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Joshua M. Duke
University of Delaware

Kristen A. Sentoff

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MANAGING ISOLATED WETLANDS AFTER *SOLID WASTE* AND *TAHOE*: THE CASE OF DELAWARE

JOSHUA M. DUKE* AND KRISTEN A. SENTOFF**

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I. INTRODUCTION

Federal protection of isolated wetlands was dramatically reshaped in 1999 by the case, *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*.[1] The effect will be most dramatic in those states that neither stringently regulate land uses

* Corresponding author, Assistant Professor of Natural Resource Management and Legal Studies, Department of Food and Resource Economics, University of Delaware. The authors thank the Delaware Water Resources Center for funding part of this research.

** Intern, Department of Food and Resource Economics, University of Delaware, Newark, DE.

1. 531 U.S. 159 (2001).

on isolated wetlands nor have existing backstop protection for isolated wetlands. Unlike wetlands associated with navigable waters (which remain federally protected) and coastal wetlands (which tend to have assorted jurisdictional protections), isolated wetlands in many states now may be vulnerable to land uses that degrade or destroy their ecological functionality. In effect, isolated wetlands ostensibly protected prior to 1999 may now be more readily available for developed uses, thus altering the expectations of landowners and creating opportunities to manifest investment-backed expectations.

Among states with vulnerable isolated wetlands, there will likely be efforts to adopt new legislation to regulate more stringently in the next few years. Thus, in certain states, there exists an "interim" period during which isolated wetlands are vulnerable. In this interim, some isolated wetlands will be subjected to degradation, which would not have occurred in the institutional environment prior to *Solid Waste*. Perhaps as important, however, are those isolated wetlands for which landowners merely manifest their expectations for intensive use during the interim but who choose not to proceed with development prior to the anticipated state legislation. These investment-backed expectations will be manifested by an arms-length transaction — with a commensurately high price — or in plans for development. Accordingly, legal conflicts involving regulatory takings, either triggered by development moratoria or new isolated wetlands regulations, are likely to emerge in the near future. This brings one to the 2002 decision, *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, [2] in which the U.S. Supreme Court clarified its regulatory takings doctrine. Any conclusions about the impact of *Solid Waste* on isolated-wetlands regulation must therefore consider the influence of *Tahoe*.

The objective of this paper is to assess the possible future legal environments of isolated wetlands regulation, which is likely to emerge at the state level in the ensuing years. To give substance to the discussion, the analysis applies the new case law to Delaware and reports estimates of vulnerable isolated wetlands. Delaware provides a useful example because: (1) it has abundant, yet threatened isolated wetlands; (2) inadequately regulates land uses on isolated wetlands; and (3) is struggling to enact new legislation to protect isolated wetlands. As such, policy makers across the U.S. stand to learn a great deal from Delaware's approach to the challenges of isolated-wetlands regulation.

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2. 535 U.S. 302 (2002).

One conclusion of the analysis is that although the State is well positioned — in terms of procedural efficiency — to regulate Delaware's isolated wetlands, the threat of regulatory takings has complicated attempts to create a quick, new law. Nevertheless, the risk of future regulatory takings problems increases as the interim period continues and swift legislative action ought to minimize both the risk of regulatory takings and the degradation of isolated wetlands. One possible remedy that should be investigated is the use of development moratoria.

This paper is organized as follows. The second section discusses the history of wetlands regulation in Delaware, providing a context for the analysis. The third and fourth sections discuss *Solid Waste* and *Tahoe*, respectively. The fifth section applies these two cases to the regulation of isolated wetlands in Delaware and draws conclusions. The sixth section summarizes the results.

II. WETLANDS REGULATION OVER TIME: THE CASE OF DELAWARE

Delaware has an abundance of wetlands resources. Despite great losses in the earlier part of the past century, a 1985 U.S. Fish and Wildlife inventory estimated that the state contained 223,000 acres of wetlands, or roughly 18 percent of its surface area.[3] Although definitions have changed over time — as more forestland was reclassified as wetland — by 1997 Delaware still had 242,684 acres of wetlands.[4] Even the most recent figures show that 350,000 acres, or 30 percent of the state, was covered by wetlands.[5] Nevertheless, when a consistent metric is applied, there is a decline in wetland acreage over time. Development, waste disposal, and agriculture, among other things, have caused the destruction of over 50 percent of Delaware's wetlands.[6] Since the 1970s, however, both the state and federal governments have protected wetlands. These regulations have made great improvements in the reduction of wetlands loss, but the goal of "no-net-loss" has yet to be achieved.[7]

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3. RALPH W. TINER, JR., U.S. FISH & WILDLIFE SERVICE AND DEL. DEP'T OF NAT. RESOURCES & ENVTL. CONTROL, WETLANDS OF DELAWARE 17 (1985).

4. JOSHUA M. DUKE ET AL., DEP'T OF FOOD AND RESOURCE ECON., U. OF DEL., LAND USE ISSUES IN DELAWARE AGRICULTURE, FREC RR02-03 (2002).

5. R. W. TINER, U.S. FISH & WILDLIFE SERVICE AND DEL. DEP'T OF NAT. RESOURCES & ENVTL. CONTROL, DELAWARE'S WETLANDS: STATUS AND RECENT TRENDS 7 (2001).

6. *Id.* at 10.

7. *Id.* at 17.

A. History of State Wetlands Protection

Wetlands in the United States were long considered a nuisance that impeded the productive use of land.[8] This sentiment was reflected in nineteenth century wetlands policy at the federal level, which encouraged "reclamation," the filling or draining of wetlands to "re-claim" farmland[9] and which posed a threat to public health because of mosquito born diseases.[10] Efforts at mosquito control within Delaware included the draining of many coastal wetlands.[11] Destruction of wetlands was generally encouraged until increases in scientific understanding of wetlands function and public awareness of environmental issues occurred in the 1960s.[12]

Research in the 1950s began to increase public awareness about the importance of wetlands, especially in coastal areas.[13] Coastal wetlands, considered the most important type for waterfowl and other wildlife, were the focus of early studies of Delaware's wetlands.[14] This was followed by the first wave of wetlands legislation passed by several states along the East Coast, including Delaware.[15] The centerpiece of Delaware's wetlands regulation is the 1973 Wetlands Act, which requires permits from the Delaware Department of Natural Resources and Environmental Control (DNREC) for activities including "dredging, draining, filling, bulkheading, [and] construction of any kind" in wetlands.[16] However, the Wetlands Act limits the definition of wetlands to "any bank, marsh, swamp, meadow, flat, or other low land *subject to tidal action* ..." or lands other than those previously used for agriculture "containing *400 acres or more* of contiguous nontidal swamp, bog, muck, or marsh."[17] No provision is made for any smaller, non-tidal wetlands in relation to the permitting process of this chapter. It is these isolated wetlands and more specifically, freshwater isolated wetlands, which are the focus of this study.

Other chapters of the Delaware Code, though not aimed specifically at wetlands, may provide some protection in certain

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8. *See* RONALD KEITH GADDIE & JAMES L. REGENS, REGULATING WETLANDS PROTECTION: ENVIRONMENTAL FEDERALISM AND THE STATES, 17 (Michael E. Kraft & Harlan Wilson eds., 2000); TINER, *supra* note 3, at 1.

9. *See* Swamp Lands Act, 43 U.S.C. §§ 982-984 (1972).

10. *See* David E. Moss, The Administration of Delaware's Wetlands Act 18 (1979) (unpublished M. Marine Studies thesis, University of Delaware) (on file with author).

11. *Id.* at 22.

12. *See* TINER, *supra* note 3, at 1.

13. *Id.*

14. *See* U.S. FISH & WILDLIFE SERVICE, WETLANDS INVENTORY OF DELAWARE 3, 6 (1953).

15. TINER, *supra* note 3, at 1.

16. DEL. CODE ANN. tit. 7, § 6603 (2001).

17. *Id.* § 6603 (emphasis added).

areas. The Coastal Zone Act prevents "heavy industry uses" in the coastal zone and allows other "manufacturing uses" by permit only.[18] One of the factors to be considered while issuing permits is "environmental impact," including "likely destruction of wetlands and flora and fauna."[19] Since the defined Coastal Zone encompasses much of Delaware, this Act is likely to prevent detrimental commercial development of some freshwater wetlands as well as tidal and saltwater wetlands.

In addition, the Subaqueous Lands Act requires owners of private subaqueous lands to obtain a permit from DNREC to "deposit material upon or remove ... material from, or construct, modify, repair or reconstruct, or occupy any structure or facility upon submerged lands or tidelands...."[20] Though some wetlands certainly fall under the category of submerged lands and tidelands, this Act was found to provide inadequate protection of wetlands.[21] While the Coastal Zone and Subaqueous Lands Acts certainly aid in the management of coastal wetlands resources, they are not designed to protect freshwater wetlands and do so only incidentally.

The lack of protections for freshwater and non-tidal wetlands is in contrast to the multiple permit requirements for development in coastal areas under the above statutes and others.[22] As early as 1979, just three years after DNREC regulation under the state Wetlands Act had gone into effect, Moss noted inadequate protection for freshwater wetlands.[23] The gap was again noted in the Wetlands Inventory released by the U.S. Fish and Wildlife Service in 1985.[24] Interestingly, both of these studies occurred during the period of time in which the U.S. Army Corps of Engineers (Corps) was asserting its greatest regulatory jurisdiction over wetlands. Since the initiation of the movement to preserve wetlands in Delaware, strict regulation of coastal wetlands has been contrasted by a lack of regulation for non-tidal and freshwater wetlands that may now be compounded by changes in federal jurisdiction.

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18. *Id.* §§ 7003-7004.

19. *Id.* § 7004.

20. *Id.* § 7205.

21. *See* Moss, *supra* note 10, at 94. (arguing that wetlands losses under the Subaqueous Lands Act in the interim period from 1973-76 while DNREC formed regulations under the Wetlands Act were far greater and more serious than losses after Wetlands Act regulations were instituted).

22. *Id.* at 44 ("[A]n applicant seeking to build within the coastal zone must go through a maze of up to six separate permit applications for land use and environmental quality....").

23. *Id.* at 94.

24. *See* TINER, *supra* note 3, at 1.

B. Federal Wetlands Protection

In 1972 Congress passed the Federal Water Pollution Control Act Amendments, which became known as the Clean Water Act (CWA). This Act was one of the most revolutionary pieces of environmental legislation of its era, diverging greatly from its predecessor, and setting lofty goals for the elimination of pollution in the nation's waters.[25] The statute makes no mention of "wetlands;" rather, wetlands regulation is derived from the section 404 dredge and fill permit program of the CWA.[26] Section 404(a) of the CWA entitles the Corps to issue permits for the "discharge of dredged or fill material into navigable waters,"[27] defined as "the waters of the United States."[28] The Corps expanded this jurisdiction in its own regulations to include waters beyond those that would normally be considered navigable. In 1975, Corps regulations were revised to extend protection first to "tributaries, wetlands adjacent to navigable water, and lakes, and then to other waters, including isolated wetlands."[29] In 1986, the Corps' "Migratory Bird Rule" was introduced to clarify and justify federal jurisdiction over isolated intrastate waters under the Commerce Clause. It states that the "waters of the United States" include those "which are or would be used as habitat by birds protected by Migratory Bird Treaties ... other migratory birds which cross state lines; or ... endangered species."[30] Thus, until recently, federal jurisdiction has extended to nearly every ecologically valuable wetland.

The extent of federal wetlands protection has been shaped by two recent cases, which in combination could have a profound effect on the future of wetlands regulation. The third section discusses *Solid Waste* and the separation of regulatory power between state and federal governments. *Solid Waste* seemed to shift control over freshwater, isolated wetlands from the federal government to landowners. The fourth section examines *Tahoe*, which clarifies the regulatory takings doctrine. Regulatory takings claims may arise in the interim between *Solid Waste* and the enactment in Delaware of a law to protect isolated wetlands.

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25. *See* Solid Waste Agency of N. Cook County v. Army Corps of Eng'rs, 531 U.S. 159, 183 (2001) (Stevens, J. dissenting) (describing history of the CWA and other preceding legislation).

26. GADDIE & REGENS, *supra* note 8, at 29.

27. Clean Water Act § 404(a), 33 U.S.C. § 1344(a) (2000).

28. *Id.* § 1362.

29. *Solid Waste,* 531 U.S. at 184 (Stevens, J. dissenting).

30. Migratory Bird Rule, 51 Fed. Reg. 41217 (Nov. 13, 1986).

III. *SOLID WASTE* AND THE FUTURE OF FEDERAL WETLANDS PROTECTION

Oddly, the precedent-setting case, *Solid Waste*, originated as a conflict over an atypical isolated wetland. In order to save the approximately $90 million annual cost of shipping trash to a Wisconsin landfill,[31] the Solid Waste Agency of Northern Cook County (SWANCC) acquired a 533-acre plot with the intention of creating a landfill for baled, non-hazardous waste.[32] The site had been abandoned as a sand and gravel pit mining operation in 1960, and the excavation pits had developed into both seasonal and permanent ponds of varying sizes up to several acres.[33] By 1993, SWANCC had secured the necessary permits and approvals from county and state agencies.[34] SWANCC also, due to the necessity of filling the ponds, contacted the Corps to inquire whether a fill permit was required under section 404(a) of the Clean Water Act.[35] The Corps refused to issue a fill permit,[36] judging that the proposal was not the least environmentally damaging alternative and that it posed threats to public health and wildlife.[37]

SWANCC challenged the Corps' jurisdiction over their proposed disposal site as well as the merits of the permit denial in the District Court for the Northern District of Illinois, which ruled in favor of the Corps.[38] The Corps' jurisdiction was again challenged in the Court of Appeals for the Seventh Circuit, which affirmed the decision of the lower court.[39] On certiorari, the Supreme Court reversed.[40]

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31. *Puddles Do Not a Wetlands Make,* CHI. SUN-TIMES, Jan. 11, 2001, at 29 (describing benefits of SWANCC victory).

32. *Solid Waste,* 531 U.S. at 162-164. The SWANCC was formed as a consortium of 23 suburban Chicago municipalities with the purpose of finding a suitable landfill site.

33. *Id.*, at 163.

34. *Id.* at 165.

35. *Id.*

36. *Id.* at 165-166. The Corps initially declared it had no jurisdiction over the area, but upon notification by the Illinois Nature Preserves Commission of the presence of migratory birds, found there to be 121 species using the site. Based on these findings the Corps re-asserted its jurisdiction over the site in November of 1987.

37. *Id.* at 165 (quoting U.S. Army Corps of Engineers, Chicago District, Dept. of Army Permit Evaluation and Decision Document, Lodging of Petitioner, Tab No.1, p. 6). The Corps found that insufficient funds had been appropriated for repair of leaks creating a possible threat to water quality and the public water supply.

38. *Id.* at 166.

39. *Id.* at 167.

40. *Id.*

A. Rationale for Attenuated Jurisdiction

Despite previous speculation that federal wetlands regulations might not survive a Commerce Clause attack after *United States v. Lopez*,[41] the Court avoided that particular question here.[42] Instead, the Court struck down the Corps' jurisdiction over isolated wetlands based on the principle that such jurisdiction surpassed Congress' intent in the CWA.[43] In the opinion of the Court, no evidence was provided to indicate Congress' intention of the expanded jurisdiction in the 1972 legislation, nor Congress' acquiescence to the new regulations in later years.[44]

By 1977, the Corps' regulations had formally expanded jurisdiction under § 404 to many wetlands and isolated waters.[45] Amendments to the CWA in the same year included § 404(g), providing for the states to assume control of permitting for waters *other than* those used for commerce and adjacent wetlands from the Corps.[46] The Corps hoped to prove that this amendment demonstrated Congress' intention for the Corps to continue regulating isolated waters until the states are able to do so.[47] Instead, the Court held that the "other ... waters" of § 404(g) might have only referred to other waters adjacent to navigable waters.[48] In addition, the Court noted the failure of a 1977 bill that would have limited the definition of navigable waters.[49] The majority, however, declared that "[f]ailed legislative proposals are a particularly dangerous ground on which to rest an interpretation of a prior statute," and that "[a] bill can be proposed for any number of reasons, and it can be rejected for just as many others." [50] This statement runs counter to the argumentation in *United States v. Riverside Bayview Homes*.[51] In that decision, the Court noted that

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41. 514 U.S 549 (1995); *see, e.g.*, Jonathan H. Adler, *Wetlands, Waterfowl, and the Menace of Mr. Wilson: Commerce Clause Jurisprudence and the Limits of Federal Wetland Regulation*, 29 ENVTL. L. 1 (1999).

42. *Solid Waste*, 531 U.S. at 162 ("We are asked to decide whether the provisions of § 404(a) may be fairly extended to these waters, and, if so, whether Congress could exercise such authority consistent with the Commerce Clause .... We answer the first question in the negative and therefore do not reach the second.").

43. *Id.* at 169.

44. *Id.* at 171.

45. *See id.* at 169.

46. Clean Water Act § 404(g)(1), 33 U.S.C. § 1344 (g)(1) (2001).

47. Margaret A. Johnston, Note, *The Supreme Court Scales Back the Army Corps of Engineers' Jurisdiction Over "Navigable Waters" Under the Clean Water Act*, 24 U. ARK. LITTLE ROCK L. REV. 329 (2002).

48. *Solid Waste*, 531 U.S. at 172 (quoting 33 U.S.C. § 1344 (g)(1) (2001)).

49. *Id.* at 170.

50. *Id.* at 169-70 (quoting Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A., 511 U.S. 164, 187 (1994)).

51. 474 U.S. 121 (1985).

debate in Congress over the 1977 bill focused on wetlands protection and went on to affirm the Corps' jurisdiction over wetlands adjacent to navigable water.[52] Nevertheless, in *Solid Waste*, the Court interpreted Congress' intent as extending to those adjacent wetlands, but no farther.

The second argument in the majority opinion addresses the actual wording of the CWA. The majority argued that to allow the Migratory Bird Rule would effectively remove the term navigable from the original legislation.[53] In *Riverside Bayview,* the Court conceded the limited significance of the term navigable when it affirmed the Corps' authority over wetlands adjacent to navigable water.[54] Here, however, the Court held that assigning a legislative definition limited import is a far cry from writing it out of the law altogether.[55] Thus, the majority drew the "odd line" for Corps jurisdiction somewhere between wetlands adjacent to navigable waters and those considered isolated.[56]

Finally, the Court evaluated the questions of federalism raised by Corps jurisdiction over isolated intrastate waters. Traditionally, governing over land and water use falls within the realm of the State's power.[57] Narrowly avoiding the question of Commerce Clause constitutionality, the Court argued that "where an administrative interpretation of a statute invokes the outer limits of Congress' power, we expect a clear indication that Congress intended that result."[58] *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*[59] mandates deference to agency regulations in cases where Congress leaves out specific details. In this case, however, the Court found § 404(a) to be clear and the Corps' interpretation to be too liberal to be given administrative deference.[60]

B. Implications of Solid Waste

The most significant effect of the decision is that the Corps can no longer justify regulation of private wetlands based solely on the presence of migratory birds.[61] A memorandum from the EPA and

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52. *Id.* at 139 (holding that Corps of Engineers jurisdiction extends to wetlands adjacent to navigable waters).
53. *Solid Waste,* 531 U.S. at 173.
54. *Riverside Bayview,* 474 U.S. at 121.
55. *Solid Waste,* 531 U.S. at 173.
56. *Id.* at 178 (Stevens, J., dissenting).
57. *Id.* at 174.
58. *Id.* at 172.
59. 467 U.S. 837, 844 (1984).
60. *Solid Waste,* at 173-174.
61. Talene Nicole Megerian, Comment, *Federal Regulation of Isolated Wetlands: To Be*

the Corps states that the isolated waters listed under 33 CFR § 328.3 (a)(3), including "all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, ... sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce," cannot be regulated if the presence of migratory birds is the only nexus with interstate commerce.[62] This document and others, however, reinforce the narrow scope of the *Solid Waste* decision and the importance of wetland habitat preservation. Importantly, the memorandum instructs regulators to consult legal counsel regarding possible connections with commerce, other than migratory birds, in such isolated waters.[63] Since the decision, lower courts have upheld the Corps' jurisdiction over traditionally non-navigable waters other than those listed in section (a)(3),[64] as well as other connections of (a)(3) waters to commerce.[65] In addition, a last minute executive order by President Clinton instructs agencies whose activities affect migratory birds to establish a Memorandum of Understanding with the U.S. Fish and Wildlife Service for the conservation of those species.[66] While the order reinforces the duty of the agencies to protect migratory birds, it can do little to prevent destruction of wetlands that are beyond the reach of the Corps' jurisdiction.[67]

Efforts to minimize the impact of the *Solid Waste* decision have occurred at the state level. Before *Solid Waste*, most states had relied on federal protection of wetlands for over two decades. Only New Jersey and Michigan have formally taken over wetlands protection under § 404(g).[68] At the same time, other states have continued wetland programs without formal assumption; but only fifteen have statutes protecting freshwater wetlands.[69] Even if the

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or Not To Be?, 13 VILL. ENVTL. L.J. 157, 186 (2002); *see also* Memorandum from Gary S. Guzy, General Counsel, United States EPA. & Robert M. Anderson, Chief Counsel, United States Army Corps of Engineers (January 19, 2001), *at* http://www.epa.gov/owow/wetlands/swanccnav.html (accessed August 10, 2002).

62. *Id.* at 4.

63. *Id.*

64. *See* United States v. Interstate Gen. Co., 152 F. Supp. 2d 843, 848 (D. Md. 2001) (holding that the definition of "waters of the United States" under sections (a)(5) (tributaries to navigable water) and (a)(7) (adjacent wetlands) were *not* invalidated by *Solid Waste*).

65. *See* United States v. Lamplight Equestrian Ctr. Inc., No. 00C6486, 2000 U.S. Dist. LEXIS 3694, at *5 (N.D. Ill. Mar. 8, 2002) (holding that Corps jurisdiction extended to isolated wetlands with only a seasonal drainage connection to a tributary).

66. Exec. Order No. 13,186, 66 Fed. Reg. 3,853 (Jan. 10, 2001).

67. *See* Jamie Y. Tanabe, Comment, *The Commerce Clause Pendulum: Will Federal Environmental Law Survive in the Post-*SWANCC *Epoch of "New Federalism"?*, 31 Envtl. L. 1051, 1067 (2001).

68. GADDIE & REGENS, *supra* note 8, at 57; *see also* 33 U.S.C. § 1344 (g)(1) (2001).

69. Adler, *supra* note 41, at 51.

scope of the *Solid Waste* decision is limited to truly isolated wetlands, the lack of state level protection will undoubtedly leave some wetlands vulnerable to degradation or destruction.

Since the Court did not specify whether the migratory bird rule went beyond the limits of the Commerce Clause, one option would be for Congress to amend the CWA to include wetlands.[70] This, however, seems unlikely given recent trends and the current regulatory environment.[71] There has been speculation that the *Solid Waste* decision is a sign of new federalism and the devolution of federal environmental regulation. Tanabe argues, "The pendulum that once swung so strongly in favor of federal environmental regulation has begun to swing back with the *SWANCC* decision."[72] Nevertheless, opportunities exist if the states can design effective wetland management programs. Adler argues that states, local governments, and non-governmental organizations may well do a better job of regulating intrastate wetlands and that restriction of the Corps' jurisdiction would encourage these groups and improve wetland protection.[73] However, by imposing this restriction through judicial, rather than legislative, means, the U.S. Supreme Court has left isolated wetlands vulnerable until new policies are made at lower levels.

C. Delaware's Regulatory Response to Solid Waste

Uncertainties regarding the extent of the Corps' jurisdiction after *Solid Waste* complicate any attempt to measure its impact. Compounding these difficulties is the fact that the Corps decides whether it has jurisdiction over a specific parcel or part of a parcel on a case-by-case basis.[74] Therefore, it is impossible for landowners and researchers to determine, a priori, where the Corps maintains jurisdiction until a permit application has been submitted for the site. This also complicates state efforts to delineate threatened wetlands or even communicate with precision the extent of the threat. Nevertheless, attempts have been made to evaluate the threat, and this subsection discusses the efforts in Delaware.

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70. Stanley A. Millen, *The Odd Couple: the High Court's Expansion of Environmental Standing in Waters but Contraction of Regulatory Jurisdiction Over Them*, 47 LOY. L. REV. 729, 761 (2001).

71. *Id.* (claiming that the conservative environment will prevent congress from taking such action); *see also* Tanabe, *supra* note 67 (describing a trend towards devolution of federal regulations).

72. Tanabe, *supra* note 67, at 1053.

73. Adler, *supra note* 41, at 48-68.

74. Letter from Mark Biddle, Environmental Scientist, Delaware Department of Natural Resources and Environmental Control to author (July 16, 2002) (on file with author) [hereinafter, "Letter"].

A recent U.S. Fish and Wildlife Service report describes the character, values, and abundance of several types of isolated wetlands around the nation, including Delmarva Potholes of the Delmarva Peninsula.[75] According to the report, these wetlands provide crucial habitat for over half of the Peninsula's amphibians and support 61 rare plants including at least one federally endangered plant.[76] Other functions of the Delmarva Potholes include water storage, flood control, and groundwater recharge.[77] In a study area of 147,901 acres straddling the Delaware-Maryland border, the report's most conservative estimate found 7,856 acres of isolated wetlands.[78] The study offered estimates based on a range of definitions of "isolated" and clearly avoided an attempt to define the term for jurisdictional purposes.[79]

DNREC has also begun working on maps and estimates of isolated wetlands.[80] DNREC's estimates define "isolated" that which is 90 feet or more from surface water based on research indicating possible groundwater connections between wetlands and waters within 90 feet of them.[81] Preliminary maps and data using this definition found over 29,000 acres of isolated wetlands.[82] DNREC officials note that this estimate may still be high.[83] These estimates show, however, that even when accounting for at least one possible connection to commerce other than migratory birds, tens of thousands of acres of wetlands in the state may still be vulnerable.

Based in part on DNREC's estimates, House Bill No. 340 (sponsored by Representative Cathcart and Senator Simpson) was introduced to the Delaware legislature in January of 2002.[84] The bill would have amended the Wetlands Act, allowing the Secretary of DNREC to delineate up to 35,000 acres of "non-federal isolated wetlands"[85] and including those areas in the permitting regimen currently used for tidal wetlands in the state.[86] Despite backing

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75. RALPH W. TINER ET AL., U.S. FISH & WILDLIFE SERVICE, , GEOGRAPHICALLY ISOLATED WETLANDS: A PRELIMINARY ASSESSMENT OF THEIR CHARACTERISTICS AND STATUS IN SELECTED AREAS OF THE UNITED STATES (2002).

76. *Id.* at § 2.

77. *Id.*

78. *Id.* at § 3.

79. *Id.* at §§ 1,3.

80. *Letter*, *supra* note 74.

81. *Id.*

82. Department of Natural Resources and Environmental Control, Draft Isolated Wetlands Summary (May 2002) (on file with author).

83. Letter, *supra* note 74.

84. H.S. 1 for H.B. 340, 141st Del. Gen. Assembly §§ 1-9 (2002).

85. *Id.* at § 7.

86. *Id.* at. § 3 (adding "non-federal isolated wetlands" to the definition of wetlands and thereby requiring permits pursuant to DEL. CODE ANN. tit. 7, § 6604 (2002)).

from DNREC, the General Assembly failed to pass the bill prior to the end of the 2002 regular session.[87]

Published accounts identified weak support for the bill from the Governor and, importantly, opposition from farmers and other landowners who viewed it as a regulatory taking.[88] Of particular concern seems to have been a section that provided for the delineation of "wetlands conservation buffers" around more ecologically valuable wetlands and included protections for these uplands as well.[89] Expansion of regulatory takings doctrine by the Court prior to *Solid Waste* and soon after in *Palazzolo v. Rhode Island*,[90] would make the state wary of instituting regulations, which could be construed as takings. The Supreme Court in *Tahoe*, however, may have contained the expansion of regulatory takings doctrine. Accordingly, an assessment of the impact of *Solid Waste* on isolated wetlands must include a discussion of *Tahoe*.

IV. *TAHOE* AND THE REFINEMENT OF REGULATORY TAKINGS DOCTRINE

Lake Tahoe, which straddles the Nevada-California border in the Sierra Nevada Mountains, is often regarded as one of the most beautiful lakes in the world.[91] Its unique clarity owes to the lack of algae-nourishing nitrogen and phosphorus in its waters.[92] A surge of development in the 1950s and 60s increased impervious groundcover, thereby increasing run-off and erosion, and allowing more nutrients to enter the lake.[93] In order to prevent further degradation of the lake, in 1968, the legislatures of California and Nevada approved the interstate Tahoe Regional Planning Compact, which created the Tahoe Regional Planning Agency (TRPA) to govern land use in the area and protect the lake from further damage.[94]

After a 1972 land-use plan was deemed to be protecting the lake inadequately, the Compact was amended in 1980 with federal

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87. Jeff Montgomery, *State's Top Environmental Officer is Quitting*, NEWS J., July 23, 2002, at A10.

88. *See e.g.*, Jeff Montgomery, *DNREC shakeup raises questions*, NEWS J., July 28, 2002, at A1.

89. H.S. 1 for H.B. 340, 141st Del. Gen. Assembly § 4 (2002).

90. 533 U.S. 606 (2001) (holding that pre-acquisition notice did not necessarily pre-empt a takings claim).

91. Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Planning Agency, 535 U.S. 302, 307 (2002).

92. *Id.*

93. *Id.* at 307-08.

94. *Id.* at 309.

approval.[95] In order to maintain the status quo while studying the impact of development and creating a new comprehensive plan, the TRPA issued two moratoria on development in the basin. The first, Ordinance 81-5, prohibited development in certain areas of the basin from August 24, 1981 until August 26, 1983.[96] When negotiations for a regional plan exceeded the August 26th deadline, a second moratorium, Resolution 83-21, was imposed until the release of a final plan on April 25, 1984.[97] Soon after, California sued on the grounds that the plan did not meet the requirements of the Compact and would be insufficient to protect the basin.[98] An injunction was granted which halted development in sensitive areas until a revised plan was released in 1987.[99]

In 1984, the Tahoe-Sierra Preservation Council, a group of approximately 2000 landowners, along with other individual landowners, filed actions that were eventually consolidated in federal court in the District of Nevada, claiming that the two moratoria constituted a taking requiring compensation under the Fifth Amendment's Takings Clause.[100] The District Court ruled that a taking had occurred under *Lucas v. South Carolina Coastal Council*,[101] a per se rule which holds that a deprivation of all productive use (not nuisance-producing uses) of land is a taking requiring compensation.[102] On appeal, the Ninth Circuit Court of Appeals reversed the takings decision..[103] The landowners chose not to pursue a claim under the ad hoc tests of *Penn Central Transportation Co. v. New York City*.[104] The *Penn Central* factors, which are reinvigorated by the U.S. Supreme Court's decision, include the economic effect on the landowner, interference with investment-backed expectations, and the character of the government action.[105] The Supreme Court granted certiorari, but limited its review to the question of "whether a moratorium on development imposed during the process of devising a comprehensive land-use plan constitutes a *per se* taking of property

95. *Id.* at 309-10.
96. *Id.* at 311.
97. *Id.* at 311-12.
98. *Id.* at 312.
99. *Id.*
100. *Id.* at 312-13.
101. 505 U.S. 1003 (1992).
102. *Tahoe*, 535 U.S. at 316 (citing Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992)).
103. *Id.* at 317 (dismissed based on California and Nevada Statute of Limitations laws).
104. 438 U.S. 104 (1978); *see id.*
105. Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978).

requiring compensation under the Takings Clause of the United States Constitution."[106]

A. *Rationale for Circumscribing Regulatory Takings Law*

The Supreme Court's majority opinion, written by Justice Stevens, affirmed the decision of the Court of Appeals and denied that the moratoria constituted a taking.[107] The majority repeatedly stated that it did not wish to set a new categorical rule, instead favoring a more ad hoc approach: "[T]he answer to the abstract question of whether a temporary moratorium affects a taking is neither 'yes, always' nor 'no, never'; the answer depends upon the particular circumstances of the case."[108] Stevens, similarly, paid frequent homage to O'Connor's concurring opinion in *Palazzolo,* which warned against adopting per se rules that would consider only a single factor in deciding a takings case.[109]

Throughout the opinion, expansions to regulatory takings doctrine emerging since the 1987 cases were addressed and their impact lessened. First, the Court carefully delineated physical and regulatory takings. Physical takings are more obvious, and the physical confiscation of property, no matter how small a part, requires compensation.[110] A regulatory taking, in contrast, requires careful evaluation of the circumstances and may not require compensation when less than 100 percent of the property in question is affected.[111] In any case, precedents from physical takings cannot be applied to regulatory takings and vice versa.[112]

A second major challenge for the Court was to explain how their holding here differed from *Lucas.* The landowners argued that the moratoria, though temporary, did cause a deprivation of all use of their land.[113] Takings jurisprudence, however, requires the court to look at the "parcel as a whole" when deciding whether a taking has occurred.[114] In the opinion of the court, the "whole parcel" included the temporal dimension and the recovery of property value

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106. *Tahoe,* 535 U.S.. at 306, 320.
107. *Id.* at 343.
108. *Id.* at 321.
109. Palazzolo v. Rhode Island, 533 U.S. 606, 633-637 (2001).
110. *Tahoe,* 535 U.S. at 322-23.
111. *See id.* at 323.
112. *Se id.* at 323-24 ("For the same reason that we do not ask whether a physical appropriation advances a substantial government interest or whether it deprives the owner of all economically valuable use, we do not apply our precedent from the physical takings context to regulatory takings claims.").
113. *See id.* at 320.
114. *Id.* at 327 (quoting Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 130-31 (1978)).

after a temporary sanction is lifted means that the loss of "all economically beneficial use" required for a *Lucas*-type taking cannot occur.[115]

A third challenge was to place the Tahoe opinion in line with previous precedent on temporary takings from *First English Evangelical Lutheran Church v. County of Los Angeles*.[116] The Court claimed its decision in *Tahoe* agreed with that in *First English* for two reasons. First, as noted by the Court of Appeals, *First English* decided only whether compensation was appropriate for an action that had already been determined to be a temporary taking.[117] There was no such determination in *Tahoe*. Second, *First English* recognized that a taking would not occur if it were "part of normal delays in obtaining building permits, changes in zoning, variances, and the like...."[118] The court interpreted the facts in *Tahoe* as representing "normal delays."

Fourth, the Court explained why a *Penn Central* analysis is preferable to adopting one of several proposed *per se* rules.[119] In the extreme, the per se rule would be that an elimination of all value for any period of time constitutes a taking.[120] This is, in fact, the rule that the landowners in *Tahoe* proposed in making a facial challenge to the moratoria.[121] It seems that this facial claim — and its concomitant burdens — in proving that the moratoria constituted a taking from the moment they were imposed, which determined the outcome of the case.[122] The Court argued, "[A] rule that required compensation for every such delay in the use of property would render routine government processes prohibitively expensive or encourage hasty decision-making."[123] The opinion reinforces the importance of well-reasoned planning and the availability of planning tools, such as moratoria, to governments.[124] The *Tahoe* decision advises that no single factor, duration included, will decide whether a government action has constituted a taking.[125]

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115. *Id.* at 332.
116. 482 U.S. 304 (1987).
117. *Id.* at 304, 309-310, 316. The California courts had already determined that a taking had occurred. The Supreme Court ruled that once a taking had occurred, compensation was the only appropriate remedy and that repeal of the oppressive regulation was not sufficient.
118. *Tahoe,* 535 U.S.. at 329 (quoting *First English*, 482 U.S.at 321).
119. *See id.* at 334-43.
120. *See id.* at 334.
121. *See* Transcript, *May it Please the Court: Excerpts from U.S. Supreme Court Transcript*, 2 LAND USE L. & ZONING DIG. 3 (2002).
122. *See* Thomas E. Roberts, *A Takings Blockbuster and a Triumph for Planning,* 6 LAND USE L. & ZONING DIG. 1, 5 (2002).
123. *See Tahoe*, 535 U.S. at 334.
124. *See id.* at 339.
125. *See id.* at 342.

B. Possible Implications of Tahoe for Managing of Isolated Wetlands in Delaware

The decision in *Tahoe* appears to be celebrated by planners, governments, and environmentalists, while private property rights advocates see it as a step in the wrong direction.[126] *Tahoe* undoubtedly clarifies regulatory takings doctrine and may also suggest a return to a *Penn Central* calculus. Beyond the more general implications of *Tahoe* for the regulation of isolated wetlands, which are discussed in the preceding subsection, there are two more subtle implications that may be important for Delaware and other states in similar situations.

First, the obvious implication of *Tahoe* is that well-designed moratoria may pass the constitutional tests associated with regulatory takings. During the critical period between *Solid Waste* and future regulation, a state such as Delaware may merely need to locate the delegation of legislative authority to impose a moratorium on degradatory uses of isolated wetlands. This may ease some of the pressure building to pass quick, but perhaps flawed, legislation. Moreover, a moratorium will shorten the time period in the interim during which landowners will be able to manifest their investment-backed expectations. This, in turn, ought to limit legal challenges to any future isolated wetlands regulation.

Second, *Tahoe* may have resolved some of the issues associated with the "denominator problem" or "parcel as a whole" concept[127], i.e., determining the appropriate metric by which to measure the restrained uses of a portion of land. It appears that *Tahoe* may have ended efforts to create a *Lucas*-type per se takings by parsing off small, but fully regulated portions of parcels — such as isolated wetlands. Instead, the ad hoc tests under *Penn Central* will encourage courts to make more subtle distinctions than is allowed for in the *Lucas* per se rule allows.[128] Regulations that leave landowners with options for use on some part of the land or some use within the foreseeable future will not constitute categorical takings. This is likely to be the case with many isolated wetlands in Delaware. At a more general level, *Tahoe* is seen to support comprehensive land use planning.[129] The decision does not, by any

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126. *See* Linda Greenhouse, *Justices Weaken Movement Backing Property Rights*, N.Y. TIMES, April 24, 2002, at 1.

127. Roberts, *supra* note 120, at 6.

128. *See e.g.* Gus Bauman, *Lucas Limited and Penn Central Promoted*, 6 Land Use L. and Zoning Digest 11, 11 (2002); Roberts, *supra* note 122, at 6.

129. John L. Marshall, *Sweet Affirmation*, 6 Land Use L. and Zoning Digest 17, 17-18 (2002).

means, prevent a successful takings challenge, but it does require a more careful weighing of the circumstances in such cases.

V. DISCUSSION — THE FUTURE OF WETLANDS REGULATION IN DELAWARE

Isolated wetlands have been shown to perform valuable functions including the reduction of flooding by water storage and of drought by slowing water release.[130] Wetlands also reduce pollution by cycling nutrients and filtering, reduce soil erosion and sedimentation of waterways, and provide habitat and biodiversity. Over 29,000 acres of isolated wetlands exist in Delaware.[131] As it seems unlikely that Congress will expand federal wetlands legislation,[132] states must decide whether to fill in the regulatory gap left by *Solid Waste*.

In Delaware, the Wetlands Act has been very successful in protecting tidal wetlands.[133] An extension of similar legislation to isolated, freshwater wetlands could fill the gap and reduce the rate of losses in those areas. Moreover, such an extension would be procedurally efficient in two ways. First, the marginal impact on DNREC in assuming regulatory responsibility for isolated wetlands is likely less than the social costs of relying on uncertain jurisdictional determinations from the Corps or lobbying for new federal authority. Second, landowners would benefit from reduced uncertainty as to the control of their isolated wetlands. Without clear regulatory authority, however, landowners may not proceed with some efficient projects in fear that litigation may follow. The following subsections assess the likely impacts of *Solid Waste* and *Tahoe* on landowner behavior and possible future regulation of isolated wetlands in Delaware. Then, evidence from Delaware of recent, but failed, political efforts to fill the *Solid Waste* gaps are evaluated.

A. Landowner Behavior and Possible Future Regulation of Isolated Wetlands

The future of isolated wetlands in Delaware will be determined by landowner behavior and State-level political decision-making during the interim between *Solid Waste* and possible legislation.

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130. TINER, *supra* note 73, § 2.

131. *See supra* note 75 and accompanying text.

132. *See supra* note 70 and accompanying text.

133. TINER, *supra* note 3, at 11 (citing 95 percent of losses in the state between 1982 and 1992 occurred in freshwater vegetated wetlands), 17 (stating that the goal of no-net-loss has nearly been achieved for estuarine wetlands covered by the Wetlands Act).

Individual landowner behavioral and political processes might continue to be conducted independently: (1) sophisticated landowners will request jurisdictional determinations from the Corps, and those free from federal control will act swiftly to develop their isolated wetlands or manifest their investment-backed expectations; (2) unsophisticated landowners will remain unaware of the opportunities available in the interim; and (3) the legislative process will work to secure a regulatory strategy that satisfies the interests of environmental and property-rights activists. An alternate course, which may limit degradation of isolated wetlands, would be for the political process to signal sophisticated landowners in such a way that limits their incentive to proceed with or manifest investment-backed expectations for purely opportunistic development.

Delaware's legislature would send a clear signal to landowners by either authorizing a moratorium on development of isolated wetlands or by plainly abandoning efforts to exert authority. A less-definitive, but constructive alternative, would be for DNREC to attempt to locate the authority to enact its own moratorium. Instead, as reviewed in the next section, the initial attempt to craft new legislation sent ambiguous signals to landowners. Efficient land use requires that landowners know the "rules of the game." The interim, instead, produces institutional uncertainty and prevents landowners from making optimal decisions. If the legislature intends to regulate isolated wetlands, it is in the interests of landowners and the State to act quickly. As the length of the interim increases, some worthy development will not proceed because of landowner uncertainty and some degradatory uses will proceed as other landowners act opportunistically. Moreover, a longer interim increases the likelihood of litigation and the possibility of compensation for regulatory takings.

B. An Attempt to Create New Wetlands Legislation

Delaware's initial attempt to create new wetlands legislation failed and further complicated the regulatory environment. House Bill 340 would have extended the Wetlands Act, but the extension was limited to wetlands that "cannot or will not be regulated by the U.S. Army Corps of Engineers."[134] In House Bill 340, the State's reasons for protecting wetlands are listed in an amendment to the purpose statement of the Wetlands Act. Freshwater wetlands values listed, which apply to isolated wetlands, include:

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134. H.S. 1 for H.B. 340, 141st Del. Gen. Assembly § 4 (2002).

> 1. Habitat for fish, wildlife, and vegetation;
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> 2. Water-quality maintenance and pollution control;
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> 3. Flood Control, shoreline stabilization, sediment and erosion control, Groundwater recharge and discharge;
>
> 4. Food chain support, Open space; and
>
> 5. Opportunities for natural resource education, scientific study, and recreation.[135]

The bill also asserts that "it is the policy of this state that activities which do not depend upon water or wetland areas to fulfill the basic purpose of the activity be located outside of wetlands or undertaken so as to avoid, to the extent practicable, adversely affecting the natural functions that wetlands provide ..."[136] Accordingly, the bill's authority was rationalized in terms of ecological goals, via public welfare, rather than the more commerce-based goals of federal laws.

The aforementioned conflicts between environmental and property-rights interests derailed efforts to pass this bill in 2002. Thus, the interim will extend at least into 2003, and landowners will remain uncertain about the institutional environment that governs their isolated-wetland management decisions. Uncertainty also continues at the regulatory level. DNREC has already run into difficulties determining what wetlands might be vulnerable, and the success of future bills like HB 340 may require more definitive information from the Corps as to what wetlands are out of its jurisdiction. Moreover, there must be increased agreement — or at least clarification — between the State and the Corps about what uses of isolated wetlands are proscribed. While the state regulates most harmful activities, the Corps is limited to the regulation of the deposit of dredged or fill material.[137] A state policy for all freshwater wetlands would lead to more consistent and effective regulation. This, in turn, would reduce landowner uncertainty.

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135. *Id.* at § 1.
136. *Id.* at § 1.
137. DEL. CODE ANN. tit. 7, §§ 6603(a), 6604(a) (2001); 33 U.S.C.S. § 1344(a) (2002).

Whatever action is taken to protect isolated wetlands, the state should act soon. The main theme in *Tahoe* was that the majority of takings cases should be decided based on the ad hoc balancing approach provided in *Penn Central*.[138] If regulatory takings claims are brought that challenge new wetlands regulations, therefore, the courts will have to consider investment-backed expectations, economic effect on the landowner, and the character of the government action.[139] The Corps has regulated nearly all wetlands for twenty-five years.[140] Prior to *Solid Waste*, the majority of landowners had no manifested expectations to degrade isolated wetlands. However, landowner behavior in the interim after *Solid Waste* may be judged to be reasonable and may lead to successful challenges that any new legislation is a facial or as-applied taking. Over a year has passed since the decision and efforts to develop previously regulated areas have begun.[141]

Another important aspect of the *Tahoe* decision was the endorsement of the use of planning tools, such as moratoria, by governments.[142] The majority even suggests that without the use of moratoria, landowners will be encouraged to develop before comprehensive regulations are put in place.[143] In Delaware, some type of similar control could be used to prevent destruction of wetlands and the manifestation of investment-backed expectations until state level wetlands regulations are put in place. If a moratoria were put in place immediately and legislation were passed in the next session (January to June, 2003), the duration of the moratoria would fall well within the one year period that the Court deemed to be reasonable in most cases.[144] Once again, this would require legislation to be made soon, or else there is the risk of the moratoria itself becoming a taking.

VI. CONCLUSION

This paper has argued that state-level regulatory control of isolated wetlands is required to fill the gap left by the attenuation of the Corps' jurisdiction in the wake of *Solid Waste*. The interim between *Solid Waste* in 1999 and any forthcoming legislation is the

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138. *See* Bauman, *supra* note 128, and accompanying text.

139. *See Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

140. Solid Waste Agency of N. Cook County v. Army Corps of Eng'rs, 531 U.S. 159, 184 (Stevens, J., dissenting).

141. *See Route 26 Land Dev. Ass'n v. United States Government*, 182 F. Supp.2d 382, 383 (2002).

142. *Tahoe*, 535 U.S. at 339.

143. *See id.*

144. *See id.* at 341 ("It may well be true that any moratorium that lasts for more than one year should be viewed with special skepticism.").

most challenging time, for this is when landowners can manifest their investment-backed expectations for recently proscribed land uses. If state law is put in place soon, the government will minimize costly compensation for regulatory takings and minimize the degradation of isolated wetlands. One possible solution to the difficulties in crafting swift legislation is the use of moratoria.