

THE CORPS OF ENGINEERS' PUBLIC INTEREST REVIEW UNDER SECTION 404 OF THE CLEAN WATER ACT: BROAD DISCRETION LEAVES WETLANDS VULNERABLE TO UNNECESSARY DESTRUCTION

I. INTRODUCTION

Landowners in the United States fill wetlands at the alarming rate of over 300,000 acres every year.¹ Wetlands are of considerable impor-

1. OFFICE OF TECHNOLOGY ASSESSMENT, CONGRESSIONAL BOARD OF THE 98TH CONGRESS, *WETLANDS: THEIR USE AND REGULATION* (1984) [hereinafter cited as *OTA REPORT*]. Unregulated conversions destroy approximately 250,000 acres of inland wetlands each year for agricultural use, while the Clean Water Act and state regulatory programs allow the destruction of an additional 50,000 acres. *Id.* at 11.

The U.S. Fish and Wildlife Service defines "wetlands" as "areas where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on the surface." Sen. Chafee, *Saving Our Nation's Wetlands*, 9 *EPA JOURNAL* 3, 4 (Oct. 1983) [hereinafter cited as *Saving Our Wetlands*]. "Wetlands" generally refers to swamps, marshes, and bogs. 33 C.F.R. § 328.3(b). Wetlands are usually located in depressions or along rivers, lakes, and coastal waters that subject the wetlands to periodic flooding. *NAT'L WETLANDS INVENTORY, FISH AND WILDLIFE SERVICE, U.S. DEPT. OF INTERIOR, WETLANDS OF THE UNITED STATES: CURRENT STATUS AND RECENT TRENDS 2* (1984) [hereinafter cited as *WETLANDS STATUS*].

Wetlands cover about 5% of the contiguous United States and about 60% of Alaska. *OTA REPORT, supra*, at 3. The United States originally had 215 million acres of wetlands from coast to coast. At present, this figure has decreased 54% to only 99 million acres. *WETLANDS STATUS, supra*, at 28-29. Although wetlands are subject to natural destruction due to subsidence, droughts, hurricanes, and erosion, human activities caused 95% of wetland losses during the last 25 years. *OTA REPORT, supra*, at 3.

tance because they provide an essential breeding ground for fish and wildlife² and perform other functions, such as flood control and water purification.³ Although wetlands are a vital ecosystem for man, animals, and fish, land developers view these waters as obstacles to building industrial, residential, or recreational areas.⁴ To allow for both economic growth and the preservation of wetlands, Congress enacted the Clean Water Act (CWA),⁵ which prevents developers from altering wetlands without a permit. Under the CWA, the Army Corps of Engineers issues permits only to those applicants whose proposed activities

2. See WETLANDS STATUS, *supra* note 1, at 1. More than twelve million ducks breed annually in our Nation's wetlands. On a larger scale, approximately two-thirds of the major U.S. commercial fish depend on wetlands for nursing and spawning grounds. *Id.* at 13. Shellfish, birds, furbearers, and other wildlife, such as turtles, reptiles, and amphibians, similarly depend upon wetlands for their habitat. *Id.*

See Note, *Wetlands Protection and the Neglected Child of the Clean Water Act: A Proposal for Shared Custody of Section 404*, 5 VA. J. NAT. RESOURCES L. 227 (1985) [hereinafter cited as Note, *Wetlands Protection*] (more than one-third of nation's endangered species depends on wetlands to survive); AMERICAN ENTERPRISE INSTITUTE (AEI) LEGISLATIVE ANALYSES, REAUTHORIZATION OF THE CLEAN WATER ACT (1983) [hereinafter cited as CWA REAUTHORIZATION] (wetlands are one of the most biologically active areas in the nation as spawning grounds for fish, shellfish, and major food sources for wildlife and fish).

3. WETLANDS STATUS, *supra* note 1, at 18. Wetlands act as a filter by removing sediment from the waters. This is important because sediment often carries with it pesticides, heavy metals, and other toxins which would otherwise pollute the water. *Id.* In addition, scientists have shown that destroying wetlands is partially responsible for recent major flood disasters. *Id.* at 21.

4. Ninety-five percent of wetlands in the contiguous United States are located in inland, freshwater areas. The remaining 5% of the wetlands are located in coastal, saltwater areas. OTA REPORT, *supra* note 1, at 3. From the mid-1950's to the mid-1970's, landowners destroyed inland wetlands primarily for agricultural reasons, through drainage, clearing, land leveling, ground water pumping, and surface water division. *Id.* at 7. With respect to coastal wetlands, over half of the wetland conversions resulted from dredging for marinas, canals, and port development. Other major sources of coastal wetland destruction were urbanization, disposal of dredged material, and the creation of beaches. *Id.* Wetlands are a major area for boating and bird watching for millions of Americans. *Saving Our Wetlands*, *supra* note 1, at 3. Wetlands contribute between twenty and forty billion dollars per year to the national economy in flood and erosion control, water supply, and harvest functions. *Id.*

Wetlands can be destroyed both directly and indirectly. Dredging, filling, and draining wetlands cause an immediate effect on these waters. "Construction that takes place near wetlands, e.g., channelization, can indirectly destroy the plants and fish by creating turbidity, which impedes light penetration necessary for photosynthesis, or by filling marshes with suspended sediments which literally suffocate fish by clogging their gills." COUNCIL ON ENVIRONMENTAL QUALITY, OUR NATION'S WETLANDS 43 (1978).

5. 33 U.S.C. §§ 1251-1376 (1982).

meet certain environmental standards.⁶

To determine whether the applicant satisfies these environmental standards, the Corps closely examines the applicant's proposed activity.⁷ The Corps analyzes the proposed activity in accordance with a number of environmental guidelines and procedures.⁸ In addition, before issuing a dredge and fill permit, the Corps considers the views of other concerned state and federal agencies, such as the Environmental Protection Agency (EPA) and United States Fish and Wildlife Service (USFWS).⁹ Ultimately, under section 404 of the Clean Water Act,¹⁰ the Corps conducts a public interest review and weighs various environmental, economic, and social concerns before deciding whether to grant the permit.¹¹ The decision process, which provides checks and balances, is theoretically a good means of protecting the environment, because it allows both governmental agencies and the public to play a role.¹² On the other hand, the permit process has some serious down-

6. See 40 C.F.R. pt. 230 (1987). Part 230 is also known as the "EPA Guidelines." The fundamental policy underlying the EPA's Guidelines is to prohibit the discharge of dredge or fill material into the waters of the United States unless:

it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.

40 C.F.R. § 230.1(c) (1987).

7. See 33 C.F.R. § 320.4 (1987).

8. The Corps must review dredge and fill permits under section 404 of the Clean Water Act (CWA) and the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321-4347 (1977 & Supp. 1987). Pursuant to these Acts, the Corps is also responsible for following the EPA Guidelines, 33 C.F.R. pt. 230 (1986) (considered simultaneously with the CWA) and the Council on Environmental Quality (CEQ) Regulations, 40 C.F.R. §§ 1500-1508 (1987) (construing NEPA). See *infra* notes 52-78 and accompanying text for a discussion of these guidelines and regulations.

9. See *infra* notes 71-72 and accompanying text for a discussion of the agencies that the Corps works with to reach a permit decision.

10. 33 U.S.C. § 1344 (1982).

11. See generally 33 C.F.R. § 320.4 (1987) (Corps must balance all factors in light of the public interest). The Corps is responsible for making decisions based on competing concerns of the applicant, environmental groups, statutory standards, and public policy. See *infra* notes 79-85 and accompanying text for a discussion of the public interest review.

12. See *infra* notes 67-72 for a discussion of the roles that the Corps, governmental agencies, and the public play in the public interest review. See Blumm, *Wetlands Preservation, Fish and Wildlife Protection, and 404 Regulation: A Response*, 18 LAND & WATER L. REV. 469 (1983) [hereinafter cited as Blumm, *Wetlands Preservation*] (open, pluralistic review process is advantageous). In a 1971 Senate debate, however, Senator Muskie argued that the Army Corps of Engineer's mission is to protect navigation, not environmental values. SENATE COMM. ON PUBLIC WORKS, 93D CONG., 1ST SESS., A

falls. The Corps is overloaded with permit applications¹³ and decides whether to grant permits based upon a statute which affords the Corps a great deal of discretion.

This Note will address the multi-faceted permit process and the method by which the Corps issues dredge and fill permits under the Clean Water Act. Part II summarizes the history of the Clean Water Act. Part III explains the procedural aspects of issuing a dredge and fill permit. Part IV examines the scope of the Corps' public interest review under section 404 of the Clean Water Act. Part V analyzes the weaknesses of the public interest review and suggests some improvements and additional methods to achieve wetland preservation. This Note concludes that the public interest review grants the Corps excessive discretion and fails to adequately protect our Nation's wetlands from unnecessary destruction.

II. HISTORY OF THE CLEAN WATER ACT

Congress established our Nation's first permit program regulating the discharge of dredge and fill material¹⁴ into wetlands under section

LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 1389 (Comm. Print 1972).

13. See *River Road Alliance v. United States Army Corps of Eng'rs*, 764 F.2d 445 (7th Cir. 1985), cert. denied, 106 S. Ct. 1283 (1986). The Corps receives over 14,000 permit applications each year. 764 F.2d at 449.

Although the Corps processes many permits within 75 days, it processes the majority within 120-150 days. See Blumm, *Wetlands Preservation*, supra note 12, at 485-86. If the application is controversial, the Corps averages 271 days to process the application. See *CWA REAUTHORIZATION*, supra note 2, at 16. Reasons for delay vary. Some delays relate to the Corps' confusion as to which proposed projects fall within their jurisdiction. Other delays frequently occur with little or no documented justification. *Clean Water Act Amendments, 1982: Hearings on S. 777 and S. 2652 Before the Subcomm. on Environmental Pollution of the Comm. on Environment and Public Works, 97th Cong., 2d Sess. 789-90 (1982)* (statement of Richard Kreutzen, American Petroleum Institute). See generally 33 C.F.R. § 325.2(d) (1987) (time requirement for processing permit applications).

Efforts to expedite the Corps' permit processing have led to heated debate. The Corps is inefficient and prone to unnecessary delay. However, the purpose of the § 404 permit program is not to issue permits as fast as possible, but to save the wetlands. See *Section 404 of the Clean Water Act: Hearings Before the Subcomm. on Environmental Pollution of the Senate Comm. on Environment and Public Works, 97th Cong., 2d Sess. 416 (1982)* (Sen. Chafee's remarks to Robert Dawson, Deputy Asst. Secretary of the Army for Civil Works). Cf. *CWA REAUTHORIZATION*, supra note 2, at 15 (too many minor activities are subject to intense review under current regulations).

14. "Dredged material" is material that is excavated or dredged from waters. 33 C.F.R. § 323.2(i) (1987). "Fill material" is any material used for the primary purpose

404 of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972.¹⁵ In 1977, Congress further amended the FWPCA by expanding the section 404 program. The 1977 Amendments to the section 404 program are commonly referred to as the Clean Water Act.¹⁶ Section 404 of the Clean Water Act (CWA) substantially closed the gaps in environmental legislation that previously left wetlands completely unprotected from destruction.

Under section 10 of the Rivers and Harbors Act of 1899,¹⁷ the Corps was responsible for maintaining the navigable waters of the United States.¹⁸ The Corps had the authority to issue permits to builders or to applicants wanting to dredge or fill waters, provided such projects did not obstruct the navigable capacity of the waterways.¹⁹ The purpose of the Rivers and Harbors Act, therefore, was to protect navigation, not to preserve the wetlands.²⁰

Courts soon recognized the shortcomings of the statute. In *Zabel v. Tabb*, decided in 1970, two landowners sought a dredge and fill permit to build a trailer park on their property in the Boca Ciega Bay in St. Petersburg, Florida.²¹ The landowners argued that as long as their proposed work did not hinder navigation, the Corps lacked authority under the Rivers and Harbors Act to deny the permit for non-navigational reasons.²² The Fifth Circuit held that pursuant to the Rivers and Harbors Act the Corps may deny a permit on conservation

of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody. 33 C.F.R. § 323.2(k) (1987).

15. Pub. L. No. 92-500, 86 Stat. 816, 884 (1972) (codified as amended at 33 U.S.C. §§ 1251-1376 (1982)).

16. Clean Water Act of 1977, 33 U.S.C. § 1344 (1982). The 1977 Amendments to the FWPCA stated that the entire Act may be cited as the Clean Water Act. Pub. L. No. 95-217, 91 Stat. 1566 (1977).

17. Act of March 3, 1899, § 10, 30 Stat. 1151, codified at 33 U.S.C. § 403 (1982).

18. The term "navigable waters" is defined as "waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7) (1982). See *United States v. Riverside Bayview Homes, Inc.*, 106 S. Ct. 455 (1985) ("navigable waters" interpreted broadly); *Natural Resources Defense Council, Inc. v. Callaway*, 392 F. Supp. 685 (D.D.C. 1975) (term not limited to traditional tests of navigability).

19. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of the navigable waters of the United States. 33 U.S.C. § 403 (1982).

20. *Id.*

21. 430 F.2d 199, 201 (5th Cir. 1970), *cert. denied*, 401 U.S. 910 (1971).

22. 430 F.2d at 203. The landowners acknowledged that their proposed dredge and fill activity would damage the ecology and marine life in the bay, but they argued that the court should interpret the Rivers and Harbors Act narrowly or only apply the Act to questions of navigability. *Id.*

grounds alone.²³

After enacting the FWPCA in 1972, Congress continued to give the Corps primary responsibility over the dredge and fill permit program because the Corps had experience with a permit system under the Rivers and Harbors Act.²⁴ To insure that the Corps would enforce environmental considerations, the section 404 program empowered the EPA to veto the Corps' permit decision²⁵ if the proposed activity would have "an unacceptable adverse effect" on the water and fish life.²⁶ Furthermore, the section 404 program mandated that the Corps follow EPA guidelines in making a permit decision.²⁷

Section 402 of the FWPCA created the National Pollutant Discharge Elimination System (NPDES),²⁸ which established a permit system to regulate the discharge of pollutants into navigable waters from "point sources."²⁹ The FWPCA authorized the EPA to administer section 402.³⁰ The EPA, in turn, could delegate this responsibility to the states.³¹ Nevertheless, section 402 of the FWPCA, like section 10 of the Rivers and Harbors Act, failed to restrict the discharge of dredge and fill materials in wetlands.³² Section 402 lacked such restric-

23. *Id.* at 214. The court further held that the Corps had an affirmative duty to consult with and evaluate the recommendations of other agencies regarding environmental factors involved in a permit decision. *Id.* at 213. The *Zabel* court relied on the National Environmental Policy Act (NEPA) of 1969. *Id.* at 211-13. See *infra* notes 52-62 for an analysis of NEPA and its interaction with the Clean Water Act.

24. See *Section 404 of the Federal Water Pollution Control Act Amendments of 1972*, 94th Cong., 2d Sess. 53-55 (1976) (Statement of Mr. Veysey, Asst. Secretary of the Army for Civil Works) (historical review of the Corps' authority over the Nation's waters).

25. 33 U.S.C. § 1344(c) (1982). See *Newport Galleria Group v. Deland*, 618 F. Supp. 1179 (D.D.C. 1985) (although the EPA infrequently uses its veto power, this alone does not alter the EPA's broadly defined authority into a highly limited one).

26. 33 U.S.C. § 1344(c) (1982).

27. 33 U.S.C. § 1344(b)(1) (1982). The EPA Guidelines are at 40 C.F.R. pt. 230 (1987).

28. 33 U.S.C. § 1342 (1982).

29. Section 502(14) of the Clean Water Act defines "point source" in part as: any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel . . . from which pollutants are or may be discharged.

30. 33 U.S.C. § 1362(14) (1982).

31. 33 U.S.C. § 1342(a)(1) (1982).

32. 33 U.S.C. § 1342(b) (1982).

32. *Development of New Regulations by the Corps of Engineers, Implementing Section 404 of the Federal Water Pollution Control Act Concerning Permits for Disposal of*

tions perhaps because its framers recognized that wetlands can be navigable or non-navigable and are vulnerable to pollution from a variety of sources, not just point sources.³³

Several developments expanded the scope of the FWPCA. A few years after the enactment of the FWPCA, the District Court for the District of Columbia held in *Natural Resources Defense Council v. Callaway*³⁴ that the term "navigable waters" under the FWPCA meant the "waters of the United States."³⁵ The *Callaway* court thus broadened the scope of the Corps' federal jurisdiction over our Nation's waters.³⁶

On May 24, 1977, President Carter issued Executive Order Number 11990.³⁷ The primary purpose of this Order was to avoid the destruction of, modification of, or new construction in wetlands whenever a practicable alternative exists.³⁸ Executive Order 11990 indicated that

Dredge or Fill Material: Hearings Before the Subcommittee on Water Resources, 94th Cong., 1st Sess. 3 (1975). States could not restrict dredging activities because such regulations would interfere with the Corp's federal authority under § 10 of the Rivers and Harbors Act. Section 404 "was enacted in response to a gap left open under § 402 of the act," namely for states to have authority to issue dredge and fill permits. *Id.*

In a 1977 House debate, Representative Roberts argued that the amendment allowing states to have their own permit programs was necessary to "cut out the red tape in the Federal water pollution control program . . . to bring this effort back where it belongs—on a partnership level among the Federal Government, the States, cities and industry. No one group can afford to go it alone." A LEGISLATIVE HISTORY OF THE CLEAN WATER ACT OF 1977, A CONTINUATION OF THE LEGISLATIVE HISTORY OF THE FEDERAL WATER POLLUTION CONTROL ACT 95th Cong., 2d Sess. 305 (Comm. Print 1978) [hereinafter cited as LEGISLATIVE HISTORY].

33. See *supra* note 4 for a discussion of how wetlands are destroyed.

34. 392 F. Supp. 685 (D.D.C. 1975).

35. *Id.* at 686. The *Callaway* court stated: "Congress . . . asserted federal jurisdiction [in the FWPCA] over the nation's waters to the maximum extent possible under the Commerce Clause . . . the term is not limited to the traditional tests of navigability." *Id.*

36. The expanded definition of "navigable waters," extends the area of the Corps' jurisdiction. See LEGISLATIVE HISTORY, *supra* note 32, at 347.

37. 3 C.F.R. §§ 121-23 (1978), reprinted in 42 U.S.C. § 4231 (1982).

38. Executive Order No. 11990 states in part:

Section 1(a):

Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not

all federal agencies must take an active role to preserve wetlands.³⁹

In December of 1977, Congress amended the FWPCA by substantially expanding the section 404 program.⁴⁰ First, Congress allowed the Corps to issue "general permits" on a state, regional, or nationwide basis.⁴¹ General permits provided the Corps with administrative relief. Since the Corps could issue broad permits covering a specific category of activity, it no longer had to spend time on individual permits for minor dredge and fill activities.⁴² The Corps could grant general permits if each individual discharge of dredge and fill material would have only a minimal adverse effect on the environment, and if the cumulative effect of all such activity issued under the same general permit would still have only a minimal adverse effect.⁴³ The second major amendment to the section 404 program exempted normal farming, forestry, and ranching activities from the Clean Water Act's regulations.⁴⁴

Since enacting the Clean Water Act amendments ten years ago, Con-

limited to water and related land resources planning, regulating and licensing activities.

Exec. Order No. 11,990, 3 C.F.R. §§ 121-23 (1978), *reprinted in* 42 U.S.C. § 4321 (1982).

39. 3 C.F.R. § 121 (1978). The impetus behind Executive Order No. 11990 was NEPA. *See infra* notes 52-62 for a further analysis of NEPA and its interaction with the Clean Water Act.

40. *See supra* notes 18-20, 22-33 and accompanying text for a discussion of factors explaining why the FWPCA needed to be amended.

41. 33 U.S.C. § 1344(e)(1) (1986). The advantage of obtaining a general permit is that the proposed project will not be monitored. *See Blum, Wetlands Preservation, supra* note 10, at 483. The drawback is that a general permit is valid only for five years after the permit is issued. 33 U.S.C. § 1344(e)(2) (1982). *See also* *Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985) (nationwide permit not issued if discharge would adversely affect threatened or endangered species). *See generally* 33 C.F.R. § 330.5(a) (1987) (twenty-six activities permitted under nationwide permits); 33 C.F.R. § 330.5(b) (1987) (conditions placed on nationwide permits).

42. *See* LEGISLATIVE HISTORY, *supra* note 32, at 349. The Office of Technology Assessment reported that as of 1981, the Corps issued "374 general permits, which has reduced the number of permit applications by an estimated 60,000 to 90,000 annually." OTA REPORT, *supra* note 1, at 71.

43. 33 U.S.C. § 1344(e)(1) (1982).

44. 33 U.S.C. § 1344(f)(1) (1982). Exempted from the permit requirements are normal, everyday activities such as "plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices." 33 U.S.C. § 1344(f)(1)(A) (1982). These activities may also include maintenance and repair work. *See* 33 U.S.C. § 1344(f)(1)(B-E) (1982).

See United States v. Huebner, 752 F.2d 1235 (7th Cir. 1985) (filling wetland with dredge material on farm property for purposes of planting corn was not exempt activity); *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 925 n.44 (5th Cir.

gress has confronted and explored two main issues. The first area of concern is reconciling the Corps' and EPA's differing interpretations of the section 404 permit procedures.⁴⁵ The second matter Congress often discusses is using federal funding to acquire wetlands to shield them from destruction.⁴⁶

1983) (farming exemption designed to be a narrow one limited to ongoing agricultural activities).

45. Senator Chafee argued that because the Corps and EPA failed to reach a consensus of what wetlands the § 404 program covers, thousands of wetland acres have been lost. *Oversight Hearings on Section 404 of the Clean Water Act on S. 278 Before the Subcomm. on Environmental Pollution of the Senate Comm. on Environment and Public Works*, 99th Cong., 1st Sess. 2 (1986) [hereinafter cited as 1986 *Oversight Hearings*]. The EPA and United States Fish and Wildlife Service (USFWS) define wetlands scientifically, based on soils, vegetation, and hydrology determinations. The Corps focuses only on hydrophytes (plants growing only in wet environments), following an "agricultural suitability" or "development suitability" approach. *Id.* at 32. (Statement by Mr. Baxter, Fish and Wildlife Biologist, USFWS).

One policy that might solve some of the tension between the EPA and the Corps is "advance designation" in which the agencies would predetermine certain wetlands as ineligible for dredge or fill material prior to a permit request. *Id.* at 41. (Statement of Ms. Cooper, Asst. Administrator for External Affairs, EPA).

See *infra* notes 62-66, 78 for additional discussions of the differing viewpoints of the Corps and the EPA on alternative sites and mitigation, respectively.

46. Sen. Chafee argued that Congress should strengthen the § 404 program by passing new legislation to fund wetlands acquisition. See *Saving Our Wetlands*, *supra* note 1, at 4. See also *Wetlands Conservation: Hearings Before the Senate Subcomm. on Environmental Pollution of the Comm. on Environment and Public Works*, 98th Cong., 1st Sess. 35 (1983) (statement of Sharron Stewart, from the National Advisory Committee on Oceans and Atmosphere) (acquire wetlands based on priority rating as advised by EPA, Corps and NACOA). Senators Chafee and Stafford proposed S. 1329, "Emergency Wetlands Resources Act of 1983," under which the government would purchase wetlands from private owners. *Id.* at 36. Over 90% of wetlands outside of Alaska are on private property. *Id.* at 39. Accordingly, some advocates urged the creation of a mechanism to maintain or restore privately owned wetlands. *Id.* (statement by Dr. Robert Davidson, National Wildlife Federation). See also J. KUSLER, OUR NATIONAL WETLANDS HERITAGE, A PROTECTION GUIDEBOOK 102-04 (1983) for a detailed description of the process of wetland acquisition.

In 1985 Senator Chafee held hearings to encourage state and federal funding in response to "record low numbers of some waterfowl species." *Emergency Wetlands Resources Act of 1985, Hearings Before the Committee on Environment and Public Works, Subcomm. on Environmental Pollution*, 99th Cong., 1st Sess. 1 (1985). Sen. Chafee explained that the proposed goal of the federal government to purchase 1.95 million acres of wetlands between 1977-1986 was not met. Instead, the government acquired only 400,000 acres of wetlands during this time. *Id.* at 2. The states have also fared poorly in meeting their wetland acquisition goals. From 1959 to 1986, only 17% of the states' goals have been reached. *Id.* at 47 (Statement of W. Wentz, of the National Wildlife Federation).

The most recent Report from the Committee on Environment and Public Works suggested four ways to increase the purchase and improve the protection of wetlands:

III. THE PERMIT PROCESS

Congress designed the section 404 program to prohibit individuals from conducting dredge and fill activities in the waters of the United States absent a permit from the Corps.⁴⁷ The permit process itself is relatively simple for the applicant. Initially, the applicant must submit a complete description of the proposed activity, its location, and its intended use.⁴⁸ The Corps then has the difficult task of deciding whether to grant the permit. The Corps must follow statutorily defined procedures, using its discretion to interpret ambiguities in the statutes.⁴⁹

After receiving the application, the district engineer⁵⁰ must review it and prepare an Environmental Assessment (EA) of the proposed activity⁵¹ in compliance with the National Environmental Policy Act of 1969 (NEPA).⁵² The EA discusses whether the proposed activity

1) extend the Wetlands Loan Act and forgive repayment of the advances made to the Migratory Bird Conservation ("Duck Stamp") Fund; 2) raise additional revenues for deposit in the Duck Stamp Fund; 3) allow the Land and Water Conservation Fund to be used specifically for purchasing wetlands; and 4) require study and inventory of the Nation's wetlands.

Id. at 1. *Emergency Wetlands Resources Act of 1986, Senate Report of the Committee on Environment and Public Works*, 99th Cong., 2d Sess. (1986) (statement of Sen. Chafee).

47. 33 C.F.R. § 325.1(c) (1987).

48. *See generally Id.* at § 325.1 (1987).

49. *Id.* at §§ 325.1-325.10 (1987).

50. *Id.* at § 325.2 (1987). The Corps is composed of four levels of authority: district engineers, division engineers, the chief of engineers, and the Secretary of the Army. *Id.* at § 325.8 (1987). The Secretary does not play a role in permit decisions. Rather, the chief of engineers has the authority to represent the action of the Secretary. *Id.* § 1344(d) (1982). Each level of authority, beginning with the district engineer, may refer the application to higher authority, either when doubt exists as to the applicable laws and regulations, or when requested by a higher authority. *Id.* at § 325.8 (1987).

The Corps itself is "highly decentralized." Throughout the United States, there are thirty-six district engineers and eleven division engineers. The applicant may not appeal a permit decision made by the district or division engineer. *See id.* at § 320.1(a)(2) (1987).

51. *See* 40 C.F.R. § 1508.9 (1987) (definition of EA). An EA is a concise public document that briefly analyzes evidence to determine whether an Environmental Impact Statement (EIS) or Finding of No Significant Impact (FONSI) is necessary. *See generally* 40 C.F.R. §§ 1501.3, 1508.9 (1986).

52. 42 U.S.C. §§ 4321-4347 (1982). Congress created NEPA to establish "a national policy [to] encourage productive and enjoyable harmony between man and his environment." *Id.* at § 4321 (1986). *See also* *Sierra Club v. Sigler*, 695 F.2d 957 (5th Cir. 1983) (judicial review under NEPA is to ensure procedural integrity); *Lake Erie v.*

could affect the environment.⁵³ If the proposed project could significantly affect the environment,⁵⁴ NEPA requires the Corps to prepare a more detailed Environmental Impact Statement (EIS).⁵⁵

The Corps uses its discretion to decide whether an impact is "significant."⁵⁶ NEPA requires the Corps to consider both the context and intensity of the proposed activity's impact,⁵⁷ and lists guidelines speci-

United States Army Corps of Eng'rs, 526 F. Supp. 1063 (W.D. Penn. 1981) (under NEPA, courts must ensure that agency considered environmental consequences).

NEPA imposes two duties upon federal agencies: preparing an EIS, 42 U.S.C. § 4332(2)(C) (1982), and adhering to Council on Environmental Quality (CEQ) regulations, 42 U.S.C. § 4332(2)(B) (1982). The CEQ regulations, 40 C.F.R. §§ 1500-1508 (1987), require the agency to consider environmental, economic, and technical concerns. *Sigler*, 695 F.2d at 967. *Sierra Club v. United States Army Corps of Eng'rs*, 772 F.2d 1043 (2d Cir. 1985) (purpose of NEPA is to force federal agencies to consider environmental concerns early in the decision making process to prevent unnecessary environmental damage).

53. 40 C.F.R. § 1508.9 (1987).

54. 33 C.F.R. § 230, App. B(8)(a) (1987).

55. 42 U.S.C. § 4332(2)(C) (1982). An EIS discusses the significant environmental impacts of the proposed activity and "inform[s] decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1 (1987). *See Sierra Club v. Peterson*, 717 F.2d 1409 (D.C. Cir. 1983) (EIS required if agency decision will result in "irreversible and ir retrievable commitments of resources" that will affect the environment).

56. 40 C.F.R. § 1508.27 (1987) (definition of "significantly"). *See Louisiana Wildlife Federation v. York* 603 F. Supp. 518 (W.D. La. 1984), *aff'd in part and vacated in part*, 761 F.2d 1044 (5th Cir. 1985) ("significant" or "non-significant" determined by standard of reasonableness). *See generally River Road Alliance v. United States Corps of Eng'rs*, 764 F.2d 445, 450 (7th Cir. 1985), *cert. denied*, 106 S. Ct. 1283 (1986) (interpreting the term "significant").

57. 40 C.F.R. § 1508.27 (1987). Section 1508.27 lists several contexts to consider including society as a whole, the affected region, and the affected interests. The intensity of the impact of a dredge and fill activity refers to the severity of the impact whether beneficial or adverse. *Id. See River Road Alliance*, 764 F.2d 445 (aesthetic objections alone rarely compel need for EIS); *Lake Erie v. United States Army Corps of Eng'rs*, 526 F. Supp. 1063 (W.D. Penn. 1981) (detailed statement must reflect good faith effort to consider environmental factors). *Cf. Louisiana Wildlife Federation*, 761 F.2d 1044 (EIS insufficient when based upon false assumption that forested land would be cleared regardless of proposed activity).

See also National Wildlife Fed'n v. Marsh, 568 F. Supp. 985 (D.D.C. 1983) (EIS must contain cost-benefit analysis and analysis of alternatives). The *Marsh* court explained that the EIS itself, not just the administrative record, must discuss alternatives because only the EIS is rigorously circulated to provide the public with notice. *Id.* at 997. *See* 42 U.S.C. § 4332(2)(C) (1982).

Notably, less than 1% of all projects that received permits required an EIS. OTA REPORT, *supra* note 1, at 11. If the Corps receives additional, significant information

fyng the impact's scope.⁵⁸ For instance, the Corps must consider how the project may affect the public health or safety and scientific, cultural, or historical resources. If the Corps decides not to prepare an EIS, it must provide a "finding of no significant impact."⁵⁹ The Corps will draft an EIS only if it decides that the benefits of a better researched and analyzed statement justify the time and expense involved.⁶⁰

Under NEPA's guidelines concerning the EIS,⁶¹ the Corps must explore and evaluate "all reasonable alternatives" for the proposed activity.⁶² The EPA will deny a dredge and fill permit if a "practicable alternative which would have less adverse impact on the aquatic ecosystem" exists.⁶³ For example, if the proposed activity is not

that would affect the environment, the Corps must prepare a supplemental EIS (SEIS). 33 C.F.R. § 230.11(b) (1986).

58. 40 C.F.R. §§ 1508.25, 1508.27 (1987). See *Strycker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223 (1980) (NEPA only requires that the applicant consider environmental consequences).

59. 40 C.F.R. §§ 1501.4(e), 1508.13 (1987). In *Sierra Club v. Peterson*, 717 F.2d 1409 (D.C. Cir. 1983), the court stated four factors it considered in determining "no significant impact": (1) whether the agency took a "hard look" at the problem; (2) whether the agency identified the relevant areas of environmental concern; (3) whether the agency made a convincing case that the impact was significant as to the problems studied and identified; and (4) whether the agency convincingly established that changes in the project sufficiently minimized any impact of true significance. *Id.* at 1413. See *Van Abbema v. Fornell*, 807 F.2d 633 (7th Cir. 1986) (FONSI is not the equivalent of complete social benefit); *Save Our Wetlands, Inc. v. Witherspoon*, 638 F. Supp. 1158 (E.D. La. 1986) (local impacts that would be immediately adverse but beneficial in the long term had "no significant impact").

60. The Corps receives more than 14,000 permit applications each year, but only filed 119 EISs in 1983. *River Road Alliance, Inc. v. Corp. of Eng'rs of United States Army*, 764 F.2d 445, 449 (7th Cir. 1985). The Seventh Circuit stated that the purpose of the EA was to determine whether the proposed activity could cause significant environmental consequences. Such a result justifies the time and expense of preparing the EIS. *Id.*

61. 40 C.F.R. pt. 1502 (1987).

62. Under NEPA, 42 U.S.C. § 4332(2)(E) (1982), the Corps must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." See also 40 C.F.R. § 1502.14(a) (1987).

63. 40 C.F.R. § 230.10(a) (1987). The Seventh Circuit adopted the EPA's more conservative viewpoint on alternative sites. The court stated that "[t]he fact that this applicant does not now own an alternative site is only marginally relevant (if it is relevant at all) to whether feasible alternatives exist to the applicant's proposal." *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986). See also *Newport Galleria Group v. Deland*, 618 F. Supp. 1179 (D.D.C. 1985) (EPA can still veto permit even if no alternatives exist for proposed project).

"water dependent," the EPA presumes that viable alternatives exist.⁶⁴ The Corps, however, is unlikely to consider alternative sites if they are economically impractical to the applicant.⁶⁵ Furthermore, the Corps is under no obligation to find alternative sites.⁶⁶

64. 40 C.F.R. § 230.10(a)(3) (1987). Section 230.10(a)(3) of the EPA Guidelines defines water dependent as requiring "access or proximity to or sitting within the special aquatic site in question to fulfill its basic purpose." *Id.* In *Friends of the Earth v. Hintz*, 800 F.2d 822, 832 (9th Cir. 1986), a proposed log storage that had to be adjacent to a shiploading facility for exporting purposes was water dependent. *Cf. Korteweg v. Corps of Eng'rs of U.S. Army*, 650 F. Supp. 603 (D. Conn. 1986) (residential units not water dependent simply because the proposed adjacent dock would make units more valuable). See *Louisiana Wildlife Fed'n v. York*, 761 F.2d 1044 (5th Cir. 1985) (soybean production, a non-water dependent activity, requires a more persuasive showing that no other alternatives exist).

Mr. Dawson, Acting Assistant Secretary of the Army for Civil Works, disclaimed the importance of the water dependency requirement. He testified:

During FY 1984, approximately 1,200 permits were issued for non-water-dependent activities. The term water dependency has not been clearly defined and for the most part, serves little purpose in the analysis of an application under section 404. It often confuses the issue rather than promotes an objective analysis.

Oversight Hearings on Section 404 of the Clean Water Act: Hearings on S. 278 Before the Subcomm. on Environmental Pollution of the Senate Comm. on Environment and Public Works, 99th Cong., 1st Sess. 67 (1985).

65. See *Hough v. Marsh*, 557 F. Supp. 74 (D. Mass. 1982) (cost of an alternative parcel of land is relevant to assessment of alternative's "practicability").

The EPA and the Corps sharply differ on the issue of how to define a "practical" alternative. On April 22, 1986, the Corps' district offices received a memorandum that "requires that alternatives be practicable to the applicant and that the purpose and need for the project must be the applicant's purpose and need." *Oversight Hearings, supra* note 45, at 3 (statement by Sen. Chafee). In the Oversight Hearings, the Subcommittee on Environment and Public Works heatedly debated the Corps' practice of deciding whether an alternative is practical from the applicant's perspective. Mr. Dawson, Assistant Secretary of the Army, testified that in addition to considering the applicant's statements, the Corps must determine if reasonable alternatives exist, as long as alternative sites are "reasonably acquirable" by the applicant. *Id.* at 24-25.

The EPA Guidelines would interpret "practical alternative" more broadly. Under 40 C.F.R. § 230.10(2) (1987):

An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

Id.

66. See *Friends of the Earth v. Hintz*, 800 F.2d 822 (9th Cir. 1986) (Corps not obligated to conduct additional studies of alternatives that the applicant may have overlooked after the Corps, EPA, and Washington Department of Game sufficiently questioned the applicant's finding of four impractical alternatives). See *Olmsted Citizens for a Better Community v. United States*, 793 F.2d 201 (8th Cir. 1986) (the range of alter-

After the Corps prepares either an EA or an EIS, it makes their findings public.⁶⁷ Under the section 404 program, the Corps must provide notice and an opportunity for a public hearing regarding the issuance of a particular permit.⁶⁸ The notice must contain sufficient information describing the nature and magnitude of the proposed project so that those notified can respond with meaningful comments.⁶⁹

In addition to complying with NEPA and the Clean Water Act's notice and public hearing requirements, section 404 obligates the Corps to consult with state and federal agencies.⁷⁰ If a state currently has water quality regulations governing discharges, section 404 prohibits the Corps from issuing a dredge and fill permit absent state certification.⁷¹ Additionally, the Corps must consult with federal agencies such as the United States Fish and Wildlife Service and the National Marine Fisheries Service prior to issuing a permit.⁷²

In the final step of the section 404 permit process, the Corps has three choices: deny the permit;⁷³ issue the permit according to the applicant's original plan for the proposed activity;⁷⁴ or issue the permit

natives that the Corps considers decreases as the environmental impact of the proposed activity becomes less substantial).

67. 33 C.F.R. § 325.2(a)(2) (1987). The district engineer issues a public notice within 15 days after receiving all of the necessary information from the applicant. *Id.*

68. 33 U.S.C. § 1344(a) (1986). *See Buttrey v. United States*, 690 F.2d 1170 (5th Cir. 1982) (applicant not entitled to trial type hearing); *Shoreline Assoc. v. Marsh*, 555 F. Supp. 169 (D. Md. 1983), *aff'd*, 725 F.2d 677 (1984) (limitless written communications and informal meetings between Corps and applicant was adequate alternative to adjudicatory hearing).

See 33 C.F.R. § 325.3(d)(1) (1987) (distribution of public notices).

69. 33 C.F.R. § 325.3(a) (1987).

70. 33 U.S.C. § 1344 (1982).

71. 33 C.F.R. § 320.3(a) (1987). Section 401 of the Clean Water Act requires a permit applicant to obtain state certification if the proposed activity may result in a discharge of a pollutant into the waters of the United States. 33 U.S.C. § 1341 (1986).

72. As stated under the Fish and Wildlife Coordination Act of 1945, 16 U.S.C. §§ 742a-754a (1982), the Corps must first consult with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the appropriate state agencies prior to modifying any body of water. 33 C.F.R. § 320.3(e) (1987). The Corps must also consult with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service pursuant to the Endangered Species Act, 16 U.S.C. §§ 1531-1543 (1982), 33 C.F.R. § 320.3(i) (1987).

See Sierra Club v. United States Army Corps of Eng'rs, 772 F.2d 1043 (2d Cir. 1985) (Corps does not have to agree with agencies' conclusions; Corps must only consider their views).

73. 33 C.F.R. §§ 320.4(a)(1), 325.8 (1987).

74. 33 C.F.R. § 325.4(a) (1987).

with special conditions attached which the applicant must follow.⁷⁵ These mitigation conditions⁷⁶ range from decreasing the amount of wetland area that the applicant can dredge and fill to mandating that the applicant compensate for the impact of the proposed activity by creating new wetlands elsewhere.⁷⁷ These conditions attempt to mitigate the adverse effect on wetlands by preserving the quality or quantity of existing wetlands.⁷⁸ The Corps must decide which of the three mitigation conditions is most beneficial in a final decisionmaking process called the "public interest review."

75. *Id.* The Office of Technology Assessment provided the following statistics: "Of approximately 11,000 project applications per year, slightly less than 3 percent are denied; about one-third are significantly modified; and about 14 percent are withdrawn by applicants. About half are approved without significant modifications." OTA REPORT, *supra* note 1, at 11.

76. The Council on Environmental Quality defines mitigation as:

- a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- e) Compensating for the impact by replacing or providing substitute resources or environments.

40 C.F.R. § 1508.20 (1987).

77. *Id.* See, e.g., *Friends of the Earth v. Hintz*, 800 F.2d 822 (9th Cir. 1986) (conversion of 17 acres of pasture back into wetlands); *National Wildlife Fed'n v. Marsh*, 721 F.2d 767 (11th Cir. 1983) (creating 194 acres of green tree reservoirs and intense wildlife management program).

78. See *supra* note 76 (defining "mitigation"). In creating a new wetland, open-water or upland ecosystems are usually filled. Next, the new wetland needs the "proper substrate level and type, assuring chemical compatibility, and providing erosion control during [the] establishment of vegetation." OTA REPORT, *supra* note 1, at 130. Although the process is complex and risky, new wetlands can be created with success. *Id.*

Another option for offsite mitigation of wetland loss is to restore an existing, but degraded wetland. This can be achieved by "changing surrounding water inflow or drainage, eliminating erosion and siltation, and reducing pollution from adjacent areas." *Id.*

The EPA and the Corps both generally favor mitigation. They differ, however, on the timing of introducing mitigation as a method to procure a permit. In the 1986 Oversight Hearings on the CWA, the EPA and the Corps clarified their positions. The EPA believes that mitigation should be used only as a last resort when there would be an unavoidable loss of wetlands. *Oversight Hearings, supra* note 45, at 29 (1986) (Statement of Mrs. Wilson, Assistant Administrator for External Affairs of the EPA). The Corps responded that "in the real world of processing these 12,000-plus applications a year, what as a practical matter happens is mitigation becomes a possible factor almost

IV. PUBLIC INTEREST REVIEW

After accumulating data and comments regarding a particular wetland from the applicant, federal agencies, and environmental groups, the Corps' final step under the section 404 program is to conduct a public interest review.⁷⁹ The purpose of this review is to determine the probable impact that the proposed project will have on the public.⁸⁰ This task is by no means an easy one. The Corps must consider twenty-one broad environmental areas as well as their cumulative impact.⁸¹ These areas are:

conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood

from the beginning." *Id.* at 30. (Statement of Mr. Dawson, Assistant Secretary of the Army for Civil Works).

Mitigation, however, is still a relatively new method of maintaining the status quo of wetlands. Critics argue that this method is ineffective. See Kusler & Groman, *Mitigation: An Introduction*, 8 NAT'L WETLANDS NEWSL. 3 (Sept.-Oct. 1986) (many mitigation projects are failing to achieve their goals). See Golet, *Critical Issues in Wetland Mitigation: A Scientific Perspective*, 8 NAT'L WETLANDS NEWSL. 6 (Sept.-Oct. 1986) [hereinafter cited as *Wetland Mitigation*] (wetlands often take thousands of years to develop and cannot be moved from areas that are naturally conducive to wetland formation as if they were "chessmen"). The author explains how mitigation has led to abuse in the permit process, because land developers are "sidestepping the question of avoidability of losses altogether" by presenting mitigation proposals in their initial permit applications. *Id.* at 4. This causes the Corps to become more willing to issue the permit since it believes the applicant will be cooperative in mitigation projects. *Id.* Yet, this causes the Corps to take on a pro-destruction attitude. See also V. Newman, *Reinventing the Swamp*, 8 NAT'L WETLANDS NEWSL. 15 (Sept.-Oct. 1986) (wetlands should be protected against "any" damage). Furthermore, mitigation measures are often difficult to monitor because of unclear objectives stated in the permit condition. See Quammen, *Measuring the Success of Wetlands Mitigation*, 8 NAT'L WETLANDS NEWSL. 6 (Sept.-Oct. 1986).

79. 33 C.F.R. § 320.4(a) (1987).

The Corps must follow these general criteria in evaluating every permit application:

- (i) The relative extent of the public and private need for the proposed structure or work;
- (ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and
- (iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work may have on the public and private uses to which the area is suited.

Id.

80. *Id.*

81. 33 C.F.R. § 320.4(a)(1) (1986). Cf. *National Wildlife Fed'n v. Marsh*, 568 F. Supp. 985 (D.D.C. 1983) (cost-benefit analysis of NEPA primarily concerned with environmental costs affecting the public, not private economic costs).

hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and, in general, the needs and welfare of the people.⁸²

The Corps must balance⁸³ these areas⁸⁴ and weigh the benefits likely to result from the proposed activity against the reasonably foreseeable disadvantages.⁸⁵

A. *Standard of Review*

While balancing these environmental concerns, the Corps must consider the purpose of the Clean Water Act: "Unnecessary alteration or destruction of [wetlands] should be discouraged as contrary to the public interest."⁸⁶ To overcome this presumption in favor of wetland preservation, an applicant has the initial burden of proof.⁸⁷ The burden then shifts to the Corps, which must consider the public and private needs for the project, the existence of feasible alternative sites, and the permanence of the project's beneficial or detrimental effect.⁸⁸ Aside

82. 33 C.F.R. § 320.4(a)(1) (1987).

83. *Id.*

84. *Id.* Even though there are many specific criteria to consider in the public interest review, it is difficult for the Corps to assess future impacts of the proposed project, especially the long term effects. OTA REPORT, *supra* note 1, at 126.

85. *Id.* Bayou Des Familles Dev. v. United States Corps of Eng'rs, 541 F. Supp. 1025 (E.D. La. 1982) (appropriate to deny permit that would destroy 200 acres of wetlands, result in both the loss of wildlife habitat and the loss of water purification and filtration benefits, and have significant adverse impact on fish).

86. 33 C.F.R. § 320.4(b)(1) (1987).

87. See *Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985) (applicant had burden to show that proposed discharge would not destroy endangered species or adversely modify their critical habitat); *National Wildlife Fed'n v. Marsh*, 721 F.2d 767 (11th Cir. 1983) (most show substantial issue whether permit is required); *Buttrey v. United States*, 690 F.2d 1170, 1180 (5th Cir. 1982). The *Buttrey* court stated that an applicant for a filling permit must show: (1) that the benefits of the alteration outweigh the damages; (2) that the proposed activity is water dependent; and (3) that the proposed activity "cannot be located on any 'feasible alternative sites.'" *Id.* (citing 33 C.F.R. § 320.4(b)(4) (1987)).

88. 33 C.F.R. § 320.4(a)(2) (1987). Under NEPA, the Corps must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(e) (1982). In *Olmsted Citizens for a Better Community v. United States*, 793 F.2d 201 (8th Cir. 1986), the court stressed that the Corps could satisfy § 4332(2)(e) if it actively sought out and developed alternatives. *Id.* at 208. The *Olmsted* court relied on an earlier case, *Environmental Defense Fund, Inc. v. United States Corps of Eng'rs*, 492 F.2d 1123 (5th Cir. 1974), that suggested that an agency consider

from these general criteria, courts give the Corps a great deal of additional discretion when issuing permits.⁸⁹

The Clean Water Act and NEPA both lack a standard of review.⁹⁰ Thus, the Administrative Procedure Act (APA) establishes the standard of review for the Corps' permit decisions.⁹¹ Pursuant to section 706(2) of the APA, a court shall set aside agency findings, conclusions, and actions that are "arbitrary, capricious, [or] an abuse of discretion."⁹² In *Citizens to Preserve Overton Park, Inc. v. Volpe*⁹³ the

the possibility of shelving a project or attaining the same end through completely different means. *Id.* at 1135. *Sierra Club v. Alexander*, 484 F. Supp. 455 (N.D.N.Y.), *aff'd*, 633 F.2d 206 (2d Cir. 1980) (affirmative obligation under NEPA to consider alternatives to a shopping mall proposal).

89. *See Van Abbema v. Fornell*, 807 F.2d 633 (7th Cir. 1986) (court's role is not to second guess the Corps' public interest review); *National Wildlife Fed'n v. Marsh*, 721 F.2d 767 (11th Cir. 1983) (courts give agency officials appropriate deference when assessing whether decision is rational); *Creppel v. United States Army Corps of Eng'rs*, 670 F.2d 564 (5th Cir. 1982) (courts have no authority to review subjective decision if there is "some evidence" to support it); *Quinones Lopez v. Coco Lagoon Dev. Corp.*, 562 F. Supp. 188 (D.P.R. 1983) (Corps not at fault when there are no procedures to follow under the circumstances); *Lake Erie v. United States Army Corps of Eng'rs*, 526 F. Supp. 1063 (W.D. Penn. 1981), *aff'd*, 707 F.2d 1392 (3d Cir.), *cert. denied*, 464 U.S. 915 (1983) (Corps not required to follow advice of state or federal agencies or adopt their positions); Blumm, *Wetlands Protection*, *supra* note 12, at 480-84 (public interest review is highly subjective, the factors to consider too vague and there is a lack of a systematic method to apply these factors).

Criticism of the Clean Water Act focused on Congress' failure to specify precisely the degree to which wetlands should be protected. Testimony at a subcommittee hearing stressed that Congressional intent to protect the wetlands must expressly state that wetlands should receive primary importance. *Section 404 of the Clean Water Act: Hearings Before the Subcomm. on Environmental Pollution, of the Comm. on Environment and Public Works*, 97th Cong., 2d Sess. 403 (1982) (statement of Mr. Arnett, Asst. Secretary, Dept. of the Interior).

90. *Sierra Club v. United States Army Corps of Eng'rs*, 772 F.2d 1043, 1050 (2d Cir. 1985).

91. Administrative Procedure Act, Pub. L. 89-554, 80 Stat. 393 (1966) (codified as amended at 5 U.S.C. § 706 (1982)).

92. 5 U.S.C. § 706(2)(A) (1977). *See River Road Alliance v. United States Corps of Eng'rs*, 764 F.2d 445 (7th Cir. 1985), *cert. denied*, 475 U.S. 1055 (1986) (agency's decision not to prepare EIS set aside only if abuse of discretion). *Sierra Club v. United States Army Corps of Eng'rs*, 701 F.2d 1011 (2d Cir. 1983) (decision made in reliance on false information and lacking good faith effort to obtain accurate information is arbitrary and capricious). *National Wildlife Fed'n v. Marsh*, 721 F.2d 767 (11th Cir. 1983) (parties challenging proposed construction must prove action is arbitrary and capricious).

93. 401 U.S. 402 (1971). In *Overton Park* the Secretary of Transportation authorized the construction of a six-lane interstate highway through a public park. *Id.* at 406. The issue before the Court was whether the Department of Transportation Act of 1966

Supreme Court explained that in reviewing an agency's decision, the Court must evaluate whether the agency considered all relevant factors,⁹⁴ rather than whether the agency made a clear error of judgment.⁹⁵ The Court stated that although a court's factual discovery should be "searching and careful, the ultimate standard of review is a narrow one."⁹⁶ This arbitrary and capricious standard precludes a court from setting aside the Corps' decision unless it lacks a rational basis.⁹⁷

Although under the "rational basis" test it appears difficult to successfully challenge the Corps' permit decision, courts impose stringent procedural standards on the Corps when examining permit adjudication.⁹⁸ As mandated under the APA, judicial review of the Corps' action is limited to the Corps' administrative record.⁹⁹

In *Sierra Club v. United States Army Corps of Engineers*¹⁰⁰ the Corps issued a permit for a landfill in the Hudson River.¹⁰¹ After the Corps gave notice of the landfill project, the EPA, USFWS, and National Marine Fisheries Service (NMFS) returned comments objecting to the permit.¹⁰² In response to this criticism, the district engineer, without further inquiry, forwarded his decision to the division engineer

and the Federal-Aid Highway Act of 1968, which preclude such construction if feasible alternatives exist, prohibited the Secretary from authorizing the highway construction. *Id.* at 404-405. The Secretary approved the construction without providing documented findings. *Id.* at 408.

94. *Id.* at 416.

95. *Id.*

96. *Id.* The Court remanded the case for a thorough review of the Secretary's administrative record. *Id.* at 420.

97. *Wisconsin v. Weinberger*, 745 F.2d 412 (7th Cir. 1984) (irresponsible action is an indication of arbitrary and capricious decision).

98. See *supra* notes 50-60 and accompanying text for relevant discussion of the Corps' administrative requirements under the § 404 permit program.

99. *Lake Erie v. United States Army Corps of Eng'rs*, 526 F. Supp. 1063 (W.D. Penn. 1981), *aff'd*, 707 F.2d 1392 (3d Cir.), *cert. denied*, 464 U.S. 915 (1983) (scope of review limited to administrative record unless Corps inadequately considered relevant issues).

100. 701 F.2d 1011 (2d Cir. 1983).

101. *Id.* at 1024. New York City, New York State, and the Federal Highway Administration proposed a plan to replace a deteriorating highway with a newer highway called the "Westway." *Id.* at 1017.

102. *Id.* at 1021-22. These agencies were concerned the proposed landfill would adversely affect marine habitat. *Id.* at 1022. The EPA stated that it was unable to issue a permit based on the Corps' data. *Id.*

for review.¹⁰³ Even after the division engineer received a supplemental report describing the large fish population that the landfill would destroy,¹⁰⁴ both the division engineer and Chief of Engineers approved the permit.¹⁰⁵ The *Sierra Club* court concluded that the Corps failed both to give "great weight" to the views of the federal agencies¹⁰⁶ and to make a permit decision based on reliable information.¹⁰⁷ Therefore, the court held that the Corps acted arbitrarily and capriciously.¹⁰⁸

In addition to considering other agencies' comments regarding the issuance of a permit, the Corps must verify the information provided by the applicant.¹⁰⁹ In *Friends of the Earth v. Hintz*¹¹⁰ the Corps sent out public notice of an application to fill a wetland for a log export yard.¹¹¹ The Corps issued an EA based primarily upon the informa-

103. *Id.*

104. *Id.* at 1023. This information came from the "Lawler progress report," a study conducted by an engineering firm on the biological status of waters that would be affected by the landfill. *Id.* at 1022-23. Unlike earlier calculations by the Corps of the existence of the aquatic activity in the affected water, *id.* at 1022, the Lawler report showed that significant numbers of fish used the water for their habitat. *Id.* at 1023. In fact, the Hudson River provides 18-32% of all striped bass to the Atlantic Coast. *Id.* at 1024.

105. *Id.* at 1023-24. The court focused on the Corps' "total failure" to comply with the full disclosure provisions of NEPA, regarding the dangerous impacts on the fish set out in the Lawler report, *id.* at 1025, and its failure to comply with the Clean Water Act provision requiring the Corps to give "critical thought" to the adverse impact on the fish. *Id.* at 1032.

106. *Id.* at 1032. The Corps ignored comments by the Fisheries Service and Wildlife Service in violation of 33 C.F.R. § 320.4(c) (1987).

107. 701 F.2d at 1033. The *Sierra Club* court stated that the district engineer knowingly approved the permit before the engineers working on the Lawler report rendered their findings to the Corps. *Id.* at 1032.

108. *Id.* at 1033. The court concluded that by relying on a final EIS that claimed that the interperier area was "biologically impoverished," the Corps violated the Clean Water Act. *Id.* at 1033. The court explained that the Corps' decision was motivated by a "predetermination to grant the Westway landfill permit." *Id.*

109. See 33 C.F.R. pt. 230, App. B(8)(b) (1987) (Corps also responsible for the scope and content of the EA); 40 C.F.R. § 1506.5(b) (1987) (NEPA also requires Corps to make its "own evaluation of the environmental issues and take responsibility for the scope and content of the EA"); *National Wildlife Fed'n v. Hanson*, 623 F. Supp. 1539 (E.D.N.C. 1985) (Corps must base decision of difficult question on scientific analysis).

110. 800 F.2d 822 (9th Cir. 1986).

111. *Id.* at 827. ITT Rayonier, Inc. purchased a 17 acre tract area of a wetland. *Id.* at 825. Rayonier filled the wetland with a toxic material until the Corps learned of this activity and issued a "cease and desist order." *Id.* The EPA, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service stated that they would not oppose the filling if Rayonier implemented a mitigation plan. *Id.* at 827. Rayonier's mitigation plan consisted of purchasing 17 acres of pasture land at a different site and converting

tion supplied by the applicant.¹¹² The Court of Appeals for the Ninth Circuit held that the Corps may issue a permit based solely upon information provided by the applicant, as long as it independently verifies the information.¹¹³

Similarly, in *Buttrey v. United States*,¹¹⁴ the Corps' findings of fact explaining the costs and benefits of a proposed dredging was sufficient to preclude the court from deciding that the Corps acted arbitrarily and capriciously.¹¹⁵ However, when the Corps in the continuing case of *Sierra Club v. United States Army Corps of Engineers*¹¹⁶ failed to support a change in position in the EIS reports, the court denied the permit.¹¹⁷ In a May 1984 EIS, the Corps concluded that the proposed landfill would cause a "significant adverse impact" to the striped bass

that land into wetland. *Id.* at 825. Friends of the Earth, however, sent the Corps letters opposing the proposed activity on three grounds: (1) the permit activity was not water dependent; (2) practicable alternatives existed; and (3) issuance of the permit would adversely affect the water quality. *Id.* at 827.

112. *Id.* at 835. The court viewed the Corps' reliance on Rayonier's data as acceptable. The court, quoting language from *River Road Alliance, Inc. v. United States Army Corps of Eng'rs*, 764 F.2d 445, 453 (7th Cir. 1985), *cert. denied*, 475 U.S. 1055 (1986), stated that "[t]he Corps is not a business consulting firm . . . it is in no position to conduct a feasibility study of alternative sites." 800 F.2d at 835. Noting that the Corps receives over 14,000 permit applications each year, the *Friends* court implied that the Corps does not have enough time to verify all the applicants' information before reaching decisions. *Id.* at 835-36. The verification the court required in this case was minimal. *See infra* note 113.

Under NEPA, the Corps may also "adopt a report furnished by the applicant in whole or in part." *Lake Erie v. United States Army Corps of Eng'rs*, 526 F. Supp. 1063, 1073 (W.D. Penn. 1981). The Corps is responsible for the scope and content of the EA and for evaluating the environmental issues. *Id.*

113. *Id.* at 835. The court stated that the Corps must verify the information supplied by an applicant, as required under 33 C.F.R. pt. 230, App. B(8)(b). The standard for the verification applied by the court was low. The court required the Corps to avoid "blindly accepting" the information. *Id.* at 836. *See Van Abbema v. Fornell*, 807 F.2d 633 (7th Cir. 1986) (Corps must make independent effort to verify or discredit challenged material); *Save Our Wetlands, Inc. v. Sands*, 711 F.2d 634 (5th Cir. 1983) (if Corps independently verifies information, acceptable work by non-agency parties does not have to be redone).

114. 690 F.2d 1170 (5th Cir. 1982), *cert. denied*, 461 U.S. 927 (1983). In *Buttrey*, a land developer sought a dredge and fill permit to channel a bayou. *Id.* at 1172. Federal agencies criticized this project claiming that it would destroy natural drainage, damage a beautiful wetland area, and increase potential flooding. *Id.* at 1173.

115. *Id.* at 1185. The court looked to the Corps' administrative record in which the Corps individually acknowledged the facts and comments given by the federal agencies before denying the permit. *Id.*

116. 772 F.2d 1043 (2d Cir. 1985).

117. *Id.* at 1055.

in the Hudson River.¹¹⁸ In November 1984, after revising its analysis based upon comments received on the earlier EIS, the Corps determined that the landfill would have only "minor impacts" on the fish.¹¹⁹ As a result of the Corps' failure to explain its drastic reversal, the court held that the Corps acted arbitrarily and capriciously.¹²⁰

In general, a court will intervene if the Corps exceeded its decision making authority under the Clean Water Act, NEPA, or the EPA Guidelines.¹²¹

B. *Balancing Factors*

The more important aspect of the public interest review is not the ultimate standard of review used by the courts, but the manner in which the Corps balances competing interests in this final decision process.¹²² Some of the first variables the Corps encounters are the other federal agencies' view regarding approval of a proposed project.¹²³ The Corps must seriously consider the positive and negative comments it receives from the other agencies.¹²⁴ Since the Corps is not composed of environmental experts, the views of environmental agencies provide the Corps with valuable guidance.¹²⁵ The Corps is bound only by the

118. *Id.* at 1047. This information was contained in a draft report that followed from a "worst-case" analysis over the span of four months during the winter. *Id.*

119. *Id.* at 1048. The Corps rationalized this decision by explaining that "the long-term decline in stock would be difficult to discern from normal yearly fluctuations . . . [e]ven in a worst case scenario." *Id.*

120. *Id.* at 1055. The court warned that the Corps was foolish to issue a permit for a proposed project based on speculation whether a major fishery resource would suffer a great loss. *Id.* The court required the Corps to explain its drastic change in findings. *Id.* at 1053.

121. *See River Road Alliance v. Corps of Eng'rs of U.S. Army*, 764 F.2d 445, 450 (7th Cir. 1985) (by correctly deciding that impact was not significant, Corps did not exceed bounds of authority).

122. 33 C.F.R. § 320.4(a)(1) (1986). The Corps must perform a balancing test and weigh the "benefits which reasonably may be expected to accrue from the proposal" against the "reasonably foreseeable detriments." *Id.* *See Sierra Club v. United States Army Corps of Eng'rs*, 772 F.2d 1043 (2d Cir. 1985) (unlike the Clean Water Act, which includes an "environment impact threshold," *Id.* at 1051, under NEPA, environmental concerns receive no more weight than economic or social concerns. *Id.* at 1050); *Sierra Club v. Sigler*, 695 F.2d 957 (5th Cir. 1983) (EIS and other NEPA requirements are only a few of the factors in the decision making process; analysis underlying EIS is more important).

123. 33 C.F.R. § 325.3 (1987).

124. *See CWA REAUTHORIZATION*, *supra* note 2, at 15 (tighter restrictions necessary to force Corps to take advice of EPA and other agencies seriously).

125. Commentators differ as to whether the Corps should have full control over the

EPA's views under the section 404 program.¹²⁶

After the Corps considers the agencies' opinions, it must next assess the various public interest factors set forth by the Clean Water Act.¹²⁷ The Corps individually analyzes these environmental and nonenvironmental issues.¹²⁸ If an area of concern is relevant to the project at hand, the Corps must evaluate its beneficial or adverse effect on the public interest.¹²⁹

In a recent Seventh Circuit case, *Van Abbema v. Fornell*,¹³⁰ the Corps decided whether to grant a permit for construction of a coal-loading facility.¹³¹ The court's review involved a balancing between economic benefits and environmental costs. The court remanded the case to verify inadequate and misleading economic data.¹³² Nevertheless, the court implied that had the economic data been sufficient, the Corps could have issued a permit as long as the economic benefits slightly outweighed adverse environmental consequences.¹³³

§ 404 program. See *Clean Water Act Amendments of 1982*, *supra* note 13, at 389 (shift authority away from EPA and give ultimate power and authority to the Corps); Blumm, *Wetlands Preservation*, *supra* note 12, at 473 (Corps is an ambivalent program administrator).

126. 33 C.F.R. § 320.4(a)(1) (1987). The EPA can veto a permit decision that does not comply with the EPA § 404(b)(1) Guidelines. *Id.* See *supra* notes 25-26 and accompanying text. The § 404(b)(1) Guidelines are set forth in 40 C.F.R. pt. 230 (1987). The Guidelines prohibit landfills that will result in "significant loss of or damage to fisheries." 40 C.F.R. § 231.2(e). See *Newport Galleria Group v. Deland*, 618 F. Supp. 1179 (D.D.C. 1985) (EPA veto power upon finding of "unacceptable adverse effect" is broad).

127. See *supra* text accompanying note 82 for a list of these public interest review factors.

128. *Buttrey v. United States*, 690 F.2d 1170 (5th Cir. 1982) (in public interest review, the public benefit through construction jobs created by project not the intended economic benefit for Corps consider).

129. 33 C.F.R. § 320.4(a)(1) (1987) states: "All factors which may be relevant to the proposal must be considered including the cumulative effects thereof."

130. 807 F.2d 633 (7th Cir. 1986).

131. *Id.* at 635. The proposed site of the coal-loading facility required the building of a truck route through 900 acres of nature reserves. *Id.* These preserves are wildlife sanctuaries and a "major wintering area for bald eagles." *Id.*

132. *Id.* at 639. Originally, the district engineer decided not to issue the permit because it was not in the public interest. The division engineer made the decision because the Governor of Illinois favored the project. *Id.* at 635. The division engineer approved the permit with various preconditions. *Id.* See *supra* note 78 for a discussion of mitigation.

133. *Id.* at 639. The division engineer purposely used wrong transportation cost statistics to make the project appear more favorable. *Id.* at 642. The court also found that the Corps had not taken a "hard look" at the alternatives. The applicant presented

The *Van Abbema* court did not suggest that economic concerns, if substantial, could immunize a project from environmental considerations.¹³⁴ To the contrary, in *Van Abbema* the Corps attached twenty-three special conditions to the permit to mitigate adverse environmental impacts.¹³⁵ This step is consistent with *Sierra Club v. United States Corps of Engineers*,¹³⁶ decided one year earlier, stating the courts must reverse permit decisions that would have a significant adverse impact upon the environment.¹³⁷ The *Sierra Club* standard states the threshold for denying a permit under the public interest review.¹³⁸ As mentioned, determining whether an impact is "significant" involves considerable discretion.¹³⁹

V. ANALYSIS

The purpose of public interest review under the Clean Water Act is to protect wetlands from unnecessary destruction by requiring that the benefits of a project outweigh the detriment of wetlands loss.¹⁴⁰ Yet, developers are destroying the wetlands at a threatening rate.¹⁴¹ The structure of the section 404 program would seem to deny the existence of this quandary. The Corps, after all, has procedures and guidelines

six alternative sites and concluded in reports that none were feasible. The Corps failed to independently verify this data, but instead relied blindly on the information. *Id.*

134. *Id.* at 639. *South La. Envtl. Council, Inc. v. Sand*, 629 F.2d 1005 (5th Cir. 1980) (marginal net benefits from the project sufficient under public interest review). *Cf. Sierra Club v. Sigler*, 695 F.2d 957 (5th Cir. 1983) (Corps' decision reversed because it omitted important and significant environmental costs from EIS and decision making process).

135. 807 F.2d at 636. If the Corps issues a permit based upon the premise that the landowner must satisfy mitigating conditions, the applicant must fulfill these mitigating measures or risk nullification of the permit. *See Note, Wetlands Protection Under the Corps of Engineers' New Dredge and Fill Jurisdiction*, 28 HASTINGS L.J. 223, 241 (1976); *National Wildlife Fed'n v. Marsh*, 721 F.2d 767 (11th Cir. 1983) (mitigation plan itself required to follow § 404 program); *Sierra Club v. United States Army Corps of Eng'rs*, 701 F.2d 1011 (2d Cir. 1983) (mitigation measures either minimize loss of fish or compensate for its loss). *See generally* 33 C.F.R. § 320.4(c) (1987); 40 C.F.R. § 1508.20(e) (1987).

136. 772 F.2d 1043 (2d Cir. 1985).

137. *Id.* at 1051.

138. *Id.*

139. *See supra* note 89 and accompanying text for discussion of Corps' discretion.

140. *See supra* notes 81-85 and accompanying text for a discussion of the balancing process of the public interest review.

141. *See supra* note 1 and accompanying text for a discussion of the number of wetland acres lost both currently and historically.

to follow under the section 404 permit program.¹⁴² In addition, Congress supplemented the Corps' authority with the checks and balances of other agencies such as the EPA, USFWS, and NMFS.¹⁴³ The problem with public interest review is that it gives the Corps too much authority.

First, the balancing process is excessively discretionary. The public interest review provides over twenty areas of environmental concerns for the Corps to consider, but fails to require any degree of detail.¹⁴⁴ The task of balancing economic, aesthetic, and recreation costs, for example, could result in a skewed decision depending on the external influences on the Corps' decision.¹⁴⁵

At the opposite end of the spectrum, it is difficult to quantify the maximum acreage of wetlands or the number of fish possibly affected by a dredge and fill permit. Each wetland is too unique in its chemistry and waterfowl to meet such rigid standards. Although a subjective approach in public interest review is more practical than an objective approach, it is limited by problems of quantification.

A solution to this dilemma is to require the Corps to make two separate conclusions in its public interest review before making a permit decision. The first finding would deal solely with the economic costs and benefits of the proposed activity. The Corps would then make a separate conclusion explaining the environmental effects of the project. After separating these two distinct categories of concern, the Corps would weigh heavily the environmental considerations before making a final permit decision as intended under public interest review.¹⁴⁶ Or, in the alternative, the Corps would be required to delineate which economic concerns it favored.¹⁴⁷

Congress attempted to emphasize environmental rather than economic concerns by allowing the EPA to veto a permit decision by the

142. See *supra* text accompanying notes 51-85 for a detailed discussion of NEPA and the § 404 permit program.

143. See *supra* note 72 and accompanying text.

144. See *supra* text accompanying notes 81-82 for a listing of the areas considered under the public interest review.

145. See *supra* note 132.

146. See *supra* note 6 for the EPA's pro-conservation attitude under the § 404 program. Cf. *supra* notes 130-135 for an example of the current practice of viewing economic concerns favorably if they "slightly outweigh" environmental concerns.

147. See *Buttrey v. United States*, 690 F.2d 1170 (5th Cir. 1982) (public jobs created from construction of proposed activity was not the kind of economic benefit that the public interest review should consider.)

Corps if the permit would cause a "significant adverse effect" to the environment.¹⁴⁸ The EPA's veto power over the Corps' decision is necessary to restrain the Corps, but if falls short of a solution. The EPA uses the veto only after the Corps conducts a public hearing.¹⁴⁹ Until that point, the Corps may give little weight to the EPA's comments.¹⁵⁰ While reviewing the feasibility of a project, the Corps could structure the administrative record more favorably toward issuing a permit, thereby making it difficult for the EPA to find "significant adverse effects." To preempt such manipulations, the EPA's advance designation policy would determine whether various wetlands are ineligible for dredge and fill activity before permit requests arise.¹⁵¹

A second loophole in the section 404 program is in locating alternative sites.¹⁵² Current case law suggests that as long as the applicant attempts to find alternative sites, the Corps need not, on its own, look beyond the applicant's suggested alternatives.¹⁵³ This situation creates the potential for abuse. As stressed earlier, an applicant who desires to save money and time in obtaining a permit is not motivated to find alternative sites that would be expensive and time consuming to restructure for development. The applicant is also aware that the Corps is unlikely to determine whether sites alternative to those presented by the applicant exist.¹⁵⁴ An applicant familiar with the section 404 program may cleverly present only the most favorable alternatives to the proposed project. As a result, the Corps will receive a narrow view of the alternatives to the proposed project.

A third problem with public interest review relates to the effect that potential mitigation measures have on the Corps' decision. The Corps is more likely to weigh the public interest criteria in favor of granting the permit if mitigation measures will reduce the permit's detrimental effects.¹⁵⁵ The mitigating factors range from measures that decrease

148. See *supra* notes 25-26 and accompanying text for a discussion of the EPA's veto power.

149. 33 U.S.C. § 1344(c) (1986).

150. See *supra* text accompanying notes 50-69 for the steps that the Corps follows under the § 404 permit program prior to the public hearings.

151. See *supra* note 45 for a discussion of the advance designation policy.

152. See *supra* notes 61-66 for a discussion of the EPA's and the Corps' differing attitudes toward locating alternative sites.

153. See *supra* note 66.

154. See *supra* notes 61-66 and accompanying text for a discussion of alternative sites.

155. See *supra* note 78 for both discussion and criticisms of mitigation.

the impact of a project to plans that create artificial wetlands elsewhere to account for the proposed project's destruction of existing wetlands. These measures, however, are often ineffective¹⁵⁶ and take place only after the Corps fails to consider environmentally feasible alternative sites.¹⁵⁷ More importantly, frequently the permit does not state the mitigation objectives clearly.¹⁵⁸

Public interest review can be understood only if one recognizes the problems presented in finding alternative sites and in allowing mitigation measures. As suggested by the EPA, these three problems should be reordered and analyzed one at a time. The Corps should consider implementing mitigation only after it independently determines that the loss of wetlands is unavoidable,¹⁵⁹ and that the permit will serve the public interest in the long term.

CONCLUSION

The section 404 permit program under the Clean Water Act is a step in the right direction. To ensure the existence of the remaining wetlands, the permit process must continue to give environmental goals top priority. The section 404 permit program must give less discretion to the Corps and more weight to the protection of the wetlands. It is time to eliminate the serious loopholes of the section 404 permit program. Preservation of the wetlands is an investment in our environmental future.

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156. *Id.*

157. Barrows, *Mitigation in the Army Corps of Engineers Regulatory Program*, 8 NAT'L WETLANDS NEWSL. 11 (Sept.-Oct. 1986) (mitigation "tips the public interest balance" to lead to a favorable permit decision under the public interest review in cases that otherwise would have been denied.)

158. *See supra* note 78 for a criticism of mitigation.

159. *See supra* note 78 for a discussion of the EPA's view on mitigation.

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