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Preserving Nebraska's Wetlands: Now and in the Future

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Preserving Nebraska's Wetlands: Now and in the Future

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I. INTRODUCTION

The spirit of Manifest Destiny still lives in our nation. Continuously expanding, we feel compelled to “improve” or develop every asset. Often, however, we lose more than we gain. A case in point is the continuing destruction of our national wetlands.

Wetlands provide many valuable benefits, both environmental and financial. Utilized as a food source and production area by fish, migratory birds, and other animal life, wetlands constitute a significant wildlife habitat. Wetlands also serve to filter pollution and control floodwaters. However, not enough people realize the

value of wetlands and there are many who would exploit them. As a result the nation's wetlands are rapidly vanishing.

The wetlands crisis is not a new problem. Real estate developers, farmers, and the government have been draining and filling swamps and marshes since before the turn of the century¹ and this activity has taken its toll. It is estimated that one-half of the prairie potholes in the north central states had been drained by 1950; California's original 3.5 million wetland acres had been reduced to 450,000 by 1954; and southeastern Wisconsin had lost 61 percent of its total wetland acres by 1968.² By the mid-1970's, an estimated 30 to 40 percent of the nation's wetlands had been destroyed.³ Until recently, this loss was not seen as a problem. Currently, however, there is a growing public awareness of the importance of wetlands and concern over their reduction.

In 1977, President Jimmy Carter issued a national directive, ordering all federal agencies "to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands"⁴ Many state legislatures also took action to protect wetlands in the mid-1970's.⁵ Recent studies, however, indicate that in many areas the destruction of wetlands has continued, at only a slightly slower pace. Nebraska appears to be one such area.

A survey of Nebraska's two major wetland areas in the mid-1960's indicated that of the original 277,431 wetland acres, 89,598 had been destroyed.⁶ Losses in some areas were as high as 65 per-

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1. In fact, "the filling of wetlands for reclamation purposes was a national policy in the nineteenth century. The Swamp Lands Acts of 1849, 1850, and 1860 granted 15 public domain states nearly 65 million acres for swamp reclamation purposes. See FISH AND WILDLIFE SERVICE, U.S. DEPT. OF THE INTERIOR, CIRCULAR NO. 39, WETLANDS OF THE UNITED STATES 5 (1956)." Blumm, *The Clean Water Act's Section 404 Permit Program Enters its Adolescence; An Institutional and Programmatic Perspective*, 8 ECOLOGY L. Q. 409 (1980).
 2. E. HOROWITZ, OUR NATION'S WETLANDS, AN INTERAGENCY TASK FORCE REPORT 50 (1978).
 3. *Id.* at 49. In the twenty year period from the 1950's to the 1970's, the average annual net loss of inland wetlands was 439,000 acres. D. BOWDEN, W. FRAYOR, F. GRAYBILL & T. MONAHAN, STATUS AND TRENDS OF WETLANDS AND DEEPWATER HABITATS IN THE COTERMINUS UNITED STATES, 1950's to 1970's, at 3 (1983) [hereinafter cited as STATUS AND TRENDS].
 4. Exec. Order No. 11,990, 42 Fed. Reg. 26,961 (1977).
 5. See CONN. GEN. STAT. ANN. §§ 22a-28 to 22a-45 (West 1973); ME. REV. STAT. ANN. tit. 12, §§ 4701-09 (1974); MD. ANN. CODE art. 66C, §§ 718-31 (Supp. 1970); MISS. CODE ANN. §§ 49-27-1 to -69 (Supp. 1975); N.C. GEN. STAT. §§ 113-229 (Supp. 1971); R.I. GEN. LAWS §§ 2-1-13 to -25 (1975); VA. CODE §§ 62.1-13.1 to -13.20 (1975).
 6. Terrestrial Wildlife Division, Nebraska Game and Parks Commission, Survey of Habitat: Work Plan K-71 (Mar. 1971 through Feb. 1972) (available at Ne-

cent.⁷ Since that time the rate of destruction of Nebraska's wetlands has, if anything, increased. Figures on one ten county area, compiled in 1981, showed an additional reduction of nearly 50 percent.⁸ Even when faced with such substantial wetlands reductions, public awareness of the problem is insufficient and efforts to preserve these resources, inadequate.

The purpose of this article is to increase public awareness of the importance of Nebraska's wetlands and to evaluate the means presently available to aid in wetlands preservation. In addition, suggestions for further protective measures will be made. Accordingly, Section II of the paper will define wetlands and assess their role in Nebraska. Section III will evaluate existing protective measures. Section IV will suggest further action that is needed to preserve Nebraska's wetlands.

II. NEBRASKA'S WETLANDS

A. A Wetlands Definition

The general term "wetlands" encompasses a wide variety of commonly recognized landscape units such as marshes, bogs, swamps, sloughs, and wet meadows. As such, wetlands vary greatly in their degree of saturation, type of vegetation, and overall ecological profile. This is particularly true when geographical differences are taken into account. As a result, it is difficult to formulate a precise definition of wetlands.⁹

The Environmental Protection Agency (EPA) defines wetlands as: "those areas that are inundated or saturated by surface or groundwater 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."¹⁰

braska Game and Parks Commission in Lincoln, Nebraska) [hereinafter cited as Habitat Survey 1972].

7. *Id.* at 13.

8. Nebraska Game and Parks Commission, Unit Report: Update Wetland Survey of the 1960's, Project No. 90015, Job No. K-3 (Sept. 23, 1981) (available at Nebraska Game and Parks Commission in Lincoln, Nebraska) [hereinafter cited as Wetland Update].

9. Types of wetlands range from the swamps of Florida, to the salt marshes of the west coast, to the potholes of the Great Plains. The plant and animal life found in these areas vary greatly from region to region. See E. HOROWITZ, *supra* note 2.

10. 40 C.F.R. § 230.3(t) (1983). The same definition is found in 33 C.F.R. § 323.2(c) (1983), which prescribes the practices and procedures to be followed by the Army Corps of Engineers when reviewing applications for section 404 permits. See Clean Water Act § 404, 33 U.S.C. § 1344 (Supp. I 1977). This definition is an expansion from the 1975 regulation which defined wetlands as "areas that normally are characterized by the prevalence of vegetation that

Thus, to determine whether a tract of land can be considered as being wetland, three factors must be considered: the type of soil; the frequency of saturation and inundation; and the type of vegetation.¹¹ Detailed biological studies, and often litigation, may be necessary to determine whether an area fits within this definition.¹²

The United States Fish and Wildlife Service (FWS) defines wetlands as follows:

In general terms, wetlands are lands 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 its surface. The single feature that most wetlands share is soil or substrate that is at least periodically saturated with or covered by water. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or saturated soil.¹³

This concept of wetlands is considerably broader than that of the EPA and is part of a comprehensive classification scheme which includes everything from deepwater ocean habitat to forested and emergent wetlands. As such, it is more flexible than the EPA definition. The Fish and Wildlife Service, like the EPA, recognizes that wetlands may be areas where saturated soils and plants dependent upon saturated or hydric soil exist, but it also recognizes that wetlands include areas where hydric soils but no water-dependent vegetation exist, and vice versa. Under the Fish and Wildlife classification system, wetlands may even include areas where neither soil nor water dependent vegetation exist.¹⁴

In Nebraska, the most widely utilized wetlands classification system is that promulgated by the Soil Conservation Service (SCS).¹⁵ This system does not provide a general wetlands defini-

'requires' saturated soil conditions for growth and reproduction." *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897, 911 (5th Cir. 1983). The revision reflects an intention to expand the protection afforded wetlands under the Clean Water Act. *Id.* at 912.

11. *Avoyelles Sportsmen's League, Inc. v. Alexander*, 511 F. Supp. 278, 289 (W.D. La. 1981), *rev'd in part sub nom.* *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897 (5th Cir. 1983).
12. *See, e.g., United States v. DeFelice*, 641 F.2d 1169 (6th Cir. 1981); *Bayou Des Familles Development Corp. v. Corps of Engineers*, 541 F. Supp. 1025 (E.D. La. 1982); *Avoyelles Sportsmen's League, Inc. v. Alexander*, 511 F. Supp. 278 (W.D. La. 1981), *rev'd in part sub nom.* *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897 (5th Cir. 1983).
13. FISH AND WILDLIFE SERVICE, U.S. DEP'T OF THE INTERIOR, CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES 3 (1979).
14. *Id.* This classification system is presently advocated by most state resource personnel. Comprehensiveness and flexibility are cited as being its major assets.
15. SOIL CONSERVATION SERVICE, U.S. DEP'T OF AGRICULTURE, TECHNICAL NOTE NO. 29, WETLAND TYPES IN NEBRASKA (1975). This system is based on the old Fish and Wildlife classification scheme contained in circular 39. FISH AND WILDLIFE SERVICE, U.S. DEP'T OF THE INTERIOR, CIRCULAR NO. 39, WETLANDS

tion but does classify and describe the five types of wetlands found in Nebraska.

The first type of wetland under the SCS system is seasonally flooded basins or flats. These are upland depressions or overflow bottom lands that fill with water as a result of precipitation or flooding. Only periodically inundated, the land can be used for agricultural purposes most of the time.¹⁶ The second type is inland fresh meadows. These are commonly referred to as wet meadows in Nebraska and consist of areas usually free of standing water but with highly saturated soil. Wet meadows are prime wild hay production areas and are also used by nesting waterfowl.¹⁷ The third type of wetlands is inland shallow fresh marshes. In these areas, the soil is often covered with as much as six inches or more of water and a uniform vegetative cover of rushes, sedges, and tall prairie grasses. Such marshes are extensively used as waterfowl nesting and feeding grounds and constitute some of the principal waterfowl production areas in the United States.¹⁸ The fourth type is inland deep fresh marshes. These areas are usually covered with from six inches to three feet or more of water, with emergent vegetation consisting of bulrushes, cattails, reeds, and various other hydrophytes. These marshes constitute the best waterfowl breeding and feeding habitat in the country.¹⁹ The fifth type of Nebraska wetlands is inland open fresh water, which consists of shallow ponds and reservoirs with water usually less than ten feet deep. These areas are primarily used by waterfowl as feeding and resting grounds with the borders used for nesting.²⁰

Although these five types of wetlands can be found throughout Nebraska, two large regions of the state contain nearly 97 percent of Nebraska's natural marshes.²¹ This paper will focus primarily on those two areas. The more permanent waters or streams, reservoirs, deep lakes, and their adjacent wetlands will not be referred to expressly, but the value of these areas should not be overlooked and their continued existence should be ensured by future wetland protection measures.²²

OF THE UNITED STATES (1956). It has now been incorporated into the new Fish and Wildlife System discussed above. *See supra* notes 13-14 and accompanying text.

16. SOIL CONSERVATION SERVICE, U.S. DEP'T OF AGRICULTURE, TECHNICAL NOTE NO. 29, WETLAND TYPES IN NEBRASKA 1 (1975).

17. *Id.* at 3.

18. *Id.* at 5-6.

19. *Id.* at 7-8.

20. *Id.* at 9.

21. Habitat Survey, *supra* note 6, at 2.

22. Rivers, streams, reservoirs, lakes, and their adjacent wetlands provide important wildlife habitat as well as groundwater recharge areas. *See generally* E. HOROWITZ, *supra* note 2. The adjacent wetlands serve as buffers for floodwa-

B. The Destruction of Nebraska's Wetlands

The two areas comprising the majority of Nebraska's wetland resources are the sandhills region, located in the north central part of the state, and the south central rainwater basin.²³ These are also the areas that have suffered the heaviest losses of wetlands in the state.²⁴ Each will be examined separately.

1. *The Rainwater Basin*

The rainwater basin area in south central Nebraska encompasses approximately 4,200 square miles and originally contained some 3,907 natural, irregularly distributed fresh water wetlands covering 94,060 acres.²⁵ As the area was developed for agriculture, wetlands were drained, filled, and consolidated. This wetlands destruction, which began in the early 1900's, continues to cause a staggering loss of wetlands. By the mid-1960's approximately 82 percent of the original wetlands areas had been destroyed resulting in a loss of 65.4 percent of the total wetland acres.²⁶ A survey update completed in February of 1984 indicated that by the end of 1983, 90 percent of the wetland basins and 78 percent of the wetland acres had been destroyed.²⁷ Most of the wetlands that remain have undergone changes in size and classification.²⁸

The primary cause of this wetlands loss has been the development of additional agricultural land. In the eyes of many, the rain basins are more valuable when producing crops than in their natural state. Substantial amounts of money have been spent to fill, level, and drain these areas.²⁹ Ironically, however, many of these

ters and storm action and also filter pollution and sedimentation entering the lakes and rivers. *Id.* As the water levels of the lakes or streams decline, often as a result of diversion or pumping from those waters, the adjacent wetlands dry up and the benefits they provide are lost. While wetlands protective measures can solve part of this problem, to effectively deal with the loss of wetlands adjacent to these permanent waters, additional measures such as preserving instream flows are needed.

23. Habitat Survey 1972, *supra* note 6, at xi. For a map showing the location of these areas, see Appendix 1.

24. Habitat Survey 1972, *supra* note 6.

25. *Id.* at 2, 13.

26. *Id.* at 13, 19.

27. Wildlife Division, Nebraska Game and Parks Commission, Survey of Habitat: Work Plan K-83 (Mar. 1983 through Feb. 1984) (available from Nebraska Game and Parks Commission in Lincoln, Nebraska) [hereinafter cited as Habitat Survey 1984].

28. *Id.* at 9. Only about 30 percent of the existing wetlands have remained unchanged. The rest have been adversely affected by drainage ditches and concentrations of water in dugouts, or have been partially filled.

29. For a time, substantial financial and technical assistance in reclaiming wetlands was provided by the federal government. Under the Soil Conservation

efforts have been economically unsound. The soil in many wetland areas consists of only a thin layer of tillable topsoil underlain by impervious clay hardpan. Crops which are grown on such soil are particularly susceptible to drought or flooding, and crop failures are not uncommon.³⁰

2. *The Sandhills*

The sandhills region is an area of approximately twenty thousand square miles located in north central and northwestern Nebraska. Covering approximately one-fourth of the total state area, it is the greatest unbroken expanse of grassland in North America. Referred to as "a curious piece of real estate,"³¹ it is one of the state's most precious natural resources. The region originally contained 13,525 wetlands encompassing 183,391 acres. By the mid-1960's 15.3 percent of these wetlands had been destroyed.³² Since that time the area has experienced extensive center pivot irrigation development, necessitating extensive leveling and filling accompanied by even more serious wetland losses.³³

and Domestic Allotment Act of 1936, 16 U.S.C. §§ 590 to 590q-2 (1976), farmers could be paid 50 percent of the cost of drainage work on their land and receive technical assistance free. However, in 1962, the Act was amended to restrict financial or technical assistance for wetland drainage "if the Secretary of the Interior has made a finding that wildlife preservation will be materially harmed on that farm by such drainage and that preservation of such land in its undrained status will materially contribute to wildlife preservation" Pub. L. No. 87-732, 76 Stat. 696 (codified as amended at 16 U.S.C. § 590p-1 (1976)). This limitation only applied to North Dakota, South Dakota, and Minnesota when initially enacted. Now, all cost sharing programs must be consistent with the protection of wetland and other environmental concerns. 7 C.F.R. §§ 701.1-.85 (1983).

30. Habitat Survey 1984, *supra* note 27, at 3. Other causes of wetlands reduction are road, airport, and reservoir construction as well as isolated refuse dumping. Habitat Survey 1972, *supra* note 6, at 19.
31. Aucoin & Pierce, *A Curious Piece of Real Estate*, AUDUBON, Sept. 1983, at 84.
32. Habitat Survey 1972, *supra* note 6, at 19-20. These figures do not include extensive acres of wet meadows in the eastern portion of the sandhills.
33. The sandhills are experiencing a tremendous irrigation boom. On January 1, 1970, there were 1,299 registered irrigation wells in 16 sandhills region counties. By January 1, 1980, this number had increased to 4,909. Nebraska Natural Resources Commission, Sandhills Area Study Decision Document 1-5 (Mar. 1981). This expansion of irrigation in the sandhills is expected to continue. See Institute of Agriculture and Natural Resources (IANR), Sandhills Task Force Report (Aug. 1983) (available from the Water Resources Center in Lincoln, Nebraska) [hereinafter cited as Sandhills Task Force Report]. Environmentalists as well as sandhills residents have expressed concern. Farrar, *Pivot Irrigation and the Prairie Chicken: Friends or Foes?*, NEBRASKALAND, Sept. 1980, at 30; Nebraska Natural Resources Commission, A Survey of Ranchers and Farmers Adversely Affected Economically by Irrigation in the Eastern Section of the Sandhills (May 1983); Nebraska Natural Resources Commission, Sandhills Area Study Decision Document 1-1 app. (Mar. 19,

The early wetland losses in the sandhills were primarily due to drainage by ditching and pumping out open water areas.³⁴ Fifty percent of the wetlands destroyed prior to 1970 were over 100 acres in size.³⁵ However, recent losses that have occurred as a result of irrigation development are caused by filling and leveling smaller wetlands that interfere with crop production or caused by the drop in groundwater tables that occurs with extended pumping.³⁶ Furthermore, irrigation in the sandhills has contaminated groundwater supplies and wetlands with nitrates and other chemicals used for fertilization.³⁷ While the net long term effect of this chemical pollution is yet unknown, it presents a hazard to the environment as well as to the health of the residents in the sandhills.³⁸

The conversion of the natural habitat of the sandhills to irrigated cropland is expected to continue. The abundance of relatively inexpensive land, the bountiful water supply found in the region, as well as certain economic incentives for sandhills development, account for such continued losses.³⁹ In addition, increased competition for sandhills water from other sources is predicted.⁴⁰ These developments present a serious threat to the continued existence of the remaining sandhills wetlands. Unless there is increased appreciation of the value of Nebraska's wetlands and the consequences of their destruction, we may witness losses in the sandhills similar to those which have occurred in the rain-water basin.

1981) (noting that 73 percent of the sandhills residents believed large-scale irrigation in the sandhills should be stopped or regulated).

34. Habitat Survey 1972, *supra* note 6, at 34.

35. *Id.*

36. See Farrar, *supra* note 33, at 46, 48. Most of the sandhills lakes depend upon the groundwater table and fluctuate directly with its level. The high groundwater level is also responsible for extensive subirrigated wet meadows. D. MCCARRAHER, NEBRASKA GAME AND PARKS COMMISSION NEBRASKA'S SANDHILLS LAKES, 2 (1977). As irrigation increases, the groundwater level decreases. This action has a direct effect on streamflows, subirrigated meadows, wetlands, lakes, and previously existing wells. Sandhills Task Force Report, *supra* note 33, at 52.

37. Sandhills Task Force Report, *supra* note 33, at 9. See also NEBRASKA WATER RESOURCES CENTER, PRESERVING THE ENVIRONMENT OF A SANDHILLS REGION CONCURRENT WITH INTENSIVE IRRIGATION DEVELOPMENT 1 (1976) (noting the necessity of nitrate fertilizers for successful sandhills irrigation).

38. There have already been reports of nitrate poisoning caused by high nitrate levels in drinking water supplies of areas that have experienced extensive center-pivot development. Farrar, *supra* note 33, at 48.

39. For an analysis of the economic and tax incentives, see M. BAKER, PROJECT COMPLETION REPORT; ANALYSIS OF TAX INCENTIVES FOR INTENSIVE IRRIGATION DEVELOPMENT IN THE NEBRASKA SANDHILLS (1983).

40. Sandhills Task Force Report, *supra* note 33, at 10-11.

C. The Consequences of Wetlands Destruction

Wetland areas are a valuable natural resource. Few people, however, realize just how valuable they are. Of course certain benefits are obvious—principally, the value of wetlands to waterfowl and other wildlife. Wetlands provide food sources and production areas for migratory birds, spawning grounds for fish, and critical habitat for a variety of mammals and other marsh birds. Many other benefits of wetlands are not so obvious.⁴¹ For example, it has now been established that wetlands are quite efficient natural filtration plants.⁴² Wetland ecosystems tend to hold and use nutrients, thereby filtering polluted water arriving from other sources as this water circulates through the wetland. The cleansed water is then available to recharge groundwater supplies, or for other purposes. This capacity to recycle is presently being studied further and has been put to use in some areas for pollution control at a substantial savings over manmade treatment systems.⁴³

41. Commentators list at least eight vital services that wetlands provide:

1. habitat for various mammals and marsh birds;
2. food sources for migratory birds;
3. study and sanctuary areas;
4. shields from wave action, erosion and storm damage;
5. storage areas for storm and flood waters;
6. recharge areas for groundwater;
7. spawning grounds; and
8. natural water filtration plants.

Ablard & O'Neill, *Wetland Protection and Section 404 of the Federal Water Pollution Control Act Amendments of 1972: A Corps of Engineers Renaissance*, 1 VT. L. REV. 51, 52 (1976). See also Caplin, *Is Congress Protecting Our Water? The Controversy Over Section 404, Federal Water Pollution Control Act Amendments of 1972*, 31 U. MIAMI L. REV. 445, 455 (1977); E. HOROWITZ, *supra* note 2, at 19-29.

42. See E. HOROWITZ, *supra* note 2, at 22-23. Filtration of pollution is one of the most valuable functions of wetlands. Wetlands can recycle amazing amounts of polluted water. In Georgia, a study by the Georgia Water Quality Control Board of Mountain Creek showed that water heavily polluted by sewage was purified after passing through only 2.75 miles of swamp forest. *Id.* In the Tinicum Marsh in Pennsylvania, wetlands have been shown to remove 6.4 pounds of phosphorous and thirteen pounds of nitrogen per acre of polluted water each day. Harmon, *The Economics of Wetlands*, NEBRASKALAND, Oct. 1980, at 45. This purification is a very valuable service. For example, it was estimated that the pollution filtration provided by the Tinicum Marsh made that wetland worth \$9,600 to \$28,400 per acre. *Id.* In 1974, ten thousand acres of wetland near Savannah, Georgia were valued at \$46.5 million as a waste treatment facility. Delorme & Wood, *Savannah River Improvement and Environmental Preservation*, LAW LAND ECON. 284 (1974).

43. At the Brookhaven National Laboratory in New York an artificial wetland system has been created to aid sewage disposal and water supply. "The system treats 20,000 gallons of sewage daily from the town of Brookhaven. There is no problem of odor, and there is a notably thriving plant, fish, and shellfish population. After natural filtration, the cleansed water can be used to recharge ground water supplies." E. HOROWITZ, *supra* note 2, at 23.

Wetlands also serve as important groundwater recharge areas, as well as storage areas, for storm and flood waters. Their function in this regard can be likened to that of a huge sponge.⁴⁴ Excess water from rainfall, snow melt, and flooding is trapped and held within the wetlands to be released more slowly, either into groundwater aquifers or adjacent surface water areas. Water that is not retained by the wetland is at least slowed down. Areas where riparian wetlands have been destroyed often have suffered severe flooding as a result, necessitating the construction of costly man-made protection.⁴⁵

Nebraska's wetlands provide a good example of the services wetlands perform. The sandhills wetlands demonstrate quite clearly the groundwater recharge capabilities of wetlands, since many are directly connected to underground aquifers.⁴⁶ In addition, inland meadow wetlands provide fertile hay production areas throughout the state. The utility of the state's riparian wetlands in flood control has been demonstrated by the adverse effects that accompany their destruction.⁴⁷ And, although the extent of the bene-

44. Some biologists say this analogy is misleading. Only certain types of wetlands, such as those with high moss content, actually absorb water. However, wetlands do detain flood waters. It is estimated that a ten-acre wetland can capture 1.5 million gallons of water with only a six inch rise in the water level. E. HOROWITZ, *supra* note 2, at 27.

45. See Harmon, *supra* note 42, at 44. A study of the Charles River in Massachusetts showed that the destruction of natural wetlands had substantially increased flooding problems in Cambridge and Boston. To alleviate the problem, the Corps of Engineers considered building a new flood control dam. However, when studying the area, the Corps noted that where natural wetlands still existed, flooding was much less severe. As a result the Corps recommended that the federal government acquire 8,500 wetland acres and maintain them in their natural state. In the words of the Corps:

Nature has already provided the least-cost solution to future flooding in the form of extensive wetlands which moderate extreme highs and lows in stream flow. Rather than attempt to improve on this natural protection mechanisms, it is both prudent and economical to leave the hydrologic regime established over the millenia undisturbed. In the opinion of the study team, construction of any of the most likely alternatives, a 55,000 acre-foot reservoir, or extensive walls and dikes, can add nothing.

E. HOROWITZ, *supra* note 2, at 28 (quoting U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DIVISION, NATURAL VALLEY STORAGE: A PARTNERSHIP WITH NATURE 1 (Spring 1976)). The annual flood control benefits of these wetlands was valued at \$1,203,000. *Id.*

46. See *supra* note 33.

47. Extensive losses of riparian wetlands have occurred in the Nemaha and Little Nemaha River basins in Nebraska. The destruction of these wetlands has resulted in a direct loss of wildlife habitat and the loss of their filtration capabilities has increased the water sediment load which limits fish populations. NEBRASKA DEPARTMENT OF ENVIRONMENTAL CONTROL, REPORT ON FEASIBILITY STUDY OF STATE 404 ASSUMPTION 67 (1982) [hereinafter cited as DEC FEASIBILITY STUDY]. The reduction of wetlands on the Nemahas, primarily the

fit of the pollution filtration function of Nebraska's wetlands has not been documented, the potential is there. In light of the nitrate pollution problem arising in the sandhills⁴⁸ it may be necessary to utilize this benefit more fully in the future. Further, the aesthetic and scientific value of the state's wetlands cannot be overlooked. Wetlands are beautiful natural habitats that provide opportunities for recreation as well as serving as outdoor classrooms for scientific study. However, the most important function the Nebraska wetlands is that of providing wildlife habitat.

Nebraska lies directly within the central migratory flyway, one of the most productive waterfowl areas in the United States. The birds that travel this flyway rely heavily on Nebraska's wetlands. Literally millions of migratory birds use the state's wetlands every year.⁴⁹ Ducks and geese alike use the Nebraska basins and surrounding uplands as resting and feeding areas during their spring and fall migration. In addition, about 80 percent of North America's sandhill cranes rest at Nebraska wetlands and waterways during their spring migration to Canada, Alaska, and the Soviet Union.⁵⁰ Nebraska's rainwater basin wetlands are also within the migration corridor of the endangered whooping crane. Between 1950 and 1980, twelve of the forty-six confirmed sightings of "whoopers" in Nebraska occurred in the rainwater basin area.⁵¹

Nebraska wetlands also benefit other wildlife. Upland game, such as pheasants, make extensive use of wetland vegetation for roosting, nesting, and feeding.⁵² Furbearing mammals also rely on wetlands and adjacent undeveloped upland.⁵³ Wetlands supply an

result of straightening and channelization projects, has also increased flooding. Interview with Clark Haberman, Chief of the Program Plans Section of DEC, in Lincoln, Nebraska (Nov. 16, 1983).

48. See *supra* notes 35-37 and accompanying text.

49. An estimated 2.5 million ducks and geese pass through the rainwater basin area annually. This number includes 250,000 to 300,000 white-fronted geese, amounting to 90 percent of the mid-continental population. Farrar, *The Rainwater Basin . . . Nebraska's Vanishing Wetlands*, NEBRASKALAND, March 1982, at R-12. The state's riparian wetlands also provide waterfowl habitat. Most rivers produce a few duck broods each year and provide important wintering grounds as well. The Platte River supports from 100,000 to 250,000 wintering mallards and up to 7,000 Canada geese during a winter. Habitat Survey 1972, *supra* note 6, at 30.

50. U.S. FISH AND WILDLIFE SERVICE, NEBRASKA WETLANDS, 4 (1981).

51. *Id.* at 5.

52. W. Baxter & C. Wolfe, Nebraska Game and Parks Commission, Ecological Relationships of Wetlands to Ring-Necked Pheasants in Nebraska (Summer 1971) (paper presented at 16th Annual Summer Conference, Wildlife Society Institute).

53. The use of wetlands by furbearers also provides a financial benefit to Nebraska. "During the 1979-80 fur harvest season almost 318,000 pelts valued at \$4,676,693 were taken in Nebraska. Wetlands support a substantial part of

important fishing resource as well.⁵⁴ Probably no other habitat type in Nebraska supports such a wide variety of animal life.

When wetland areas are destroyed many of the benefits which are associated with them are lost. Groundwater recharge, pollution filtration, flood control, and wildlife habitat are all reduced. In addition, there are adverse secondary effects of losing wetland resources. The avian cholera outbreak in Nebraska is one example of a rather severe secondary effect.

Avian cholera is a highly infectious disease caused by a deadly bacterium known as *Pasteurella multocidia*.⁵⁵ Although it is not known exactly how the disease is spread in the wild, it is believed that major outbreaks occur when bird populations are stressed by inclement weather or overcrowding.⁵⁶ Nebraska experienced its first major cholera outbreak in the spring of 1975 in the rainwater basin. That year the number of basins available to migrating waterfowl, already only a fraction of what once existed,⁵⁷ was further reduced by drought conditions. Birds arriving in Nebraska on their journey north found little water available and were prevented from moving on by late season blizzards in the Dakotas. The result was a massive number of waterfowl concentrated in a limited number of basins and a major outbreak of fowl cholera. Between April 11 and April 21, 1975, Game and Parks and Fish and Wildlife personnel picked up 13,748 dead birds. The estimated total loss of waterfowl was 20,000 to 25,000.⁵⁸ In 1980, similar conditions led to an even more severe outbreak. In that year the estimated loss in the rainbasin was 72,000 to 80,000 birds—the second largest cholera epidemic ever reported in the United States.⁵⁹ The effect of such huge losses of birds extends beyond the rainwater basin, the state, or even the central flyway. This reduction of the bird population has a profound effect on the entire North American Continent.⁶⁰

this activity." U.S. FISH AND WILDLIFE SERVICE, NEBRASKA WETLANDS 2 (1981).

54. The sandhills wetlands, in particular, support extensive fish populations. Species commonly found in the sandhills lakes include bullhead, perch, crappie, carp, northern pike, largemouth bass, bluegill, sunfish, walleye, and fathead minnow. MCCARRAHER, *supra* note 36, at 20.

55. Dey & Hurt, *Fowl Cholera*, NEBRASKALAND, Sept. 1975, at 14.

56. Farrar, *supra* note 49, at R-10.

57. See *supra* notes 25-27 and accompanying text.

58. Hurt, Unit Report: Avian Cholera in Nebraska, Outbreak in the Rainwater Basins and Other Areas in South Central Nebraska 6 (Spring 1981) (unpublished report) (available from the Nebraska Game and Parks Commission in Lincoln, Nebraska).

59. Farrar, *supra* note 49, at R-12. See Hurt, *supra* note 58, at 6 (table showing the number of birds picked up and total estimated losses from 1975 through 1981).

60. The loss in Nebraska alone from 1975 through 1981 is estimated to be between 113,795 and 134,800. Hurt, *supra* note 58, at 6. It is unknown just how many

Additional secondary effects of the loss of Nebraska wetlands have not yet become apparent. However, it is safe to conclude that few good things will result from the continued destruction of these resources. Efforts to stop this destruction and to ensure the continued existence of the state's wetland areas clearly need to be increased; but who is responsible for protecting the wetlands and what tools are available to accomplish the task?

III. WETLAND PROTECTION MEASURES CURRENTLY AVAILABLE

A. Section 404 of the Clean Water Act

Heralded as "about the only legal protection private wetlands are afforded,"⁶¹ section 404 of the Clean Water Act⁶² is potentially the most effective means of protecting the remaining Nebraska wetlands. Unfortunately this potential has, for the most part, been unrealized. Furthermore, the effectiveness of the current 404 program in preserving wetlands of the state is unlikely to improve in the near future. In order to understand more completely the potential and limits of section 404, its history and intended purpose must be examined.

1. *The History of Section 404.*

The original section 404 was created by the Federal Water Pollution Control Act (FWPCA) amendments of 1972.⁶³ The Federal Water Pollution Control Act's stated purpose is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters,"⁶⁴ and speaks of a national goal of eliminating the discharge of all pollutants.⁶⁵ Section 404, a major exception to the general rule that "the discharge of any pollutant by any person

birds have died throughout the central flyway after being infected in Nebraska. Experts have concluded "that birds die from avian cholera after leaving an endemic area and probably occurs [sic] throughout the flyway." *Id.* at 3.

A further cause of concern is the possibility that the endangered whooping crane may be susceptible to the disease. Sandhill cranes have died from cholera and on at least two occasions it has been necessary to chase "whoopers" from infected basins. Farrar, *supra* note 49, at R-12.

61. Farrar, *Ducks and the 404*, NEBRASKALAND, Sept. 1983, at 42.

62. 33 U.S.C. § 1344 (Supp. I 1977). Formerly known as the Federal Water Pollution Control Act (FWPCA), the Act was retitled in 1977 as the Clean Water Act of Dec. 27, 1977, Pub. L. No. 95-217, 91 Stat. 1566.

63. Act of Oct. 18, 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified at 33 U.S.C. § 1251 (1972)).

64. 33 U.S.C. § 1251 (1976).

65. *Id.*

shall be unlawful,"⁶⁶ sets up a permit program to regulate the discharge of dredged and fill material into the Nation's waters. Pursuant to this regulatory program, the Army Corps of Engineers (Corps), under the supervision of the EPA, is given the authority to issue or deny permits to discharge solid material into the navigable waters.⁶⁷

The scope of the authority granted by section 404 was, for several years, an issue of great controversy. Initially, the Corps restricted its jurisdiction under section 404 to only those waters that met the traditional federal test of navigability.⁶⁸ The EPA, on the other hand, urged a broader reading of the term "navigable waters" arguing that broad jurisdiction was necessary to achieve effective pollution control.⁶⁹ Several federal courts adopted the EPA's broader approach⁷⁰ and, in 1975, the District Court for the District of Columbia, in *N.R.D.C. Inc. v. Callaway*,⁷¹ ordered the Corps to expand their jurisdiction "to the maximum extent per-

66. 33 U.S.C. § 1311(a) (1976).

67. 33 U.S.C. § 1344 (Supp. V 1981).

68. See Blumm, *supra* note 1, at 415-16; Caplin, *supra* note 41, at 449. The traditional federal test of navigability was first set forth in *Daniel Ball v. United States*, 77 U.S. (10 Wall.) 557 (1870), in which the Court held that federal regulatory power could be exercised only over those waters which are navigable in fact. "And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water." *Id.* at 563. This test was later expanded to include those waters which, although not currently navigable, were historically navigable in fact, *Economy Light & Power Co. v. United States*, 256 U.S. 113 (1921), and those waters which by reasonable improvement could be made available for navigation in interstate commerce. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377 (1940).

Under section 10 of the Rivers and Harbors Appropriations Act of 1899, 33 U.S.C. § 403 (1976), the jurisdiction of the Corps of Engineers is limited to those waters navigable under the federal test. See 33 C.F.R. § 329 (1983) (regulations defining navigable waters for the Corps of Engineers).

69. See Caplin, *supra* note 41, at 449.

70. Cases which ruled that federal jurisdiction extended beyond the traditional federal test of navigability prior to the 1977 Clean Water Act Amendments include: *Minnesota v. Hoffman*, 543 F.2d 1198 (8th Cir. 1976); *California State Water Resources Control Board v. EPA*, 511 F.2d 963 (9th Cir. 1975), *rev'd on other grounds*, 426 U.S. 200 (1976); *United States v. Ashland Oils Transp. Co.*, 504 F.2d 1317 (6th Cir. 1974); *Wyoming v. Hoffman*, 437 F. Supp. 114 (D. Wyo. 1977); *Conservation Council v. Costanzo*, 398 F. Supp. 653 (E.D.N.C. 1975); *Sun Enterprises, Ltd. v. Train*, 394 F. Supp. 211 (S.D.N.Y. 1975); *P.F.Z. Properties, Inc. v. Train*, 393 F. Supp. 1370 (D.D.C. 1975); *United States v. Phelps Dodge Corp.*, 391 F. Supp. 1181 (D. Ariz. 1975); *Leslie Salt Co. v. Froehlke*, 403 F. Supp. 1292 (N.D. Cal. 1974); *United States v. Holland*, 373 F. Supp. 665 (M.D. Fla. 1974).

71. 392 F. Supp. 685 (D.D.C. 1975).

missible under the Commerce Clause of the Constitution.”⁷²

Responding to the order of *Callaway*, the Corps issued a now infamous press release stating that under their expanded jurisdiction permits might be required from “the rancher who wants to enlarge his stock pond, or the farmer who wants to deepen an irrigation ditch or plow a field, or the mountaineer who wants to protect his land against stream erosion.”⁷³ The result of this statement was an outcry from farmers and ranchers who would be so affected, a flurry of proposed amendments to section 404 in both the Senate and the House of Representatives, and a proposed compromise by the EPA.⁷⁴ It was not until the FWPCA Amendments of 1977⁷⁵ that a compromise was finally reached preserving the broad jurisdiction of section 404, while limiting the exercise of that jurisdiction in certain instances.

2. *The Current Scope of Section 404*

Presently, under the Clean Water Act, section 404 jurisdiction extends to the “waters of the United States.”⁷⁶ “Waters of the United States” are defined as: (1) the territorial seas; (2) lakes, rivers, and streams meeting the traditional federal test of navigability⁷⁷ and adjacent wetlands; (3) tributaries to those waters meeting the traditional navigability test and adjacent wetlands; (4) interstate waters and their tributaries, including adjacent wetlands; and (5) all other waters, “such as isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the degradation or destruction of

72. *Id.* at 686. The dispute in *Callaway* was over the meaning of the term “navigable waters” as contained in the FWPCA Amendments of 1972. Congress defined the term to mean “the waters of the United States, including the territorial seas.” Act of June 30, 1948, Pub. L. No. 92-500, 86 Stat. 886 (codified at 33 U.S.C. § 1362(7) (1976)). The Corps interpreted the term narrowly, including only those waters navigable under the federal test. *See supra* note 68. The *Callaway* court ruled that Congress had intended to expand the definition of navigable waters for the purposes of the FWPCA and the Secretary of the Army and the Chief of the Army Corps of Engineers lacked the power to change that interpretation.

73. Caplin, *supra* note 41, at 451. The press release is reprinted in *Hearings on Section 404 of the Federal Water Pollution Control Act Amendments Before the Senate Public Works Committee*, 94th Cong., 2d Sess. 4, 517-20 (1976).

74. For a discussion of the various proposed amendments to the FWPCA Amendments, *see* Caplin, *supra* note 41, at 457-90.

75. Clean Water Act of Dec. 27, 1977, Pub. L. No. 95-217, 91 Stat. 1566 (codified as amended in scattered sections of 33 U.S.C.).

76. 33 U.S.C. § 1362(7) (1976). Section 404 gives authority over navigable waters which are defined in § 1362(7) as “waters of the United States.”

77. *See supra* note 68.

which could affect interstate commerce."⁷⁸ This appears to grant very broad jurisdiction. Indeed, a footnote to the regulations, provided to guide the Corps in the exercise of their jurisdiction, states that the definition is intended to include all waters "that could be regulated under the Federal government's constitutional powers to regulate and protect interstate commerce, including those for which the connection to interstate commerce may not be readily obvious."⁷⁹ Clearly, federal jurisdiction under section 404 extends to even isolated waters and wetlands, such as those found in Nebraska, provided that their destruction would have some demonstrable effect on interstate commerce.⁸⁰ This is very encouraging to the wetlands preservation effort, since the 404 guidelines, at least on their face, appear to limit some of the primary activities

78. 33 C.F.R. § 323.2(a)(3)(1983).

79. *Id.* at § 323.2(a)(5) n.2.

80. It is well established that even local activities may affect interstate commerce and thereby be subject to regulation by the federal government under the commerce clause, U.S. CONST. art. I, § 8, cl. 3. *See Wickard v. Filburn*, 317 U.S. 111 (1942) (individual farmer's production of wheat for his own consumption affects interstate commerce sufficiently to be subjected to federal regulation); *United States v. Wrightwood Dairy Co.*, 315 U.S. 110 (1942) (Congress can regulate wholly intrastate handling of milk.). Therefore even activities affecting purely intrastate wetlands may be regulated.

In *United States v. Byrd*, 609 F.2d 1204 (7th Cir. 1979), the defendant challenged the Corps' authority to regulate the filling of wetland adjacent to an intrastate lake. The court held that his filling activities, although local, had "the potential for exerting a substantial economic effect on interstate commerce by an easily traced chain of causation." *Id.* at 1210. The court recognized the importance of the wetlands in maintaining the purity of the lake and reasoned that the destruction of those wetlands could impair the attraction the lake held for interstate travelers, directly affecting interstate commerce. Thus, "Congress constitutionally may extend its regulatory control of navigable waters under the Commerce Clause to wetlands which adjoin or are contiguous to intrastate lakes that are used by interstate travelers for water-related recreational purposes . . ." *Id.*

In Nebraska it may be more difficult to show how the destruction of intrastate wetlands affects interstate commerce, but the holding of *Byrd* provides one clue. *Byrd* recognized the effect the recreational use of intrastate waters has on interstate commerce. In Nebraska the primary recreational use of wetlands is hunting. And, at least historically, many out-of-state hunters took advantage of Nebraska's prime waterfowl habitat. *See Farrar, supra* note 4, at R-2 ("[A]t the turn of the century wealthy hunters from the east were coming to south-central Nebraska to shoot waterfowl, often pulling their private rail cars onto a siding at Shickly, and staying for two or three weeks."). Although this practice has probably declined in recent years (partly due to the loss of hunting areas), a significant number of out-of-state hunters still hunt on Nebraska's wetlands; undoubtedly, quite a bit of money is spent in the process creating a significant effect on interstate commerce. In addition, the loss of the habitat provided by Nebraska's wetlands would have a drastic effect on all the other states in the Central Migratory Flyway by reducing the number of birds which travel that route.

that damage wetlands. In general, the applicable regulations make it clear that placing a material designed to replace an aquatic area with dry land, or to alter the bottom of such an area⁸¹ in a manner which will "cause or contribute to significant degradation of the waters of the United States, will not be permitted."⁸² Factors to be considered in determining whether significant degradation of the waters will occur include the adverse effects of filling on fish and wildlife (such as the loss of wildlife habitat), and on recreational, aesthetic, and economic values.⁸³ Thus, it appears that someone wishing to fill a wetland would have difficulty obtaining a permit.⁸⁴ However, exceptions contained in section 404 make this appearance of protection largely illusory.

Section 404(f) exempts six categories of activity from 404 permit requirements.⁸⁵ The exempted activities range from normal farming, ranching, and foresting activities to the construction of temporary mining roads and the maintenance of currently serviceable structures. It is uncertain just how far these exemptions ex-

81. 33 C.F.R. § 323.2(m) (1983) provides that "fill material" is "any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody."

82. 40 C.F.R. § 230.10(c) (1983).

83. *Id.* The Corps of Engineers must make and document factual determinations of the probable impact and the practical alternatives to filling. 40 C.F.R. § 230.5 (1983). The Corps must also give notice of the application for a permit and provide an opportunity for public hearings. 33 U.S.C. § 1344(a) (Supp. V 1981). A determination may then be made as to whether the permit should be granted. However, the Administrator of the EPA can, in effect, overrule the granting of a permit or withdraw a permit previously granted "whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas . . . , wildlife, or recreational areas." 33 U.S.C. § 1344(c) (Supp. V 1981).

84. It is well established that the Corps may deny a permit on ecological grounds. *See, e.g., Bayou Des Familles Dev. Corp. v. Corps of Engineers*, 541 F. Supp. 1025 (E.D. La. 1982). *See supra* notes 41-60 and accompanying text. The appearance of protection is bolstered by the fact that the regulations expressly note the loss of value that results from the discharge of dredged or fill material in wetlands. 40 C.F.R. § 230.41(b) (1983). "[F]rom a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines." 40 C.F.R. § 230.1(d) (1983).

85. The exempted activities are: (1) normal farming, forestry, and ranching activities; (2) the maintenance of currently serviceable structures; (3) the construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches; (4) the construction of upland temporary sedimentary basins; (5) the construction or maintenance of farm or foresees roads, or temporary mining roads, if done in accordance with best management practices; (6) activities regulated under state section 208(b)(4) programs to control minor discharges through best management practices. 33 U.S.C. §§ 1344(f)(1)(A)-(F) (Supp. V 1981).

tend, but they clearly limit the scope of section 404 in Nebraska.⁸⁶ Perhaps even more damaging, however, is the provision for the issuance of general permits contained in section 404(e).⁸⁷ This provision allows the Corps to issue state, regional, or nationwide permits for activities that "will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment."⁸⁸ The issuance of a general permit means that persons may engage in exempt activities without applying for specific individual permits.

86. Since the loss of Nebraska's wetlands has been due primarily to the expansion of agriculture, *see supra* note 29 and accompanying text, the exclusion of normal farming and ranching activities is particularly significant. In 40 C.F.R. § 233.35 (1982), this exemption is limited to those activities that are a part of established farming, ranching, or foresting activities, thus disallowing the conversion of wetlands to farm ground by filling. However, 40 C.F.R. § 233.35(a)(1)(iii)(C)(1)(1983), allows the discharge of dredged or fill material, incidental to the drainage of upland croplands, by means of ditching or tilling. Thus it appears that § 404 allows the drainage of land which had been the subject of previous tillage attempts (even if prior attempts were unsuccessful because the ground was too wet). Seasonally flooded basins and inland fresh meadows in Nebraska are probably included under § 404.

The exemption of the construction of stock ponds and irrigation ditches are also significant in Nebraska. It's interesting to note that the threat of subjecting these activities to § 404 regulation is what initiated the movement for the amendment of the FWPCA Amendments in the first place. *See supra* note 73 and accompanying text.

87. 33 U.S.C. § 1344(e) (Supp. V 1981).

88. *Id.* Certain conditions must be followed for the nationwide permits to be valid. For the waters under nationwide permits these conditions are: (1) the discharge must not be located near a public water supply intake; (2) the discharge must not destroy a threatened or endangered species or the habitat of such species; (3) the discharge cannot contain toxic pollutants in toxic amounts; (4) the fill must be properly maintained to prevent erosion and other non-point sources of pollution; (5) the discharge cannot occur in a component of the National Wild and Scenic River System; and (6) best management practices must be followed to the maximum extent practicable. 33 C.F.R. § 330.4(b) (1983). In addition to the conditions listed above, for specific activities covered by nationwide permits: (1) the discharge cannot take place in areas of concentrated shellfish production unless directly related to authorized shellfish harvesting activities; (2) the fill activity cannot significantly disrupt the movement of aquatic life indigenous to the waterbody; and (3) the activity cannot cause an unacceptable interference with navigation. 33 C.F.R. § 330.5(b) (1983).

These conditions provide very little protection for Nebraska's wetlands. For example, there are no shellfish harvesting activities in the state and the only Nebraska river in the National Wild and Scenic Rivers System is that portion of the Missouri running from Gavins Point Dam to Ponca State Park. The conditions protecting the habitat of threatened and endangered species may be of some help since the endangered whooping crane does frequent Nebraska's wetlands, *see supra* note 51 and accompanying text, but, for the most part, these conditions do nothing to stop the type of filling activities which routinely take place in Nebraska.

Specific categories of discharges are authorized by nationwide permits, as well as discharges into certain waters of the United States.⁸⁹ Until last year, the waters covered by nationwide permits included natural lakes of less than ten acres and their adjacent wetlands, and wetlands adjacent to non-tidal rivers and streams located above the headwaters of those rivers and streams.⁹⁰ The exclusion of these areas from section 404 requirements greatly reduced the Act's effectiveness in protecting Nebraska wetlands, since a significant proportion of wetlands fit within those categories.⁹¹ Then, on July 22, 1982, any remaining protection was effectively eliminated when the Corps issued twenty-seven new nationwide permits under their interim final regulations.⁹²

The Corps' new nationwide permits reduce the number of categories of waters in which discharges are authorized from four⁹³ to two. However, the scope of the permitted filling is expanded rather than reduced. Discharges are now allowed in all "[n]on-tidal rivers, streams and their lakes and impoundments, including adjacent wetlands that are located above the headwaters" and "[o]ther non-tidal waters of the United States . . . that are not a part of a surface tributary system to interstate waters or navigable waters of the United States."⁹⁴ The ten acre limit has been removed. This means that *all* of Nebraska's isolated wetlands (being non-tidal waters of the United States)⁹⁵ are now covered by a na-

89. 33 C.F.R. §§ 330.4-5 (1983). There is also a nationwide permit for activities which occurred before the phase-in of the § 404 permit program. 33 C.F.R. § 330.3 (1983).

90. 33 C.F.R. § 323.4-2 (1982). The waters under nationwide permits, prior to July 22, 1982, were:

- (1) Non-tidal rivers, streams and their impoundments including adjacent wetlands that are located above the headwaters;
- (2) Natural lakes, including their adjacent wetlands, that are less than 10 acres in surface area and that are fed or drained by a river or stream above the headwaters;
- (3) Natural lakes, including their adjacent wetlands that are less than 10 acres in surface area and that are isolated and not part of a surface river or stream;
- (4) Other non-tidal waters of the United States other than isolated lakes larger than 10 acres . . . that are not part of a surface tributary system to interstate waters or navigable waters of the United States

Id.

91. About 70 percent of the wetlands destroyed prior to the mid-1960's were ten acres or less. Habitat Survey 1972, *supra* note 6, at 27.

92. 47 Fed. Reg. 31794 (1982).

93. *See supra* note 90.

94. 33 C.F.R. § 330.4(a)(1)-(2) (1983).

95. The new nationwide permit for "other non-tidal waters of the United States", 33 C.F.R. § 330.4(a)(2) (1983), refers to 33 C.F.R. § 323.2(a)(3) (1983), as the section defining such waters. Other non-tidal waters are defined as "[a]ll other waters such as intrastate lakes, rivers, streams (including intermittent

tionwide permit. Therefore, the program is, at this point, useless to Nebraska's wetlands preservation efforts.

The new nationwide permits⁹⁶ have encountered substantial resistance from certain government officials⁹⁷ and environmental groups. Several congressional hearings have been held to examine Corps officials on the meaning and scope of the changes. In addition, a lawsuit has been filed in the District Court for the District of Columbia challenging the validity of the permits.⁹⁸ As a result, the Corps is now considering reinstating the ten acre lake limit for areas covered by nationwide permits.⁹⁹ However, even if the ten

streams), mudflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce." Clearly this includes the majority, if not all, of Nebraska's wetlands providing an effect on interstate commerce can be shown. If no such effect can be shown they are not covered by § 404 in the first place. *See supra* note 80 and accompanying text.

96. In addition to the two nationwide permits for discharges into certain waters, there are 25 new nationwide permits for specific filling activities. 33 C.F.R. § 330.5 (1983). These activities range from the maintenance of currently serviceable structures to minor roadcrossing and utility line fills as well as a categorical authorization of any discharge which does not exceed ten cubic yards of dredged or fill material.

97. For example, Senator John H. Chafee (R-RI) has strongly criticized the Corps' interim final regulations, particularly the lifting of the ten acre limit. Chafee asserted that the change would remove the requirement for individual permits in up to two million acres of lakes and wetlands in Minnesota, Michigan, and Wisconsin alone—clearly more than a minimal aggregate effect. *Chafee Attacks Corps Scheme to Expand Water Act General Dredge and Fill Permits*, [Current Developments] 13 ENV'T REP. (BNA) 399 (July 23, 1982).

Even William R. Gianelli, Assistant Secretary of the Army for Civil Works, has said that § 404 is not an effective wetlands protective device, and that Congress needs to enact a comprehensive wetlands protection law. *Wetlands Should Be Protected Under New Law, Not Dredge, Fill Program*, Gianelli As-
serts, [Current Developments] 13 ENV'T REP. (BNA) 492 (Aug. 13, 1982).

98. *National Wildlife Fed'n v. Marsh*, No. 82-3632 (D.D.C. filed Dec. 22, 1982). In this case, sixteen environmental groups attempted to obtain an order enjoining the Corps from implementing or enforcing the new nationwide permits and further, ordering the Corps to revoke the challenged permits. They alleged that the permits were issued over the objection of EPA and the Fish and Wildlife Service and that the Corps violated both substantive and procedural provisions of the Clean Water Act by failing to assess the environmental impacts of the new permits, improperly defining terms, and failing to comply with applicable guidelines. *See* [Pend. Lit.] ENVTL. L. REP. (ENVTL. L. INST.) 65775. The government filed a motion to dismiss on the basis that there is no justifiable case or controversy (filed Jan. 28, 1983), and the plaintiffs responded with a motion for partial summary judgment (filed Feb. 14, 1983). [Pend. Lit.] ENVTL. L. REP. (ENVTL. L. INST.) 65784. The case is presently pending.

99. 48 Fed. Reg. 21, 466 (1983) (to be codified at 33 C.F.R. §§ 320, 322, 323, 325, 327, 328, 330) (proposed May 12, 1983).

Another factor responsible for the Corps taking a second look at the new

acre limit is reinstated and the Corps cuts back the scope of other nationwide permits, additional factors will continue to limit section 404's potential as a comprehensive wetlands protection device. One such factor is built into the section's basic structure. Permit requirements apply only to *discharges* of dredged or fill material. Where wetlands are drained instead of filled, 404 permit require-

nationwide permits is the reaction of state certification agencies. Section 401 of the Clean Water Act, 33 U.S.C. § 1341 (1976 & Supp. V 1981), requires any applicant for a federal license or permit to obtain state water quality certification. A federal permit cannot be issued until state certification has been obtained or waived. (If the state fails to grant or deny certification within one year, it is waived. 33 U.S.C. § 1341(a)(1) (Supp. V 1981)). This power has the potential to be an effective check in the hands of the states.

However, prior to the promulgation of the new nationwide permits, all states except Wisconsin waived certification of the permitted discharges. 48 Fed. Reg. 21,466 (1983) (to be codified at 33 C.F.R. §§ 320, 322, 323, 325, 327, 328, 330) (proposed May 12, 1983). Wisconsin had refused to authorize discharges included in the headwaters and isolated waters permits. But, "[i]n response to the July 22, 1982, interim final regulations, several states which had waived certification indicated that they may now wish to deny 401 certification for some of the nationwide permits." See DEC FEASIBILITY STUDY, *supra* note 47, at 160. The Corps is allowing those states the opportunity to deny certification until publication of the final regulations. After publication of the final regulations all other certifications will be considered to be waived. *Id.*

Nebraska is one state that has denied certification since the promulgation of the interim final regulations. In a letter to the chief of engineers of the Army Corps of Engineers, the Nebraska Game and Parks Commission and the DEC, Nebraska refused to certify the specific nationwide permits, including those expanding the water classifications, and instead provided a list of comments and suggested revisions. Letter from Eugene T. Mahoney, Director of the Nebraska Game & Parks Commission, and George H. Ludwig, Acting Director of the Nebraska Department of Environmental Control, to the Office of the Chief of Engineers, Army Corps of Engineers (July 8, 1983). The Corps responded with a letter thanking Nebraska for its comments and stated that those comments, along with suggestions from other states, would be considered and possibly reflected in the Corps' final regulations. Letter from C.E. Edgar III, Brigadier General, U.S. Army, Deputy Director of Civil Works to Eugene T. Mahoney (Aug. 9, 1983). This action by the DEC should, at least for the time being, avoid the new nationwide permits and may provide a test of the DEC's authority to deny certification.

The basis for Nebraska's refusal to certify the new permits is rather questionable. The *Nebraska Water Quality Standards for Surface Waters of the State*, 7 NEB. ADMIN. R. 117 (1983), do not specifically address any of the activities requiring a 404 permit and do not focus at any time on wetlands other than those contained in Special Use Areas and State Recreation Areas. Only through an expansive reading of both the Clean Water Act and Nebraska statutes could the state deny certification of wetland filling activities. In addition, certification procedures in Nebraska may actually violate the Clean Water Act. Section 404 requires that the state or agency responsible for certification establish for public notice and public hearings in connection with applications for certification. Nebraska has not done this. DEC FEASIBILITY STUDY, *supra* note 47, at 145. For a complete discussion of the possibility of denial of certification in Nebraska, *id.* at 160.

ments never come into play.¹⁰⁰ Even when wetlands are consolidated by dredging, if such dredging can be accomplished without depositing the dredged material into the water, no permit is required. Furthermore, the program established by section 404 is currently the focus of several other legislative and administrative proposals which would further reduce its scope.¹⁰¹ These limitations and the statutory exemptions explain why section 404 has done so little to prevent the destruction of Nebraska's natural wetlands.

3. *The Current 404 Program in Nebraska*

The 404 permit program in Nebraska is administered by the Missouri River Division of the U.S. Army Corps of Engineers headquartered in Omaha, Nebraska. This office has jurisdiction over Nebraska, South Dakota, and parts of North Dakota, Wyoming, Montana, Colorado, Kansas, Missouri, and Iowa.¹⁰² The Omaha office administers permit programs other than the section 404 program, but most of the permit activity in Nebraska involves 404 permits.¹⁰³ From 1977 to 1980, a total of 145 section 404 permits were issued for discharges in Nebraska waters other than naviga-

100. On occasion, even activities which appear to involve the discharge of dredge or fill material into wetlands are exempted from § 404 requirements. *See Save Our Wetlands, Inc. v. Sands*, 711 F.2d 634 (5th Cir. 1983) (holding that timber and other vegetation cleared from wooded swampland, then winnowed and deposited in a localized area of the swamp, were not fill material and, therefore, no permit was required).

101. The Reagan Administration has been pushing for the reform of § 404 ever since 1981. *See* PRESIDENT'S TASK FORCE ON REGULATORY RELIEF, ADMINISTRATIVE REFORMS TO THE REGULATORY PROGRAM UNDER SECTION 404 OF THE CLEAN WATER ACT AND SECTION 10 OF THE RIVERS AND HARBORS ACT (1982). In both the 97th and the 98th Congress, bills were introduced to return the Corps jurisdiction only to those waters navigable under the traditional federal test. S. 777, 97th Cong., 1st Sess., 127 CONG. REC. 2584 (1981); H.R. 393, H.R. 3083 & H.R. 3962, 97th Cong., 1st Sess. (1981); H.R. 1570, 98th Cong., 1st Sess. (1983). For a complete discussion of these and other attempts to limit the § 404 dredge and fill program, see Comment, *Corps Recasts § 404 Permit Program, Braces for Political, Legal Skirmishes*, 13 ENVTL. L. REP. (ENVTL. L. INST.) 10,128 (May 1983).

102. U.S. ARMY CORPS OF ENGINEERS, PERMIT PROGRAM: A GUIDE FOR APPLICANTS 20 (1977). The tremendous amount of territory that the Missouri Division and the Omaha District Office are responsible for is another factor influencing the 404 program's effectiveness in Nebraska. The Corps simply lacks the manpower to monitor compliance over such a great area. For the more inconspicuous discharges of dredged and fill material, such as that occurring in many isolated wetlands, the Corps must rely on voluntary compliance for the most part. Those persons engaging in such activity who choose not to apply for a permit or who simply don't know that permits are required go undetected.

103. DEC FEASIBILITY STUDY, *supra* note 47, at 35.

ble waters.¹⁰⁴ Of the total 145 permits, six were for discharges above headwaters.¹⁰⁵ Those six were covered by a nationwide permit. Only three of the 145, besides those above headwaters, were for discharges in wetland areas.¹⁰⁶ Thus, although very little wetlands filling is authorized by the Corps, very little is prevented either.¹⁰⁷

The Corps does attempt to detect unauthorized filling, and, if such activities are discovered violators may be subject to both civil and criminal penalties.¹⁰⁸ However, criminal penalties or daily fines have never been used against violators in Nebraska.¹⁰⁹ Figures from the Omaha Corps office show that occasionally reported violations may fall under a previously issued, or general permit or no permit is required at all. Also, in about 30 percent of the cases, an after-the-fact permit is issued for the violation.¹¹⁰ This data indicates that the 404 permit program, as administered by the Corps, provides very little protection for Nebraska wetlands. Thus, those who are concerned with the preservation of wetlands must look elsewhere for an effective means of accomplishing their goal.

B. Other Means of Wetlands Preservation

1. Federal Land Acquisition

There are other federal programs designed to aid in the nations wetlands protection effort. The most important of these has been the federal wetlands acquisition program. Since the turn of the

104. *Id.* The only water that has been declared "navigable" under the federal test in Nebraska is the Missouri River. *See Harris v. Central Nebraska Pub. Power & Irr. Dist.*, 29 F. Supp. 425 (D. Neb. 1938).

105. DEC FEASIBILITY STUDY, *supra* note 47, at 37.

106. *Id.*

107. Of all the instances of wetlands destruction by the deposit of fill material in the rainwater basin area between 1977 and 1981, only three were investigated by the Corps. On one occasion the permit was denied and two other permits were issued after being modified to minimize habitat destruction. Habitat Survey 1984, *supra* note 27, at 13.

108. 33 U.S.C. § 1344(s) (Supp. V 1981). This section provides for a civil penalty not to exceed ten thousand dollars per day per violation for disregarding any condition or limitation in a permit. For willful violations the penalty is a fine of not less than twenty-five hundred dollars nor more than twenty-five thousand dollars per day, or imprisonment for not more than one year, or both. After the first offense the maximum penalty is a fifty thousand dollar fine, or two years imprisonment, or both. *Id.*

Case law has recognized that restoration may also be ordered. *See, e.g., United States v. Bradshaw*, 541 F. Supp. 884 (D. Md. 1982); *Parkview Corp. v. Department of Army*, 490 F. Supp. 1278 (E.D. Wis. 1980); *United States v. Weisman*, 489 F. Supp. 1331 (M.D. Fla. 1980).

109. DEC FEASIBILITY STUDY, *supra* note 47, at 41.

110. *Id.* at 43.

century, the federal government has possessed the power "to adopt such measures as may be necessary to" effect the "preservation, distribution, introduction, and restoration of game birds and other wild birds."¹¹¹ The authority to establish migratory bird refuges was provided by the Migratory Bird Conservation Act of 1929.¹¹² The most important legislation, however, was the Migratory Bird Hunting Stamp Act of 1934, which provided the financial assistance necessary to procure the land.¹¹³

The Migratory Bird Hunting Stamp Act, more commonly referred to as the Duck Stamp Act, required all waterfowl hunters to purchase a one dollar duck stamp. The funds raised by the sale of these stamps was used to purchase and develop bird sanctuaries pursuant to the Migratory Bird Conservation Act. In 1949, the Act was amended to raise the cost of the duck stamps to two dollars;¹¹⁴ and, in 1958, the cost was raised to three dollars.¹¹⁵ The 1958 amendment also authorized the Secretary of the Interior to acquire "small wetland and pothole areas", through the purchase of long-term easement, to be designated "Waterfowl Production Areas."¹¹⁶ However, even this program could not curb the advanced rate of wetlands destruction. Finally, in 1961, Congress passed the Wetlands Act, authorizing a \$105 million interest-free loan, repayable from future sales of duck stamps, "to offset or prevent the serious loss of important wetlands and other waterfowl habitat"¹¹⁷ The increased funds generated by the Wetlands Act of 1961 enabled the Fish and Wildlife Service to purchase some of the most essential remaining wetlands.

In Nebraska, seven counties located in the rainwater basin area contain forty-five¹¹⁸ Waterfowl Production Areas for a total of 8002

111. Act of May 25, 1900, ch. 553, 31 Stat. 187 (codified as amended at 16 U.S.C. § 701 (1982)).

112. Ch. 257, 45 Stat. 1222, (codified as amended at 16 U.S.C. § 715 (1982)). A refuge cannot be established, unless the state consents "by law." 16 U.S.C. § 715(f) (1982). Thus consent from the state legislature is required. *North Dakota v. United States*, 103 S. Ct. 1095, 1098 n.3 (1983).

113. Ch. 71, 48 Stat. 451 (codified as amended at 16 U.S.C. § 718 (1982)).

114. Act of Aug. 12, 1949, ch. 421, 63 Stat. 599.

115. Act of Aug. 1, 1958, Pub. L. No. 85-585, 72 Stat. 486. The Secretary of the Interior may now set the price from \$3.00 to \$7.50. 16 U.S.C. § 718b (1982).

116. 16 U.S.C. § 718d(c) (1982).

117. Wetlands Act, Pub. L. No. 87-383, 75 Stat. 813 (1961) (codified as amended at 16 U.S.C. § 715K-3 to -5 (1982)). This Act has been amended to increase the amount authorized to \$200 million. 16 U.S.C. § 715K-3 (1982). Repayment of this money was to begin Oct. 1, 1983. 16 U.S.C. § 715K-5 (1982).

It is important to note that 16 U.S.C. § 715K-5 (1982) requires the consent of the Governor of the state or appropriate state agency before any land can be acquired with moneys from the migratory bird conservation fund.

118. These counties are: Clay, Gosper, Fillmore, Franklin, Kearney, Phelps, and York Counties.

wetland acres.¹¹⁹ These Waterfowl Production Areas are open to the public for hunting and recreation, and are extensively inhabited by wildlife. The FWS has installed wells on nineteen of these areas to supplement natural inflows in times of drought.¹²⁰ The purpose behind the pumping is to provide waterspace for migrating waterfowl, thereby allowing the birds to disperse, thus reducing the chances of a major fowl cholera outbreak. While there has been opposition to the use of these wells,¹²¹ it is believed that the

119. This figure was compiled from the table found in Habitat Survey 1984, *supra* note 27, at 12.

120. *Id.*

121. In November of 1977, Robert Raun and several other landowners in the area in which the Fish and Wildlife Service had proposed to drill more wells filed suit in federal district court seeking to enjoin further drilling or pumping by the Fish and Wildlife Service. *Raun v. Andrus*, No. 77-223 (D. Neb. filed Nov. 7, 1977). The plaintiffs, later joined by the Tri-Basin Natural Resource District, alleged: (1) a violation of 42 U.S.C. § 4332(C) (1976), in that the activity of the Fish and Wildlife Service was major federal action "significantly affecting the quality of the human environment" and there had been no environmental impact statement filed as required; (2) that further pumping would cause the plaintiffs irreparable harm by degrading agricultural land; disrupting farming, diminishing domestic and agricultural water supplies, and altering the ecological balance; (3) that the defendant's use of groundwater was not a beneficial use under Nebraska law; and (4) that flooding the wetland basins was a deprivation of private property without just compensation and was a nuisance. The defendants claimed that the plaintiffs lacked jurisdiction, that Tri-County lacked standing, and that there was no statement of a claim for which relief could be granted. Defendants also counterclaimed for reimbursement of all funds expended to defend against the action.

After several years of pre-trial motions and discovery, the case was finally set for trial on November 30, 1981. However, the case was announced settled on November 11, 1981, and the trial was cancelled. Dismissal papers were never filed however, and on October 3, 1983, the court ordered the case dismissed without prejudice under Local Rule 21. On October 24, 1983, plaintiffs moved to reinstate the action claiming that the parties were in substantial agreement and that a consent decree was anticipated. The court granted the motion on November 9, 1983, with the understanding that a consent decree would be recorded and the case dismissed within 30 days or it would be set for trial. On December 9, 1983, the court added an additional 15 days in which to submit a consent decree.

On December 20, 1983, a consent decree was filed by the parties and signed by Hon. Judge Warren K. Urbom of the Federal District Court for the District of Nebraska. The major points of the decree were:

(1) Mapping—that the Fish and Wildlife Service prepare topographical maps of each WPA to identify basin capacities and natural drainage. All areas are to be mapped by the fall of 1988.

(2) Cleaning drains—that the Fish and Wildlife Service clean and maintain WPA natural drainways in order to permit the unobstructed flow of run off water into WPA basins.

(3) Water level—that the Fish and Wildlife Service restrict pumping so as to maintain a water level in the WPA basins that would accommodate a 100 year rain without overflow.

(4) Pumping season—that the Fish and Wildlife Service only flood the

pumping has been effective in reducing the number of waterfowl lost to cholera.

There are also three National Wildlife Refuges, located in Cherry, Garden, and Washington counties, containing Nebraska wetlands.¹²² In these areas, an additional 2,569 acres of marsh and 11,070 acres of open water have been set aside.¹²³ Although only the Crescent Lake area in Garden County allows waterfowl hunting, all three National Wildlife Refuges are available for other recreational uses, including fishing.

2. *State Land Acquisition*

Federal land acquisition efforts have been successful in setting aside a limited amount of wetland acres. In an effort to supplement these efforts, the State of Nebraska has engaged in similar programs. By 1972, the Nebraska Game and Parks Commission owned all, or parts, of seventeen wetlands totaling 4,011 wetland acres. Five of these are in the rainwater basin and eleven are in the sandhills.¹²⁴ However, land acquisition efforts were limited by a lack of funding until the enactment of LB 861, now codified in section 37-216.01 of the Nebraska Revised Statutes, requiring Nebraska hunters to purchase a "Habitat Stamp" in addition to their state hunting licenses.¹²⁵ Funds generated by the sale of these stamps are used to acquire critical wildlife habitat.¹²⁶ Habitat collections began on January 1, 1977, and, as of August 23, 1983, some

WPA basins during the months of January and February. Pumping may also occur in December and March if necessary to accommodate unusual migration schedules, unusual weather conditions, or epidemic diseases of migratory birds, provided that at least fourteen days notice of the intended pumping be given to the Tri-Basin Natural Resources District. Pumping may also occur between October 15 and November 30 to establish water levels that will allow hunting in the WPA basins, but such water levels may not exceed 50 percent of the maximum level otherwise allowed.

(5) Defendant's present position—that they are subject to Nebraska water law as set forth in the state statutes, case law, and regulations of competent authorities. (A principal issue of conflict between the parties had been whether federal agencies are even subject to state water law.) *Raun v. Andrus*, No. 77-223 (D. Neb. filed Dec. 20, 1983).

122. These refuges are, respectively: Valentine National Wildlife Refuge, Crescent Lake National Wildlife Refuge, and De Soto National Wildlife Refuge.

123. Compiled from the seven Recreational Planning Region maps supplied by the Nebraska Game and Parks Commission. The De Soto National Wildlife Refuge spans the Missouri River and encompasses a total of eight thousand acres of both wetland and upland in Nebraska and Iowa.

124. Habitat Survey 1972, *supra* note 6, at 29.

125. NEB. REV. STAT. § 37-216.01 (1978).

126. NEB. REV. STAT. § 37-109 (1978) authorizes the Game and Parks Commission to spend money received from the sale of hunting and fishing permits and habitat stamps pursuant to the policies of the Game and Parks Commission.

8,936 acres have been acquired at a total cost of \$4,385,869.¹²⁷ Of the acreage acquired, approximately 2,907 acres are rainbasin and sandhills wetlands.¹²⁸ Money from the Habitat Fund has also been expended for habitat improvement in certain areas, including Waterfowl Production Areas. For example, since 1979, the Game and Parks Commission has shared the cost of pumping water into selected rain basins.¹²⁹

3. State Cost Sharing Practices

As part of its habitat preservation efforts, the Nebraska Game & Parks Commission, in cooperation with Nebraska's Natural Resources Districts (NRD's),¹³⁰ works to create new habitat and preserve existing habitat on private lands. This program entails contracting with private landowners to protect or preserve wildlife habitat. Landowners are paid varying amounts depending upon the type of land enrolled in the program and the work required.¹³¹ Funds to operate the program are generated from the sale of Habitat Stamps and are matched on a three-to-one basis with NRD dollars. As of July 31, 1983, 2,333 landowners statewide were participating in this program, enrolling a total of 49,756 acres.¹³² Although data on the actual wetland acreage involved is unavailable, approximately 47 percent of this acreage is enrolled in Practice II (a program designed to protect wetlands or woody cover in combination with other superior cover).¹³³

4. Water Bank Program

A final program available to aid in the preservation of Ne-

127. H. EDWARDS, NEBRASKA GAME AND PARKS COMMISSION, HABITAT PROGRAM UPDATE 3 (1983) [hereinafter cited as HABITAT PROGRAM UPDATE].

128. Compiled from Nebraska Game and Parks Commission Public Use Areas statistics.

129. HABITAT PROGRAM UPDATE, *supra* note 127, at 4.

130. The natural resource districts were created in 1972 in order to consolidate the functions of soil and water conservation districts, watershed conservancy districts and others. NEB. REV. STAT. § 2-3201 (1977). Governed by locally elected boards of directors, NEB. REV. STAT. § 2-3214 (1977), each district has the power to govern the use of lands within the district in the interest of conserving soil and water resources. NEB. REV. STAT. § 2-3244 (1977).

131. Practice II is designed to protect wetlands and other established habitat areas. Contracts are for ten years with a maximum annual payment of fifteen dollars per acre. Landowners must enroll a minimum of three acres and the maximum allowed is forty acres per cooperator. Nebraska Game and Parks Commission, Private Lands Wildlife Habitat Program (informational pamphlet available from the Nebraska Game and Parks Commission in Lincoln, Nebraska).

132. HABITAT PROGRAM UPDATE, *supra* note 127, at 3.

133. *Id.* at 6.

braska's wetlands was created by the federal Water Bank Act.¹³⁴ Enacted in 1970, this Act provides 30 million a year¹³⁵ to the United States Department of Agriculture (USDA) to be paid to private landowners if they agree to preserve their wetlands. The program is administered by the Agricultural Stabilization and Conservation Service (ASCS) with technical assistance provided by the Soil Conservation Service (SCS). Under the Water Bank Program, landowners enter a ten year contract with the USDA, promising to keep their wetlands wet in return for annual, per acre payments.¹³⁶ At the expiration of the contract, the agreement can be renewed if funds are available.

The Water Bank Program was initiated in Nebraska in 1972. In that year only two counties participated in the program. However, in 1982, there were eleven counties enrolled, bringing a total of 3,056.5 wetland acres under contract.¹³⁷ Further growth is somewhat limited since the program is administered on a county-by-county basis and only those counties designated by the national ASCS office can participate in the program. If a county is approved but no one uses the program, the county loses its funds. Despite massive losses of wetlands, Nebraska has experienced difficulty getting counties designated.¹³⁸ Therefore, in many parts of the state, landowners who would like to enroll in the program cannot.

134. 16 U.S.C. §§ 1301-11 (1982).

135. Water Bank Act, Pub. L. No. 91-559, § 11, 84 Stat. 1468, 1471 (1970). The amount of funds available was ten million a year for those years prior to September 30, 1980. 16 U.S.C. § 1310 (1982).

136. In Nebraska the payment rate is ten dollars per acre per year for inland shallow and deep fresh marshes and inland open fresh water wetlands. Payment rates for adjacent upland range from sixteen to fifty-five dollars per acre per year depending upon the soil capability class and whether it is dryland or irrigated ground. Water Bank Program—Nebraska (Sept. 9, 1983) (rate sheet provided by the Federal ASCS office located in Lincoln, Nebraska).

Landowners who enter the program must enroll a minimum of two acres of wetland and eight acres of adjacent upland. This four-to-one ratio must be maintained no matter what the total acreage enrolled. The landowner cannot harvest or graze adjacent land. Interview with Bob Koerner, Soil Conservation Service in Lincoln, Nebraska (Oct. 19, 1983).

137. Nebraska Waterbank Program: Counties in Program (1982) (county summary sheet provided by the Federal ASCS office located in Lincoln, Nebraska). Most of the counties enrolled are located in the rainwater basin area. Only one, Logan County, could be considered a sandhills county, and it does not lie within the area designated as sandhills wetlands. See Appendix I.

138. Interview with Bill Steinkruger, Agriculture Stabilization and Conservation Service in Lincoln, Nebraska (Oct. 12, 1983). Apparently the Washington office does not believe other counties within the state contain threatened wetlands.

5. Summary

While each of the programs discussed above contributes to the preservation of Nebraska's wetlands,¹³⁹ several factors prevent them from providing the level of protection that is truly needed. They are all limited by one essential factor: their success is dependant on the private landowner's willingness to sell, lease, or preserve their wetlands.¹⁴⁰ In addition, the programs tend to compete against each other. Landowners who are willing to participate in a cost sharing program or who wish to sell their wetlands must evaluate both federal and state programs and choose between them.

There is also a good deal of public sentiment against government, especially federal government, land management and acquisition. The recent lawsuit against the Fish and Wildlife Service¹⁴¹ is some indication of these feelings in Nebraska. However, a more extreme example is provided by the attempts made by North Dakota to limit the federal wetlands program in that state. In 1977, North Dakota enacted legislation designed to restrict the United States ability to acquire easements over wetlands.¹⁴² This legislation, conditioned the further acquisition of wetlands upon the approval of a board of commissioners of the county in which the land

139. In some areas, the contribution of these programs is greater than others. For example, in the rainwater basin region, 49 percent of the remaining wetlands are publicly owned. Habitat Survey 1984, *supra* note 27, at ii. However, these figures do not reflect tremendous amounts of government-owned wetlands, but rather demonstrate great losses of privately-owned wetlands in that area.

140. The Nebraska Game and Parks Commission is empowered to acquire real property of fish and wildlife management value by eminent domain. But it can exercise this power only with the consent of the Legislature. NEB. REV. STAT. § 81-815.26 (1981) provides for the right of such eminent domain on two occasions. Therefore, while the acquisition of wetlands and riparian habitat is stated as the Game and Parks Commission's highest priority, it still must acquire such habitats on a willing seller basis.

There is one other wetlands protective measure in Nebraska that does not depend upon willing participation. NEB. REV. STAT. § 46-801 (1978) makes it unlawful to drain or lower any natural lake greater than twenty acres in size unless a permit is obtained from the Department of Water Resources. Further provisions of the statute, however, make it rather meaningless. First, it only applies "if the lake is of such depth and character as to have more economic importance for fish culture, hunting, or other purpose than the bed of said lake would have for agricultural purposes." *Id.* Quantifying these values would be very difficult. Second, the statute does not apply if "the ownership of all the land used for drainage construction and of all the land forming the shoreline and the bed of said lake or lakes is vested in the person performing said work of drainage or diversion . . ." NEB. REV. STAT. § 46-806 (1978). Thus a landowner can drain any wholly owned lake if he does the work himself.

141. See *supra* note 121.

142. N.D. CENT. CODE § 20.1-02-18.2 (1978).

was located,¹⁴³ permitted landowners who were bound by existing easements to drain after-expanded wetlands contrary to the terms of those easements,¹⁴⁴ and restricted all easements to a maximum duration of ninety-nine years.¹⁴⁵ Further legislation, enacted in 1981, forbid the federal government from acquiring additional land for migratory bird reservations and suspended the Governor's authority to consent to any acquisition from the Duck Stamp Loan fund.¹⁴⁶ The United States brought suit seeking to invalidate these statutes.

In *North Dakota v. United States*,¹⁴⁷ the Supreme Court ruled that North Dakota could not revoke the consent given by prior governors to the acquisition of easements over wetlands by the United States. To the extent the statute authorized landowners to drain after-expanded wetlands, contrary to the terms of the United States easement, it was hostile to federal interests and could not be applied to easements acquired through the consent previously given by a former governor. The Court further held that the statute which limited easements to a maximum term of ninety-nine years could not be applied to wetland easements acquired by the United States under consents previously given pursuant to the Duck Stamp Act.¹⁴⁸ Thus the attempt by North Dakota to abolish federal land acquisition was unsuccessful. However, because of the uncertainty created by the North Dakota statutes, the United States was unable to acquire easements over North Dakota's wetlands between 1977 and the time of the suit.¹⁴⁹ In addition, the Court declined to consider whether the North Dakota statute permits the state to condition future acquisition of easements over wetlands upon the Fish and Wildlife Service providing a detailed impact analysis of such future acquisitions and the final approval of a county board of commissioners.¹⁵⁰ If such restrictions were upheld, acquisitions beyond those presently consented to could be

143. N.D. CENT. CODE § 20.1-02-18.1 (Supp. 1983).

144. N.D. CENT. CODE § 20.1-02-18.2 (Supp. 1983).

145. N.D. CENT. CODE § 47-05-02.1 (1978).

146. 1981 N.D. Sess. Laws ch. 258, § 2, at 654 (codified as amended at N.D. CENT. CODE § 20.1-02-18.3 (Supp. 1983)).

147. 103 S. Ct. 1095 (1983).

148. *Id.* at 1096.

149. *Id.* at 1100.

150. *Id.* at 1105. For the time being, N.D. CENT. CODE § 20.1-02-18.1 (Supp. 1983) is left intact as to future acquisition of wetlands that have not been consented to previously. The Court cited one case which held that conditions can be placed on consent, *United States v. Williams*, 302 U.S. 46 (1937), and another which held that conditions could not be imposed upon consent, *James v. Dravo Contracting Co.*, 302 U.S. 134 (1937), indicating that the issue could be decided either way.

effectively prohibited. Thus it appears that the continued preservation of wetlands through federal efforts is by no means ensured.

For these and other reasons the federal and state management and acquisition programs, even when supplemented by section 404, fail to provide the kind of comprehensive and reliable wetland protection that is needed. If Nebraska is to effectively preserve its wetlands, additional steps must be taken.

IV. WHAT MUST BE DONE

A. State Takeover of the 404 Permit Program

The first step which must be taken in order to ensure the protection of Nebraska wetlands is for Nebraska to take over the 404 permit program. The Clean Water Act authorizes the EPA to approve state-operated 404 programs regulating the discharge of dredged and fill materials in non-navigable waters, provided the state program meets certain conditions.¹⁵¹ The Nebraska Department of Environmental Control (DEC) has concluded that such a takeover by Nebraska is feasible¹⁵² and presently is laying the groundwork for a state program. However, one prerequisite for EPA approval is that the state must submit, along with a complete description of the program, a statement from the state attorney general "that the laws of such state . . . provide adequate authority to carry out the described program."¹⁵³ On August 26, 1983, the Acting Director of the DEC requested an opinion from the Nebraska Attorney General as to whether the state had current statutory authority to assume the 404 program. On September 8, 1983, the Attorney General's Office responded with a one page letter.¹⁵⁴ In that letter, the Attorney General indicated that there is no specific authority in the Nebraska Environmental Protection Act¹⁵⁵ for the DEC to regulate dredge and fill activities in wetlands of the state and concluded that, without specific legislation, the DEC could not assume control of the 404 program.¹⁵⁶

151. 33 U.S.C. § 1344(g)-(h) (Supp. V 1981). The Corps of Engineers would retain jurisdiction over the traditionally navigable waters. In Nebraska, only the Missouri River has qualified as navigable water. See *supra* note 104. However, it appears that the state could share this jurisdiction. See 33 U.S.C. § 1344(t) (Supp. V 1981). Both federal and state permits would be required, but they could be processed jointly. 33 C.F.R. § 320.4(j)(5) (1983).

152. See DEC FEASIBILITY STUDY, *supra* note 47.

153. 33 U.S.C. § 1344(g)(1) (Supp. V 1981).

154. Letter from John Boehm, Assistant Attorney General, to George H. Ludwig, Acting Director of the Department of Environmental Control (Sept. 8, 1983).

155. NEB. REV. STAT. §§ 81-1501 to -1532 (1981).

156. The Nebraska Revised Statutes declare the purpose of the DEC to be:

(1) To conserve the water in this state and to protect and improve

This pronouncement by the Attorney General makes it necessary for Nebraska to enact new legislation granting the DEC the authority to administer a 404 program. A bill which would provide this authority has been drafted and is being considered by the ad hoc advisory board of the DEC. In essence, the bill inserts definitions, penalties, and enabling provisions similar to those contained in the federal Clean Water Act. Whether the DEC will be able to find a sponsor for this bill, and whether it will ultimately be enacted into law, is yet unknown.¹⁵⁷ But beyond this first obstacle to

the quality of water for human consumption, wildlife, fish, and other aquatic life . . . ;

- (2) . . . and to promulgate laws, rules and regulations and enforce uniformly the same in such a manner as to give meaningful recognition to the protection of each element of the environment, air, water, and land

NEB. REV. STAT. § 81-1501 (1981).

The DEC is given the power to:

- (2) [D]evelop comprehensive programs for the prevention, control and abatement of new or existing pollution of the air, waters, and land of the state;

- (11)
To issue, continue in effect, revoke, modify, or deny permits, under such conditions as the director may prescribe, consistent with the standards, rules, and regulations adopted by the council, to prevent, control, or abate pollution, or for the discharge of wastes into the air, land, or waters of the state . . . ;
[and]

- (20)
To require all persons engaged or desiring to engage in operations which result or which may result in air, water, or land pollution to secure a permit prior to installation or operation or continued operation.

NEB. REV. STAT. § 81-1504 (1981).

Water pollution is defined as "the manmade or man-induced alteration of the chemical, physical, biological, and radiological integrity of the water,"

NEB. REV. STAT. § 81-1502(20) (1981), and "waters of the state" are defined as:

[A]ll waters within the jurisdiction of this state including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state.

NEB. REV. STAT. § 81-1502(21) (1981).

The DEC concluded that it had the authority to administer a state 404 program under these statutory provisions. Letter from George H. Ludwig, Acting Director of the Department of Environmental Control, to Paul Douglas, Nebraska Attorney General (Aug. 26, 1983). See DEC FEASIBILITY STUDY, *supra* note 47, at 127-35. Under broad statutory construction it is possible to conclude they are correct. The Attorney General's office, however, chose not to interpret the statutes in such a manner, thereby delaying state assumption efforts considerably.

157. Any environmental bill will face tough opposition in the Nebraska Unicameral. With legislators referring to the endangered whooping crane as those "blooming birds," Omaha World Herald, Feb. 16, 1983, at 3, col. 1, and others

the effective preservation of Nebraska wetlands, things look brighter.

The 404 permit program could be much more effective in state, rather than federal, hands. While the state program must be at least as strict as the federal program, nothing would preclude it from regulating activities presently exempted from the Corps requirements.¹⁵⁸ Even a program identical to Corps' could be more effective in state hands. The states' authority to manage and preserve their natural resources is well recognized.¹⁵⁹ They also have the expertise and resources available to accomplish the task. In Nebraska, a state-administered 404 program could more fully utilize the Game and Parks Commission staff and area NRD's in maintaining the program and increasing public awareness of its requirements. These agencies know the nature and extent of Nebraska's wetlands and have a true interest in preserving them. Contacts with local conservation groups and citizen "watchdogs" could also be increased.¹⁶⁰ In addition, state control would reduce the bureaucracy which presently exists with Corps administration and hopefully avoid further reductions in the protection offered by section 404. Most importantly, a state administered program

who perceive any bill to conserve water resources as a threat to agriculture, a wetlands protection bill may not even reach the floor.

158. 40 C.F.R. § 233.20(j) (1983) provides:

Nothing in this part precludes a state from:

- (1) Adopting or enforcing requirements which are more stringent or more extensive than those required under this part;
- (2) Operating a program with a greater scope of coverage than that required under this part. Where an approved State program has greater scope of coverage than required by federal law the additional coverage is not part of the Federally approved program.

If not part of the federal program, federal review and enforcement would not be available. In addition, the independent state program would not be limited by the commerce clause, but would have to stay within the confines of the police powers of the state.

As presently structured, when a state assumes the § 404 program, extensive supervision by the EPA continues. If the Administrator of the EPA at any time determines that the state is not administering the program properly, he will notify the state to take corrective action and, if that is not done, he will withdraw approval of the program and order the Corps to resume control. 33 U.S.C. § 1344(i) (Supp. V 1981). In addition, every application the state receives is inspected by the EPA, which has substantial veto power. 33 U.S.C. § 1344(j) (Supp. V 1981). Thus, even in state hands, the 404 program remains essentially federal.

159. See *Baldwin v. Fish and Game Comm'n*, 436 U.S. 371 (1978).

160. "Currently, DEC staff, working on other regulatory programs are traveling throughout the State." DEC FEASIBILITY STUDY, *supra* note 47, at 77. These people are already in a position to monitor a state 404 program and to increase public awareness.

should be able to override the new nationwide permits.¹⁶¹

The DEC has conducted a detailed study on the feasibility of the state's assumption of the 404 program.¹⁶² Manpower requirements, financing, management problems, and legal implications were all considered. The study concluded that state assumption is feasible and that the DEC is the appropriate state agency to assume the program.¹⁶³ The DEC could provide a greater amount of section 404 protection at "a savings of at least \$40 thousand per year in public expenditures."¹⁶⁴ Thus, it appears that the state's takeover of the 404 program may be both practical and profitable. However, acquiring approval of, and actually implementing, such a program entails a substantial amount of additional preparation.

In order to obtain EPA approval of a state program, the state must not only provide the Attorney General's opinion stating that the state can legally assume the 404 program and a letter from the Governor requesting approval of the program, but must also submit an extensive description of proposed programs, including: a description of the agency (or agencies) which will administer the program; an itemization of the estimated costs of the program; an itemization of the sources and amounts of funding; a description of procedures (including copies of permits, application, and reporting forms); a categorization by type and quantity of discharges within

161. Since the "nationwide permits apply only to Department of the Army regulatory programs," 33 C.F.R. § 330.1 (1983), they really should have no effect after a state takeover of the 404 program. It would then be up to the state agency responsible for the program to formulate state or regional permits. The state may wish to adopt certain nationwide permits such as those allowing minor road-crossing fills, but, hopefully, the more damaging nationwide permits would be abandoned. However, even if all of the current nationwide permits were adopted, the state should be able to avoid those which are most dangerous to wetlands. Currently, the Corps division engineers have discretionary authority "to modify nationwide permits by adding regional conditions or to override nationwide permits by requiring individual permit applications on a case-by-case basis." 33 C.F.R. § 330.7 (1983). Since, in essence, the state replaces the district engineers when the 404 program is assumed, it should have the same authority. Of course, this authority may have to be exercised according to the guidelines established by the EPA, but that would not be a problem since they are, for the most part, environmentally oriented. See 40 C.F.R. § 230 (1983). It may be that the EPA would exercise its supervisory power under 33 U.S.C. § 1344(j) (Supp. V 1981), and disallow this practice. However, this is one possible way to avoid the impact of the new nationwide permits.

162. See DEC FEASIBILITY STUDY, *supra* note 47.

163. *Id.* at xi. This conclusion was based in part on the premise that the DEC had unambiguous authority to conduct a 404 program and, therefore, no new legislation would be required. That premise is false, at least in the opinion of the Nebraska Attorney General. See *supra* notes 153-156 and accompanying text.

164. DEC FEASIBILITY STUDY, *supra* note 47, at xi.

the state; an estimate of how many discharges will require a permit; and a description of the state's monitoring and enforcement program.¹⁶⁵ The state must also submit a Memorandum of Agreement (MOA) with both the Regional Administrator of the EPA and the Secretary of the Army Corps of Engineers.¹⁶⁶ These MOA's must describe how the state's program will allow federal review, including monitoring and reporting requirements, as well as providing for the coordination of activities and the sharing of jurisdiction. Finally the state must also submit "[c]opies of all applicable State statutes and regulations, including those governing State administrative procedures."¹⁶⁷

Clearly a substantial amount of time and work is necessary to even prepare a request for approval. Even then, the EPA, after receiving comments from the Corps, the Fish and Wildlife Service, the National Marine Fisheries Service, and the public, may choose to disapprove the state program. The state would then have to start over, modifying or revising the program to meet EPA's requirements.¹⁶⁸ Therefore the state must be sure to establish a solid data base before the approval process even begins. Proposals backed with detailed and comprehensive data are more likely to be approved; and, if not approved, such data should make future revisions or modification much easier.

Despite the fact that approval, or even submission, of a state program is contingent on many factors, not the least of which is getting the Governor to request approval, Nebraska must start preparing for the program now. First, a comprehensive statewide inventory of wetlands must be prepared. This will entail mapping the entire state, through the use of high speed infrared photography, and identifying and classifying the wetlands revealed. Substantial progress has already been made toward the completion of this task. The United States Fish and Wildlife Service and the DEC have been mapping on a contract basis and are nearing completion of the sandhills region. It is hoped that the mapping of the rainwater basin will begin sometime this year.¹⁶⁹

165. 40 C.F.R. § 233.22 (1983).

166. *Id.* at § 233.21 (1983).

167. *Id.* at § 233.21(5) (1983).

168. The approval process is described in 40 C.F.R. § 233.31 (1983). The EPA must provide notice and allow public comment on the program and, if the state program is disapproved, the state must be notified of any revisions or modifications which are necessary to obtain approval.

169. Interview with Clark Haberman, Chief of the Program Plans Section of the DEC, in Lincoln, Nebraska (Nov. 16, 1983). Color infrared photographs, prepared for the National Wetlands Inventory, are already available for the area outlined in black in Appendix 1. By late 1984, or early 1985, these photographs and maps will be accessible by computer. Most of the rest of the state

After existing wetlands in the state have been inventoried and classified, the state will be able to assess the rate of loss of the wetlands and isolate the factors responsible for this loss. The next step in preparing for the state takeover of the 404 program is the valuation of Nebraska's wetlands. This requires an analysis of all the biological, physical, and chemical factors which make wetlands such a vital natural resource—their value as groundwater recharge areas, pollution filtration systems, flood control devices, and wildlife habitat. If possible a monetary figure should be placed on the value of wetlands to the state.¹⁷⁰ Although such a task is difficult, it will provide an effective means of withstanding political and public pressure to sacrifice wetlands in pursuit of the dollar.

A final factor that would help ensure the success of a state 404 program is increased public awareness of the value of Nebraska's wetlands and the requirements of the 404 permit program. Local input should be encouraged. Working together, private landowners who wish to engage in filling activities and the DEC could accomplish many of the objectives of both parties while minimizing adverse environmental impacts. Accordingly, Nebraska's resource agencies should increase public relation efforts in order to enhance public appreciation of the state's resources.

Realistically, state assumption of the 404 program may still be several years in the future. To date, no state has assumed the 404 program.¹⁷¹ However, every journey starts with a first step; even if

has been photographed under the National High Altitude Photography Program; but funds are needed for photograph interpretation and mapping.

170. Placing a monetary value on wetlands is very difficult. For the most part, the benefits they yield are not quantifiable in dollars and cents. However, such quantification is possible, *see supra* notes 4, 42 & 45 and accompanying text, and is gaining acceptance.

In Nebraska, the DEC has already developed an impact matrix as a basis for managing the 404 program. Under this system, § 404 activities are rated from one to ten on the basis of their potential for adversely affecting or degrading important environmental values. The state's water areas are also assigned numerical ratings based on their overall ecological importance. These figures are then combined to produce a matrix where each activity in each water area is given a numerical value. *See DEC FEASIBILITY STUDY, supra* note 47, at 93-99. This system has merit in that it assesses water values and activities that affect them in quantifiable terms. It is at least a good start toward an overall valuation scheme. One possible fault of the system is that it may tend to limit flexibility beyond the initial assignment of values.

171. Comment, *supra* note 101, at 10,130 n.26. Extensive requirements must be met in order to assume the program and section 404 provides no federal funding. The Senate Environment and Public Works Committee has drafted amendments that would make state assumption easier. The proposed draft would allow partial delegation and would allow thirty million dollars annually for grants to states to develop or implement 404 programs. *Draft Water Act Dredge, Fill Changes Said to Ease Delegation, Speed Permits*, [Current Developments] 14 ENV'T REP. (BNA) 643 (Aug. 19, 1983).

Nebraska never adopts the 404, work done in the preparation of state assumption will not go to waste. A more complete understanding of the wetland resources of the state and of the various activities which affect them will enhance the chances of wetlands preservation through other means. And, to be sure, the *effective* preservation of Nebraska's wetlands *will* require other means, reaching even further than state assumption of section 404.

B. Comprehensive Wetlands Protection

Even Nebraska's assumption of the section 404 would provide only minimal wetlands protection. As noted earlier, a true 404 program would not affect the presently exempt activities and, of course, would only regulate the *discharge* of dredged or fill material. This is not enough to effectively preserve the state's wetlands. What Nebraska needs is a comprehensive wetlands protection statute.

Many coastal states now provide some sort of protection for coastal wetlands, either through explicit coastal regulation statutes or broader shoreland acts.¹⁷² Far fewer states have enacted statutes to protect inland wetlands.¹⁷³ However, among the coastal and inland regulatory statutes that do exist, certain common provisions are found. These include:

- (1) Legislative findings of fact concerning wetland losses and the need for protection.
- (2) A statement of statutory purposes and policies.
- (3) Wetland definitions.
- (4) Authorization for a designated agency to map wetlands.
- (5) Delegation of power to the designated agency to either directly regulate wetland uses or establish standards for regulation by local governments.
- (6) A requirement that landowners seek permits for specified kinds of land uses in wetland areas (piers, fills, dredging, structures) from the State agency or local government. The statute usually contains criteria for evaluating permits and procedures for applying for and issuing permits.
- (7) Penalties for violating regulatory standards.
- (8) Appeal procedures of permits or regulatory orders to a specified court or administrative body. Appeal procedures may establish standards for determining whether a taking of

172. See *supra* note 5.

173. Statutes specifically protecting interior wetlands include: CONN. GEN. STAT. ANN. § 22a-36 to -45 (West 1973); MASS. ANN. LAWS ch. 131, § 40A (Michie/Law. Co-op. 1977); N.Y. ENVTL. CONSERV. LAW § 24-0101 to -1105 (McKinney Supp. 1982-1983).

property has occurred and provide remedies.¹⁷⁴

These common elements provide a good framework for a comprehensive protection scheme. Nebraska should work for a similar program. Particular attention should be given to the eighth point and the manner in which the issue of taking is to be handled.

One effect of wetlands regulation is that often the landowner is deprived of practically all other uses of his wetland property. The landowner may claim that this constitutes an unconstitutional "taking" of his property without just compensation.¹⁷⁵ Model legislation, prepared by Jon Kusler, attempts to deal with the question of whether a taking has occurred by providing a framework within which the court must decide the issue, and by designating certain uses as unreasonable *per se*; thereby removing any need for compensation when those uses are restricted. The statute provides that the appeal procedure for determining whether a taking has occurred shall be the exclusive means of determining the issue.¹⁷⁶ While the courts might be opposed to such a restriction, the attempt to provide guidance in the resolution of this issue has merit since it is a recurring problem and the cases dealing with whether there is a taking do not always reach uniform results.

It was established long ago that states have a right to regulate the use of private property through the exercise of their police power.¹⁷⁷ Therefore, courts initially held that a physical appropriation of privately held property by the government was necessary before a "taking" would be found.¹⁷⁸ Since that time, it has been recognized that government regulation may sufficiently restrict the use of property such that the regulation itself would constitute a taking.¹⁷⁹ The distinction between those cases where a taking oc-

174. J. KUSLER, STRENGTHENING STATE WETLAND REGULATIONS 11 (1978).

175. "No person shall . . . be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

176. J. KUSLER, *supra* note 174, at 59. The New York Freshwater Wetlands Act, N.Y. ENVTL. CONSERV. LAW §§ 24-0101 to -1105 (McKinney 1975), also provides for judicial review of any decision denying a permit in order to determine whether there has been a taking without just compensation. The statute does not place a limit on the courts as to the manner in which they decide the issue of taking; but it does limit the remedy once a taking is found. The court may either direct that the requested permit be granted or order that formal condemnation proceedings be instituted. N.Y. ENVTL. CONSERV. LAW § 24-0705 (McKinney 1975). This approach has merit in that it handles the constitutional issue on a case-by-case basis and avoids the possibility of the whole act being declared unconstitutional. *See Spears v. Berle*, 48 N.Y.2d 245, 397 N.E.2d 1304, 422 N.Y.S.2d 636 (1979).

177. *See Mugler v. Kansas*, 123 U.S. 623 (1887).

178. *See, e.g., Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166 (1872).

179. *See, e.g., Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922).

curs, requiring just compensation, and those legitimate exercises of the police power, is said to be "a matter of degree of damage to the property owner."¹⁸⁰ But there is also a conceptual difference. As explained by the Wisconsin court in *Just v. Marinette County*:¹⁸¹

'It may be said that the state takes property by eminent domain because it is useful to the public, and under the police power because it is harmful . . . [T]he difference between the power of eminent domain and the police power . . . [is] that the former recognised [sic] a right to compensation, while the latter on principle does not.' Thus the necessity for monetary compensation for loss suffered to an owner by police power restriction arises when restrictions are placed on property in order to create a public benefit rather than to prevent a public harm.¹⁸²

Therefore, the resolution of the taking issue depends, in part, on whether the regulation of the property is characterized as creating a public benefit or preventing a public harm.

Earlier decisions considering the constitutionality of wetlands regulations tended to find that those regulations did constitute a taking, reasoning either that their object was to preserve the land in its natural state as a public benefit¹⁸³ or that they deprived the landowners of every practical and profitable use; therefore requiring compensation.¹⁸⁴ Later courts, however, began to perceive the purpose of wetlands regulations as the prevention of public harm and reasoned that the prevention of harm outweighed the loss suffered by the landowner as a result of the restriction in use.¹⁸⁵ For

180. *Just v. Marinette County*, 56 Wis. 2d 7, 15, 201 N.W.2d 761, 767 (1972).

181. 56 Wis. 2d 7, 201 N.W.2d 761 (1972).

182. *Id.* at 16, 201 N.W.2d at 767 (quoting 1 RATHKOPF, *THE LAW OF ZONING AND PLANNING* 6-7 (3d ed. 1974)).

183. *See Morris County Land Improvement Co. v. Parsippany-Troy Hills*, 40 N.J. 539, 193 A.2d 232 (1963).

184. *See State v. Johnson*, 265 A.2d 711 (Me. 1970).

185. Actually, one of the first cases to adopt this reasoning involved flood hazard zoning. *Turnpike Realty Co. v. Town of Dedham*, 362 Mass. 221, 284 N.E.2d 891 (1972), *cert. denied*, 409 U.S. 1108 (1973). In that case the court balanced the severity of the restrictions against the potential harm from overdevelopment of a floodplain and upheld the statute.

Just v. Marinette County, 56 Wis. 2d 7, 201 N.W.2d 761 (1972), is an early wetlands case which applied this analysis. The *Just* court recognized that "wetlands serve a vital role in nature, are part of the balance of nature and are essential to the purity of the water in our lakes and streams," *id.* at 17, 201 N.W.2d at 768, and that "[t]he changing of wetlands and swamps to the damage of the general public by upsetting the natural environment and the natural relationship is not a reasonable use of that land which is protected from police power regulation." *Id.* at 17-18, 201 N.W.2d at 768. *See also Poto-mac Sand & Gravel Co. v. Governor of Maryland*, 266 Md. 358, 293 A.2d 241,

example, in *Sibson v. State*¹⁸⁶ the court held that the denial of a state permit to fill a wetland was not a taking but rather a "[v]alid exercise of the police power proscribing future activities that would be harmful to the public"¹⁸⁷ The court also pointed out that the denial of the permit did not depreciate the value of the wetland. It remained as valuable as it had been for hundreds of years.

The current trend among cases considering wetlands regulations is to find that wetlands protection is a valid exercise of the police power.¹⁸⁸ Vital to these decisions is an appreciation of the value of wetlands and recognition of the fact that "[a]n owner of land has no absolute . . . right to change the essential nature of his land so as to use it for a purpose for which it was unsuited in its natural state and which injures the rights of others."¹⁸⁹ The lesson to be learned when developing a comprehensive wetlands statute is that the value of wetlands to the public welfare of the state and the harm which will result from their destruction must be clearly established. Then, a statute with the stated purpose of preventing such public harm, should be found to be a valid exercise of the states' police power.¹⁹⁰

Keeping in mind the restrictions on the exercise of its police power, Nebraska should work toward a comprehensive wetlands statute similar to that outlined by Kusler.¹⁹¹ An added feature that might be considered is the reduction or elimination of state property taxes on privately owned wetlands.¹⁹² Since the whole state

cert. denied, 409 U.S. 1040 (1972) (holding that statute prohibiting dredging, taking, and carrying away of sand and gravel from tidal waters and wetlands was not a taking, but rather a legitimate exercise of the police power to prevent a use that would be injurious to the public).

186. 115 N.H. 124, 336 A.2d 239 (1975).

187. *Id.* at 130, 336 A.2d at 243.

188. See *Town of Indialantic v. McNulty*, 400 So. 2d 1227 (Fla. Dist. Ct. App. 1981); *Graham v. Estuary Properties Inc.*, 399 So.2d 1374 (Fla.), *cert. denied*, 454 U.S. 1083 (1981); *Manor Dev. Corp. v. Conservation Comm'n*, 180 Conn. 692, 433 A.2d 999 (1980); *Pope v. City of Atlanta*, 242 Ga. 331, 249 S.E.2d 16 (1978); *Milardo v. Coastal Resources Mgmt. Council*, — R.I. —, 434 A.2d 266 (1981).

189. *Just v. Marinette County*, 56 Wis. 2d 7, 17, 201 N.W.2d 761, 768 (1972).

190. The Nebraska Supreme Court has considered the taking issue infrequently, although in *Crawford Co. v. Hathaway*, 67 Neb. 325, 328, 93 N.W. 781, 782 (1903), it held that establishing a prior appropriation system for water allocation was not a regulatory taking. The court has never dealt with the issue in the context of wetlands protection and it is not clear how it would be decided. If it is in accord with the current authority on the matter, however, it should find a reasonable wetlands protection measure to be within the police power of the state.

191. J. KUSLER, *supra* note 171, at 11.

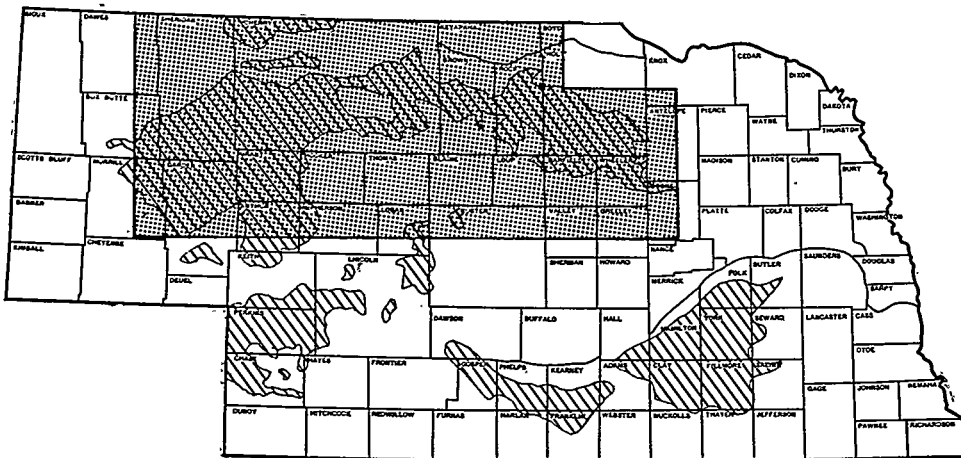
192. See Note, *The Wetlands Controversy: A Coastal Concern Washes Inland*, 52 NOTRE DAME LAW. 1015, 1034 (1977).

benefits from wetlands it seems only equitable that a portion of the burden of their conservation be borne by the public. This may also ease opposition that can be expected from certain elements of the public to the implementation of a comprehensive protection scheme. Regardless of the particular form of a protection proposal, it will undoubtedly meet some opposition in Nebraska.¹⁹³ One can only hope that those who would oppose these measures realize the value of our diminishing wetland resources and come to that realization before it is too late.

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193. See *supra* note 154.

Appendix 1



- ▨ Rainbasin and Sandhills Wetland Areas
- ▤ Area where color infrared photographs are available for the National Wetlands Inventory