Applications of the Public Trust Doctrine to the Protection and Preservation of Wetlands: Can It Fill the Statutory Gaps?

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I. INTRODUCTION

A. Background

It has only been in relatively recent times that western society has deemed it necessary to protect the environment from development and abuse. But even so, our nation has been ambivalent toward environmental protection, wavering between calls for development, justified by economic need, and concern for what appears to be an environmental catastrophe in the making. Wetlands have not avoided this dilemma. By 1976, perhaps as much as forty percent of the wetlands in the United States had been destroyed.

In 1954, the first effort to inventory the nation’s wetlands began. The next such effort, the National Wetlands Inventory Project, commenced in 1974 and was much broader in purpose,

1. According to Roderick Nash, development of the wilderness, especially in the United States, was largely considered a necessary step to physical and economic security. A change in attitude toward nature and wilderness began to appear, beginning with the writings of Henry David Thoreau, in the latter part of the nineteenth century. It was not until the 1960s, however, that large-scale public support began to appear for preservation of the environment. RODERICK NASH, WILDERNESS AND THE AMERICAN MIND (3rd ed. 1982).

2. Id.

3. The Army Corps of Engineers, The EPA, The Fish and Wildlife Service, the U.S. Department of Agriculture Soil Conservation Service and other interested federal agencies have long been operating under different definitions of wetlands. In 1989, the FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS (Delineation Manual) was published. This standardized the definition of wetlands among the various federal agencies involved. According to the Delineation Manual, wetlands have three basic characteristics: “hydrophobic vegetation, hydric soils, and wetland hydrology.” ARMY CORPS OF ENGINEERS, E.P.A., F.W.S. AND U.S.D.A. SOIL CONSERVATION SERVICE, THE FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS, Part II 2.0 (1989).


providing comprehensive data on the characteristics and extent of the nation's wetlands for the first time. Since completion of
the inventory project in 1979, no major studies have comprehensively reconsidered the inventory. It was not until the passage of the Federal Water Pollution Control Act Amendments of 1972 that the federal government took affirmative steps to actually protect the ecological integrity of wetlands for wetlands' sake.

Wetlands protection came to the forefront of public attention as the scientific community gathered more information about the importance of wetlands. Wetlands serve a variety of ecological functions, among them: "[W]etlands regulate water flows, storing water and buffering the effects of storms. They filter and help to purify water, and they provide essential habitat for flora and fauna." Wetlands also act as a nursery for a great deal of wildlife. Between sixty and ninety percent of the coastal fisheries depend on wetlands as spawning grounds; the fur and hide industries also depend on wetlands for their vitality, as do sport fishermen and birdwatchers. Further, over thirty percent of the Nation's endangered species depend on wetlands for their survival. It also appears that wetlands help to stabilize local weather by moderating local temperature and precipitation.

6. Id.
9. The Rivers and Harbors Act of 1899 granted regulatory jurisdiction over "Navigable waters of the United States" to the Army Corps of Engineers. 33 U.S.C. § 403. If a wetland fulfills the statute's definition of navigable, it is deemed to fall under the jurisdiction of the Army Corps of Engineers. Navigability under this statute has been defined as, 1) navigability in fact, 2) connection with other waterways making such waters usable as highways of interstate commerce. MInnehaha Creek Watershed Dist. v. Hoffman, 597 F.2d 617, 622-623 (8th Cir. 1979); see also The Daniel Ball v. United States, 77 U.S. (10 Wall) 557, 563 (1871).
Thus, the Army Corps of Engineers has had jurisdiction over wetlands for some time, but § 404 of the Clean Water Act is the first statute which has protected wetlands for their own sake rather than for purposes of navigation or waterfowl preservation.
10. Wilen, supra note 7, at 182.
11. Id.
12. Id. at 183.
13. Id.
14. Id.; see also FISH AND WILDLIFE SERVICE, supra note 5, at 39. This report also makes special note of the intrinsic values of wetlands.

For many personal reasons, whether ethical, religious, aesthetic or recre-
B. Inadequacies of Section 404

The fill and dredge permit system of section 404 of the Federal Water Pollution Control Act has slowed but not stopped the loss of wetlands. In 1981 the conversion of coastal wetlands was reduced by only seventy to eighty-five percent. Even greater losses continue for inland wetlands. In part, these continued losses result from enforcement problems under the present protection scheme, but most losses result from activities that do not fall under the jurisdiction of section 404 or most state statutes. "Agricultural conversions involving drainage, clearing, land leveling, ground water pumping, and surface water diversion were responsible for eighty percent [of wetlands] conversions." In the twenty year period from the mid-1950's to the mid-1970's, 11,000,000 acres of wetlands were so converted, and the present system established by section 404 of the Federal Water Pollution Control Act does not provide a means to stop it.

The present administration has declared a policy of "no net loss" of America's wetlands. Unless they make considerable changes in the means by which we protect wetlands, the present system will allow for their continued conversion.

national in nature, people value wetlands for their intrinsic qualities. Because these intrinsic values are intangible and thus difficult to express in quantitative and economic terms, they are often overlooked in a society where decisions are based on numerical cost-benefit analyses.

Id. 15. See infra text accompanying note 28. 
18. Id. at 7. 
19. Id. 
20. Id. at 87. 

The President has called for a national goal of "no net loss" of wetlands. Consistent with that pledge, an interagency task force has been convened and is meeting to develop recommendations to meet that goal. The president has proposed special legislative authority to allow interest from monies collected under the Pullman-Robinson Act to be used for wetland purchase under the North American Waterfowl Management Act.

Id. It is still unclear what the Bush administration meant by "no net loss", and aside from the purchase proposal, it is still unclear what other steps the administration had in mind to initiate the policy.
C. The Public Trust Doctrine Can Fill the Gap.

The public trust doctrine traditionally protected the states' interest in keeping large public waterways free for navigation and public use.\(^{22}\) Since then, the doctrine has been greatly expanded to allow for the protection of a variety of different interests in waters that would otherwise not be considered navigable in the formal sense.\(^{23}\)

The public trust doctrine can be applied to protect wetlands from the removal of their vital water, a major means of their destruction, regardless of their navigability. It may also place a responsibility on the states to take other affirmative actions to protect wetlands. Thus the public trust doctrine fills a vital gap in the protection of wetlands which the present federal and state protection schemes have left unprotected.

II. PROTECTION OF WETLANDS UNDER SECTION 404 OF THE FEDERAL WATER POLLUTION CONTROL ACT

In 1972, Congress passed the Federal Water Pollution Control Act Amendments expressly intending, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."\(^{24}\) The Federal Water Pollution Control Act\(^ {25}\) makes it unlawful to "discharge . . . any pollutant" into the navigable waters of the United States.\(^ {26}\) For the purposes of this Act, the definition of navigable waters is broad, and has been interpreted by the EPA to include a variety of bodies of water\(^ {27}\) that would not be considered navigable un-

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\(^{27}\) "Waters of the United States" are defined by the EPA as,

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands;"

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce . . . .

40 C.F.R. § 122.2 (1991). Thus, if a given body of water fits the definition of a
under the traditional definition.\textsuperscript{28} Pollutants are defined by the Act to include: “[D]redged spoil, solid waste, incinerator residue, sewage, garbage, . . . rock, sand, [and] cellar dirt . . . .”\textsuperscript{29} This definition is sufficiently broad to make it illegal to discharge almost anything into a wetland.

Section 404 of the Act establishes a permitting system for the legal discharge of dredge or fill material into navigable waters. However, it was specifically intended to prevent the dumping of fill into the Nation’s wetlands.\textsuperscript{30} Section 404 delegates power to issue such permits to the Army Corps of Engineers.\textsuperscript{31} The EPA also has veto power over dredge and fill permits under certain circumstances.\textsuperscript{32}

Before a permit can be issued under section 404, the Army Corps of Engineers, or a designated state permitting authority,\textsuperscript{33} must conclude that the permittee will comply with four limiting guidelines. First, there must be no practicable alternative; second, there must be no significant adverse impacts; third, all reasonable mitigation must be employed; and fourth, no other statutory violations may occur.\textsuperscript{34}

As this very abbreviated overview of section 404 shows, the federal scheme for protecting wetlands concerns itself primarily with what goes into wetlands, not with what is taken out.\textsuperscript{35} Section 404 excludes application of the permitting requirement for “normal farming operations, silviculture and ranching activities such as plowing, seeding, cultivating, [and] minor drainage . . . .”\textsuperscript{36} Thus, the major source of wetlands conver-

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\textsuperscript{28} The Daniel Ball v. United States, 77 U.S. (10 Wall.) 557, 563 (1870). Here, the Court defined navigable waters as “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.”

\textsuperscript{29} 33 u.s.c. § 1362(6) (1989).


\textsuperscript{32} 33 U.S.C. § 1344(c) (1989). The Administrator may “prohibit the specification (including the withdrawal of specification) of any . . . disposal site,” and may do so “whenever he determines . . . 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.”


\textsuperscript{34} Ferretti, supra note 4, at 109 (citing 40 C.F.R. § 230.10 (a)-(d) (1990)).

\textsuperscript{35} Id. at 108.

sion, agriculture,\textsuperscript{37} is largely exempt from the limitations of the Act.

As mentioned above, a variety of other activities which may destroy or adversely affect wetlands do not fall under the Act's jurisdiction.\textsuperscript{38} Among these are excavation, clearing, drainage and water allocation, either upstream or ground water, none of which constitute fills for the purpose of section 404.\textsuperscript{39} "These activities were responsible for the vast majority of past conversions, especially in inland areas, where 95\% of the Nation's wetlands are located. Inland freshwater wetlands are generally poorly protected."\textsuperscript{40}

Of particular concern is the impact of water allocation on wetlands. Water is of course the key element of any wetland area:

The effects of [water] withdrawals and diversions on downstream wetlands are twofold. First, upstream depletions may lower the water table in downstream freshwater wetlands, causing a temporary or permanent loss of vegetation and a decrease in habitat values. Second, decreasing freshwater inflow in coastal areas will allow tidal incursion of saltwater into the brackish and freshwater marshes. The increase in salinity to these marshes will reduce species diversity and abundance as well as overall ecosystem productivity.\textsuperscript{41}

The effectiveness of federal efforts to protect the water resources necessary for wetlands preservation is inhibited by the nature of water law. The power to allocate water has been left primarily to the respective states.\textsuperscript{42} Although it is clear from case law that the states do not own the water, their control of its distribution is almost complete.\textsuperscript{43}

\textsuperscript{37} Office of Technology Assessment, \textit{supra} note 17 at 7.
\textsuperscript{38} See \textit{supra} text accompanying notes 16-19.
\textsuperscript{39} Office of Technology Assessment, \textit{supra} note 16, at 4.
\textsuperscript{40} Id.
\textsuperscript{41} Id. at 123.
\textsuperscript{43} Sporhase v. Nebraska, 458 U.S. 941 (1982). Though this case was primarily concerned with the restriction placed on the export of water by the state of Nebraska, the Court addressed the nature of the state's interest in its unappropriated waters. The Court explicitly rejected Nebraska's claim that the state was the owner of its waters. The Court analogized the state's interest in water to its interest in wildlife, which was expressly held to not be an ownership interest: "this court traced the demise of the public ownership theory and definitely recast it an 'but a
Any system that is going to adequately protect wetlands must address the problem of what is being taken out of wetlands, not just what is being put into them. The public trust doctrine can step in to fill this gap in the federal wetlands protection system. The public trust doctrine has not only evolved in such a manner that a state may use it to protect water resources, but it may well be applied to protect the various values associated with wetland ecosystems.

III. HISTORY AND DEVELOPMENT OF THE PUBLIC TRUST DOCTRINE

A. History of the Doctrine

It is actually very difficult to say what the public trust doctrine “is.” In fact, to call it a doctrine is probably not completely accurate.\(^\text{44}\) In reality it is fifty-one separate doctrines that vary from state to state and from the state to federal systems.\(^\text{45}\) Each version of the public trust doctrine, however, does require that certain public interests in state waters, or interests connected with those waters, be given special protection by the courts. What is protected, and to what extent it is protected, depends on the jurisdiction in question.

The public trust has its roots in Roman law. As long ago as the Institutes of Justinian, running waters, “were res communes - things common to all and property of none.”\(^\text{46}\) Use of rivers, the sea and its shores were free for all.\(^\text{47}\) This concept spread among the various civil law countries, finding its way into the Napoleonic Code and Spanish law.\(^\text{48}\)

\(^{44}\) Wilkinson, supra note 23, at 425 n. 1.


\(^{46}\) “The Institutes of Justinian summarize the Roman law public trust: ‘Things common to mankind by the law of nature, are the air, running water, the sea, and consequently the shores of the sea.’” McCurdy, Public Trust Protection for Wetlands, 19 ENVTL. L., 683, 685, n.11 (1989), (quoting J. Inst. 2.1.1).

\(^{47}\) Gerlach, 339 U.S. at 944-945; see also Dunning, supra note 21, at 17-6 n.10 (1984)(quoting Las Siete Partidas 3.28.6 (Scott trans. & ed. 1932)). Spanish law provided, “Every man has a right to use the rivers for commerce and fisheries, to tie up to the banks, and to land cargo and fish on them.”
American public trust concepts arise directly from those developed under the English common law which stated that *jus publicum* was held in trust for the people by the Crown. Most notable among these protected interests were the coasts and rivers affected by the tide.\(^49\) The English public trust doctrine primarily prohibited the Crown from alienating such waters and lands.\(^50\)

**B. Development of the Public Trust in the United States**

As successors to the King of England, the original thirteen colonies incorporated the English common law concept of the public trust into American law.\(^51\) The people of each state were considered to hold all navigable waters and the land underlying them in common.\(^52\) Navigable waters in territories of the United States which had not yet been granted statehood were held in trust by the federal government.\(^53\) Upon admission to the Union, title to the navigable waters within the new state and the land underlying them passed to the state under what is called the equal footing doctrine.\(^54\)

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49. See supra note 23, at 431.


The right to alienate public rights, E.G., of fishery, was taken from the Crown by Magna Charta. [Cite omitted] An illustrative case is Malcomson v. O'Day, 11 Eng. Rep. 1155, 1156 X H.L.C. 593 (H.L. 1862):

> The soil of navigable tidal rivers, so far as the tide flows and refloows, is prima facia in the Crown, and the right of fishery therein is prima facie in the public. But the right to exclude the public therefrom . . . existed in the crown, and might, lawfully, have been exercised by the Crown before Magna Charta.

Id.

51. Kosloff, supra note 44, at 10201.


54. In Pollard's Lessee v. Hagen, 44 U.S. (3 How.) 212, 223 (1845), the Supreme Court announced the equal footing doctrine, with the intention that the new states receive all the powers of sovereignty enjoyed by the original states. Since the navigable waters and their beds were held in trust by the original states, all subsequent states acquired such sovereign control. This doctrine did not, however, grant title to the state of other federally owned lands. See also Illinois Central R.R. Co. v. Illinois, 146 U.S. 387 (1892).

Some states have subsequently attempted to extend the equal footing doctrine to all lands owned by the federal government within the state. This view has been expressly rejected by the courts, that continue to limit the doctrine's application to navigable waters and their beds. Nevada *ex rel.* Nevada State Board of Agriculture v. United States, 512 F. Supp. 166 (D.Nev. 1981), *aff'd*, 699 F.2d 486 (9th Cir. 1983).
Illinois Central Railroad Co. v. Illinois\textsuperscript{55} is the seminal case on the public trust doctrine and its early development in the United States. Illinois Central made it clear that the states held actual title to navigable waters, and that the sovereign control of those waters were limited by the parameters of the trust.\textsuperscript{56}

According to the facts of Illinois Central, the Illinois legislature granted a considerable amount of Chicago's waterfront to the Illinois Central Railroad, along with the submerged lands under Chicago's harbor.\textsuperscript{57} Because of the dubious circumstances under which the grant was made, the legislature rescinded the grant.\textsuperscript{58} The State of Illinois sought a decree confirming its title to the bed of Lake Michigan.\textsuperscript{59}

The Court accepted outright that the state of Illinois held title to the navigable waters and the land underlying them, thus giving it power, at least hypothetically, to grant away its interest.\textsuperscript{60} However, the Court made it clear that title was held in trust for the public and that the state could dispose of such lands only if such disposition did not conflict with the public interest in them.\textsuperscript{61} The Court held the legislature's rescission of the transfer to be valid in light of the State's duties under the public trust doctrine.\textsuperscript{62}

Even in light of relatively clear acceptance of the public trust doctrine, it is not entirely clear whether the doctrine is grounded in state or federal law. The public trust doctrine is

\begin{itemize}
\item \textsuperscript{55} 146 U.S. 387 (1892).
\item \textsuperscript{56} Id. at 453.
\item \textsuperscript{57} Id. at 340 n.1.
\item \textsuperscript{58} Id. at 410-11.
\item \textsuperscript{59} Id. at 412.
\item \textsuperscript{60} The Illinois Central Court stated:
\begin{quote}
It is settled law of this country that the ownership of and dominion and sovereignty over lands covered by tide waters, within the limits of the several States, belong to the respective States within which they are found, with the consequent right to use or dispose of any portion thereof, when that can be done without substantial impairment of the interest of the public in the waters . . . . This doctrine has been often announced by this court, and is not questioned by counsel of any of the parties.
\end{quote}
\item \textsuperscript{61} Illinois Central, 146 U.S. at 453 (holding that the control of the State for the purpose of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and water remaining).
\item \textsuperscript{62} Id. at 464.
\end{itemize}
commonly perceived as a state law concept, but the early cases on the subject refer to it as a federal law doctrine.

The legal foundation of the public trust is also not particularly clear. Four possible sources have been forwarded by commentators: first, some claim the doctrine arises from federal common law; second, some have forwarded the theory that the doctrine arises from the Guarantee Clause, a view which can be implied from the language of *Illinois Central*; third, Congressional preemption is seen as a likely source of the doctrine; and finally, and probably the most convincing alternative, some claim that the doctrine arises from the Commerce Clause itself.

Regardless of the doctrine's legal foundation, it is clear that power to administer and define the outward reach of the trust lies with the states, though the state's power to decrease the impact of the trust may be limited. An alternative way of expressing this: federal law determines the minimum reach of the public trust, and state law determines the outward expansion of the trust.

What makes the public trust potentially useful in the protection of wetlands is that states have been willing to expand the trust beyond its original purpose of protecting public use of navigable waters. In fact, the trust has been expanded to protect a variety of public interests.

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63. McCurdy, *supra* note 47.
64. Wilkinson, *supra* note 23, at 453. "*Illinois Central*, however, seems plainly to have been premised on federal law. The briefs relied upon both federal cases and authority from many different states, of which Illinois was just one."
65. *Id.* at 455.
66. *Id.* at 453-59.
67. *Id.* at 461. According to Wilkinson:

There are powerful state interests — powerful enough to induce the implied transfer in the first place — and strong national interests — strong enough to impress an implicit trust on these highly valued natural resources. It does not make sense that a state could abdicate a federally and constitutionally imposed trust completely.

*Id.*
68. *See infra* note 92.
IV. APPLICATION OF THE PUBLIC TRUST DOCTRINE TO WETLANDS PROTECTION

A. Extension of the Trust

The public trust doctrine has expanded considerably over the years, protecting interests beyond navigability. The trust's scope varies greatly from state to state, protecting interests ranging from stream access to clean drinking water. The trust's scope depends in great part on a liberal definition of navigability. There are at least three definitions of navigability, each serving a different purpose: navigability for determining federal jurisdiction, navigability under the equal footing doctrine, and navigability under a prong of the public trust doctrine known as the public use doctrine.

1. Expanding the Definition of Navigability.

The definition of navigability for the purposes of general federal jurisdiction was expanded from the ebb and flow definition of English Common Law to a navigability in fact test. This test was in turn expanded to include waters that could be

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71. Kosloff, supra note 44, at 10205. It should be noted that the jurisdiction of section 404 of the Federal Water Pollution Control Act is dependent on a different, very liberal, definition of navigability.
74. See Ralph W. Johnson, Public Trust Protection for Stream Flows and Lake Levels, 14 U.C. DAVIS L. REV. 233, 248-49 (1980). The terminology "public use doctrine" may be loosely associated with jus publicum. However, the courts have been very loose in the use of this language, making it hard to tell when they are talking about the public trust or public use, or if they perceive the doctrines as being different at all. See id. at 248-49 n.63.

The public use doctrine is so closely allied and so parallel to the public trust doctrine in its protection of in-place water uses that it can justifiably be claimed as a part, or a different form of expression, of the public trust doctrine. Courts have used the public use doctrine, developed largely since the Second World War, to protect the public right of navigation on waters that are recreationally but not commercially navigable, where the beds are generally privately owned.

Id.
75. Dunning, supra note 22, at 17-18.
made navigable with reasonable improvements.  

Navigability under the equal footing doctrine is more narrowly defined than it is for federal jurisdiction. Here the definition is also navigability in fact, but it is limited to the ordinary condition of the water before improvement.

The definition of navigability under the public use doctrine is the most expansive of these definitions. In fact, some have questioned whether any kind of navigability is a prerequisite to the application of this doctrine at all. In reality, the definition varies from state to state, but most often it is based on some historical use of the water for recreational or general public use.

Some have forwarded the view that the public trust doctrine and the public use doctrine are in fact two different legal concepts. However, the public use and the public trust arise from the identical concept of state ownership of navigable waters, and it is perhaps most logical to view the public use doctrine as being a subset of the public trust.

2. What the Public Trust Protects.

Of the three definitions of navigability, only the one applicable to the concept of public use is broad enough to protect wetlands to any extent. Expressing any specific rules on what the public use doctrine protects is as difficult as making general statements about the public trust, because it is in fact

78. Kosloff, supra note 44, at 10208.
79. Lamprey v. Metcalf, 53 N.W. 1139 (Minn. 1893) (The public trust protects sailing, rowing, fowling, bathing, skating and domestic, agricultural and city water needs.).
80. Johnson, supra note 74, at 252. As is the case with the public trust generally, the source of the state's power under the public use doctrine is not at all clear. Courts have articulated three broad justifications for their exercise of the trust power over the waters of the state. First, some have held a public use of waters for recreational boating, fishing etc, to be a public riparian right. Second, some courts have based the doctrine on the Northwest Ordinance and to state constitutions which guarantee navigation of the Missouri and Mississippi rivers, including their tributaries. Third, some courts have based the doctrine on state constitutional language which declares waters of the state as being the domain of the citizens of the state. Id. at 250-51.
81. Because most wetlands involve amounts of water insufficient to make them "navigable in fact," common law definitions are unable to protect them. Section 404 operates under a much broader definition of navigability which gives it jurisdiction over wetlands regardless of "navigability in fact." 33 U.S.C. § 1362(7) (1989).
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fifty different doctrines. Most states, however, use the public use doctrine to protect some sort of activity or use of public waters.

Some commentators have argued that navigability for the purposes of the public trust is no longer a concern. In fact, several courts have protected certain interests regardless of whether definitions of navigability were met. That the definition of navigability is no longer relevant at all is probably an overstatement. The definition of navigability may or may not be a factor depending on the jurisdiction and the interests being addressed.

B. How the Public Trust Can Protect Wetlands

The public trust doctrine applies wetlands protection in two ways: protection of the wetland's water interests, and protection of wetlands for their uses.

82. Kosloff, supra note 44, at 10206.

84. Johnson, supra note 73 at 250, n.66: "Professor Corker argued persuasively as long ago as 1970 that the whole concept of navigability for determining anything other than the floating of a supreme court opinion should be abandoned. The concept is confusing, slippery, unpredictable, antique and irrelevant to today's problems." See also Kosloff, supra note 44, at 10206.
85. People v. Truckee Lumber Co., 48 P. 374 (Cal. 1897) (enjoined a mill from polluting the Truckee river because it was killing the fish, even though the river passed through private land); Montana Coalition for Stream Access, Inc. v. Curran, 682 P.2d 163 (Mont. 1984) (recreational use of river for fishing in itself made stream navigable); Just v. Marinette County, 201 N.W.2d 761 (Wis. 1972) (swamps and wetlands necessary part of the ecology and were connected with navigable waterways).
1. Protection of Wetland Water Interests.

As was discussed earlier, the loss of wetlands through appropriation and diversion of water resources is significant.\(^{87}\) It is possible that a state might assert the public trust doctrine to halt allocation of water to protect wetlands within the state.

The state has a strong proprietary interest in the allocation of the water resources within its borders.\(^{88}\) On several occasions, this interest has been deemed significant enough to justify application of the trust to water allocations.

In *United Plainsmen Ass'n v. North Dakota State Water Conservation Commission*,\(^ {89}\) the North Dakota Supreme Court stated that the public trust doctrine requires that the state consider both short and long term impacts on trust interests before large appropriations of water can be made.\(^ {90}\) "Confined to traditional concepts, the Doctrine confirms the State's role as trustee of the public waters. It permits alienation and allocation of such precious state resources only after an analysis of the present supply and future need."\(^ {91}\)

*United Plainsmen* is noteworthy. Although the North Dakota Supreme Court did not directly address the issue of navigability, it implied that the state's duty under the trust extended beyond navigability to the resource itself.\(^ {92}\) This rule would potentially extend the trust to allocations of ground water as well as to surface waters. A broad reading of the case, and similar holdings by other courts, would also extend the trust to other natural resources within the state over which the state holds a proprietary interest, such as minerals, wildlife and timber.\(^ {93}\)

*United Plainsmen* can possibly be applied to protect wetlands in two ways. First, it could require protection of

\(^{87}\) Office of Technology Assessment, *supra* note 17, at 7.


\(^{89}\) 247 N.W.2d 457 (N.D. 1976).

\(^{90}\) Id. at 464.

\(^{91}\) Id.

\(^{92}\) The court in this case also relied upon statutory and constitutional language to find authority for the trust. Id. at 461.

\(^{93}\) People v. Truckee Lumber Co., 48 P. 374 (Cal. 1897), is another example of the extension of the trust to other natural resource interests. In this case, the protection of fish. Because the fish fell under the protection of the trust, the waters upon which they were dependent were also subject to the protection of the trust.
wetlands under the auspices of the trust duty over state waters. Because wetlands rejuvenate aquifers, control runoff and purify water, the quality and quantity of both ground and surface water directly depends in many situations on the well being of wetlands.\textsuperscript{94} From this connection with a protected state water source, an affirmative duty may be implied under the trust to consider the short and long term impact on wetlands before any destructive activity is undertaken. Such an approach is particularly appealing because of its independence from any finding of navigability, thus protecting wetlands that cannot qualify as navigable.\textsuperscript{95}

Second, many other important state natural resources protected by the public trust, particularly wildlife, may be dependent on wetlands for their continuing vitality. Because of this, the wetlands may also qualify for protection under the trust if such a vital connection exists.\textsuperscript{96}

Trust protection based on a connection with some other protected state resource does have weaknesses. Foremost among these are: 1) it depends on state interpretation of the trust, which may be limited depending on the jurisdiction, 2) it only imputes a duty to consider trust concerns — limited wetland impacts might not justify intervention by the courts if the legislature has already considered such impact, and 3) it requires the court to base protection on some connection to a protected waterway, which may or may not be sufficiently verifiable.

Wetlands that can qualify as navigable under the applicable state definition may be directly protected from deprivation of their water resources. \textit{National Audubon Society v. Superior Court of Alpine County},\textsuperscript{97} is perhaps the best example of the judicial restriction of water allocations to protect trust interests in a navigable body of water. In that case, the California Supreme Court ordered reconsideration of the allocation of two streams used by the City of Los Angeles since 1970.\textsuperscript{98} As a result of these allocations, the level of Mono Lake, a saline body of water near the Sierra Nevada Mountains, dropped to

\textsuperscript{94} OFFICE OF TECHNOLOGY ASSESSMENT, \textit{supra} note 17, at 47-51.

\textsuperscript{95} United Plainsmen Ass'n v. North Dakota State Water Conservation Comm'n., 247 N.W.2d 457, 463 (N.D. 1976)

\textsuperscript{96} People v. Truckee Lumber Co., 48 P. 374 (Cal. 1897).

\textsuperscript{97} 658 P.2d 709 (Cal. 1983).

\textsuperscript{98} Id. at 732-33.
levels that endangered the "scenic beauty and ecological values" of the lake.\textsuperscript{99}

After first determining Mono Lake to be a navigable body of water,\textsuperscript{100} the court announced, "that the public trust doctrine . . . protects navigable waters from harm caused by diversion of nonnavigable tributaries."\textsuperscript{101}

Along with extending the trust beyond the shores of the navigable body to limit appropriations from tributary waters, the court held that water rights appropriated prior to any negative impact on the protected water body were not absolute, but were subject to, "a duty of continuing supervision over the taking and use of the appropriated water."\textsuperscript{102} The court also said, "The state accordingly has the power to reconsider allocation decisions even though those decisions were made after due consideration of their effect on the public trust."\textsuperscript{103} In light of the fact that the appropriations in this case were granted in 1940,\textsuperscript{104} and the case finally decided in 1983, the reach of the public trust in California is long indeed.

What impact could this ruling have on the protection of wetlands? First, it could bar water allocations that could damage navigable wetlands, be they surface or groundwater allocations. Second, taken to its logical extreme, this expression of the public trust doctrine could allow the state to reconsider and revoke water rights to allow for the reclamation of once navigable wetlands. This could be an incredibly potent weapon, though dangerous to use in light of the policy and political ramifications involved in revoking long relied upon water rights.

The use of the public trust doctrine to protect wetland water interests does have inherent limitations. First, because

\textsuperscript{99} Id. at 711.
\textsuperscript{100} Id. at 719. California operates the trust under a liberal definition of navigability. "A waterway usable only for pleasure boating is nevertheless a navigable waterway and protected by the public trust." Id. at 720, n.17. Such a definition could well apply to relatively shallow wetlands, where flat boats have been used in waterfowl hunting or fishing etc., potentially impacting a broad number of wetlands. Board of Univ. School Lands v. Andrus, 671 F.2d 271 (8th Cir. 1982), is another example of such a liberal definition of navigability which could potentially reach wetlands (use of small recreational boats and floating logs). See also Montana Coalition for Stream Access, Inc. v. Curran, 682 P.2d 163 (Mont. 1984), extends the trust to all waters usable for recreational purposes.
\textsuperscript{101} Audubon, 658 P.2d at 721 (citations omitted).
\textsuperscript{102} Id. at 728.
\textsuperscript{103} Id.
\textsuperscript{104} Id. at 711.
the parameters of the trust are defined by state law,\textsuperscript{105} not all jurisdictions will allow it to reach so far as to revoke existing water rights or impact allocations from tributary streams flowing into the navigable body.\textsuperscript{106} No general rule can be stated, and the reach of the rule will depend on the jurisdiction.

Second, the application of the public trust in this form still depends on a definition of navigability, liberal though it may be. Under the current definition of wetlands,\textsuperscript{107} a large number of wetlands areas would not be protected from water allocation for want of navigability or connection to a protected body of water.\textsuperscript{108}

2. **Protection of Wetlands for Public Uses.**

Certain states have been willing to extend the public trust beyond the protection of water and resources to protect uses traditionally carried out on the public trust waters. These courts have not restricted themselves to definitions of navigability in many instances, and in some cases have held that the trust protects those activities even when the land underlying the waterways is owned by a private party.\textsuperscript{109}

Uses receiving protection under the public trust doctrine fall primarily under two categories: recreational and wildlife habitat.

Recreational uses protected by the trust have included boating, swimming, bathing, hunting and skating.\textsuperscript{110} *Montana Coalition for Stream Access v. Curran*\textsuperscript{111} is an example of how the public trust may be applied to create a recreational trust. This case concerned the right of the public to access the Dearborn River as it passed through the property of the defen-

\textsuperscript{105} Wilkinson, *supra* note 23, at 464 n.164.

\textsuperscript{106} Dunning, *supra* note 22, at 17-45. "The future in Western states other than California is much less clear. *United Plainsmen from North Dakota and Kootenai Environmental Alliance from Idaho may be read as effectively being as broad as Audubon, or they may be narrowly confined." Id.

\textsuperscript{107} *Army Corps of Engineers, supra* note 3.


\textsuperscript{111} 682 P.2d 163 (Mont. 1984).
dant, who also claimed title to the banks and the bed of the river where it passed through his property. The court held that the river in question, though not navigable in fact, was navigable under the more liberal state definition of navigability\textsuperscript{112} and, thus, protected by the public trust.

The court considered more than navigability while considering the protection of recreational interests. The court held that past recreational use of a stream made it navigable in fact. The court stated:

\begin{quote}
The capability of use of the waters for recreational purposes determines their availability for recreational use by the public. Streambed ownership by a private party is irrelevant. If the waters are owned by the State, and held in trust for the people of the State, no private party may bar the use of those waters by the people. The Constitution and the public trust doctrine do not permit a private party to interfere with the public's right to recreational use of the surface of the State's waters.\textsuperscript{113}
\end{quote}

This embodiment of the public trust could be applied to the protection of wetlands. If it could be shown that such wetlands are or have been used for recreational purposes, then public use of those waters could not be denied on the basis of private ownership.

The extent of this interpretation of the public trust is not at all clear. Its application to wetlands protection would be dependent on interpretations of at least two key terms. First, what is meant in "interfering with use"\textsuperscript{114} of state owned wa-

\begin{footnotesize}
\textsuperscript{112} The state of Montana applies the federal "log floating test." This test declares a body of water navigable if logs have been floated on it sometime, even before statehood, that body of water was navigable in fact. The body of water would be considered navigable even if the logs could only be floated on the river during part of the year. \textit{Id.} at 166.

\textsuperscript{113} Montana Coalition for Stream Access v. Curran, 682 P.2d 163, 170 (Mont. 1984). Wyoming has a similar public trust protection for recreational uses of water:

Irrespective of the ownership of the bed or channel of waters, and irrespective of their navigability, the public has the right to use public waters of this State for floating usable craft and that use may not be interfered with or curtailed by any landowner. Is also the right of the public while so lawfully floating the state's waters to lawfully hunt or fish or do any and all other things which are not otherwise made unlawful.


\textsuperscript{114} Montana Coalition, 682 P.2d at 170. It is clear that the court has limited its holding to interference with the use of waters protected by the trust, and not with access to them. "We grant a cautionary note that nothing in this opinion
ters? Broadly defined, it could be interpreted to include draining or denying water to a wetland area making it unusable for recreational purposes. Under such a definition a vast amount of wetlands could be protected without the necessity of finding navigability. Narrowly interpreted, interference could be held to extend no further than restricting physical presence on the wetland. Under this definition, wetlands would be afforded very little or no protection of their water resources.

Second, the application of this recreational trust depends on the court's definition of recreation. It clearly applies to hunting, fishing, boating and other traditional outdoor activities. The language of the opinion appears broad enough to include birdwatching, hiking, plant collecting, photography and other less traditional recreational activities. It is possible that wetlands involving too little water to allow for recreational boating might not be protected by a recreational trust. Depending on the definitions given to key terms by a state court, the recreational trust that exists in some jurisdictions could afford tremendous protection to wetlands.

There is another potential limit to this doctrine other than the meaning of these key terms. The Supreme Court of Montana made it clear that the recreational trust extended only to the waters "owned" by the state, and not to privately owned waters. Thus a wetland that might otherwise be protected under the recreational trust would receive no protection at all because it was a part of a private party's vested water rights.

Other courts have implied that the public trust might also be extended to protect the wildlife dependent upon state waters. This application of the trust differs from the recreational trust in that the animals are the users as well as the protected interest.

shall be construed as granting the public the right to enter upon or cross over private property to reach the State owned waters . . . ." Id. at 172. See also supra note 112.

115. Id. at 170.
116. Id.
117. "The Constitution and the public trust doctrine do not permit a private party to interfere with the public's right to recreational use of the surface of the State's waters." Id.

The court's emphasis on the use of the surface of the water seems to imply a body of water at least large enough for small craft use.

118. Id.
In *People v. Truckee Lumber Co.*,\(^{120}\) the question was raised whether the state had a cause of action against a lumber mill that was polluting the Truckee river and killing off the fish population. The California Supreme Court held that even though the Truckee river was not navigable, and thus not subject to the public trust itself, the fish living in the river were subject to the public trust as commonly owned property of the citizens of the state.\(^{121}\)

The protection of the public trust over the fish extended beyond their habitat in public waters. "To the extent that waters are the common passageway for fish, although flowing over lands entirely subject to private ownership, they are deemed for such purposes public waters, and subject to all laws of the state regulating the right of fishery."\(^{122}\) The court held that the state did indeed have the power to enjoin the pollution of the river.

The literal reading of this ruling would extend the protection of the public trust to wetlands serving as habitat for animals and wildlife. This would at least restrict actual physical damage to the wetland in question and could also be extended to restrict water allocations that harm wetlands.

The Wisconsin Supreme Court in *Just v. Marinette County*,\(^ {123}\) extended the trust to actually protect shoreline wetlands regardless of their ownership. They made no specific mention of navigability as a requirement and seemed to imply that the wetlands deserved public trust protection for their own sake.\(^ {124}\)

Both of these decisions appear to apply to the protection of wetlands. The greatest possible limits on their application are the willingness of the state courts to extend the trust to protection of wildlife regardless of navigability.

In *Marks v. Whitney*,\(^ {125}\) the California Supreme Court alluded to a potentially broad application of the public trust doctrine to wildlife and ecological interests. Though dealing with tidelands that they had previously found to fall under the defi-
nition of navigability, they stated:

There is a growing public recognition that one of the most important public uses of the tidelands — a use encompassed within the tidelands trust — is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area.\textsuperscript{126}

This case is clearly limited in its application — tidelands themselves are a protected use of the public trust when navigable — but it does express a growing concern with previously ignored elements of our environment.

Judges hold a variety of tools under the public trust, and it is foreseeable that they could extend the public trust protection to wetlands.

V. SUMMARY

The public trust doctrine has expanded considerably from its initial interpretation of protecting the navigability of public water ways. This expansion of the trust may well have taken in the protection of wetlands.

The application of the public trust to the protection of wetlands is subject to the definition and reach that individual states have given to the doctrine. Depending on the jurisdiction in question, the trust might be invoked to protect the water resources upon which the wetlands are dependent, to protect the wildlife which are dependent on the wetlands for their continued vitality, or in some circumstances, to protect the wetlands for their own sake.

The possible application of the trust to wetlands has inherent weaknesses. It is in no way a panacea for the ills of our Nation's wetlands. It may, however, in some situations, be invoked to protect a given wetland area, an area that might otherwise be endangered under the current statutory protections.

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\textsuperscript{126} Id. at 380.