must not be contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of operations.³⁹

EPA's regulations implementing the amendments relating to stormwater runoff appear to exempt from point source regulation some oil and gas production operations, even though analogous activities in the mining industry are regulated. Whereas the regulations require mine operators to submit NPDES permit applications whenever stormwater discharges come into contact with overburden or waste products,⁴⁰ an oil and gas facility must apply for a permit only if it has discharged more than reportable quantities of oil or a hazardous substance,⁴¹ or has contributed to

state's group certification of draft EPA permits for all placer mines in the state), *cert. denied*, 493 U.S. 1077 (1990).

38. 33 U.S.C. § 1342(l)(2) (1988). Conveyance systems include, but are not limited to, pipes, conduits, ditches, and channels. *Id.* *But see* American Mining Congress v. EPA, 965 F.2d 759 (9th Cir. 1992), where the court rejected an attack on EPA regulations, 40 C.F.R. § 122.26(b)(14)(iii), that required permits for contaminated stormwater discharges from inactive mining operations. Although the statute requires a permit only for stormwater discharges "associated with industrial activity," 33 U.S.C. § 1342(p)(2)(B) (1988), the court found reasonable EPA's interpretation that the activity need not necessarily occur concurrently with the discharge of stormwater. 965 F.2d at 764-66. A congressional committee report in 1993 concluded that it will cost billions of dollars to provide stormwater runoff controls in compliance with the CWA at abandoned mine sites on Bureau of Land Management (BLM) lands. *See Majority Staff Report of the Subcomm. on Oversight and Investigations of the Comm. on Natural Resources, Deep Pockets: Taxpayer Liability for Environmental Contamination* 8 (July 1993). EPA reportedly has begun developing a general permit system for federal agencies to deal with abandoned mines. Under the proposed program, each land management agency would receive a general permit and would be required to prioritize clean-up requirements by watershed. *Id.* at 9.

39. 33 U.S.C. § 1342(l)(2) (1988).

40. 40 C.F.R. § 122.26(c)(1)(iv) (1992).

41. EPA is responsible under the oil spill provisions of the CWA for determining the quantities of oil and of hazardous substances the discharge of which may be harmful to the public health or welfare or to the environment. 33 U.S.C.

violation of a water quality standard.⁴² In *NRDC v. EPA*,⁴³ an environmental group sought invalidation of these oil and gas regulations, arguing that oil and gas operations should be subject to the same strict standards applicable to mining operations. The court disagreed, holding that EPA properly had exercised its discretion to determine whether stormwater runoff is contaminated.⁴⁴

B. NPDES Permit Conditions

Point sources covered by the NPDES program must comply with a series of conditions applicable to all permit holders, regardless of the industrial category involved.⁴⁵ The regulations specify additional conditions for specific types of point sources, including existing mining and silvicultural dischargers.⁴⁶ Point sources must comply with applicable effluent limitations, which are typically incorporated into permits as quantitative limitations on discharges.⁴⁷ Permits also may require compliance with best management practices; mining-related point sources, for example, have been required to minimize excess water entering a mine site, divert water around a mine, and prevent the release of settling pond sludge.⁴⁸

EPA's regulations list several statutes affecting activities on the federal lands whose substantive and procedural requirements may be incorporated into CWA permits.⁴⁹ These laws include the National Wild and Scenic Rivers Act of 1968,⁵⁰ the Endangered Species Act,⁵¹ the Fish and Wildlife Coordination Act,⁵²

§ 1321(b)(4) (1988). For further discussion of regulation of oil spills, see *infra* part V.

42. 40 C.F.R. § 122.26(c)(1)(iii)(C) (1992). Water quality standards are established by the states, subject to EPA approval under 33 U.S.C. § 1313 (1988). See *infra* parts III.B.-C.

43. 966 F.2d 1292 (9th Cir. 1992).

44. *Id.* at 1306-08.

45. 40 C.F.R. § 122.41 (1992).

46. *Id.* § 122.42. General permits may be available for an operator of more than one similarly situated point source discharge. *Id.* § 122.28.

47. See, e.g., *id.* § 436.182 (concerning phosphate rock mining).

48. See *Rybachek v. EPA*, 904 F.2d 1276, 1286-87 (9th Cir. 1992).

49. 40 C.F.R. § 122.49 (1990).

50. 16 U.S.C. §§ 1273-1287 (1988). Section 7 prohibits the EPA from assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a wild and scenic river was established. *Id.* § 1278(b); see PNRL, *supra* note *, § 15.02.

51. 16 U.S.C. §§ 1531-1543 (1988). Section 7 requires EPA to ensure that any action it authorizes is not likely to jeopardize the continued existence of any endan-

and the National Environmental Policy Act (NEPA).⁵³ Conversely, section 401(a) of the CWA requires any applicant for a federal license or permit which may result in any discharge into waters of the United States to provide to the licensing agency a certification from the state in which the discharge originates that any discharge will comply with applicable provisions of the CWA.⁵⁴ Without such certification, the applicant is ineligible to receive the license or permit.⁵⁵ A state certification may include "any . . . appropriate requirement of State law."⁵⁶ Although state law determines what requirements are "appropriate," requirements imposed by state certifications become permit conditions enforceable under the federal CWA.⁵⁷ In *State v. PUD No. 1 of Jefferson County*,⁵⁸ the Washington Supreme Court held that section 401(d) authorized the state's Department of Ecology to include a minimum streamflow requirement in a certification issued by the Federal Energy Regulatory Commission (FERC) to a hydroelectric power plant seeking a license to construct its facility on a river that runs through a national park, a national wilderness area, and a national forest.⁵⁹ The court rejected the argument that section 401 certification conditions may only limit pollution discharges, concluding that the minimum flow requirements were necessary to prevent violations of the state's an-

gered or threatened species or adversely affect its critical habitat. *Id.* § 1536(a)(2); see also 50 C.F.R. pt. 402 (1992). For analysis of the application of the Endangered Species Act to the federal lands, see PNRL, *supra* note *, § 15.05.

52. 16 U.S.C. §§ 661-667 (1988). Section 3 requires EPA, before issuing a permit authorizing the impoundment, diversion, or other control or modification of any body of water, to consult with the appropriate state agency exercising jurisdiction over wildlife resources in order to conserve those resources. *Id.* § 662(a).

53. 42 U.S.C. §§ 4321-4370b (1988). NEPA may require the preparation of an environmental impact statement in connection with the issuance of a permit to a new source. 40 C.F.R. § 122.29(c) (1992). For analysis of the application of NEPA to the federal lands, see generally PNRL, *supra* note *, ch. 12. Other federal statutes that may affect permit conditions include the National Historic Preservation Act, 16 U.S.C. §§ 470 to 470w-6. (1988), and the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464 (1988). See 36 C.F.R. pt. 800 (1993) (protection of historic and cultural properties); 15 C.F.R. pt. 930 (1993) (federal consistency with approved coastal management programs).

54. 33 U.S.C. § 1341(a) (1988).

55. *Id.*

56. *Id.* § 1341(d) (1988).

57. *Id.*

58. 849 P.2d 646 (Wash.) (en banc), *cert. granted*, 114 S. Ct. 55 (1993).

59. *Id.* at 650-51 (citing *Bangor Hydro-Elec. Co. v. Board of Env'tl. Protection*, 595 A.2d 438 (Me. 1991), and *Hi-Line Sportsmen Club v. Milk River Irrig. Dists.*, 786 P.2d 13 (Mont. 1990)).

tidegradation regulations.⁶⁰ As a result, applicants for permits or licenses from agencies, such as the U.S. Forest Service (USFS), the Bureau of Land Management (BLM), or FERC, may have to demonstrate compliance with the CWA to get those authorizations.⁶¹

C. *Assessment of Control of Point Sources on the Federal Lands*

The CWA's program for controlling point sources of pollution has been labelled "probably . . . the most effective pollution control program in the world in terms of producing identifiable abatement."⁶² The relative success of EPA's efforts to control point source discharges reflects the degree of attention EPA has paid to this aspect of water pollution; the control of point sources has been the principal focus of EPA's CWA implementation for more than twenty years.⁶³ Additionally, the CWA tends to regulate point sources far more comprehensively and stringently than it does nonpoint sources; thus, under the current statutory

60. *PUD No. 1 of Jefferson County*, 849 P.2d at 649-53; see also *Georgia-Pacific Corp. v. Vermont Dep't of Envtl. Conserv.*, 628 A.2d 944 (Vt. 1992) (under Vermont law, it was appropriate to impose spill flow requirements on dam to preserve aesthetic and recreational opportunities). The court in *PUD No. 1 of Jefferson County* also rejected the claim that the minimum streamflow condition was preempted by the Federal Power Act, 16 U.S.C. §§ 797(e), 803(a), (j) (1988). 849 P.2d at 653-57. *But cf. Niagara Mohawk Power Corp. v. New York State Dep't of Envtl. Conserv.*, 592 N.Y.S.2d 141 (N.Y. App. Div. 1993) (section 401(d) does not authorize state to impose requirements relating to dam safety, effects on wildlife, and effects on recreational opportunities, or to engage in general balancing of economic and other concerns, as conditions for operation of hydroelectric facility, because such matters are preempted by the Federal Power Act).

61. See, e.g., 33 C.F.R. § 320.3(a) (1992); see also Charles F. Wilkinson & H. Michael Anderson, *Land and Resource Planning in the National Forests*, 64 OR. L. REV. 1, 219 (1985).

62. Oliver A. Houck, *The Regulation of Toxic Pollutants Under the Clean Water Act*, 21 Envtl. L. Rep. (Envtl. L. Inst.) 10,528, 10,536 (1991). Professor Houck added, however, that the program earned these plaudits not necessarily because of its intrinsic merit, but "only because alternative programs have proven equally burdensome and so much less effective." *Id.* at 10,541. As of 1990, "[n]early 80 percent of existing industrial dischargers of toxics (59,338 of 74,525) still are not covered by [effluent limitations based on the best available technology]." ROBERT V. PERCIVAL ET AL., *ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY* 912 (1992) [hereinafter PERCIVAL, *ENVIRONMENTAL REGULATION*].

63. See ELL, *LAW OF ENVIRONMENTAL PROTECTION*, *supra* note 6, § 12.04[2][a][iii]; 2 JACKSON B. BATTLE, *ENVIRONMENTAL LAW: WATER POLLUTION AND HAZARDOUS WASTE* 213 (1986); cf. ZYGMUND B. PLATER ET AL., *ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY* 835 (1992) (noting the "disturbing anomaly that the most widespread sources of water pollution — nonpoint sources — are virtually unregulated by the Clean Water Act").

scheme, the more broadly the term point source is defined, the more effective regulation of potential contamination of the nation's waters is likely to be. As indicated above,⁶⁴ both EPA and the courts have treated as point sources some activities on or near the federal lands that are typically associated with diffuse discharges — the hallmark of a nonpoint source. Unfortunately, nonpoint sources are the largest contributors to the pollution of bodies of water located on the federal lands.⁶⁵ Efforts to buttress protection of federal water resources against contamination should focus, therefore, on reform of the CWA's provisions for controlling nonpoint source pollution rather than on the NPDES permit program and related statutory provisions.

III.

CONTROL OF NONPOINT SOURCES

EPA believes that nonpoint source pollution generated by activities that include farming, construction, forestry, and mining is responsible for much of the nation's remaining water quality impairment.⁶⁶ One environmental organization has estimated that nonpoint source pollution accounts for nearly one hundred percent of sediment, eighty-two percent of nitrogen, and eighty-four percent of phosphorous reaching the nation's surface waters.⁶⁷ Nonpoint sources are also responsible for about sixty percent of state water quality standard violations,⁶⁸ and for even higher percentages of contamination in rivers, lakes, and estuaries.⁶⁹ Because many of these activities, particularly those related to forestry and mining, are concentrated on or in close proximity to the federal lands,⁷⁰ the degree to which nonpoint sources contribute to impaired waters on the federal lands is undoubtedly even higher.

The CWA's regulatory scheme for nonpoint sources of pollution is harder both to describe and to implement than its permit

64. See *supra* notes 19-33 and accompanying text.

65. See *infra* part III.A.

66. Claudia Copeland, *Comprehensive Clean Air and Clean Water Permits: Is the Glass Still Just Half Full?*, 21 ENVTL. L. 2135, 2169 (1991).

67. PERCIVAL, ENVIRONMENTAL REGULATION, *supra* note 62, at 944 (citing CONSERVATION FOUNDATION, STATE OF THE ENVIRONMENT: A VIEW TOWARD THE NINETIES (1987)).

68. Copeland, *supra* note 66, at 2169.

69. PERCIVAL, ENVIRONMENTAL REGULATION *supra* note 62, at 944 (citing EPA, ENVIRONMENTAL PROGRESS AND CHALLENGES: EPA'S UPDATE 46 (1988)).

70. See *infra* part III.A.

system for point source control. Nonpoint sources under the CWA are defined by default; everything that is not a point source is a nonpoint source. The term thus includes any source of pollution "not associated with a discrete conveyance . . . [such as] runoff from fields, forests, mining and construction activity."⁷¹ Because some legislators have regarded federal regulation of nonpoint sources as an undue infringement upon traditional state and local prerogatives to control land use,⁷² Congress has approached the task of controlling nonpoint source pollution far more gingerly than it has point source pollution.⁷³ This part describes major nonpoint sources of pollution associated with federal land use and the convoluted and, in large part, ineffectual regulatory systems devised to abate them.

A. *Nonpoint Source Pollution on the Federal Lands*

Most of the water quality problems that occur on federal lands result from nonpoint sources.⁷⁴ The most important kinds of nonpoint source pollution are timber harvesting, livestock grazing, roadbuilding, and mining. Logging, reforestation, and forest road construction disturb soils, facilitating surface erosion and mass soil movement. Removal of streamside vegetation and shading through soil movement may increase water temperature, adversely affecting fish habitat. Similarly, sedimentation as a result of increased soil movement may threaten aquatic life and damage drinking water supplies through reservoir siltation and reduction of storage capacity for downstream reservoirs.⁷⁵ Forest protection efforts such as fire suppression also may impair water quality, as fire retardants may find their way into rivers and

71. *Oregon Natural Resources Council v. Lyng*, 882 F.2d 1417, 1424 n.8 (9th Cir. 1989) (citing WILLIAM H. RODGERS, JR., *ENVIRONMENTAL LAW* 375 (1977)), *modified*, 899 F.2d 1565 (9th Cir. 1990), *and rev'd*, *Oregon Natural Resources Council v. Madigan*, 980 F.2d 1330 (9th Cir. 1992) (award of attorney's fees); *see also* *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 373 (10th Cir. 1979) (nonpoint source pollution is "disparate runoff caused primarily by rainfall around activities that employ or cause pollutants").

72. *Cf. Mississippi Comm'n on Natural Resources v. Costle*, 625 F.2d 1269, 1275 (5th Cir. 1980) (The CWA's legislative history "reflects congressional concern that the act not place in the hands of a federal administrator absolute power over zoning watershed areas.").

73. *See, e.g.*, H.R. REP. NO. 215, 89th Cong., 1st Sess. 8-12 (1965), *reprinted in* 1965 U.S.C.C.A.N. 3313, 3320-23.

74. *See* Richard Whitman, *Clean Water or Multiple Use? Best Management Practices for Water Quality Control in the National Forests*, 16 *ECOLOGY* L.Q. 909, 912, 915 (1989) (national forests).

75. *See id.* at 912-17.

streams.⁷⁶ The same is true of chemicals used as fertilizers and herbicides. The application of fertilizers and other attempts to increase forest productivity can add organic nutrients, which consume dissolved oxygen and release organic compounds detrimental to aquatic life.

Soil erosion is also generated by livestock grazing. Cattle destroy riparian vegetation and trample soil, causing soil erosion and runoff. The resulting increases in sedimentation and turbidity in surface waters may reduce light penetration, causing a reduction in aquatic plant photosynthesis and dissolved oxygen levels.⁷⁷ Chemical and biological pollution also result from discharges into water of cattle urine and manure.⁷⁸

Mining activities generate siltation, usually from surface water runoff. Processes such as the cyanide leaching process associated with gold mining may cause acid drainage from refuse bank and spoil pile surface runoff, the passage of groundwater over subsurface mine shafts, and discharges from drainage tunnels.⁷⁹

B. *State Water Quality Management Plans*

Instead of authorizing EPA to promulgate uniform, national standards for nonpoint sources analogous to the end-of-the-pipe controls applicable to point sources, Congress attempted to deal with nonpoint source pollution through state planning processes that give the states considerable discretion. The CWA contains three principal planning provisions. EPA treats the first two, sections 208⁸⁰ and 303(e),⁸¹ as a single planning process⁸² that re-

76. *See id.* at 916-19.

77. *See* Richard H. Braun, *Emerging Limits on Federal Land Management Discretion: Livestock, Riparian Ecosystems, and Clean Water Law*, 17 ENVTL. L. 43, 67 (1986).

78. *See id.* at 68.

79. *See* Henry W. Ipsen, *Water Quality Management Plans and Their Impact on Mining Operations*, 23 ROCKY MTN. MIN. L. INST. 551, 576-78 (1977), and the sources cited in Whitman, *supra* note 74, at 915 n.34.

80. 33 U.S.C. § 1288 (1987).

81. *Id.* § 1313(e).

82. *See* 40 C.F.R. §§ 130.0(a), 130.1(a), 130.2(k), 130.6 (1992). *But see* Whitman, *supra* note 74, at 923 n.95 ("To this day, there is no agreement on what is required of the different plans . . . and how they are supposed to fit together."). In *NRDC v. Costle*, 564 F.2d 573, 576 (D.C. Cir. 1977), the court indicated that § 303(e) plans do not have to include all of the elements of a § 208 plan, such as long-term preventive programs for identifying and controlling nonpoint sources. The court further held that a § 208 plan must cover the entire state, not just certain "designated" urban areas, as the National Forest Products Association had argued. *Id.* at 578-79.

quires each state to develop a water quality management plan.⁸³ The plan must specify beneficial uses for each body of water within the state and establish water quality standards (WQSs) to maintain and protect those uses.⁸⁴ State WQSs are comprised of two components: a designated use (such as fishing or swimming) for a particular body of water; and water quality criteria (sometimes expressed as maximum concentrations of pollutants) necessary to meet that use.⁸⁵ The state standards are designed to ensure further pollution reductions by sources discharging into bodies of water that have not yet achieved the designated level of water quality, despite compliance by point sources with EPA's technology-based limitations.⁸⁶

The water quality management plan also must identify priority point and nonpoint sources that are causing or may cause violations of the standards, recommend control measures for those sources, and allocate among those sources amounts (called total maximum daily loads, or MDLs) that can be discharged without violating the standards.⁸⁷ The control measures included in state plans for nonpoint sources are usually referred to as best management practices (BMPs), which EPA defines as "[m]ethods, measures or practices . . . to meet . . . nonpoint source control needs . . . [including] structural and nonstructural controls and operation and maintenance procedures."⁸⁸ State plans must

83. The state planning requirements are set forth at 40 C.F.R. pt. 130 (1992). See generally Ipsen, *supra* note 79; Michael Jungman, *Areawide Planning Under the Federal Water Pollution Control Act Amendments of 1972: Intergovernmental and Land Use Applications*, 54 TEX. L. REV. 1047 (1976); Michael P. Axline, Comment, *Regulation of Nonpoint Sources of Water Pollution in Oregon Under Section 208 of the Federal Water Pollution Control Act*, 60 OR. L. REV. 184 (1981).

84. The state WQSs must be set in accordance with regulations appearing at 40 C.F.R. pt. 131 (1992).

85. 33 U.S.C. § 1313(c)(2)(A) (1988).

86. Technology-based standards for point sources under 33 U.S.C. § 1311(b) may be insufficient in a situation in which numerous point sources discharge into a single body of water with a relatively low assimilative capacity.

87. See 33 U.S.C. §§ 1288(b)(2), 1313(e)(3) (1988); 40 C.F.R. § 130.6 (1992); Whitman, *supra* note 74, at 923-24. Few states have established MDLs for nonpoint sources. *Id.* at 924-25. In *Alaska Ctr. for the Env't v. Reilly*, 762 F. Supp. 1422 (W.D. Wash. 1991), the court held that § 1313(d) of the CWA imposes a nondiscretionary duty on EPA to issue MDLs for states that have failed to take any meaningful action to identify bodies of water in which state WQSs are not being achieved or to establish loads for those bodies of water. In a subsequent case, *Alaska Ctr. for the Env't v. EPA*, 796 F. Supp. 1374 (W.D. Wash. 1992), the same court established a schedule for EPA to develop MDLs for Alaska.

88. 40 C.F.R. § 130.2(m) (1992). According to EPA, "BMPs can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters." *Id.*

identify silviculture-related nonpoint sources, runoff from land used for livestock production, and mine-related sources of pollution, and specify methods (including land use requirements) for controlling those sources to the extent feasible.⁸⁹ States also must designate management agencies, which need not be state entities, to administer the plans.⁹⁰ Some states containing national forests, for example, have designated the Forest Service as the management agency for those lands.⁹¹

EPA's role in the planning process is limited. It reviews state WQs for consistency with minimum statutory requirements,⁹² and it reviews state certifications that management plans will achieve those standards.⁹³ While EPA may issue WQs for a state that does not issue its own acceptable standards,⁹⁴ it may not mandate the use of particular BMPs or their application to specific nonpoint sources. In theory, EPA may revoke a state's authority to issue point source permits if the state fails to prepare an acceptable management program.⁹⁵ More realistically, it may withhold federal funding for wastewater treatment facilities, a threat that has become less powerful in recent years as available

89. 33 U.S.C. § 1288(b)(2)(F)-(H) (1988); *see also* 40 C.F.R. § 130.6(c)(4)(iii)(C)-(E) (1992) (requiring state plans to address BMPs for silvicultural, mine-related, and construction-related sources).

90. 33 U.S.C. § 1288(c)(1) (1988); 40 C.F.R. § 130.6(c)(5) (1992).

91. *See* Whitman, *supra*, note 74, at 941.

92. 33 U.S.C. § 1313(c)(3) (1988). State WQs are composed of two components, the uses desired for a particular body of receiving water and the water quality criteria necessary to protect those uses. *Id.* § 1313(c)(2). Whereas the states are primarily responsible for designating uses, EPA is responsible for developing the water quality criteria based on the latest scientific knowledge concerning, among other things, the extent of effects of pollution on health and welfare, the concentration and dispersal of pollutants, and the effects of pollution on biological community diversity, productivity, and stability. *Id.* § 1314(a). For several years, EPA and the Interior Department considered whether § 7 of the Endangered Species Act, 16 U.S.C. § 1536 (1988), requires EPA to consult with the U.S. Fish and Wildlife Service (USFWS) in developing CWA water quality criteria. *See EPA to Link Clean Water Act Criteria With Endangered Species Protection*, *INSIDE EPA WKLY. REP.*, Aug. 28, 1992, at 1, 6. In 1992, EPA, the USFWS, and the National Marine Fisheries Service established a nationwide consultation process for determining the effects of the issuance of state water quality standards on endangered and threatened species. *See* William H. Satterfield et al., *Who's Afraid of the Big Bad Beach Mouse?*, 8 *NAT. RESOURCES & ENV'T*, Summer 1993, at 13, 16.

93. 33 U.S.C. § 1288(b)(3) (1988). One commentator has suggested that EPA's review of state certifications is more substantial lately than it used to be. *See* Whitman, *supra* note 74, at 942 (EPA in 1985 vetoed provision of Idaho plan exempting logging industry from the antidegradation policy). On the antidegradation policy, *see infra* part III.D.

94. 33 U.S.C. § 1313(c)(4) (1988).

95. *Id.* § 1313(e)(2).

funds have diminished.⁹⁶ In any event, EPA lacks the same power to dictate control of nonpoint source pollution that it has over point sources.

In the 1987 amendments to the CWA,⁹⁷ Congress adopted a third CWA planning program requiring states to prepare reports and management programs for nonpoint source pollution. Under the new section 319 program,⁹⁸ states must identify nonpoint sources (both individually and by category) which add significant pollution to waters which do not meet state WQSS, define the process for identifying BMPs for those nonpoint sources which will reduce pollution "to the maximum extent practicable," and describe the programs to be used to implement those BMPs.⁹⁹ Additionally, EPA may prepare a report for a state that has not done so.¹⁰⁰ The new program still lacks teeth, however, because EPA has no authority to prepare or implement a management program or to require the use of specific BMPs.¹⁰¹

Section 319 may affect federal public land users in one important new respect. States are now required to determine whether federal financial assistance and development projects are consistent with their section 319 programs.¹⁰² EPA has indicated that this obligation encompasses reviewing forest plans, resource area analyses, integrated resource management plans, timber sales, and watershed management by the Forest Service,¹⁰³ and it probably covers analogous BLM activities. According to one commentator, if a state finds such a proposed federal action to be inconsistent with its section 319 program, the federal agency must accommodate the state's concerns.¹⁰⁴ With this potentially

96. See Whitman, *supra* note 74, at 924 n.96.

97. Pub. L. No. 100-4, 101 Stat. 52 (1987).

98. 33 U.S.C. § 1329 (1988).

99. *Id.* § 1329(a)(1)(B)-(C), (b)(2)(B) (1988).

100. *Id.* § 1329(d)(3).

101. See Robert D. Fentress, Comment, *Nonpoint Source Pollution, Groundwater, and the 1987 Water Quality Act: Section 208 Revisited?*, 19 ENVTL. L. 807, 825 (1989).

102. 33 U.S.C. § 1329(b)(2)(F) (1988).

103. See Whitman, *supra* note 74, at 930 n.138.

104. *Id.* at 930-31. In addition to the requirements deriving from the CWA, the federal land management agencies may be subject to planning requirements and substantive limitations designed to protect water quality on specific federal lands. See, e.g., 16 U.S.C. § 482b nt (1988) (Bull Run Watershed Management Unit); Citizens Interested in Bull Run, Inc. v. Edrington, 781 F. Supp. 1502, 1504-05 (D. Or. 1991) (Forest Service's proposed sale of timber in Mt. Hood National Forest did not violate the water quality-related provisions of the Bull Run Watershed Management Unit).

important exception, section 319 appears to add little to the pre-existing CWA planning programs as applied to nonpoint sources.¹⁰⁵

C. *The Relationship Between Water Quality Standards and BMPs*

Forestry, livestock grazing, and mining generate pollutants that may cause or contribute to violations of the WQSs issued by the states under section 303 of the CWA.¹⁰⁶ WQSs which are intended to limit the amount of degradation caused by processes that include soil erosion are generally expressed as limits on turbidity or concentrations of suspended solids.¹⁰⁷ But private landowners ordinarily are not subject to sanctions under the CWA for violating the WQSs themselves.¹⁰⁸ Theoretically, individual nonpoint sources operating on federal lands may become the subject of enforcement actions under state law. Some states, however, appear to exempt logging, grazing, and other nonpoint sources from complying with state WQSs, provided they comply with applicable BMPs.¹⁰⁹ State WQSs thus may "not constitute an actual regulatory 'bottom line' in some western states" for nonpoint sources.¹¹⁰ The remedy for excessive nonpoint source pollution instead tends to be more indirect — a tightening of the BMPs.¹¹¹

The situation is somewhat different for nonpoint source activities on federal lands. Under section 313 of the CWA,¹¹² all fed-

105. See Whitman, *supra* note 74, at 929-30.

106. 33 U.S.C. § 1313 (1988).

107. See H. Michael Anderson, *Water Quality Planning for the National Forests*, 17 ENVTL. L. 591, 607 (1987). For a summary of these standards in the Pacific Northwest and Rocky Mountain states, see *id.* at 608-12.

108. See Whitman, *supra* note 74, at 925.

109. See Anderson, *supra* note 107, at 608; Whitman, *supra* note 74, at 926 (many western states exempt forest users from numeric WQSs if they follow BMPs).

110. Anderson, *supra* note 107, at 610. Anderson suggests that "western state water quality standards, while clearly applicable to nonpoint source pollution, may not always be strictly enforceable against nonpoint source activities." *Id.*

111. See Whitman, *supra* note 74, at 929. Whitman speculates that a tightening of EPA's review of state WQSs will lead to a decline in the practice of exempting nonpoint sources from the obligation to avoid causing violations of those standards as long as they comply with BMPs. *Id.* at 926.

112. 33 U.S.C. § 1323 (1988). This provision was amended in 1977 to reverse the Supreme Court's decision in *EPA v. California ex rel. State Water Resources Control Bd.*, 426 U.S. 200 (1976), holding that federal facilities need not comply with state NPDES permit requirements. The Act now subjects federal facilities to both procedural and substantive requirements of state water quality control law. See

eral agencies having jurisdiction over any property, or engaged in any activity resulting in the discharge or runoff of pollutants, must comply with all federal, state, and local requirements, including state WQSs,¹¹³ for controlling pollution. As a result, state standards provide judicially enforceable constraints on federal land management.¹¹⁴ In particular, state WQSs are critical considerations in the BLM and Forest Service planning processes.¹¹⁵ Forest Service regulations require that forest planning insure compliance with all substantive and procedural requirements of the CWA.¹¹⁶ In *Citizens for Environmental Quality v. United States*,¹¹⁷ the district court enjoined the Forest Service from increasing timber harvest levels in the Rio Grande National Forest, because planning documents for the area failed to demonstrate compliance with the CWA.¹¹⁸

These kinds of constraints on the federal land management agencies may lead to enforceable restrictions on individual federal land users. Both the Forest Service and the BLM require persons conducting mineral operations¹¹⁹ or engaged in oil and gas leasing activities¹²⁰ to comply with applicable state WQSs. Arguably, these agencies must include applicable BMPs as enforceable conditions in all timber contracts, road building specifications, and other permits for projects on federal lands.¹²¹ Persons causing violations of state WQSs thus would appear to be liable under federal law for violating agency regulations, permit conditions, or contracts.

United States *ex rel.* TVA v. Tennessee Water Quality Control Bd., 717 F.2d 992, 997 (6th Cir. 1983), *cert. denied*, 466 U.S. 937 (1984).

113. See *Marble Mountain Audubon Soc'y v. Rice*, 914 F.2d 179, 183 (9th Cir. 1990) (Forest Service must comply with state water quality requirements); *Oregon Natural Resources Council v. Lyng*, 882 F.2d 1417, 1424 (9th Cir. 1989), *modified*, 899 F.2d 1565 (9th Cir. 1990), *and rev'd*, *Oregon Natural Resources Council v. Madigan*, 980 F.2d 1330 (9th Cir. 1992) (award of attorney's fees); *Oregon Natural Resources Council v. United States Forest Service*, 834 F.2d 842, 848 (9th Cir. 1987).

114. See *Anderson*, *supra* note 107, at 605; *Whitman*, *supra* note 74, at 928-29.

115. See *Anderson*, *supra* note 107, at 596.

116. 36 C.F.R. § 219.23(d) (1992). Compliance with the federal Safe Drinking Water Act, 42 U.S.C. §§ 300f-300j-26 (1988), is also required. 36 C.F.R. § 219.23(d) (1992).

117. 731 F. Supp. 970 (D. Colo. 1989).

118. *Id.* at 991.

119. 36 C.F.R. § 228.8(b) (1992) (Forest Service).

120. *Id.* § 228.112(c)(2) (Forest Service); 43 C.F.R. §§ 3802.3-2(b), 3809.2-2(b) (1992) (BLM).

121. See *Whitman*, *supra* note 74, at 941.

The relationship between state WQs and BMPs has been the subject of considerable litigation in the Ninth Circuit. The leading case is *Northwest Indian Cemetery Protective Association v. Peterson* (the *Blue Creek* decision).¹²² An association of Native Americans and an environmental group sued to prevent construction of logging roads and timber harvesting in the Blue Creek Unit of the Six Rivers National Forest on the ground, among others, that the Forest Service's decision to permit these activities violated the CWA. The district court found that if the proposed projects went forward, California's WQs for turbidity would be violated, even if those engaged in the road construction and timber harvesting fully complied with applicable BMPs.¹²³ The court enjoined road construction and timber harvesting anywhere in the Blue Creek Unit until studies were completed demonstrating that these activities would not violate the CWA.¹²⁴

On appeal, the Forest Service adopted the same position taken by many western states — that compliance by nonpoint sources with BMPs constitutes compliance with state WQs. The Forest Service had agreed with California to accept responsibility for implementing the state water quality management plan on all National Forest lands within the state. The state, in turn, had agreed to recognize the Forest Service's BMPs to be sound water quality protection measures which, if reasonably implemented, would assure compliance with state WQs.¹²⁵ Accordingly, the Forest Service argued that once both EPA and the state accepted Forest Service BMPs for timber harvesting, these BMPs superseded — and, in effect, became — the state WQs.¹²⁶ The Ninth Circuit panel summarily rejected this argument, holding that BMPs “are merely a means to achieve” the state WQs, rather than an end in themselves. Therefore, the Forest Service's insistence that federal land users comply with BMPs did not necessarily satisfy its obligation under section 313 to comply with state

122. 795 F.2d 688 (9th Cir. 1986), *rev'd on other grounds sub nom. Lyng v. Northwest Indian Cemetery Protective Ass'n*, 485 U.S. 439 (1988). For an extended discussion of the *Blue Creek* case, see Anderson, *supra* note 107; see also Braun, *supra* note 77, at 74.

123. See 795 F.2d at 697.

124. See *id.* at 690-91.

125. Most western states have adopted the Forest Service's BMPs for activities occurring in National Forests. See Whitman, *supra* note 74, at 940-41. These BMPs are compiled in various Forest Service handbooks and manuals, and may include prohibitions on harvesting in riparian zones and restrictions on harvesting on certain soil types and gradients. Wilkinson & Anderson, *supra* note 61, at 220.

126. 795 F.2d at 697.

WQSS.¹²⁷ The WQSSs thus are enforceable independent of compliance with BMPs.

Following the *Blue Creek* decision, some commentators concluded that the Forest Service would be "highly vulnerable" to additional suits seeking to halt road building and timber harvesting.¹²⁸ In a subsequent decision, however, another panel of the Ninth Circuit muddied the waters when it refused to enjoin the Forest Service from offering a timber sale in the Duck Creek area of Hell's Canyon National Recreation Area, despite allegations that the sale would result in violations of Oregon's WQSSs for stream turbidity.¹²⁹ The court stated that "proper implementation of state-approved BMPs will constitute compliance with [state WQSSs under] the CWA unless water quality monitoring reveals that the BMPs have permitted violations of these water quality standards."¹³⁰ Despite the court's characterization of the evidence concerning the likely effect of the timber sale on turbidity as "confused and confusing," and of the district court's interpretation of this evidence as possibly incorrect,¹³¹ the Ninth Circuit refused to overturn the district court's finding that a violation would not occur.

The picture that emerges from the Ninth Circuit's decisions, although not completely clear, is as follows. States must adopt WQSSs,¹³² and the federal land management agencies must conform their own activities to those standards¹³³ and, apparently, to state management plans designed to achieve them.¹³⁴ The agencies have taken the position that private activities conducted on federal lands must not cause violations of state WQSSs, and they typically include BMPs as contract or permit conditions as a means of preventing WQSSs violations.¹³⁵ In theory, compliance by nonpoint sources with these BMPs does not necessarily fulfill the agencies' obligation to assure compliance with WQSSs.¹³⁶ It remains to be seen, however, what kind of evidence will be re-

127. *Id.*

128. Anderson, *supra* note 107, at 605.

129. Oregon Natural Resources Council v. Lyng, 882 F.2d 1417 (9th Cir. 1989), modified, 899 F.2d 1565 (9th Cir. 1990), and *rev'd*, Oregon Natural Resources Council v. Madigan, 980 F.2d 1330 (9th Cir. 1992) (award of attorney's fees).

130. *Id.* at 1424.

131. *Id.* at 1425.

132. 33 U.S.C. § 1313(c)(2) (1988).

133. *Id.* § 1323(a).

134. *Id.* § 1329(b)(2)(F).

135. See *supra* notes 112-27 and accompanying text.

136. See *supra* note 127 and accompanying text.

quired to satisfy courts that violations of WQs have occurred and are attributable to present and proposed nonpoint sources complying with applicable BMPs. When such violations are established, the courts may enjoin land management agency programs and decisions contributing to the violations, if sanctions against individual nonpoint sources are unavailable due to compliance with BMPs.

D. *The Antidegradation Policy*

EPA's antidegradation policy may impose further constraints on nonpoint sources of pollution on federal lands. This policy, which Congress endorsed in the 1987 amendments to the CWA,¹³⁷ requires each state to develop and implement a state-wide antidegradation program.¹³⁸ At a minimum, a state program must conform to the following three standards: (1) maintenance of existing instream uses and the level of water quality necessary to protect them; (2) maintenance of water quality exceeding levels necessary to support recreation and the propagation of fish, shellfish, and wildlife, unless the state finds that lower water quality is necessary to accommodate important economic and social development; and (3) maintenance of high quality waters constituting an outstanding national resource, such as waters of national and state parks and wildlife refuges, and waters of "exceptional recreational or ecological significance."¹³⁹ The first standard provides "the absolute floor of water quality in all waters of the United States."¹⁴⁰ The second standard protects water quality that is better than necessary to support fish and wildlife and recreation.¹⁴¹ A state seeking an exception from the second requirement on the basis of necessary development must still ensure the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint sources.¹⁴²

137. See 33 U.S.C. §§ 1313(d)(4)(B), 1342(o)(1) (1988). EPA also interpreted the 1972 amendments as an endorsement of its preexisting antidegradation requirements. See Anderson, *supra* note 107, at 617. On the antidegradation policy generally, see Jeffrey M. Gaba, *Federal Supervision of State Water Quality Standards Under the Clean Water Act*, 36 VAND. L. REV. 1167, 1188-94 (1983); Gregory J. Hobbs, Jr. & Bennett W. Raley, *Water Quality Versus Water Quantity: A Delicate Balance*, 34 ROCKY MTN. MIN. L. INST. 24-1, 24-20 to 24-24 (1988).

138. 40 C.F.R. § 131.12(a) (1992).

139. *Id.*

140. Water Quality Standards Regulation, 48 Fed. Reg. 51,400, 51,403 (1983).

141. *Id.*

142. See Anderson, *supra* note 107, at 622.

The third requirement, referred to as the provision for "outstanding national resource waters" (ONRW), covers "waters for which the ordinary use classifications and water quality criteria do not suffice."¹⁴³ Although the thrust of the provision is the protection of "the highest quality waters of the United States," EPA has said that it also protects other waters of "ecological significance."¹⁴⁴ These are bodies of water which are important, unique, or ecologically sensitive, but whose quality as measured by traditional parameters (dissolved oxygen, pH, etc.) may not be particularly high or whose character cannot be adequately described by these parameters.¹⁴⁵ Degradation in ONRW is permitted only on a temporary, short-term basis.¹⁴⁶ EPA guidance documents refer to this as "a very narrow exception,"¹⁴⁷ which was added in 1983 to address EPA's fear that waters which properly could have been designated as ONRW were not because states wanted to avoid the flat prohibition on degradation of ONRW then in effect.¹⁴⁸

EPA's regulations neither define "high quality" waters nor provide guidance on when waters are of exceptional recreational or ecological significance.¹⁴⁹ States that have sought to implement the antidegradation policy appear to have adopted one of three different approaches. Some have simply repeated, without

143. 48 Fed. Reg. 51,400, 51,403 (1983).

144. *Id.*

145. *Id.*

146. *Id.* EPA has interpreted the requirement that ONRW be maintained and protected as imposing a nearly absolute ban on new or expanded point source discharges. See Christie C. Morgan, *Challenges and Opportunities in Protecting Outstanding National Resource Waters*, NAT. RESOURCES & ENV'T, Spring 1991, at 30, 33. But see OFFICE OF WATER REGULATIONS AND STANDARDS, CRITERIA AND STANDARDS DIVISION, ENVIRONMENTAL PROTECTION AGENCY, *Questions and Answers On: Antidegradation* 6 (Aug. 1985) (New dischargers or expansions of existing facilities are prohibited in high quality waters unless the state finds the activities necessary to accommodate important economic or social development.). Some state regulations have qualified this prohibition. Florida, for example, authorizes such discharges if they will enhance the water quality of ONRW. Morgan, *supra*, at 33 (citing FLA. ADMIN. CODE ANN. § 17-4.242(3)(b)). Other deviations from EPA's interpretation risk rendering a state's program inconsistent with the federal policy. See *id.* For a case invalidating state permits to sewage treatment facilities for non-compliance with the federal and state antidegradation policies, see *Columbus & Franklin County Metropolitan Park Dist. v. Shank*, 600 N.E.2d 1042 (Ohio 1992).

147. Anderson, *supra* note 107, at 622; see also OFFICE OF WATER REGULATIONS AND STANDARDS, U.S. ENVIRONMENTAL PROTECTION AGENCY, *WATER QUALITY STANDARDS HANDBOOK* 2-14, 2-15 (Dec. 1983).

148. Water Quality Standards Regulation, 48 Fed. Reg. 51,400, 51,403 (1983).

149. See Morgan, *supra* note 146, at 31-32.

elaboration, the vague terminology used in EPA's regulations.¹⁵⁰ Others have developed their own criteria for determining which waters qualify as exceptional.¹⁵¹ These states sometimes have been motivated by a desire to avoid EPA interference with the state's ONRW program or by a desire to provide a degree of protection for its waters beyond what the federal policy requires.¹⁵² A third group has attached the "high quality" or "exceptional" designations to bodies of water that are designated as federal or state wild and scenic rivers or that harbor an endangered species.¹⁵³

The ONRW component of the antidegradation policy has the potential to constrain both point and nonpoint source emissions into waters on the federal lands which are important to recreational use and wildlife propagation. The program has not been widely used, however. According to the National Wildlife Federation, as of early 1992, only thirty-six states had the legal authority to implement the ONRW program.¹⁵⁴ Of those, only twenty-eight had adopted classification schemes, and only twenty-five had actually designated some waters as ONRW.¹⁵⁵ Less than 0.5% of all United States river miles had been designated as high quality waters.¹⁵⁶

The consequences of violating the antidegradation policy are essentially the same as for violating any other aspect of the CWA's requirements for state establishment and implementation of WQs. EPA has rejected state certifications that section 208 management plans would comply with WQs for failure to comply with the antidegradation policy.¹⁵⁷ If EPA rejects a section 319 state management program because its nonpoint source controls are inadequate, the state becomes ineligible for federal

150. *Id.* at 32.

151. *Id.*

152. *Id.* EPA's Region IV and some states, however, appear to have moved in the opposite direction by equating "high quality" waters with waters governed by the second standard of the antidegradation policy, waters that are better than necessary to support fish, wildlife, and recreation. *See id.* at 31. Morgan argues that ONRWs should be limited to waters that have high quality *and* are of exceptional significance. *Id.*

153. *Id.*

154. *See Programs to Protect Pristine U.S. Waters Largely Ineffective, Wildlife Federation Says*, 23 [Current Developments] *Env't Rep.* (BNA) 432 (May 29, 1992).

155. *Id.*

156. *Id.*

157. *See Whitman, supra* note 74, at 941-42.

grants to assist in implementing the program.¹⁵⁸ Finally, the *Citizens for Environmental Quality*¹⁵⁹ and *Blue Creek*¹⁶⁰ cases demonstrate that environmental groups and other private plaintiffs may seek judicial review of federal agency actions for alleged violations of water quality standards, which include the antidegradation policy.¹⁶¹

E. *Beneficial Application of Sewage Sludge*

Facilities that generate municipal sewage sludge¹⁶² may sell it for use as a fertilizer or soil conditioner instead of disposing of it. Beneficial use of sewage sludge has not been a common practice of the federal land management agencies,¹⁶³ even though it may improve soil conditions, resulting in increased productivity and enhanced diversity and richness of plant and animal communities.¹⁶⁴ In 1991, an interagency task force that included representatives of EPA and the Agriculture, Energy, and Interior Departments issued a nonbinding policy statement to guide the federal land management agencies.¹⁶⁵ The statement encourages the agencies to consider beneficial use of sewage sludge as a fertilizer and soil conditioner when cost-effective use will enhance resources on federal lands.¹⁶⁶ The policy urges land management agencies to engage in beneficial use of sewage sludge unless (1) legal or programmatic obstacles prohibit such use;¹⁶⁷ (2) adverse

158. See 33 U.S.C. § 1329(h)(1) (1988); Anderson, *supra* note 107, at 624.

159. *Citizens for Env'tl. Quality v. United States*, 731 F. Supp. 970 (D. Colo. 1989); see *supra* notes 117-18 and accompanying text.

160. *Northwest Indian Cemetery Protective Ass'n v. Peterson*, 795 F.2d 688 (9th Cir. 1986), *rev'd on other grounds sub nom. Lyng v. Northwest Indian Cemetery Protective Ass'n*, 485 U.S. 439 (1988); see *supra* notes 122-27 and accompanying text.

161. See Anderson, *supra* note 107, at 623.

162. Municipal sewage sludge is "any residue removed during the treatment of municipal wastewater and domestic sewage." See *Interagency Policy on Beneficial Use of Municipal Sewage Sludge on Federal Land*, 56 Fed. Reg. 30,448 (1991) (notice of interagency policy).

163. *Id.* Beneficial use includes any application of sludge to land which is designed to take advantage of the nutrient characteristics of this material to improve soil fertility or structure and thereby further some natural resource management objective. *Id.*

164. *Id.* Sludge contaminated with high concentrations of heavy metals and other toxic substances, however, can cause damage to plants and animals. *Id.* at 30,449.

165. *Id.* at 30,448.

166. *Id.*

167. The CWA authorizes EPA to issue regulations providing guidelines for the disposal of sewage sludge and the use of sludge for various purposes. 33 U.S.C. § 1345(d)(1) (1988). After years of delay, EPA in 1993 issued final regulations governing the disposal of sewage sludge, including its application to land, which the

environmental consequences of sewage sludge application would exceed its benefits; or (3) application would impose excessive costs on the agency relative to natural resource benefits.¹⁶⁸ These determinations must be made on a case-by-case basis.¹⁶⁹ The policy statement indicates that federal agencies beneficially using sewage sludge must comply with NEPA.¹⁷⁰

F. *Recommendations for Control of Nonpoint Sources on the Federal Lands*

Most observers consider the CWA's section 208 areawide waste management planning program to be ineffective.¹⁷¹ Few states took the program seriously, probably because the statute imposed no significant penalties for noncompliance. Likewise, few were willing to face the opposition of politically powerful constituencies such as the agriculture, mining, and construction

regulations define to include application to range land, forest lands, public contact areas, and reclamation sites. See Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248 (1993) (to be codified at 40 C.F.R. pts. 257, 403 and 503). The regulations require persons applying sewage sludge to land to these areas to comply with specified management practices, *id.* at 9336 (to be codified at 40 C.F.R. § 503.14), and operational standards for pathogen reduction. *Id.* at 9337 (to be codified at 40 C.F.R. § 503.15). For example, bulk sewage may not be applied to land if it is likely to adversely affect a threatened or endangered species or its designated critical habitat. *Id.* at 9336 (to be codified at 40 C.F.R. § 503.14(a)); see also *id.* at 9342 (to be codified at 40 C.F.R. § 503.24(a)) (similar requirement for surface disposal of sludge); *id.* at 9343 (to be codified at 40 C.F.R. § 503.24(f)) (limits on animal grazing on active sewage sludge units). Regulations for state sludge management programs are at 40 C.F.R. pt. 501 (1992).

168. Interagency Policy on Beneficial Use of Municipal Sewage on Federal Land, 56 Fed. Reg. 30,448 (1991).

169. The policy statement indicates that proposed sewage sludge applications must be evaluated in "a programmatic context." *Id.* at 30,449. If the agency is pursuing a land management objective such as revegetation of a heavily mined area or improving forage for livestock or wildlife, the results of beneficial sewage sludge use are "more likely to be considered positive." *Id.* But if the agency's objective is maintenance of the ecological status quo, or enhancement of the population of a species that would be disadvantaged by the application, then the land manager may find sludge use to be inconsistent with its land management objective and may choose not to pursue it. *Id.*

170. *Id.* The nonbinding policy statement is not intended to create any right or benefit enforceable against the agency, or to provide any independent basis for challenging agency decisions allegedly in violation of the policy. *Id.* Any particular application of the policy that violates NEPA or any of the substantive statutes governing the agency presumably could be challenged, however, under those statutes or the Administrative Procedure Act (APA), 5 U.S.C. §§ 701-706 (1988). For more on NEPA and environmental assessment, see PNRL, *supra* note *, ch. 12.

171. See BATTLE, *supra* note 63, at 213-15; ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 12.04[2][a][ii]; PERCIVAL, ENVIRONMENTAL REGULATION, *supra* note 62, at 945-46.

industries¹⁷² that was almost certain to result from land use regulation and control. One unfortunate consequence of this failed effort to regulate nonpoint sources has been inadequate control of discharges by the sources that contribute the most pollution to water on the federal lands.

Despite some early enthusiasm for the section 319 nonpoint source planning process created in the 1987 amendments to the CWA,¹⁷³ one skeptic has predicted that the new process is not likely to be much more successful than previous efforts to control nonpoint source discharges: “[i]t will produce a second round of paperwork comparable to that generated in the early 1970s by the hauntingly similar section 208 program.”¹⁷⁴ EPA still lacks the power to impose meaningful sanctions on states that ignore their statutory responsibilities,¹⁷⁵ and much of the money allocated for federal grants to assist in the development of state programs has not been appropriated.¹⁷⁶ Effective control of nonpoint sources whose discharges affect federal lands and resources will require the implementation of a more effective program than any Congress has been willing to carry out thus far.

The prospects for reducing those discharges are not entirely bleak, however. In its first report to Congress on implementation of the section 319 planning process, EPA discerned a significant increase in state efforts to control nonpoint sources.¹⁷⁷ Even if all that emerges from the new planning process is more stringent state WQSs in some of the states that contain federal lands, water quality on the federal lands should improve as a result. State WQSs already limit the discretion of the federal land management agencies to authorize projects, such as new mining and timber cutting ventures, that threaten to cause violations of those standards.¹⁷⁸ These limits have affected both BLM and Forest Service planning processes and lease provisions.¹⁷⁹

172. See BATTLE, *supra* note 63, at 215; ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 12.04[2][a][iii].

173. PERCIVAL, ENVIRONMENTAL REGULATION, *supra* note 62, at 948.

174. Oliver A. Houck, *Ending the War: A Strategy to Save America's Coastal Zone*, 47 MD. L. REV. 358, 377 (1988).

175. EPA may not, for example, issue a § 319 management program for a state that fails to act or that acts inadequately. ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 12.04[2][a][i].

176. See PERCIVAL, ENVIRONMENTAL REGULATION, *supra* note 62, at 948.

177. See *id.* at 951.

178. See *supra* notes 112-18 and accompanying text.

179. See *supra* notes 119-21 and accompanying text.

If Congress ever overcomes the political barriers that thus far have prevented the adoption of significant federal controls over nonpoint sources, it should consider taking steps to enhance the protection of ONRW. As interpreted by EPA, this component of the agency's antidegradation policy prohibits degradation of "ecologically significant" waters except in limited circumstances.¹⁸⁰ Congress has endorsed the antidegradation policy, but only in the most general terms.¹⁸¹ This endorsement could provide a starting point for more effective protection of water quality on the federal lands, from point and nonpoint source discharges alike.

Just as Congress followed EPA's lead in creating a program to prevent the significant deterioration (PSD) of air quality in existing clean air areas,¹⁸² it could put a statutory stamp of approval on the ONRW protection program. Congress could designate certain lakes, rivers, and streams, or portions thereof, that are located within federal lands as mandatory ONRW.¹⁸³ Alternatively, Congress could delegate to the federal land management agencies the power to designate bodies of water within their jurisdiction as ONRW.¹⁸⁴ If the specter of federal zoning looms too large in either of these solutions, Congress should at least insure that federal land management agencies have the right to provide meaningful input into the ONRW selection process the states implement.

Congress should not confine itself to the creation of a new ONRW designation process. It should also adopt additional amendments to prevent impairment of outstanding natural resource waters. States should be obligated to include in their section 319 state water quality management programs whatever means are necessary to prevent degradation of waters designated as ONRW (including imposition of BMPs on nonpoint sources).¹⁸⁵ If a state fails to take the necessary measures, EPA

180. See *supra* notes 143-44 and accompanying text.

181. 33 U.S.C. §§ 1313(d)(4)(B), 1342(o)(1) (1988).

182. See 42 U.S.C. §§ 7470-7479, 7491-7492 (1988 & Supp. III 1991); PNRL, *supra* note *, § 11.02[5][a]; Robert L. Glicksman, *Pollution on the Federal Lands I*, *supra* note 1, at 29-39.

183. Cf. 42 U.S.C. § 7472(a) (1988) (mandatory class I PSD areas).

184. Congress could give the states the right to comment on such designations and to appeal them to EPA. Under such a scheme, EPA would have the authority to overrule the federal land management agency if EPA concluded that a particular body of water did not meet statutory criteria for designation as ONRW.

185. Limited exceptions similar to those in the agency's current antidegradation policy might be appropriate.

should have the authority to adopt and implement for the state that portion of the state's management program related to protection of ONRW. In short, even if Congress is not willing to create a full-blown antidegradation program for ONRW patterned after the Clean Air Act's PSD program, it should consider selective implementation of aspects of the PSD program that seem well suited to protection of ONRW on the federal lands.

In the absence of statutory amendments to buttress control of nonpoint source pollution, the responsibility for protecting water quality on the federal lands from impairment attributable to nonpoint sources rests with EPA, the federal land management agencies, and the states. A recent agreement designed to protect water quality in the Everglades indicates how these entities can work together to fashion innovative programs for protecting federal water resources. In July 1991, the federal government and the state of Florida entered a consent decree to end a lawsuit charging the state with failing to enforce its water quality standards, resulting in pollution of the Everglades National Park.¹⁸⁶ Under the agreement, the state agreed to filter water polluted with phosphorous from agricultural fertilizers through an artificial marsh that the state must create to the south of Lake Okeechobee. The water will be purified before it flows into the Park or into the Arthur R. Marshall Loxahatchee National Wildlife Refuge.¹⁸⁷ When the federal district court approved the consent decree in early 1992, the judge indicated that a state forum would decide details concerning how to reduce phosphorous loads in the Park and Wildlife Refuge.¹⁸⁸ Cooperative efforts of this sort could go a long way toward protecting water quality on the federal lands.

186. Anthony DePalma, *U.S. and Florida Settle Suit on Everglades Water*, N.Y. TIMES, July 12, 1991, at A7. The agreement could set a precedent for protecting other national parks from nonpoint source pollution.

187. *Id.*

188. *United States v. South Florida Water Management District*, No. 88-1886-CIV (S.D. Fla. Feb. 24, 1992). The court subsequently reaffirmed its earlier ruling that the federal government's role in the restoration project constituted a "major federal action" that required the preparation of an environmental impact statement under the National Environmental Policy Act, 42 U.S.C. § 4332(2)(C) (1988). See *United States v. South Florida Water Management District*, No. 88-1886-CIV (S.D. Fla. July 6, 1992).

IV.

CONTROL OF AQUATIC AND WETLANDS
DEVELOPMENTA. *The Dredge and Fill Permit Program*

A second CWA permit program,¹⁸⁹ established by section 404, requires permits for the discharge of dredged or fill material into waters of the United States.¹⁹⁰ The federal government has spent millions of dollars in recent years acquiring wetlands for national wildlife refuges and other purposes.¹⁹¹ The scope of the CWA's dredge and fill permit program, and the manner of its application, could determine whether projects threatening those and other wetlands on the federal lands may proceed.

Dredge and fill permit decisions are made by the U.S. Army Corps of Engineers,¹⁹² but the Corps must abide by EPA guidelines,¹⁹³ and EPA retains the power to veto a permit the Corps issues.¹⁹⁴ Although the statute does not do so, both EPA and the Corps, with judicial support,¹⁹⁵ have defined "navigable waters"

189. The first is the NPDES permit program for point sources. See 33 U.S.C. § 1342 (1988); *supra* part II.

190. 33 U.S.C. §§ 1344, 1362(7) (1988). See generally ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 12.06; Jeffrey C. Fereday, *Wading Through the Dredge and Fill Permit Process: A Practitioner's Guide to Section 404 of the Clean Water Act*, 34 ROCKY MTN. MIN. L. INST. 4-1 (1988); Alan B. Lilly, *EPA's Emerging Role in Water Allocation Decisions*, 36 ROCKY MTN. MIN. L. INST. 22-1 (1990). For a discussion of the application of the § 404 permit program to forestry activities, see J. Owens Smith, *Some Current Environmental Issues in Forestry*, 68 N.D. L. REV. 345, 351-57 (1992). The terms "discharge of dredged material" and "fill material" are defined at 33 C.F.R. § 323.2 (1993) (Army Corps of Engineers definitions) and 40 C.F.R. § 232.2 (1992) (EPA definitions). Both sets of definitions were revised at Clean Water Act Regulatory Program, 58 Fed. Reg. 45,008 (1993).

191. See James T.B. Tripp & Daniel J. Dudek, *The Swampbuster Provisions of the Food Security Act of 1985: Stronger Wetland Conservation if Properly Implemented and Enforced*, 16 *Envtl. L. Rep.* (Envtl. L. Inst.) 10,120, 10,121 (1986).

192. The Corps' regulations for the dredge and fill permit program are published at 33 C.F.R. pts. 323-330 (1993).

193. *Id.* § 320.4(a)(1). The EPA guidelines are set forth at 40 C.F.R. pt. 230 (1992).

194. 33 U.S.C. § 1344(c) (1988). EPA, but not the Corps, has the authority to assess penalties for violations of the dredge and fill permit provisions. See *Orange Env't, Inc. v. County of Orange*, 811 F. Supp. 926, 930 (S.D.N.Y. 1993) (compliance order issued by EPA under 33 U.S.C. § 1319(a) (1988) which required creation of off-site wetlands in lieu of on-site remediation of illegally filled wetlands did not preclude the need for a § 404 permit); *Leslie Salt Co. v. United States*, 789 F. Supp. 1030, 1033 (N.D. Cal. 1991) (citing 33 U.S.C. § 1319(g) (1988)).

195. In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985), the Supreme Court affirmed the Corps' broad definition of jurisdictional wetlands. See also *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 902 n.10, 911-13

to include wetlands for purposes of the section 404 dredge and fill permit program.¹⁹⁶ Wetlands are “those areas that are unin-

(5th Cir. 1983); *Jentgen v. United States*, 657 F.2d 1210, 1211 (Ct. Cl. 1981), *cert. denied*, 455 U.S. 1017 (1982). One court reluctantly rejected the claim that Congress unconstitutionally delegated its legislative authority to the Corps by allowing it to define “waters of the United States” to include wetlands for imposing criminal penalties for violations of the CWA. *United States v. Mills*, 817 F. Supp. 1546, 1551-55 (N.D. Fla. 1993). In *Hoffman Homes, Inc. v. EPA*, 999 F.2d 256, 262 (7th Cir. 1993), however, the court vacated an EPA administrative penalty order issued for filling an isolated wetland. The court first agreed with EPA that the dredge and fill permit program cover waters whose connection to interstate commerce is potential and minimal rather than actual and substantial. *Id.* at 261 (citing 40 C.F.R. § 230.3(s)(3)). It also agreed that it was reasonable for EPA to designate the use of wetlands by migratory birds as the requisite connection with interstate commerce. *Id.* The court ultimately found, however, that there was insufficient evidence to support the agency’s conclusion that the area that had been filled was suitable migratory bird habitat. *Id.* at 262; *cf. Lykes Bros., Inc. v. United States Army Corps of Eng’rs*, 821 F. Supp. 1457 (M.D. Fla. 1993) (creek that runs through wildlife refuge is not navigable and therefore not subject to the dredge and fill permit program). For a discussion of the constitutional aspects of *Hoffman Homes*, see PNRL, *supra* note *, § 3.03[4][b][i].

196. 33 C.F.R. § 328.3(a) (1993); 40 C.F.R. § 232.2(q) (1992); *see also* FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS 2 (1989) (interagency publication of EPA, the Army Corps of Engineers, the USFWS, and the Soil Conservation Service); *Mulberry Hills Dev. Corp. v. United States*, 772 F. Supp. 1553 (D. Md. 1991) (challenge to validity of 1989 Manual not ripe for review).

The 1989 Manual created a storm of controversy by expanding the definition of wetlands subject to the § 404 dredge and fill permit program. In the fiscal year 1993 Energy and Water Development Appropriations Act, Pub. L. No. 102-377 (1992), which funded the Army Corps of Engineers, and the Water Resources Development Act, Pub. L. No. 102-580 (1992), Congress responded to the concerns of regulated wetlands owners by forbidding the Corps from using the 1989 Manual in its implementation and enforcement of § 404. This prohibition in effect forced the Corps to return to a 1987 version of the Manual, whose definition of wetlands is narrower. *See 1987 Delineation Manual Formally Adopted, Ending Battle Over Changes Proposed in 1991*, 23 [Current Developments] Env’t Rep. (BNA) 2485 (Jan. 22, 1993); *EPA Predicts Corps’ Use of Separate Wetlands Manual Will Cause Chaos*, INSIDE EPA WKLY. REP., Sept. 20, 1991, at 1-2. But Congress failed to subject EPA to the appropriations prohibition. *Id.* at 2. As a result, developers who relied on a determination by the Corps that their property was not subject to regulation could nevertheless become the targets of enforcement actions by EPA for discharging without a permit. *See id.*; *see also* Memorandum of Agreement Concerning the Determination of the Geographic Jurisdiction of the Section 404 Program, 58 Fed. Reg. 4995 (1993). To add to the confusion, prompted by the Bush Administration’s Council on Competitiveness, the agencies responsible for the 1989 Manual joined together in issuing proposed revisions. 1989 “Federal Manual for Identifying and Delineating Jurisdictional Wetlands”; Proposed Revisions, 56 Fed. Reg. 40,446 (1991) (proposed rule and policy statement). Their proposal would have narrowed the definition of wetlands by lengthening the time soil must be saturated from seven to 21 days and changing the vegetation requirements for land to be considered a wetlands. *New Administration Wetlands Policy Focuses on Definition, Permit Process*, 22 [Current Developments] Env’t Rep. (BNA) 1052 (Aug. 16, 1991); *What on Earth is a Wetland ?*,

dated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”¹⁹⁷ It is in the context of aquatic and wetlands development that this program has probably been most important, and certainly most controversial.¹⁹⁸

NEWSWEEK, Aug. 26, 1991, at 48, 48-49. The Chairman of the Council on Environmental Quality testified before Congress that the proposed revisions were unworkable and that a “mid-course correction” was necessary. At the beginning of 1993, EPA and the Corps announced that, pending completion of a scientific analysis of wetlands delineation by the National Academy of Science, EPA would return to the definition of wetlands contained in the 1987 wetlands delineation manual. See Memorandum of Agreement Concerning the Determination of the Geographic Jurisdiction of the Section 404 Program, 58 Fed. Reg. 4995 (1993). Accordingly, decisions by both EPA and the Corps under the section 404 permit program will be governed again by the 1987 manual.

197. 33 C.F.R. § 328.3(b) (1993). The courts have interpreted that definition expansively. In *Leslie Salt Co. v. United States*, 896 F.2d 354 (9th Cir. 1990), cert. denied, 498 U.S. 1126 (1991), the court held that the dredge and fill permit program applied to private property that the federal government helped to convert to wetlands. Caltrans and the Fish and Wildlife Service had breached a levee on an adjacent wildlife refuge, allowing water to flood Leslie’s land. *Id.* at 358. In *Golden Gate Audubon Soc’y, Inc. v. United States Army Corps of Eng’rs*, 796 F. Supp. 1306 (N.D. Cal. 1992), the court liberally interpreted the portion of the regulatory definition of wetlands that requires that the area support a prevalence of vegetation adapted to saturated soil conditions “under normal circumstances.” The Corps had declined to exercise its section 404 jurisdiction because, although wetlands existed, the Corps maintained that they were not normal for that area. The Corps premised this conclusion on the fact that previously existing wetlands had been transformed to dry land by filling, after which the wetlands had reemerged. The court overturned the Corps’ jurisdictional determination, concluding that “it is impossible to state that the ‘normal circumstances’ of an area which contains wetlands is anything other than ‘wetlands.’” *Id.* at 1313. The Corps may find that an area exhibiting wetlands characteristics is not a wetland because the area cannot under normal circumstances support wetlands vegetation. It may not, however, “find that the presence of wetlands in an area is abnormal. On the contrary, by finding that ‘wetlands’ are present, the Corps determines that their presence is normal.” *Id.*

198. The Corps also administers a permit program under the Rivers and Harbors Appropriation Act of 1899, which prohibits the creation of obstructions to the navigable capacity of waters of the United States and requires a permit from the Corps before a person may build any structures in such waters. 33 U.S.C. § 403 (1988). For a description of the relationship between the § 404 permit program and the 1899 Act, see Robert L. Potter, Comment, *Discharging New Wine Into Old Wineskins: The Metamorphosis of the Rivers and Harbors Act of 1899*, 33 U. PITT. L. REV. 483 (1972). As under the § 404 program, the key statutory terms have been liberally construed. According to the Supreme Court, for example, an “obstruction” includes clogging of a channel with deposits of inorganic solids. *United States v. Republic Steel Corp.*, 362 U.S. 482 (1960). The Corps requires a permit for any activity that “affects” navigable waters, which the Corps has defined in 33 C.F.R. pt. 329 (1993). According to the Corps, however, precise definitions of these waters “are ultimately dependent on judicial interpretation and cannot be made conclusively by administrative agencies.” *Id.* § 329.3. A court has found a statutory violation for the con-

The statute authorizes the states to apply to EPA for the authority to administer the dredge and fill permit program.¹⁹⁹ EPA must supply copies of any proposed state programs to the U.S. Fish and Wildlife Service (USFWS) for comment.²⁰⁰ An authorized state must provide a copy of each permit application and proposed general permit to EPA, which then must provide such copies to the USFWS. If EPA, taking into account the comments of the USFWS, objects to a proposed state permit, the state must revise the permit to account for those objections. If it fails to do so on a timely basis, authority to dispose of that permit is transferred to the Corps of Engineers.²⁰¹

Although provisions authorizing the states to administer the dredge and fill permit program have been exercised sparingly,²⁰² they are likely to give rise to knotty problems concerning the jurisdictional bounds of EPA, the Corps, and state agencies. In *Friends of the Crystal River v. EPA*,²⁰³ for example, an environmental group challenged the authority of a Michigan agency to issue a dredge and fill permit for a proposed golf course development. The project would have required the developer to clearcut and fill wetlands adjacent to the Crystal River, which flows through the Sleeping Bear Dunes National Lakeshore.²⁰⁴ EPA, the Corps of Engineers, the USFWS, and the National Park Service all objected to the issuance of the permit. Despite these objections, the state agency proposed to issue the permit. As a result, EPA notified the state agency that its authority over the case had been transferred to the Corps.²⁰⁵ When EPA changed

struction of a levee and canal system on tidal marshland without a permit. See *Bayou Des Familles Dev. Corp. v. United States Corps of Eng'rs*, 541 F. Supp. 1025, 1035 (E.D. La. 1982). Section 13 of the Act prohibits the discharge of "any refuse matter" without a permit, 33 U.S.C. § 407 (1988), but while this prohibition is still in effect, the Corps' permit authority under this provision has been superseded by the permit authority of EPA under sections 402 and 405 of the CWA, 33 U.S.C. §§ 1342, 1345 (1988 & Supp. III 1991). 33 C.F.R. § 320.2(d) (1992). The latter statutory provision authorizes EPA to regulate the disposal or use of sewage sludge. See *supra* note 167.

199. 33 U.S.C. § 1344(g) (1988).

200. *Id.* § 1344(g)(3).

201. *Id.* § 1344(j); 40 C.F.R. § 233.50(j) (1992). The Corps' decisions remain subject to EPA veto. 33 U.S.C. § 1344(c) (1988).

202. As of 1992, EPA authorized only one state to grant dredge and fill permits. See *Friends of the Crystal River v. EPA*, 794 F. Supp. 674, 680 n.4 (W.D. Mich. 1992).

203. 794 F. Supp. 674 (W.D. Mich. 1992).

204. *Id.* at 678.

205. *Id.* at 678-79.

its mind and withdrew its objections to the permit, on the ground that there was no conclusive evidence that the project would adversely affect the National Lakeshore, the state resumed jurisdiction. The court, however, enjoined the state from issuing the permit, rejecting EPA's contention that it had the discretion to withdraw its objections and restore the state authority previously transferred to the Corps. Both the statute and the legislative history indicated that when EPA and an authorized state reach an impasse over the issuance of a wetlands permit, and the state refuses to revise a proposed permit to meet EPA objections, the state's authority under section 404 is automatically transferred to the Corps.²⁰⁶ EPA's interpretation to the contrary notwithstanding, EPA may not transfer that authority back to the state.²⁰⁷

B. *Dredge and Fill Permit Exemptions*

Although the CWA prohibits discharge of dredged or fill material into navigable waters without a permit from the Army Corps of Engineers,²⁰⁸ the statute contains two relevant exemptions. First, discharges from "normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products" do not require a permit.²⁰⁹ Second, discharges associated with the construction or maintenance of farm or forest roads, or temporary roads for moving mining equipment, are exempt, provided these activities are conducted in accordance with BMPs to minimize adverse effects on the aquatic environment.²¹⁰ Industry has urged a broad interpretation of the exemptions, particularly the first,²¹¹ but the courts have tended to interpret them narrowly. The judicial consensus is that the exemptions apply

206. *Id.* at 692-93.

207. *Id.* at 693-94. EPA subsequently decided that all objections involving Michigan's administration of the dredge and fill permit program would be decided by EPA headquarters, rather than by the regional office, at least temporarily. See *Resolution of Disputed Wetlands Permit Seen As Proof State Delegation Works*, INSIDE EPA WKLY. REP., May 14, 1993, at 14-15.

208. 33 U.S.C. § 1344(a) (1988).

209. *Id.* § 1344(f)(1)(A).

210. *Id.* § 1344(f)(1)(E). Dewatering a mine, however, may create an artificial wetlands area whose subsequent development requires a dredge and fill permit. See John B. Draper & Stephen E. Flechner, *Environmental Laws and Regulations Governing Gold Mining in the West — Current Issues*, 36 ROCKY MTN. MIN. L. INST. 5-1, 5-25 to 5-26 (1990).

211. See Sara S. Kendall, *The Silvicultural Exemption After Bayou Marcus*, NAT. RESOURCES & ENV'T, Winter 1991, at 13, 13-14.

only to "agricultural and silvicultural activities that have little or no adverse effect on the nation's waters."²¹² The Corps' regulations specify in considerable detail the BMPs that must be used to qualify for the second exemption.²¹³ Both exemptions are qualified by a "recapture provision,"²¹⁴ which, according to EPA, subjects to the permit program discharges that are otherwise exempt if they are associated with an activity that constitutes a new use and causes a reduction in the reach or impairment of flow of jurisdictional waters. In other words, a new use that destroys wetlands character must have a permit.²¹⁵

C. Criteria for Issuance of Dredge and Fill Permits

Under the Corps' regulations, no section 404 permit will be issued for a proposed project to dredge or fill wetlands unless it is in the public interest.²¹⁶ This "public interest review" entails balancing a project's public benefits against its reasonably foreseeable detriments, reflecting concern for both protection and utilization of resources.²¹⁷ Relevant factors include conservation, economics, aesthetics, fish and wildlife values, land use, recreation, water quality, and mineral and energy needs.²¹⁸ EPA's

212. *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 926 (5th Cir. 1983). For example, "normal" timber harvesting does not include timber clearing for the purpose of permanently changing an area from wetlands into agricultural land. *See id.* at 926 n.46; *United States v. Larkins*, 852 F.2d 189, 192 (6th Cir. 1988), *cert. denied*, 489 U.S. 1016 (1989). The Corps' regulations interpreting the exemptions appear at 33 C.F.R. § 323.4(a)(1)-(6) (1993). *See also* 40 C.F.R. § 232.3(c)(1), (6) (1992) (EPA guidelines).

213. 33 C.F.R. § 323.4(a)(6) (1993).

214. 33 U.S.C. § 1344(f)(2) (1988).

215. *See Bayou Marcus Livestock & Agric. Co. v. EPA*, 20 *Envtl. L. Rep. (Envtl. L. Inst.)* 20,445 (N.D. Fla. Nov. 3, 1989) (development constituted new use requiring permit due to insufficient evidence of sustained forest management operation); *Kendall*, *supra* note 211, at 15.

216. 33 C.F.R. §§ 320.1(a), 320.4(a), 322.1 (1993). River and Harbors Act permits are subject to the same test. *Id.* Additional criteria for River and Harbors Act permits are set forth at *id.* pt. 322. The Corps' CWA regulations authorize the agency to hold a public hearing, but the decision is discretionary, and the courts will overturn a decision not to convene a hearing only if it is unreasonable. *See Coalition for Canyon Preservation, Inc. v. Hazen*, 788 F. Supp. 1522, 1528 (D. Mont. 1990) (citing 33 C.F.R. § 327.4(a)-(b)).

217. *See Town of Norfolk v. United States Army Corps of Eng'rs*, 968 F.2d 1438, 1454-55 (1st Cir. 1992); *Environmental Coalition of Broward County, Inc. v. Myers*, 831 F.2d 984, 986 (11th Cir. 1987).

218. 33 C.F.R. § 320.4(a)(1) (1993). *See Coalition for Canyon Preservation, Inc. v. Hazen*, 788 F. Supp. 1522, 1525-29 (D. Mont. 1990). The relevance and impact of each of these factors is more thoroughly addressed at 33 C.F.R. §§ 320.4(b)-(q) (1993). *See generally* Lawrence R. Liebesman & Phillip T. Hundemann, *Regulatory*

guidelines, which the Corps must follow,²¹⁹ enunciate the principle that dredged or fill material should not be discharged into the aquatic ecosystem unless the discharge will not have an unacceptable adverse impact.²²⁰ Factors to be considered include impact on threatened or endangered species, wildlife, fish and wildlife sanctuaries and refuges designated under federal or state laws, recreational and commercial fisheries, and areas (such as national parks, seashores, and wilderness areas) designated under federal or state law to be managed for their aesthetic, educational, historic, recreational, or scientific value.²²¹ The guidelines also specify actions, including the prevention of nonpoint source pollution, that permittees must take to minimize adverse effects on plant and animal populations.²²² In addition, the EPA guidelines prohibit discharges that cause a violation of any other statute or law, or that cause or contribute to significant degradation of waters of the United States²²³ unless there are no practicable alternatives.²²⁴ The Corps must comply with NEPA in carrying out its section 404 responsibilities.²²⁵ Thus, if issuance of a permit would constitute a major federal action significantly affecting the quality of the environment, the Corps must prepare an environmental impact statement.²²⁶

Standards for Permits Under Section 404, NAT. RESOURCES & ENV'T, Summer 1992, at 12.

219. 33 C.F.R. § 320.4(a)(1) (1993). See also *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1525 (10th Cir. 1992).

220. 40 C.F.R. § 230.1(c) (1992).

221. *Id.* §§ 230.30, .32, .40-.41, .51-.54.

222. *Id.* §§ 230.70-.77.

223. See *Town of Norfolk*, 968 F.2d at 1447; *Holy Cross*, 960 F.2d at 1525 n.13 (citing 40 C.F.R. § 230.10(a)-(d)).

224. 40 C.F.R. § 230.10(a) (1992). The "practicable alternatives" provision prohibits discharge of dredged or fill material "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." *Id.* Courts reviewing whether the Army Corps of Engineers complied with the "practicable alternatives" requirement may employ a standard of review that is similar to the one used in reviewing the adequacy of the discussion of alternatives in an environmental impact statement under NEPA. See, e.g., *Holy Cross*, 960 F.2d at 1528; see also *Town of Norfolk*, 968 F.2d at 1445-48. See generally Robert Uram, *The Evolution of the Practicable Alternatives Test*, NAT. RESOURCES & ENV'T, Summer 1992, at 15.

225. See *Holy Cross*, 960 F.2d at 1525; *Maryland Conservation Council, Inc. v. Gilchrist*, 808 F.2d 1039, 1042 (4th Cir. 1986); *City of Angoon v. Hodel*, 803 F.2d 1016, 1020-22 (9th Cir. 1986), *cert. denied*, 484 U.S. 870 (1987).

226. 42 U.S.C. § 4332(2)(C) (1988); see *National Wildlife Fed'n v. Marsh*, 721 F.2d 767 (11th Cir. 1983); cf. 33 C.F.R. § 230.10(b) (1993) (Corps' obligation to discuss

If a permit is required, those proposing a project to be located on or near federal lands may have to concern themselves with factors in addition to those generally considered in the "public interest" review. The Corps must provide the USFWS with an opportunity to comment on permit applications²²⁷ and must give "full consideration" to any USFWS comments.²²⁸ Other statutes, such as the Fish and Wildlife Coordination Act²²⁹ and the Endangered Species Act (ESA),²³⁰ also may affect the Corps' deliberations. Both of these laws require federal agencies to consult with the USFWS to assure protection of the aquatic environment and endangered and threatened species.²³¹ EPA's section 404 Guidelines prohibit the discharge of dredged or fill material that would jeopardize the continued existence of species listed as endangered or threatened under the ESA, or would likely result in the destruction or adverse modification of their critical habitat.²³² Furthermore, the National Wild and Scenic Rivers Act of 1968²³³ prohibits the issuance of a federal permit for construction of water resources projects that would directly and adversely affect the values for which the rivers were designated.²³⁴

The government has successfully blocked, at least for a time, federal lands development projects because of their adverse impact on wetlands. In *United States v. Schmitt*,²³⁵ a district court preliminarily enjoined a developer from docking or storing boats

alternatives to proposed action). On NEPA, see generally PNRL, *supra* note *, ch. 12; ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, at ch. 9.

227. 33 U.S.C. § 1344(m) (1988).

228. 33 C.F.R. § 320.4(c) (1993). But the role of the USFWS is advisory, and, according to one commentator, the Corps often ignores USFWS recommendations. See Jan Goldman-Carter, *Clean Water Act Section 404: A Critical Link in Protecting Our Nation's Waters*, NAT. RESOURCES & ENV'T, Spring 1991, 10, 53.

229. 16 U.S.C. §§ 661-666(c) (1988).

230. *Id.* §§ 1531-1544 (1988).

231. See 33 C.F.R. § 320.3(e), (i) (1993); PNRL, *supra* note *, § 15.05.

232. 40 C.F.R. § 230.10(b)(3) (1992); see *Town of Norfolk*, 968 F.2d at 1452-53 (Corps did not violate EPA's § 404 Guidelines in issuing permit to fill artificial wetlands because bird species potentially affected by project was not listed under the ESA even though listed under state law and because evidence indicated that the filling would not threaten its existence).

233. 16 U.S.C. §§ 1271-1287(1988). See generally PNRL, *supra* note *, § 15.02.

234. See 33 C.F.R. § 320.3(f) (1993). In *Coalition for Canyon Preservation, Inc. v. Hazen*, 788 F. Supp. 1522, 1527 n.6 (D. Mont. 1990) (citing 33 C.F.R. § 320.4(e)), the court concluded that although the Corps' regulations require that the Corps give due consideration to the factors (aesthetic, scenic, historic, archaeological, and scientific) which are emphasized under the National Wild and Scenic Rivers Act of 1968, the Corps need not give these values *primary* emphasis in deciding whether to issue a permit.

235. 734 F. Supp. 1035 (E.D.N.Y. 1990).

and expanding a marina located on private land within a national recreation area, because these activities could cause irreparable harm to wildlife and wildlife habitat.²³⁶ In another case, a court upheld the Corps' denial of a permit for a levee and canal construction project partially located in a national historical park because it would have adverse impacts on wetlands, wildlife habitat, and fisheries.²³⁷

D. *Nationwide Dredge and Fill Permits*

The Corps does not require an individual dredge and fill permit if one of its nationwide permits²³⁸ covers a proposed activity. Nationwide permits are appropriate only when the activities in the category to which the permit applies are similar in nature and will cause only minimal adverse environmental effects, both separately and cumulatively.²³⁹ But nationwide permits, which are meant to expedite activities with inconsequential effects on the environment,²⁴⁰ are unavailable in many federal land situations — such as where the activity will jeopardize a threatened or endangered species, or will occur in a component of the National Wild and Scenic River System or a river being studied for inclu-

236. *Id.*

237. *Bayou Des Familles Dev. Corp. v. United States Army Corps of Eng'rs*, 541 F. Supp. 1025, 1038-39 (E.D. La. 1982).

238. There are two types of general permits, nationwide permits and regional permits. The former are issued by the Office of the Chief of Engineers. Projects meeting the conditions set out in the permit and in the Corps regulations need not obtain individual § 404 permits. Regional permits, which are issued by the division or by a district engineer, may modify a nationwide permit for a particular region, 33 C.F.R. § 330.1(d) (1993), or authorize discharges not covered by a nationwide permit. *See generally* *Abenaki Nation of Mississquoi v. Hughes*, 805 F. Supp. 234, 237 n.4 (D. Vt. 1992), *aff'd*, 990 F.2d 729 (2d Cir. 1993).

239. *See generally* 33 U.S.C. § 1344(e) (1988); 33 C.F.R. pt. 330 (1993); Robert D. Comer, *The New Section 404 Nationwide Permit Program — Greater Corps Discretion and Enhanced Environmental Protection*, NAT. RESOURCES & ENV'T, Spring 1992, at 61-63. Nationwide Permit 26 (NWP 26) authorizes dredging and filling in isolated or headwater wetlands, provided the resulting damage is limited to fewer than ten acres. *See* *O'Connor v. United States Army Corps of Eng'rs*, 801 F. Supp. 185 (N.D. Ind. 1992) (analyzing the scope and application of NWP 26). *See generally* Thomas Addison & Timothy Burns, *The Army Corps of Engineers and Nationwide Permit 26: Wetlands Protection or Swamp Reclamation*, 18 *ECOLOGICAL L.Q.* 619 (1991); Goldman-Carter, *supra* note 228, at 11 (citing 33 C.F.R. § 330.5(a)(26)). According to Goldman-Carter, the Corps typically does not enforce NWP 26 conditions or require mitigation of wetland losses, so that "thousands of wetlands are being destroyed annually through NWP 26 alone." *Id.*; *see also id.* at 13 (NWP 26 "acts as a virtual 'black hole' for freshwater wetlands.").

240. *See, e.g.,* *Vieux Carre Property Owners, Residents & Assocs. v. Brown*, 875 F.2d 453, 465 (5th Cir. 1989), *cert. denied*, 493 U.S. 1020 (1990).

sion in that System.²⁴¹ Developers operating under nationwide permits must comply with specified BMPs.²⁴²

E. *Incentives to Preserve Wetlands*

A recent addition to the government's efforts to prevent the destruction of wetlands is the "swampbuster" provision of the Food Security Act of 1985.²⁴³ This provision makes any person who produces an agricultural commodity on converted wetlands ineligible for federal agricultural subsidies such as price support payments, federal crop insurance, and Farmers Home Administration loans.²⁴⁴ The Agricultural Stabilization and Conservation Service has the authority to issue exemptions from this provision,²⁴⁵ but users of wetlands resources may have standing to challenge their issuance on the basis of adverse effects on wetlands and wildlife populations dependent on them.²⁴⁶

F. *Assessment of Control of Wetlands Development on the Federal Lands*

The dredge and fill permit program was embroiled in controversy for most of the Bush Administration. Potential wetlands developers supported the Administration's efforts in 1991 to narrow the definition of wetlands subject to the program by lengthening the time of required soil saturation and changing vegetation requirements. Environmentalists argued that these proposed changes to the federal wetlands delineation manual were driven more by politics than by science.²⁴⁷ The Clinton Administration's decision to abandon the 1991 proposed changes in favor of a return to the 1987 definition of wetlands pending studies by the National Academy of Science²⁴⁸ promises to restore at least temporary stability to the program.

241. 33 C.F.R. pt. 330, app. A, C(7), (11) (1993).

242. *Id.* § 330.6.

243. 16 U.S.C. § 3821 (1988).

244. *See generally* Tripp & Dudek, *supra* note 191.

245. 16 U.S.C. § 3822 (1988).

246. *See* National Wildlife Fed'n v. Agricultural Stabilization and Conservation Serv., 941 F.2d 667 (8th Cir. 1991), *vacated*, 955 F.2d 1199 (8th Cir. 1992); National Wildlife Fed'n v. Agricultural Stabilization and Conservation Serv., 901 F.2d 673 (8th Cir. 1990).

247. *See, e.g., Wetlands: Players in Wetlands Manual Debate See Hope In Browner's Comments, Record*, 23 [Current Developments] Env't Rep. (BNA) 2104 (Dec. 25, 1992) (quoting National Wildlife Federation spokeswoman).

248. *See supra* note 196. Under the proposal, fifty percent of the Florida Everglades would have been exempt from the § 404 permit program. *See Wetlands: Revi-*

It would be advisable, however, to resolve at least one additional set of issues. The exact parameters of the jurisdictions of EPA, the Corps of Engineers, the USFWS, and the states need to be clarified. EPA and the Corps have disagreed on several occasions on the disposition of dredge and fill permits for wetlands.²⁴⁹ Although EPA has the authority to veto the Corps' issuance of a dredge and fill permit on the basis of unacceptable adverse environmental effects,²⁵⁰ the two agencies continue to feud over when and how EPA may exercise that authority.²⁵¹ The Corps' controversial new practice of delegating wetlands permitting authority to the states has given rise to similar issues concerning the respective roles of EPA and state agencies.²⁵² Finally, the tendency of the Corps to ignore the recommendations of the USFWS²⁵³ has created friction between those two agencies. These jurisdictional questions need to be resolved in order to provide a greater degree of certainty for all parties involved with potential wetlands development that may affect federal resources.

Even if these issues are resolved, however, regulation of wetlands development on or near the federal lands is likely to remain controversial. In recent years, increasing numbers of developers opposed to such regulation have sought to invalidate agency decisions restricting wetlands development as unconstitutional takings of property without just compensation.²⁵⁴ Given the chaotic nature of the Supreme Court's takings jurisprudence,²⁵⁵ and the Claims Court's apparent receptivity to takings challenges in the context of wetlands regulation,²⁵⁶ this kind of

sions to Wetlands Manual 'Unworkable,' CEQ Chairman Says in Calling for 'Correction,' 22 [Current Developments] Env't Rep. (BNA) 2467 (Mar. 6, 1992).

249. See, e.g., *Corps Rejects First-Time EPA Request for Delegation of Wetlands Dispute*, INSIDE EPA WKLY. REP., Jan. 15, 1993, at 1, 10 [hereinafter *Corps Rejects Request*]; INSIDE EPA WKLY. REP., Dec. 25, 1992, at 1, 10.

250. 33 U.S.C. § 1344(c) (1988).

251. See, e.g., *Corps Rejects Request*, INSIDE EPA WKLY. REP., Jan. 15, 1993, at 1, 10 (the Corps rejected EPA's request for review, short of a formal veto proceeding under § 404(c), of a dredge and fill permit issued by the Corps); INSIDE EPA WKLY. REP., Dec. 25, 1992, at 1, 10.

252. See, e.g., INSIDE EPA, WKLY. REP., Dec. 25, 1992, at 4.

253. See *supra* note 228.

254. For discussion of several of these cases, see PNRL, *supra* note *, § 3.04[3][b][iii].

255. See *id.* § 3.04[3][a]; Michael J. Davis & Robert L. Glicksman, *To the Promised Land: A Century of Wandering and a Final Homeland for the Due Process and Taking Clauses*, 68 OR. L. REV. 393 (1989).

256. See PNRL, *supra* note *, § 3.04[3][c][ii].

regulation is likely to spawn considerable litigation for the foreseeable future.

V.

OIL SPILLS

Federal legislation to prevent and respond to oil spills represents congressional reaction to dramatic and well-publicized incidents causing damage to the environment. Following the blowout of oil wells off the coast of Santa Barbara and the *Torrey Canyon* oil spill off the Cornwall coast during the late 1960s, Congress in 1972 added section 311 to the CWA.²⁵⁷ Congress expanded the section 311 oil spill program in 1978²⁵⁸ by authorizing the government to recover the value of lost or damaged natural resources from those responsible for the losses. Later, in response to the *Exxon Valdez* oil spill in Alaska's Prince William Sound, Congress passed the Oil Pollution Act of 1990 (OPA).²⁵⁹ The OPA contains a variety of provisions applicable to onshore facilities and operations, including those on federal lands, which should prove important to some public natural resource users.

This part first summarizes the provisions of amended CWA section 311 and the new OPA that deal with the prevention, cleanup, and mitigation of oil spills. It then describes the liability provisions of these statutes, focusing on activities occurring on or affecting federal lands. Finally, it assesses the OPA provisions most likely to spawn legal issues relevant to the protection of federal lands and resources, the provisions imposing liability for damage to natural resources.²⁶⁰

257. 33 U.S.C. § 1321 (1988). See generally ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 13.05[2].

258. Pub. L. No. 95-576, 92 Stat. 2467 (1978).

259. Pub. L. No. 101-380, 104 Stat. 486 (codified at 33 U.S.C. § § 2701-2761). For a summary of the OPA, see Russell V. Randle, *The Oil Pollution Act of 1990: Its Provisions, Intent, and Effects*, 21 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,119 (1991). See also Michael P. Donaldson, *The Oil Pollution Act of 1990: Reaction and Response*, 3 *VILL. ENVTL. L.J.* 283 (1992); Charles Openchowski, *Federal Implementation of the Oil Pollution Act of 1990*, 21 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,605 (1991); Cynthia M. Wilkinson et al., *Slick Work: An Analysis of the Oil Pollution Act of 1990*, 12 *J. ENERGY NAT. RESOURCES & ENVTL. L.* 181 (1992); Tammy M. Alcock, Comment, "Ecology Tankers" and the Oil Pollution Act of 1990: A History of Efforts to Require Double Hulls on Oil Tankers, 19 *ECOLOGY L.Q.* 97 (1992); Michael J. Uda, Comment, *The Oil Pollution Act of 1990: Is There a Bright Future Beyond Valdez?*, 10 *VA. ENVTL. L.J.* 403 (1991).

260. Until a body of case law develops under the OPA, cases interpreting the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675 (1988), which served as a model for some of the

A. Federal Response Authority

Section 311 of the CWA requires the President to ensure effective and immediate removal of a discharge of oil²⁶¹ or a hazardous substance²⁶² into navigable waters, on adjoining shorelines,²⁶³ or affecting natural resources belonging to or managed by the United States.²⁶⁴ The President also must mitigate and prevent substantial threats of such discharges.²⁶⁵ The President has delegated those responsibilities to EPA and the Coast Guard.²⁶⁶ If a discharge or threat of a discharge of oil from a vessel,²⁶⁷ offshore facility,²⁶⁸ or onshore facility²⁶⁹ poses a substantial threat to the public health or welfare (including to fish, wildlife, other natural resources, or public beaches and shorelines), the President must direct all federal, state, and private actions to remove the discharge or threat.²⁷⁰

All cleanup, mitigation, and prevention efforts must be performed in a manner consistent with the National Contingency Plan (NCP),²⁷¹ a blueprint for spill cleanup operations that originated under section 311 of the CWA, but which is now de-

OPA's liability provisions, presumptively will be pertinent to application of the OPA.

261. "Oil" is defined to include petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. 33 U.S.C. § 1321(a)(1) (1988).

262. Spills of hazardous substances are now dealt with primarily under CERCLA. See ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 13.05[2]. The application of CERCLA to federal lands will be discussed in the fourth article in this series on pollution on the federal lands, Robert L. Glicksman, *Pollution on the Federal Lands IV: Liability for Hazardous Waste Disposal*, which will appear in volume 12, number 2 of the *UCLA Journal of Environmental Law and Policy* (forthcoming 1994). See also PNRL, *supra* note *, § 11.05.

263. Discharges into or on the waters of the exclusive economic zone (the zone contiguous to the territorial sea, extending 200 miles from shore) also are covered. 33 U.S.C. § 1321(c)(1)(A)(iii) (Supp. III 1991).

264. *Id.* § 1321(c)(1)(A)(iv).

265. *Id.* § 1321(c)(1)(A).

266. EPA's regulations relating to oil spills are published at 40 C.F.R. pts. 110, 112-114, 116-117 (1992).

267. "Vessels" include watercraft capable of being used as a means of transportation on water. 33 U.S.C. § 1321(a)(3) (1988).

268. "Offshore facilities" includes (1) facilities located in, on, or under navigable waters of the United States, and (2) facilities subject to the jurisdiction of the United States (as defined in *id.* § 1321(a)(17)) that are located in, on, or under any other waters. *Id.* § 1321(a)(11).

269. "Onshore facilities" means facilities (including motor vehicles and rolling stock) located in, on, or under any land within the United States other than submerged land. *Id.* § 1321(a)(10).

270. *Id.* § 1321(c)(2)(A).

271. *Id.* § 1321(c)(3).

veloped in conjunction with CERCLA's program for the cleanup of hazardous substance spills.²⁷² The OPA expands and refines planning requirements in an attempt to obviate in the future the kind of confusion that attended cleanup and response in the *Exxon Valdez* spill. These requirements begin at the national level but also encompass individual facilities. For example, the Coast Guard is directed to establish a National Response Unit to compile a computer list of available spill removal resources, personnel, and equipment, and to coordinate use of private and public personnel and equipment in dealing with spills.²⁷³ Area committees designated by the President to work with state and local officials must prepare Area Contingency Plans (ACPs) to enhance contingency planning and joint response and mitigation efforts.²⁷⁴ Each ACP must include a list of requirements, including development of adequate means of dealing with a "worst case" discharge and a description of areas of special economic or environmental importance, that a discharge might damage.²⁷⁵ Finally, the statute requires the issuance of regulations for preparing plans applicable to certain individual onshore facilities.²⁷⁶ Facility plans must respond, to the maximum extent practicable, to a worst case discharge or threat of a discharge. Each plan must (1) be consistent with the NCP and with ACPs, (2) designate an employee authorized to implement removal actions, and (3) identify and ensure the availability of personnel and equipment necessary to remove a worst case discharge and mitigate or prevent a substantial threat of a discharge.²⁷⁷

B. *Liability Under the Clean Water Act*

Section 311 of the CWA imposes strict liability on the owner or operator of a vessel or facility which discharges oil or a hazardous substance in quantities that EPA determines may be harmful

272. The National Contingency Plan, whose required contents are described at *id.* § 1321(d)(2), is set forth at 40 C.F.R. pt. 300 (1992).

273. 33 U.S.C. § 1321(j)(2) (Supp. III 1991).

274. The Coast Guard also must create district response groups to provide technical assistance and equipment, maintain response equipment, and review ACPs. *Id.* § 1321(j)(3).

275. *Id.* § 1321(j)(4).

276. *Id.* § 1321(j)(5)(A). This includes "[a]n onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone." *Id.* § 1321(j)(5)(B)(iii).

277. *Id.* § 1321(j)(5).

to public health or the environment.²⁷⁸ The "environment" includes fish, shellfish, wildlife, public and private property, shorelines, and beaches.²⁷⁹ Defenses to liability are limited to proof that the discharge was caused solely by an act of God, an act of war, negligence on the part of the federal government, an act or omission of a third party, or any combination of those causes.²⁸⁰ Liability extends to costs incurred by the government in responding to the discharge and costs incurred by the federal or any state government in the restoration or replacement of natural resources damaged or destroyed as a result of the discharge.²⁸¹ The statute limits the liability of an onshore facility for removal costs to \$50 million, but if the government can show that the discharge resulted from willful negligence or willful misconduct within the owner's privity and knowledge, liability is unlimited.²⁸² Liability for natural resource damages is unlimited in any event.

If the owner or operator of a vessel or facility from which a discharge occurs proves that the discharge was caused solely by an act or omission of a third party, that third party becomes liable for removal costs under section 311(g).²⁸³ The third party can escape liability only by qualifying for one of the defenses available to owners and operators.²⁸⁴ In *Quaker State Corporation v. United States Coast Guard*,²⁸⁵ the Coast Guard sued Quaker State to recover the costs of excavating and removing oil leaking from a containment pit at a drilling site in the Allegheny National Forest. In a previous ruling, the court had concluded that the Forest Service, as surface owner of land that had been leased to Quaker State until 1975, was the "owner or operator" of the site. Therefore, Quaker State could not be liable under section 311(f), which imposes liability only on owners and operators of discharging facilities.²⁸⁶ When the government amended its complaint to seek recovery under section 311(g) on the ground that Quaker State was a solely responsible third party, Quaker State

278. See *id.* § 1321(f) (1988); *United States v. Marathon Pipe Line Co.*, 589 F.2d 1305 (7th Cir. 1978).

279. 33 U.S.C. § 1321(b)(4) (1988).

280. *Id.* § 1321(f)(1)-(2).

281. *Id.* § 1321(f)(2), (4).

282. *Id.* § 1321(f)(2).

283. *Id.* § 1321(g).

284. *Id.*

285. 716 F. Supp. 201 (W.D. Pa. 1989).

286. *Quaker State Corp. v. United States Coast Guard*, 681 F. Supp. 280 (W.D. Pa. 1988).

moved for summary judgment, arguing that the Forest Service was at least partially responsible for the discharge, since it had directed Quaker State to fill in the containment pit from which the discharge occurred. The court denied the motion, holding that section 311(g) imposes liability on a third party not only for a discharge caused solely by its act or omission, but also for an act or omission by a third party in combination with negligence by the federal government.²⁸⁷ Thus, Quaker State could be liable even if the Forest Service acted negligently in ordering the company's actions that led to the leak.

C. *Liability Under the Oil Pollution Act of 1990*

1. Standard of Liability and Defenses

Following the *Exxon Valdez* spill, Congress expanded liability for oil spills beyond the parameters of section 311 of the CWA by enacting the OPA.²⁸⁸ Certain components of the OPA's liability scheme are similar to the CWA's oil spill provisions. Every "responsible party," including the owner and operator of any on-shore facility,²⁸⁹ from which oil is discharged, or which poses the substantial threat of a discharge, into or upon navigable waters,²⁹⁰ adjoining shorelines, or the exclusive economic zone, is liable for removal costs and damages that result from the incident.²⁹¹ The standard of liability is the same as the CWA standard — strict, joint and several liability.²⁹² The defenses to liability are as limited under the OPA as they are under the CWA; parties can escape liability only by demonstrating that a discharge or threat thereof, and the resulting removal costs, were caused solely by an act of God, an act of war, an act or omission of an unrelated third party,²⁹³ or any combination of those

287. 716 F. Supp. at 202.

288. Pub. L. No. 101-380, 104 Stat. 486 (1990) (codified at 33 U.S.C. §§ 2701-2761).

289. 33 U.S.C. § 2701(32) (Supp. III 1991).

290. As under the Clean Water Act, this term means any "waters of the United States." *Id.* § 2701(21); *see supra* part V.A.

291. 33 U.S.C. § 2702(a) (Supp. III 1991).

292. *Id.* § 2701(17). Unlike CERCLA, however, the OPA does not impose liability retroactively. 42 U.S.C. §§ 9601-9675 (1988); 33 U.S.C. §§ 2717(e), 2751(d) (Supp. III 1991).

293. To qualify for this defense, the third party must not be "an employee or agent of the responsible party or a third party whose act or omission occurs in connection with any contractual relationship with the responsible party (except where the sole contractual arrangement arises in connection with carriage by a common carrier by rail)." 33 U.S.C. § 2703(a) (Supp. III 1991). The responsible party also

three.²⁹⁴ Further, these defenses are unavailable to a party who fails (1) to report a spill as required by law, (2) to cooperate reasonably with officials responsible for removal activities, or (3) without sufficient cause, to comply with a cleanup order issued under the CWA or the Intervention on the High Seas Act.²⁹⁵ Discharges authorized by a permit issued under federal, state, or local law, discharges from a public vessel,²⁹⁶ and discharges from an onshore facility subject to the Trans-Alaska Pipeline Authorization Act²⁹⁷ are not covered by the OPA.²⁹⁸ One commentator asserts that upsets or bypasses will not be shielded from OPA liability, even if they would not constitute CWA point source permit violations.²⁹⁹

2. Liability for Removal Costs

Responsible parties are liable under the OPA for removal costs incurred by the United States, a state, or an Indian tribe under the CWA's oil spill provisions.³⁰⁰ Removal costs include the costs of removing an oil spill that has already occurred as well as the costs of preventing, minimizing, or mitigating pollution from a threatened discharge.³⁰¹ Liability also extends to costs incurred by anyone else (such as a private individual or corporation) for removal in a manner consistent with the NCP.³⁰² Case law under CERCLA's private cost recovery provision,³⁰³ upon

must establish that it exercised due care and took precautions against foreseeable acts or omissions of the third party. *Id.* These provisions are patterned after similar provisions in CERCLA, *see* 42 U.S.C. § 9607(b)(3) (1988), and cases decided under that statute therefore may be helpful in interpreting the parameters of the OPA's third-party defense.

294. 33 U.S.C. § 2703(a) (Supp. III 1991).

295. *Id.* § 2703(c). The Intervention on the High Seas Act is at *id.* §§ 1471-1487 (1988).

296. This term is defined at 33 U.S.C. § 2701(29) (Supp. III 1991).

297. 43 U.S.C. §§ 1651-1656 (1988).

298. 33 U.S.C. § 2702(c) (Supp. III 1991).

299. *See* Randle, *supra* note 259, at 10,122. Upsets are exceptional incidents in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit holder. 40 C.F.R. § 122.60(h)(1) (1992). A bypass is the intentional diversion of waste streams from any portion of a treatment facility. *Id.* § 122.60(g)(1).

300. 33 U.S.C. § 2702(b)(1) (Supp. III 1991).

301. *Id.* § 2701(31).

302. *Id.* § 2702(b)(1)(B). The NCP is prepared by EPA under the CWA's oil spill provisions, *id.* § 1311(d) (1988), and under CERCLA, 42 U.S.C. § 9605 (1988).

303. 42 U.S.C. § 9607(a)(1)-(4)(B) (1988).

which this provision of the OPA is modelled, may be helpful in interpreting the scope of liability to private plaintiffs.³⁰⁴

3. Liability For Damages

The OPA also imposes liability on responsible parties for damages, which include several categories of damages that were not recoverable under the CWA's oil spill provision.³⁰⁵ Any OPA plaintiff, public or private, may sue to recover damages to real and personal property and loss of profits or earning capacity.³⁰⁶ Any claimant may sue for loss of subsistence use of natural resources, regardless of who owns or manages those resources, provided the claimant uses those resources for subsistence purposes.³⁰⁷ Federal, state, or local governmental entities may sue for lost taxes or other revenues and for increased costs of public services resulting from an oil spill.³⁰⁸ Finally, trustees of the federal government, states, foreign governments, or Indian tribes may sue for damages for injury to, or destruction, loss, or loss of use of natural resources, including the reasonable costs of assessing the damage.³⁰⁹

The OPA sets limits on the total liability of responsible parties.³¹⁰ However, these limits do not apply under the following circumstances: a spill caused by gross negligence or willful misconduct; violation by the responsible party (or its agents or employees) of an applicable federal safety, construction, or operating regulation; and the failure of a responsible party to report the incident as required by law, to cooperate with responsible officials during removal operations, or to comply with an

304. See cases cited in ELI, LAW OF ENVIRONMENTAL PROTECTION, *supra* note 6, § 13.06[3][f].

305. In addition, the Trans-Alaska Pipeline Authorization Act, 43 U.S.C. §§ 1651-1656 (1988), imposes liability for damages resulting from the transportation of trans-Alaska pipeline oil. *Id.* § 1653; see *Slaven v. BP America, Inc.*, 973 F.2d 1468 (9th Cir. 1992).

306. 33 U.S.C. § 2702(b)(2)(B), (E) (Supp. III 1991).

307. *Id.* § 2702(b)(2)(C). For interpretation of the scope of "subsistence" use, see *In the Matter of the Petition of Cleveland Tankers, Inc.*, 791 F. Supp. 669 (E.D. Mich. 1992).

308. 33 U.S.C. § 2702(b)(2)(D), (F) (Supp. III 1991).

309. *Id.* § 2702(b)(2)(A). Natural resources are broadly defined to include land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other resources belonging to or managed, held in trust, or otherwise controlled by the United States, any state or local government, Indian tribe, or foreign government. *Id.* § 2701(20).

310. *Id.* § 2704(a). The limit for an onshore facility is \$350 million. *Id.* § 2704(a)(4).

order issued under the CWA or the Intervention on the High Seas Act.³¹¹ The OPA does not preempt the imposition of additional liability for oil spills under state law.³¹²

4. Natural Resource Damage Liability and Assessment

The OPA requires the federal, state, and tribal governments, and permits foreign governments, to designate officials as trustees of natural resources.³¹³ If natural resources belonging to, managed by, or appertaining to these entities are injured, lost, or destroyed as a result of a discharge of oil covered by the OPA, these trustees are authorized to assess natural resource damages and develop a plan for the restoration, rehabilitation, or replacement of the resources under their trusteeship.³¹⁴ The OPA does not resolve ownership questions:

Both the [OPA] and CERCLA appear to assume that some resources clearly belong to a state, some to the United States, and some to Indian tribes. As lengthy disputes over western water rights indicate, however, that assumption is mistaken. Confusion over which resources are the duty of which trustee to defend may impair resolution of natural resource damage claims under this Act, as it has under CERCLA.³¹⁵

Natural resource trustees must assess damages in accordance with regulations issued by the National Oceanic and Atmospheric Administration (NOAA) (in consultation with EPA and the USFWS).³¹⁶ NOAA has issued an Advance Notice of Proposed Rulemaking in which it solicited comments on issues including the most accurate way to measure lost use value and whether regulations issued by the Interior Department under CERCLA³¹⁷ should apply under the OPA.³¹⁸ The trustees may

311. *Id.* § 2704(c).

312. *Id.* § 2718(a).

313. *Id.* § 2706(b).

314. *Id.* § 2706(c).

315. Randle, *supra* note 259, at 10,125-26.

316. 33 U.S.C. § 2706(e) (Supp. III 1991).

317. The fourth article in this series, *see supra* note 262, will describe the Interior Department's natural resource damage assessment regulations under CERCLA. *See also* PNRL, *supra* note *, § 11.05[8].

318. *See* Natural Resource Damage Assessments, 55 Fed. Reg. 53,478 (1990). NOAA subsequently published and incorporated into the rulemaking record a report of an agency panel on the contingent valuation method for determining non-use values. Natural Resource Damage Assessments Under the Oil Pollution Act of 1990, 58 Fed. Reg. 4601 (1993) (advance notice of proposed rulemaking). Natural resources damage assessments conducted under the OPA and CERCLA will not necessarily result in the same damage amounts. *See* Richard W. Dunford, *Natural*

seek to recover natural resource damages either by bringing a suit in federal district court against responsible parties³¹⁹ or by making a claim on the expanded Oil Spill Liability Trust Fund.³²⁰ If the trustees have conducted their damage assessments in compliance with NOAA's regulations, the statute creates a rebuttable presumption on behalf of the trustees in either administrative proceedings involving claims against the Fund or suits against responsible parties.³²¹ The measure of natural resource damages to which trustees will be entitled is the sum of the costs of restoring, rehabilitating, replacing, or acquiring the equivalent of the damaged resources; the diminution in value of those natural resources pending restoration; and the reasonable cost of assessing those damages.³²² The legislative history indicates that this definition of natural resource damages was meant to endorse the approach outlined in *Ohio v. Department of Interior*,³²³ in which the Court of Appeals for the District of Columbia Circuit overturned the Interior Department's "Type B" natural resource damage assessment regulations under CERCLA.³²⁴ Those regulations had specified as the measure of damages the lesser of restoration or replacement cost, or diminution in use value.³²⁵ The court remanded the regulations to the agency to formulate an alternative approach more consistent with the congressional intent that restoration costs were to be the basic measure of recovery for harm to natural resources.³²⁶ Congress also intended restoration to be the preferred alternative under the OPA.³²⁷ Amounts recovered by natural resource trustees must be deposited in an interest-

Resource Damages from Oil Spills: A Comparison of the Ohio Decision and the Oil Pollution Act, 22 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,263 (1992).

319. 33 U.S.C. §§ 2702(b)(2)(A), 2717(b) (Supp. III 1991).

320. *Id.* §§ 2713-2717.

321. *Id.* § 2706(e)(2).

322. *Id.* § 2706(d).

323. 880 F.2d 432 (D.C. Cir. 1989); see Randle, *supra* note 259, at 10,126.

324. See also *Colorado v. Department of Interior*, 880 F.2d 481 (D.C. Cir. 1989) (upholding the scope of the Interior Department's "Type A" regulations under CERCLA, but rejecting lost use value as the exclusive measure of natural resource damages). Both cases and their aftermath are analyzed in PNRL, *supra* note *, § 11.05[8][h][ii]-[iv].

325. 43 C.F.R. § 11.35(b)(2) (1989).

326. 880 F.2d at 159; cf. *Puerto Rico v. SS Zoe Colocotroni*, 628 F.2d 652, 675-76 (1st Cir. 1980) (appropriate measure of damages in admiralty action caused by spill from oil tanker is reasonable cost to restore or rehabilitate the environment to its preexisting condition, or as close to it as feasible without grossly disproportionate expenditures, unless restoration is impossible, in which case reasonable cost of acquiring offsetting resources might suffice), *cert. denied*, 450 U.S. 912 (1981).

327. See Randle, *supra* note 259, at 10,126.

bearing, revolving trust account for exclusive use in connection with damage assessment and resource restoration.³²⁸

5. Claims Against the Oil Spill Liability Trust Fund

The OPA establishes an Oil Spill Liability Trust Fund, which consolidates and expands the CWA's oil spill trust fund, the Deepwater Port Liability Fund, and the Offshore Oil Pollution Compensation Fund.³²⁹ The new Fund will be financed by a tax on crude oil received at United States refineries and on petroleum products imported into, consumed in, or warehoused in this country.³³⁰ The Fund may be used to pay the following: (1) removal costs incurred by federal or state authorities consistent with the NCP; (2) costs incurred by trustees to assess natural resource damages and develop and implement restoration plans; (3) reasonable federal administrative costs to implement and enforce the OPA; and (4) claims for uncompensated removal costs incurred in a manner consistent with the NCP or for uncompensated damages.³³¹ Removal costs, damages, and penalties recovered from responsible parties will be deposited in the Fund for use in connection with other spills.³³²

The Fund is designed to be "the insurer of last resort for third parties damaged by oil spills."³³³ Accordingly, with limited exceptions,³³⁴ claims for removal costs or damages must be presented first to the responsible party or its guarantor.³³⁵ If the responsible party or guarantor to whom a claim is presented denies liability, or if a claim is not settled within ninety days after it was presented or advertised,³³⁶ the claimant may commence an

328. 33 U.S.C. § 2706(f) (Supp. III 1991).

329. See Randle, *supra* note 259, at 10,126.

330. 26 U.S.C. § 4611 (Supp. III 1991).

331. 33 U.S.C. § 2712(a) (Supp. III 1991).

332. 26 U.S.C. § 9609(b)(2), (5) (Supp. III 1991).

333. Randle, *supra* note 259, at 10,127.

334. Claims may be presented directly to the Fund, for example, if the federal government has been unable to designate the source of the discharge and has advertised or otherwise notified claimants of procedures by which claims may be presented to the Fund. 33 U.S.C. § 2713(b)(1) (Supp. III 1991).

335. *Id.* § 2713(a). A guarantor is "any person, other than the responsible party, who provides evidence of financial responsibility for a responsible party." *Id.* § 2701(13). Certain vessels and offshore facilities, including deepwater ports, must establish and maintain evidence of financial responsibility sufficient to meet their maximum liabilities under the OPA. *Id.* § 2716.

336. If a responsible party or guarantor does not deny designation by federal officials as the source of a discharge or threat, it must advertise that designation and the procedures by which claims may be presented to it. *Id.* § 2714(b).

action in court against the responsible party or guarantor, or present a claim to the Fund.³³⁷

Anyone, including the Fund, who pays removal costs or damages is subrogated to the rights of the claimant.³³⁸ Like CERCLA, the OPA permits any responsible party to bring a contribution action against other potentially responsible parties.³³⁹

D. Penalties

In addition to liability for removal costs and damages, responsible parties may be subject to administrative or judicial civil penalties and to criminal liability.³⁴⁰ EPA may impose administrative civil penalties under the CWA³⁴¹ against the owner, operator, or person in charge of any vessel or facility from which oil or a hazardous substance is discharged in harmful quantities.³⁴² The same people are subject to civil penalties in court of up to \$25,000 per day of violation or \$1000 per barrel of oil discharged.³⁴³ A court also may impose civil penalties of up to \$25,000 per day of violation against any person who fails properly to carry out a removal ordered by the federal government,³⁴⁴ or who violates any regulation issued as part of the Coast Guard's National Response System³⁴⁵ for removing discharges of oil.³⁴⁶ Violations caused by gross negligence or willful miscon-

337. *Id.* § 2713(c). If a claim is not fully compensated by the responsible party, the uncompensated portion may be presented to the Fund. *Id.* § 2713(d).

338. *Id.* § 2715(a).

339. *Id.* § 2709.

340. Responsibility for enforcing the OPA is divided between the EPA and the Coast Guard. The Act's enforcement provisions will be implemented pursuant to a Memorandum of Agreement between the two agencies. Memorandum of Understanding Between the U.S. Environmental Protection Agency and the U.S. Coast Guard Concerning the Enforcement of § 311 of the Clean Water Act as Amended by the Oil Pollution Act of 1990, 58 Fed. Reg. 19,420 (1993).

341. These penalties are divided into two classes, based on the severity of the violation. The more severe class II penalties may not exceed \$125,000. *Id.* § 1321(b)(6)(B).

342. *Id.* § 1321(b)(6).

343. *Id.* § 1321(b)(7).

344. The federal government may issue administrative orders to protect the public health and welfare against an imminent and substantial threat attributable to an actual or threatened discharge of oil. *Id.* § 1321(e)(1)(B). Anyone who violates such an order is liable for a civil penalty of up to \$25,000 per day of violation or an amount up to three times the cost incurred by the Oil Spill Liability Trust Fund as a result of the violation. *Id.* § 1321(b)(7)(B)(ii).

345. This System is described at *id.* § 1321(j).

346. *Id.* § 1321(b)(7)(B)(i), (C).

duct may result in civil penalties of *not less than* \$100,000, and not more than \$3000 per barrel of oil discharged.³⁴⁷ The OPA amended the CWA to impose the same criminal penalties on persons responsible for oil discharged in harmful quantities as apply to any other CWA violation.³⁴⁸ These penalties, which include fines as well as incarceration for responsible individuals, can be severe, especially for spills involving "knowing endangerment" of another person.³⁴⁹

E. *Assessment of Oil Spill Control and Liability*

The amended CWA and the OPA include both regulatory and liability provisions that are designed to reduce damage to natural resources attributable to oil spills. The elaborate planning process required under this legislation could remedy organizational difficulties in responding to spills such as those that exacerbated the damage caused by the *Exxon Valdez* disaster and other incidents.³⁵⁰ But planning processes sometimes work better in theory than they do in practice. Although planning may increase readiness prior to a spill, it also may reduce decisionmaking flexibility at the time of a spill. Experience with planning in other public natural resources law contexts indicates that reduced flexibility does not always translate into improved resource management.³⁵¹ The advantages and disadvantages of the CWA and OPA planning processes will not become clear until federal, state, and local officials have responded to spills under the new statutory machinery.

It is somewhat easier to make predictions about the effects of the liability provisions of the OPA, particularly those that impose liability for damage to natural resources. The OPA's natural resource damage liability provisions are likely to become one of the most active, if not effective, tools for protecting federal water resources from oil spills. Experience with the analogous natural resource damage liability provisions of CERCLA has shown that the extent of potential liability under these provisions is enormous.³⁵² Efforts by the federal and state governments to recover

347. *Id.* § 1321(b)(7)(D).

348. *Id.* § 1319(c).

349. *Id.* § 1319(c)(3). Organizations can be fined up to \$1 million and individuals can be fined up to \$250,000, imprisoned for up to 15 years, or both. *Id.*

350. See *supra* notes 271-77 and accompanying text.

351. See, e.g., PNRL, *supra* note *, § 13.01.

352. For example, the federal government sought \$1.8 billion in damages under CERCLA at one site alone, the Rocky Mountain Arsenal in Colorado. See United

natural resource damages under CERCLA have accelerated considerably in recent years, and undoubtedly will continue to do so following issuance of the Interior Department's natural resource damage regulations.³⁵³ The recoveries (as well as the litigation experience) they accumulate in the context of CERCLA probably will encourage natural resource trustees to initiate administrative claims and suits to impose natural resource damage liability under the OPA as well.

Experience under CERCLA provides additional lessons. The potential of the OPA's liability scheme to provide compensation for damaged natural resources cannot be fully realized until NOAA has issued its assessment regulations.³⁵⁴ But the process of issuing those regulations may be a lengthy one. Congress adopted CERCLA's natural resource damage provisions in 1980, and it ordered the Interior Department to issue damage assessment regulations by 1982.³⁵⁵ As of the beginning of 1994, the Department had not yet issued valid final regulations.³⁵⁶ NOAA has already missed its August 1992 deadline³⁵⁷ for issuing damage assessment regulations under the OPA. NOAA probably will be able to move more quickly than Interior has, however, if only because NOAA will not have to reinvent the wheel. It may decide to employ some of the methodologies reflected in the CERCLA damage assessment regulations, or even to adopt portions of those regulations as its own. In its Advanced Notice of Proposed Rulemaking, NOAA indicated that it was considering whether Interior's regulations should apply under the OPA.³⁵⁸

States v. Shell Oil Co., 605 F. Supp. 1064, 1084-86 (D. Colo. 1985). In the first year following the *Exxon Valdez* spill, the government spent more than \$35 million just to study the impact of the spill. See Bradley M. Marten & Cestjon L. McFarland, *Litigating CERCLA Natural Resource Damage Claims*, 22 [Current Developments] Env't Rep. (BNA) 670, 672 (1991); see also PNRL, *supra* note *, § 11.05[8][a].

353. See PNRL, *supra* note *, §§ 11.05[8][a], [8][i], [11].

354. For one thing, the rebuttable presumption that trustees have conducted their assessments properly does not take effect until after issuance of the regulations. See 33 U.S.C. § 2706(e)(2) (Supp. III 1991).

355. 42 U.S.C. § 9651(c)(2) (1988).

356. Significant provisions of the final regulations that Interior issued in 1986 were invalidated in *Ohio v. Department of Interior*, 880 F.2d 432, 438 (D.C. Cir. 1989), and *Colorado v. Department of Interior*, 880 F.2d 481, 483 (D.C. Cir. 1989). The Department's proposed regulations issued on remand are at Natural Resource Damage Assessments, 56 Fed. Reg. 19,752 (1991).

357. 33 U.S.C. § 2706(e)(1) (Supp. III 1991).

358. See Natural Resource Damage Assessments, 55 Fed. Reg. 53,478 (1990); *supra* note 318 and accompanying text. NOAA subsequently indicated its tentative support for the use of contingent valuation methodologies for assessing damages. See Natural Resource Damage Assessments Under the Oil Pollution Act of 1990, 58

In short, the difficulties that the federal land management agencies have had in implementing other planning and liability programs preclude confident predictions that the OPA will significantly improve protection of federal water resources from oil spills. It is clear that natural resource trustees designated under the Act will test their new authority to seek reimbursement for resources damaged by oil spills. Further, given the magnitude of potential liability, it also is clear that potentially responsible parties will attack agency damage assessments on all available legal and technical grounds.³⁵⁹ If, as is likely, deficiencies in the OPA regulatory and liability schemes are revealed in the course of the statute's implementation, corrective amendments may be advisable. The 1986 amendments to CERCLA³⁶⁰ may provide a model. Among other things, these amendments confined EPA's discretion to determine the appropriate level of cleanups,³⁶¹ imposed deadlines on the agency for performing designated cleanup tasks,³⁶² provided expanded authority for the EPA to enter into settlement agreements with potentially responsible parties,³⁶³ and authorized citizen suits to enforce non-discretionary statutory duties.³⁶⁴

VI.

CITIZEN SUITS

The CWA authorizes any person having an interest which is, or may be, adversely affected³⁶⁵ to bring suit in federal district court against any other person, including any agency of the federal government, alleged to be in violation of the statute. To vest the court with jurisdiction, the plaintiff must allege violation of "an effluent standard or limitation under [the CWA]," or any order

Fed. Reg. 4601 (1993). Contingent valuation is a method for valuing natural resources in the absence of information concerning market price. It involves the establishment of hypothetical markets to elicit an individual's economic valuation of natural resources. See 43 C.F.R. § 11.83(d)(5) (1992) (Interior Department's damage assessment regulations under CERCLA); Frank B. Cross, *Natural Resource Damage Valuation*, 42 VAND. L. REV. 269, 315 (1989).

359. Cf. PNRL, *supra* note *, § 11.05[8][h][iv] (describing attacks by potentially responsible parties on damage assessments conducted under CERCLA).

360. Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. No. 99-499, 100 Stat. 1613 (1986).

361. 42 U.S.C. § 9621 (1988).

362. *Id.* § 9616.

363. *Id.* § 9622.

364. *Id.* § 9659.

365. This means any person who has standing. See *Middlesex County Sewerage Auth. v. National Sea Clammers Ass'n*, 453 U.S. 1 (1981).

issued by EPA or a state in relation to such a standard or limitation.³⁶⁶ This phrase clearly includes a point source discharging without a permit or in violation of a permit.³⁶⁷ Several courts have held that section 313 of the CWA constitutes a waiver of sovereign immunity and authorizes the imposition of civil penalties against federal agencies that operate point sources in violation of the statute.³⁶⁸ One decision by the Tenth Circuit which imposed penalties on the Interior Department for the Bureau of Reclamation's failure to comply with an NPDES permit issued for the Leadville tunnel in Colorado³⁶⁹ was reversed by the Supreme Court following its decision in *United States Energy Department v. Ohio*.³⁷⁰ In light of the Supreme Court's holding that the CWA does not waive the federal government's sovereign immunity from liability for civil fines imposed by a state for past violations of the CWA,³⁷¹ the Tenth Circuit reversed its earlier decision, holding that the CWA did not waive the Interior Department's sovereign immunity from civil penalties.³⁷²

The issue of whether citizen suits are available for alleged nonpoint source violations is less clear. In *Oregon Natural Resources Council v. United States Forest Service*,³⁷³ the Ninth Cir-

366. 33 U.S.C. § 1365(a)(1) (1988).

367. *Id.* § 1365(f)(1)-(2).

368. *See, e.g., California v. United States Department of Navy*, 631 F. Supp. 584 (N.D. Cal. 1986), *aff'd*, 845 F.2d 222 (9th Cir. 1988); *see also, supra* notes 112-14 and accompanying text; *cf. NRDC v. Watkins*, 954 F.2d 974 (4th Cir. 1992) (environmental organization had standing to sue Energy Department to block reopening of nuclear reactor that would operate in violation of NPDES permit). *But see Metropolitan Sanitary Dist. of Greater Chicago v. United States Department of Navy*, 737 F. Supp. 51 (N.D. Ill. 1990) (sovereign immunity barred District's claim for civil penalties absent showing that penalties arose under federal law). Federal employees are immune from civil penalties for violations arising from the performance of official duties, 33 U.S.C. § 1323(a) (1988), but not from criminal prosecution. *See United States v. Curtis*, 988 F.2d 946 (9th Cir.), *cert. denied*, *Curtis v. United States*, 114 S. Ct. 177 (1993).

369. *Sierra Club v. Lujan*, 931 F.2d 1421 (10th Cir. 1991), *vacated and remanded*, 112 S. Ct. 1927, *rev'd*, 972 F.2d 312 (10th Cir. 1992).

370. 112 S. Ct. 1627 (1992).

371. *Id.* at 1490. The Court distinguished between "coercive fines" imposed to induce government agencies to comply with injunctions or other judicial orders designed to modify behavior prospectively, and "punitive fines," which it defined as imposing liability to punish past statutory violations. The Energy Department conceded that the Act renders the government liable for the former, *id.* at 1491, but the Court held that the Act did not clearly waive sovereign immunity for the latter. *Id.* at 1492-97.

372. *Sierra Club v. Lujan*, 972 F.2d 312 (10th Cir. 1992). The court rejected the Sierra Club's argument that *Ohio* was distinguishable because the permit there was issued by the state, whereas in this case, EPA issued the permit. *Id.* at 316.

373. 834 F.2d 842 (9th Cir. 1987).

cuit held that a citizen suit could not be brought under the CWA to enjoin an alleged violation of a state water quality standard caused by a nonpoint source.³⁷⁴ The court nevertheless permitted the plaintiff to seek a declaratory judgment, based on the Administrative Procedure Act (APA) and the federal question statute,³⁷⁵ that proposed timber practices and construction of a logging road would violate Oregon's WQSS. The court interpreted the decision in the *Blue Creek* case³⁷⁶ to support this conclusion, because although neither the district nor appellate court addressed jurisdiction in that case, the district court mentioned that the plaintiff alleged violations of the APA.³⁷⁷ The Ninth Circuit confirmed this point three years later, holding that a suit challenging the Forest Service's fire-recovery timber sale in the Klamath National Forest on the ground that the sale threatened violations of California's WQSS could be premised on the APA.³⁷⁸

These cases demonstrate that private plaintiffs should be able to seek review in federal district court of Forest Service and BLM activities for consistency with state WQSS. The APA, however, only applies to federal agencies, so even this alternative route for review in federal district court of alleged CWA violations relating to nonpoint sources is unavailable against private defendants alone, or such defendants in conjunction with state or local governmental entities.³⁷⁹ Persons seeking to challenge CWA violations by nonpoint sources not involving federal agencies will be relegated to state court.

The citizen suit provision does not expressly cover alleged violations of the dredge and fill permit program. Citizen suits are authorized, however, against EPA for an alleged failure to per-

374. The court rejected the plaintiff's plausible argument that because the statute authorizes citizen suits alleging violations of § 1311, and because § 1311(b)(1)(C) requires compliance with effluent limitations necessary to meet state WQSS, citizen suits alleging violations of such standards are appropriate, whether they are attributable to point or nonpoint sources. *Id.* at 849-50. For another case concluding that a citizen suit could not be used to enjoin a timber-cutting contract between the Forest Service and a timber company, see *Zieske v. Butz*, 406 F. Supp. 258 (D. Alaska 1975).

375. 834 F.2d at 851.

376. *See supra* part III.C.

377. *See* 834 F.2d at 851 (citing *Northwest Indian Cemetery Protective Ass'n v. Peterson*, 589 F. Supp. 921, 922 n.1 (N.D. Cal. 1983)).

378. *Marble Mountain Audubon Soc'y v. Rice*, 914 F.2d 179 (9th Cir. 1990).

379. *See Anderson, supra* note 107, at 596 n.25.

form a nondiscretionary duty under the CWA,³⁸⁰ and some courts have permitted suits against the Army Corps of Engineers in connection with alleged violations of the dredge and fill permit provisions.³⁸¹ One court stated that the Corps' failures to perform nondiscretionary duties are actionable because the Corps stands in EPA's shoes when it makes jurisdictional determinations under section 404.³⁸²

VII.

CONCLUSION

A variety of activities on or near federal lands may be regulated or may give rise to liability under the federal statutes aimed at curtailing water pollution. Aspects of mineral development and processing are covered by the CWA's NPDES permit program for point sources. Permits also may be required for silvicultural activities resulting in discharges of pollutants into surface waters, or groundwater connected to surface waters, from a discernible, confined conveyance.

Although the CWA also authorizes regulation of nonpoint source activities affecting the federal lands, including aspects of mining, silviculture, road building, and livestock management, the regulatory program for nonpoint sources generally has not been effective. Each state is required to devise a waste management plan to prevent violation of state WQSs, but in some states individual point sources are not liable for causing such violations, provided they have complied with applicable BMPs. Nonpoint source activities with potential effects on federal lands and resources may be subject to more meaningful constraints. The federal land management agencies must not approve projects that would cause violations of WQSs. The agencies have the authority to translate this prohibition into permit and lease provisions applicable to individual nonpoint sources.

If Congress wants to increase the effectiveness of controls on nonpoint source discharges with potential federal lands effects, it should build upon the ONRW program initiated as part of EPA's antidegradation program. The Clean Air Act's PSD program is

380. 33 U.S.C. § 1365(a)(2) (1988).

381. *E.g.*, *Golden Gate Audubon Soc'y, Inc. v. United States Army Corps of Eng'rs*, 717 F. Supp. 1417 (N.D. Cal. 1988); *see also Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 904 (5th Cir. 1983).

382. *Golden Gate Audubon Soc'y, Inc. v. United States Army Corps of Eng'rs*, 700 F. Supp. 1549, 1552-53 (N.D. Cal.), *modified*, 717 F. Supp. 1417 (N.D. Cal. 1988).

available as a model for preventing degradation of water quality whose protection is necessary to achieve recreational, wildlife propagation, or other similar federal lands purposes. After designating (or authorizing EPA to designate) bodies of water located on the federal lands as ONRWs, Congress could require states to include in water quality management programs whatever means are necessary to prevent degradation of the quality of those waters. It could delegate to EPA the power to adopt and enforce this requirement in the event a state defaults in its obligation.

A third CWA regulatory program, the section 404 permit program administered by the Army Corps of Engineers, applies to activities that result in the dredging or filling of wetlands. Efforts to control wetlands development under section 404 have created a storm of controversy in recent years. Although the adoption of a definition for wetlands subject to the permit requirement may reduce uncertainty over the scope of the program, constitutional challenges to particular applications of the section 404 permit process will continue to reflect the political opposition to controlling development of wetlands located outside of federal lands but with potential ecological impacts on federal lands and resources.

The OPA, enacted in 1990, is directed at oil spills, the fourth category of threats to water resources on the federal lands this Article has addressed. That statute directs agencies at the federal, state, and local levels to improve planning processes in the wake of the chaotic efforts to clean up the *Exxon Valdez* spill. The OPA also imposes liability for removal costs, property damage, and damage to natural resources. The last category of damage liability has the potential to make the greatest contribution to protecting federal lands and resources from damage attributable to oil spills. It probably will take years to erect even the initial regulatory framework for implementation of the OPA's natural resource damage liability provisions. Like the analogous provisions under CERCLA, however, the OPA's provisions ultimately will provide the federal land management agencies as natural resource trustees with a formidable weapon for restoring natural resources damaged by oil spills.