Nontidal Wetlands Protection in Maryland and Virginia

Richard H. McNeer

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NONTIDAL WETLANDS PROTECTION IN MARYLAND AND VIRGINIA

RICHARD H. MCNEER*

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I thank those individuals who kindly answered my questions and gave me advice and guidance over the telephone. Any errors in the Article, though, are solely my responsibility. I especially thank Professor Arnold W. Reitze, Jr. of the George Washington University and Professor Steven A.G. Davison of the University of Baltimore for their help and encouragement. I also thank Marcia Gottesman for her patience.

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INTRODUCTION

Nontidal wetlands are a vital natural resource. They are generally considered important because they help purify open waters, provide habitat for many plants and animals, and help regulate the flow of surface and ground water. In order to conserve nontidal wetlands on private property, the federal government has taken the lead in wetlands protection since 1972. The federal scheme, laid out in the Clean Water Act (CWA),\(^1\) requires a developer to obtain a permit from the United States Army Corps of Engineers (Corps) before filling wetland areas. The Corps issues the permit pursuant to regulations promulgated by both the Corps and the Environmental Protection Agency (EPA). The EPA has authority to veto a Corps permit if it does not comply with the regulations. The CWA also gives the states a veto over the Corps permit.

Notwithstanding the CWA permit scheme, conversion of both tidal and nontidal wetlands to "uplands" has continued at a rapid pace.\(^2\) In response, several states have sought more active roles in

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2. Estimates of annual wetlands loss range from 300,000 to 500,000 acres. Michael
regulating activities in wetlands.\(^3\)

The recent efforts of Maryland and Virginia to conserve their nontidal wetlands provide interesting comparisons and contrasts. Despite the difference in their size, these states span similar geological and ecological zones,\(^4\) and experience similar demands from private landowners to convert nontidal wetlands to upland uses.\(^5\) To a certain extent, these states have produced similar stages, or tiers, of legal protection for nontidal wetlands. On the other hand, the details of the existing regulatory tiers show some remarkable differences, and they reveal that Maryland has made more progress toward implementing a comprehensive program to conserve nontidal wetlands.

Understanding the context of nontidal wetlands protection in Maryland and Virginia requires a brief discussion of nontidal wetlands, and an outline of the federal regulatory framework. Following the contextual material, this Article will discuss the statutes and regulations in Maryland and Virginia that most directly conserve nontidal wetlands, and will examine a few failed attempts to establish regulatory programs for nontidal wetlands.

The federal, state, and local programs and proposals result in a dynamic tangle of restrictions on the use of privately owned nontidal wetlands. The effectiveness of the statutes and regulations in preserving the functions of nontidal wetlands and their benefit to the public may take years to assess. In the meantime, one may well wonder whether there are alternative approaches that would protect nontidal wetlands more simply, and at lower social cost.

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4. Maryland and Virginia share a common border; they each extend from the Allegheny Mountains, over the Blue Ridge Mountains, through the Piedmont region, the Tidewater region, the Chesapeake Bay, and the Eastern Shore, to the Atlantic Ocean.

5. Maryland and Virginia each have substantial urban and suburban populations that tend to encroach upon rural areas. See, e.g., YEAR 2020 PANEL, CHESAPEAKE EXECUTIVE COUNCIL, POPULATION GROWTH AND DEVELOPMENT IN THE CHESAPEAKE BAY WATERSHED TO THE YEAR 2020, at 26-27 (1988) [hereinafter REPORT OF THE YEAR 2020 PANEL]; see also DAHL, supra note 2, at 6-7 (indicating that Maryland has lost a greater percentage of its wetlands).
I. THE FEDERAL BACKGROUND: SECTION 404 OF THE CLEAN WATER ACT

A. Summary

Because of the vital role wetlands play in the Chesapeake Bay's ecosystem, it is important to set forth a comprehensive definition of the term. In the EPA's official definition:

[the term wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.]

Nontidal wetlands are those not subject to the ebb and flow of the tide, and thus are typically fresh water. Nontidal wetlands comprise only about three percent of the Chesapeake Bay's watershed, but are considered important to the overall health of the Bay. These wetlands are credited with improving water quality, providing habitat for plants and animals, controlling erosion, retaining stormwater and reducing flooding, contributing plant matter to the Bay's food chain, and providing recreational opportunities and aesthetic values. In short, nontidal wetlands are both "resilience ar-


eas,” which help protect the Bay from pollution and freshwater surges caused by storms, and “production areas,” which provide food and habitat for many species in the Bay’s ecosystem.10

The states’ efforts to conserve nontidal wetlands do not operate in a vacuum. On the contrary, state initiatives continuously interact with the federal government’s programs for wetlands. Most of the federal regulation of activities in wetlands is authorized by the Clean Water Act.11 The CWA established a nationwide permitting system administered by the United States Army Corps of Engineers.12 Because of the program’s existence, any state law restrictions on activities in wetlands are in addition to federal regulations.13 Unlike the Maryland and Virginia wetlands statutes, however, the CWA applies to both tidal and nontidal wetlands.

The EPA and the states each influence the federal wetlands program. The EPA establishes standards for the Corps to apply when ruling upon an application for a wetlands permit.14 The EPA and the state where the discharge occurs each may veto a Corps permit for discharges of dredged or fill material into wetlands.15

The Corps, the EPA, and other federal agencies issued a manual in 1989 to guide delineations of wetlands.16 The 1989 Federal Manual identified many more acres as “wetlands” than commonly had been thought to be within the scope of the CWA.17 As a result, the 1989 Federal Manual was suspended by law in 1991, pending publication of a proposed manual and opportunity for public comment.18 Immediately before the 1989 Manual was suspended, however, federal agencies published proposed revisions.19 While the

10. See Horton & Eichbaum, supra note 8, at 141-47.
17. See id. at 1.
federal agencies are receiving comments and revising the manual, the Corps’ 1987 manual is in effect for purposes of newly issued section 404 permits.\textsuperscript{20} States that require use of the 1989 Federal Manual must decide which, if any, manual to use in identifying and delineating wetlands for purposes of state programs.\textsuperscript{21}

**B. The CWA Section 404 Permitting Program**

In 1972 Congress enacted comprehensive amendments to the Federal Water Pollution Control Act (FWPCA), including section 404—an environmentally based program that expanded the Corps’ permitting authority for discharges of dredged or fill material into wetlands.\textsuperscript{22} The 1972 amendments also expanded the geographic scope of federal regulatory authority over wetlands to the “waters of the United States,”\textsuperscript{23} which was interpreted to include non-navigable tributaries of traditionally navigable waters.\textsuperscript{24}

Congress fine-tuned the 1972 amendments in 1977, and the act then became better known as the Clean Water Act (CWA).\textsuperscript{25} The 1977 amendments reaffirmed that the geographic reach of the CWA includes non-navigable surface waters, and altered the section 404 program in three ways.\textsuperscript{26} First, the 1977 amendments exempted from the permit requirement normal farming, ranching, and forestry activities.\textsuperscript{27} Second, they ratified the Corps’ practice of issuing

\textsuperscript{20} 105 Stat. at 518.


\textsuperscript{22} Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, § 404, 86 Stat. 816, 884 (codified as amended at 33 U.S.C. § 1344 (1988)). Discharging dredged or fill material into the “waters of the United States” without a § 404 permit, or in violation of the terms of a permit, is punishable by administrative penalties, civil actions for injunctions or penalties, or criminal actions. See 33 U.S.C. § 1319. Courts have broadly construed regulated “discharge of dredged or fill material” under the CWA. See, e.g., Avoyelles Sportsmen’s League v. Marsh, 715 F.2d 897, 923-24 (5th Cir. 1983) (holding that mechanized landclearing operations discharged dredged or fill material); Save Our Community v. EPA, 741 F. Supp. 605, 611 (N.D. Tex. 1990) (holding that draining which threatens significant alteration of a wetland requires a § 404 permit).

\textsuperscript{23} 33 U.S.C. § 1362(7).


\textsuperscript{26} See Blumm & Zaleha, supra note 2, at 707.

“general permits,” but restricted their use. Finally, they expanded federal regulatory authority by giving the EPA responsibility for approving state permit programs for areas not within the traditional navigable waters and by authorizing the United States Fish and Wildlife Service (FWS) to review state programs and state-issued permits.

Although section 404(b) of the CWA gives the Corps authority to issue or deny permits for filling wetlands, the EPA issues mandatory guidelines to the Corps as to section 404 jurisdiction and permitting issues. Under section 404(c), the EPA also may veto the Corps’ section 404 permits if the EPA finds unacceptable adverse effects on water supplies, fisheries, wildlife, or recreation areas. The EPA views section 404(c) vetoes as a way to enforce the section 404(b) guidelines. Yet, despite critics who complain that the Corps applies the section 404(b) guidelines inconsistently, the EPA has vetoed only eleven permits since 1979.

States also may play important roles in the federal scheme for

NAT. RESOURCES L. 219, 220 (1985) (discussing the permitting of the Upper Chester River Watershed Project and advocating that the EPA exercise its § 404 veto over the project). In September 1990 the Corps issued a Regulatory Guidance Letter stating that “prior converted cropland” is exempt from regulation under § 404, but “farmed wetlands” are subject to § 404 regulation. U.S. Army Corps of Engineers, Regulatory Guidance Letter 90-7, Clarification of the Phrase “Normal Circumstances” as it Pertains to Cropped Wetlands (1990). Prior converted cropland consists of wetlands that were drained and cropped before December 23, 1985, and are inundated for no more than 14 consecutive days during the growing season. Id. § 5(a). Farmed wetlands are those that would qualify as prior converted cropland except that they are inundated for 15 or more days during the growing season. Id. § 5(b).

28. See 33 U.S.C. § 1344(e); Blumm & Zaleha, supra note 2, at 725.
29. See 33 U.S.C. § 1344(g),(h),(i),(j).
30. 33 U.S.C. § 1344(b); see also 43 Op. Att’y Gen. 1, 6 (1979) (concluding, in part, that the Administrator of the EPA has administrative authority to interpret § 404).
32. Comments on Proposed Section 404(c) Regulations, 44 Fed. Reg. 58,076, 58,078 (1979) (“[O]ne of the basic functions of 404(c) is to police the application of the 404(b)(1) guidelines.”).
33. U.S. ARMY CORPS OF ENGINEERS, PROPOSED REVISED FEDERAL WETLANDS DELINEATION MANUAL—QUESTIONS AND ANSWERS 2 (1991) [hereinafter Delineation Manual—Q&A]; see also Blumm & Zaleha, supra note 2, at 741-42 nn.312, 314 (discussing the EPA’s use of its veto authority from 1972 to 1987). To the extent that the Corps follows the § 404(b) guidelines, the EPA vetoes are unnecessary. See generally Marged Harris, Wetlands Management Under the Clean Water Act: Checking the Balances and Balancing the Checks, [1990-1991] 21 Env’t Rep. (BNA) 828 (1990) (criticizing the statutory division of power between the Corps and the EPA, and the agencies’ response to that allocation of authority).
regulating wetlands. The CWA allows states to assume section 404 program responsibility for areas outside the traditional navigable waters of the United States. In addition, section 401 authorizes states to condition or veto any section 404 permit issued by the Corps for perceived violations of state water quality standards. A state’s veto under section 401 is reviewable only as provided by state law, unless the section 404 permit involves the activities of a federal agency—then the federal courts may review the veto decision.

A detailed analysis of the federal section 404 program could fill volumes. The preceding outline, though, should be sufficient to understand the efforts of Maryland and Virginia to regulate nontidal wetlands, given the surrounding context of the section 404 scheme.

C. What Lands are Wet Enough? The Controversy Over the Federal Manual

The EPA’s definition of “wetlands” does not delineate precisely which “wet” lands are within the reach of the CWA. In 1987 the Corps produced a wetlands delineation manual that specified the hydrology, vegetation, and soil conditions required for an area to be considered a wetland for purposes of section 404. The EPA and other federal agencies, however, used somewhat different criteria for delineating wetlands.

To provide uniformity and precision, the federal government assembled eight scientists from various agencies and formed the

35. 33 U.S.C. § 1344(g),(h). Only Michigan has an approved state program. Blumm & Zaleha, supra note 2, at 727.
37. 40 C.F.R. § 124.55(e) (1990); see Roosevelt Campobello Int'l Park Comm'n v. EPA, 684 F.2d 1041, 1056 (1st Cir. 1982) (holding that a state certification is reviewable only in state court); United States v. Puerto Rico, 721 F.2d 832, 839 (1st Cir. 1983) (holding that a state veto of certification is reviewable in federal court if challenged by a federal agency).
39. See supra text accompanying note 6.
41. See, e.g., Proposed Revisions to Delineation Manual, supra note 19, at 40,446 (noting that prior to 1989, each federal agency had its own procedures for delineating wetlands).
Federal Interagency Committee for Wetland Delineation. The Committee produced a manual in 1989 that was widely criticized for extending federal jurisdiction to areas that are rarely wet. Some critics believed that these drier areas should not be subject to section 404 because the program would become a trap for the uneducated and thus lose popular support, while others were simply opposed to federal restrictions on land use.

EPA Administrator William Reilly assembled a new interagency task force to redraft a proposed delineation manual to be published for public comment. This task force, however, did not work independently. The staff of the President's Council on Competitiveness was involved extensively in developing the new proposal, and even participated in deciding the number of days of saturation to be proposed as a requirement for wetlands status.

The results were published on August 14, 1991, as proposed revisions to the 1989 Federal Manual. The expressed intent of the agencies in publishing the proposed manual was to improve the

43. See 1989 FEDERAL MANUAL, supra note 16; see Weisskopf, supra note 42.
44. See Michael Weisskopf, Wetlands Policy Shift Announced, WASH. POST, Aug. 10, 1991, at A1. The extension of jurisdiction does not appear to have seriously infringed on permit applicants; the Corps approved 95% of the § 404 permit applications in 1990.
45. See Weisskopf, supra note 42.
47. Weisskopf, Wetlands Protection and the Struggle Over Environmental Policy, supra note 44.
48. Id.
49. Id. Two EPA scientists and an official of the Fish & Wildlife Service dissociated themselves with the work of the interagency task force, complaining of political interference with their scientific task. Atlas, supra note 46; see also Weisskopf, supra note 42. "The struggle over who should control environmental policy—the experts throughout the government or the political and economic advisers to the president—is as old as this administration." Weisskopf, Wetlands Protection and the Struggle Over Environmental Policy, supra note 44.
technical accuracy with which the delineation manual identifies areas that meet the existing regulatory definition of "wetland." The Corps' explanatory document, on the other hand, states that the Federal Manual is not solely a technical document, but also addresses important policy issues.

Meanwhile, Congress became involved in the issue. It passed Title I of the Energy and Water Development Appropriations Act for fiscal year 1992, which was signed by the President on August 17, 1991. In part, this law prohibits the Corps from using the 1989 Federal Manual until it or a substitute is published for public comment. Until a delineation manual is reissued following public comment, the Corps must use its 1987 Manual. The Act further provides that anyone who, on August 17, 1991, had submitted a permit application that had not been ruled upon, or who is subject to an ongoing enforcement action, may opt for a delineation under the Corps' 1987 Manual if the Corps determines that delineation under the 1987 Manual would be substantially different.

The Appropriations Act, however, does not apply to the EPA. The EPA currently is considering whether to use the Corps' 1987 Manual while the proposed manual is under consideration. Its options, however, are limited. Attempting to take enforcement action based on the suspended 1989 Manual would place it in a poor legal


51. See Proposed Revisions to Delineation Manual, supra note 19, at 40,446.

52. See Delineation Manual—Q&A, supra note 33, at 6 ("A key policy consideration is, for example, the determination of 'normal circumstances' under the regulatory definition of wetlands. Another is the extent of evidence necessary for each of the three criteria [hydrology, hydrophytic vegetation, and hydric soils] in order to make a positive wetland determination."). The technical criteria and procedures contained in the manual and the proposed rule are intended, therefore, not only to improve both the accuracy of and scientific basis for jurisdictional wetland identifications, but also to achieve the following wetland policy objectives: conserving wetlands and deriving correlated environmental benefits; achieving interagency consistency in wetland identification; ensuring that regulatory restrictions on the use of property are imposed only where warranted to achieve the ecological objectives of the Clean Water Act; and fostering greater public understanding of and confidence in the wetland identification process, which is essential to the continued success and improvement of federal wetland programs.


54. 105 Stat. at 518.

and political position. The EPA, therefore, would do better to adopt the Corps' 1987 Manual for the interim before the proposed manual is finalized.

Publication of the proposed manual for public comment, while a political necessity, arguably was not a legal requirement prior to enactment of the Appropriations Act. The United States District Court for the Eastern District of Virginia, in United States v. Hobbs, held that the 1989 Federal Manual was an interpretive or guidance document, not a legislative rule, and thus did not require notice and comment rulemaking. The Hobbs case was a civil enforcement action for discharging dredged or fill material into wetlands without a section 404 permit. The court allowed the government to present evidence that the discharge area met the criteria for wetlands in the 1989 Federal Manual, but instructed the jury that the government had the burden of proving that the property was a wetland under the regulatory definition. The court went on to say, however, that it would have allowed the defendants to present evidence that under the Corps' 1987 Manual, or under any other guidance document, the discharge area did not meet the regulatory definition of wetland. The court's reasoning should be upheld on appeal. Proof that an area meets the 1989 Federal Manual is relevant, but not conclusive, on the issue of whether the area is within the EPA's definition of wetlands.

Ironically, to the extent that revisions to the federal manual are published as legislative rules, future defendants in cases like Hobbs will lose the opportunity to present alternative delineations that would remove their discharge areas from the ambit of the regulatory definition of wetlands. In such a case, proof that an area was properly delineated as a wetland under a legislative rule would be conclusive on the jurisdictional issue. Publication of a revised federal manual as a legislative rule would certainly leave future defendants in enforcement actions in a worse position than that of Hobbs.

56. See 105 Stat. at 518.
58. See id. at 2094.
59. See id. at 2095.
60. See id.
61. In a case such as Hobbs, proof by the government that an area meets the requirements for a wetland under an interpretive guidance manual would probably be sufficient for a prima facie case. Another advantage for the government would be that if the defendant prevailed, the government's showing that the area met the interpretive guidance manual's criteria for a wetland would probably demonstrate that the government's posi-
Nonetheless, those who believe that their lands should not be subject to the section 404 program may benefit from the opportunity to comment on the proposed manual, whether the process results in a legislative or interpretive rule.

The controversy over the federal manual is also important at the state level. For example, delineation of wetlands for purposes of Maryland's Nontidal Wetlands Act must comply with the 1989 Federal Manual and subsequent amendments to that manual. The suspended status of the 1989 Federal Manual has caused the Maryland Department of Natural Resources (DNR) to react in three ways. First, nontidal wetlands permit applications submitted after August 17, 1991 will be processed pursuant to delineation under the 1987 Federal Manual unless the applicant elects a delineation under the 1989 Manual. Second, applications submitted before August 17, 1991 will be processed in accordance with the 1989 Manual. These applicants may reapply, however, using the 1987 Manual. Third, the DNR itself has submitted comments to the federal agencies that published the proposed revisions.

The Maryland example shows that the adoption of the federal manual by the states is an additional reason for the federal agencies to proceed with care in making the proposed revisions to the manual. The federal manual that emerges from the public comment process will control delineations for state programs that adopt the federal manual. In short, more is at stake than federal programs and policies.

II. THE STATES’ COMMITMENT TO WETLANDS

A. State Wetlands Initiatives

The preceding outline of the section 404 program traces a federal action was substantially justified, and thus avoid payment of the defendant's attorneys' fees pursuant to the Equal Access to Justice Act. See 28 U.S.C. § 2412(d)(1)(A) (1988).


63. Public Notice, supra note 21, at 1. Maryland elected to use the 1987 Manual during the interim period to maintain consistency with the Corps' program and to preserve the benefits of the Corps' Maryland General Permit. See id.; Telephone Interview with Meredith E. Gibbs, Assistant Attorney General, Maryland Department of Natural Resources (Nov. 5, 1991).

64. Public Notice, supra note 21, at 1.

65. Id. at 2.

66. Id.

67. Telephone Interview with Meredith E. Gibbs, Assistant Attorney General, Maryland Department of Natural Resources (Sept. 9, 1991).
eral regulatory scheme that could protect wetlands from deliberate filling without the need for state intervention. Why then would the states become involved in regulation of wetlands? The short answer is that, although the federal section 404 program has preserved many wetlands, it has not prevented net loss of wetland acreage or preserved wetland functions.

The further questions of whether and how states can make a positive contribution must also be addressed. These questions are particularly important in jurisdictions within the Chesapeake Bay watershed. Maryland and Virginia have promised to protect nontidal wetlands as part of their commitments to restore the Chesapeake. These two states, however, are attempting to protect nontidal wetlands in different ways. Maryland has comprehensive statutes protecting tidal shore areas and nontidal wetlands, and the § 404 program, however, does not protect wetlands from liquid or semi-liquid pollution regulated under § 402 of the CWA, or from nonpoint source discharges of sediment, nutrients, pesticides, or urban runoff, "which go virtually unregulated under the CWA." Jan Goldman-Carter, Clean Water Act Section 404: A Critical Link in Protecting Our Nation's Waters, Nat. Resources & Env't, Spring 1991, at 11.

There are several development activities that cause wetland conversion or damage, but do not involve discharge of dredged or fill material. Under certain circumstances, these may include: lowering of groundwater levels, flooding of wetlands, drainage of wetlands, and excavation of wetlands where the dredged material is disposed of on an upland site.

DELINEATION MANUAL—Q&A, supra note 33, at 3.

68. The § 404 program, however, does not protect wetlands from liquid or semi-liquid pollution regulated under § 402 of the CWA, or from nonpoint source discharges of sediment, nutrients, pesticides, or urban runoff, "which go virtually unregulated under the CWA." Jan Goldman-Carter, Clean Water Act Section 404: A Critical Link in Protecting Our Nation's Waters, Nat. Resources & Env't, Spring 1991, at 11.

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DELINEATION MANUAL—Q&A, supra note 33, at 3.

69. See, e.g., Odum, supra note 9, at 421 n.1; U.S. Envtl. Protection Agency, Chesapeake Bay Program: Findings and Recommendations 16 (1983) [hereinafter EPA Findings & Recommendations]; Horton & Eichbaum, supra note 8, at 142-43. For a discussion of the reasons for the continuing loss of wetlands, see generally Blumm & Zaleha, supra note 2. Another possible reason for the failure of the § 404 program to prevent loss of nontidal wetland acreage and function could be that the Clean Water Act does not necessarily reach, or cannot control, all of the nonpoint source pollution or off-site alteration in the hydrology of wetlands. See Goldman-Carter, supra note 68, at 11. Furthermore, a permitting statute implies, of course, that some permits should be granted. See U.S. Envtl. Protection Agency, General Program Guidance of the Water Quality Handbook (1983) ch. 2, app. B at 20 (1990).


is considering fundamental state-wide reform of land use planning. Virginia has a statute that protects tidal shore areas, and allows non-Tidewater localities to use the statutory authority to protect their sensitive resources. Virginia also has a water protection statute, but it is still working on regulations to implement the section 401 water quality certification. Comprehensive land use management at the state level is not on the horizon in Virginia.

These states' differing approaches to nontidal wetland protection, and the different stages of development of their programs, result in two different stories. Maryland's nontidal wetlands program presents a story about laws and policies. Virginia, on the other hand, presents a story of wavering resolve of the General Assembly, and perhaps of the public, to take strong measures to protect nontidal wetlands.

B. The Chesapeake Bay Agreement

The Chesapeake Bay is the largest and most productive estuary in the United States. As an estuary, the Chesapeake blends fresh water from its tributaries with salt water from the Atlantic Ocean. The Bay does not, however, simply flush itself into the Atlantic Ocean. Instead, contaminants entering the Bay circulate in unique patterns and accumulate in the estuary. Consequently, any natural system such as nontidal wetlands that helps prevent pollutants from reaching the Bay has immense value.

72. See id. §§ 8-302 to -304.
73. See Drafting Committee, Governor's Comm'n on Growth in the Chesapeake Bay Region, Protecting the Future—A Vision for Maryland (1990) (summary report) [hereinafter 1990 Governor's Comm'n Summary Report].
77. CHESAPEAKE BAY PROGRAM, U.S. ENVTL. PROTECTION AGENCY, CHESAPEAKE BAY: INTRODUCTION TO AN ECOSYSTEM 10 (photo. reprint 1987) (1982) [hereinafter INTRODUCTION TO AN ECOSYSTEM].
78. See EPA FINDINGS & RECOMMENDATIONS, supra note 76, at 19.
The Bay extends about 200 miles through eastern Virginia and Maryland, and has a surface area of more than 2500 square miles. It receives fresh water from more than 150 rivers, creeks, and streams, draining a 64,000 square-mile basin, including not only most of Maryland and much of Virginia, but also all of the District of Columbia, about one-half of Pennsylvania, and parts of New York, West Virginia, and Delaware. Yet, the Bay has relatively little water in it because it is quite shallow; its average depth is about twenty-one feet, or twenty-seven feet excluding the tidal rivers. As a result, it is the world’s most “land-leveraged” major body of water.

Because the Bay is so land-leveraged, its water quality and productivity cannot be protected or improved by effluent limitations alone. Restricting the discharge of liquid pollutants from point sources will continue to be necessary, but insufficient. Continued marginal improvements in the control of point source pollution per unit of production, or per capita, are unlikely to compensate for the twenty percent population increase forecast for the watershed in the next thirty years, or for the increasing total economic production in the area.

Furthermore, if present trends of “sprawl” development continue, construction of additional housing and facilities to serve the increasing population will devastate much of the remaining area that naturally tends to control pollution and contribute to the biological productivity of the Bay. Without managing land use to reduce dis-

79. See id. at 5.
80. See id. at 5-6.
81. HORTON & EICHB, supra note 8, at 22-23.
82. The Bay has a ratio of 2,742.86 square kilometers of land in its drainage basin to every cubic kilometer of water in the Bay. HORTON & EICHB, supra note 81, at 5. The next most land-leveraged water body is the Gulf of Finland, with a ratio of 381.79:1. Id. The Great Lakes, by comparison, have a ratio of only 119.54:1. Id.
84. Accord HORTON & EICHB, supra note 8, at 197; see Arnold W. Reitze, Jr., Environmental Policy—It Is Time for a New Beginning, 14 COLUM. J. ENVTL. L. 111, 117 (1989). Section 402 of the Clean Water Act has since 1972 mandated a permit system for the discharge of pollutants from point sources, such as pipes, ditches, and outfalls. See Clean Water Act § 402, 33 U.S.C. § 1342 (1988). Permits granted under this system, the National Pollutant Discharge Elimination System (NPDES), contain specific numerical limits for each pollutant from each outfall. See 33 U.S.C. §§ 1311, 1313(d), 1314, 1316, 1317 (1988).
85. See HORTON & EICHB, supra note 8, at 188-89 (quoting Dr. J.L. McHugh at the first bistate conference on the health of the Chesapeake Bay).
86. See id. at 206-07.
charges of nonpoint source pollutants, and to protect and increase the areas that naturally perform the pollution control and biological production work of the Bay's watershed, the point source control programs alone will not preserve the Bay's ecosystem.

The ecological and economic values of the Chesapeake Bay have stimulated governmental activity to protect the Bay's environment. Maryland and Virginia, however, are taking different approaches in regulating one category of the Bay's ecosystem—nontidal wetlands. The common policy to protect the Bay's nontidal wetlands is also at different stages of development in these two states. Their contrasting regulatory systems could result in different fates for the nontidal wetlands of Maryland and Virginia. The differing state programs also result in different relationships between the states and the federal government in regulating nontidal wetlands.

In 1983 the EPA, the District of Columbia, and Maryland, Virginia, and Pennsylvania entered into a cooperative agreement to institute a basin-wide approach to restoration of the Chesapeake Bay. In 1987 the EPA, the District of Columbia, and Maryland, Virginia, and Pennsylvania entered into a cooperative agreement to institute a basin-wide approach to restoration of the Chesapeake Bay. Four years later, they, along with the Chesapeake Bay Commission, signed a more specific agreement, which included a commitment to develop and begin to implement by December 1988 a Baywide policy for the protection of tidal and nontidal wetlands. Other commitments in the 1987 Agreement included developing a strategy to encourage and support local governments in the protection of wetlands and fragile natural areas through land use planning and other growth-related management plans. The prologue to the First Progress Report stresses the fundamental commitment of the signatories, concluding that "[w]e must ensure that the remaining wetlands are protected—for they are fundamental to the restoration of our Chesapeake Bay." Thus, the 1987 Agreement summarizes the reasons for protecting nontidal wetlands, and commits the states to act. Although the means of conserving nontidal wetlands are for the most part left to the discretion of the signatories, the Agreement provides goals against which to measure the progress of Maryland and Virginia.

88. 1987 CHESAPEAKE BAY AGREEMENT, supra note 70, at 4.
89. Id. at 8.
90. FIRST PROGRESS REPORT, supra note 87, Prologue.
III. Analysis of Nontidal Wetlands Protection in Maryland and Virginia

Theoretically, states could conserve nontidal wetlands in several different ways, including an absolute ban on converting wetlands to uplands, state acquisition of the property rights to wetlands, or a system of taxes and tax credits to shape private behavior. It seems from the 1987 Bay Agreement and the Report of the Year 2020 Commission, though, that Virginia and Maryland have envisioned a three-tiered system of nontidal wetlands protection: a regulatory scheme for the tidal shore areas, including nearby nontidal wetlands; a regulatory statute directed at conservation of nontidal wetlands outside of the tidal shore areas; and a comprehensive growth strategy to reduce future demand for development in and around nontidal wetlands. In differing degrees, Maryland and Virginia have considered initiatives that appear to be directed toward implementing such a three-tiered system.

The best measure of the states' success in protecting nontidal wetlands will be the actual acreage and functions of these wetlands remaining in the year 2020 and beyond. Nonetheless, one means of comparing their progress in the interim is to examine the states' success in establishing nontidal wetlands protections.
A. Maryland's Two-Tiered Program

The first tier of Maryland's program for protecting nontidal wetlands is the Chesapeake Bay Critical Area Act, which imposes land use controls on the ten percent of the state's acreage that is within 1000 linear feet of tidal waters. The Critical Area Act limits some of the zoning discretion traditionally exercised by the counties. The legislature's intent was to place some limits on development activity near tidal shores in an effort to protect water quality and natural habitats. The program will allow, however, an estimated 53,000 new housing units to be built within the critical area, representing about ten percent of new housing construction in Maryland from the present through the year 2020. Yet, the program promotes more compact development within the critical area, so that the new construction should take a smaller toll on nontidal wetlands within this area.

The second tier of the Maryland program is the Maryland Nontidal Wetlands Act. The Nontidal Act applies to all nontidal wetlands in the state, except those within the critical area. The Nontidal Act and implementing regulations institute a permitting system to control development in nontidal wetlands and within a buffer surrounding each nontidal wetland. The program contains thorough criteria for issuance of permits, exemptions from the permit requirement, conditioning of permits, and requirements of mitigation and compensation for permitted activities. In recognition of the Nontidal Act's strict permitting criteria, the Corps has issued a general permit, which is essentially an automatic section

95. Horton & Eichbaum, supra note 8, at 161.
96. See id. at 162.
98. Horton & Eichbaum, supra note 8, at 162. Prior to the Critical Area Act, development within 1000 feet of tidal waters constituted about 17% of the state's total development. Id.
99. See id. at 162-63.
103. See id.
404 permit, for many small-scale activities permitted under the Act.104 Maryland's Nontidal Act program goes a long way in protecting nontidal wetlands. The Nontidal Act alone, however, will not achieve its goal of no net loss of nontidal wetlands.

A third tier of Maryland's program remains under construction. A commission has taken a broad look at managing the consequences of the projected twenty percent growth in the state's population by the year 2020. Maryland's "2020 Commission" proposed legislation that would institute comprehensive statewide land use planning to protect natural resources from sprawl development.105 The "2020" legislation would direct development away from nontidal wetlands instead of merely placing a new set of permitting hurdles between developers and wetlands.

1. Maryland Chesapeake Bay Critical Area Act.—In 1984, Maryland enacted the Chesapeake Bay Critical Area Act, which authorizes a state commission to promulgate criteria for localities to use in developing local critical area protection programs.106 The critical area consists of the waters and lands under the Bay and its tributaries to the head of tide; all state and private tidal wetlands designated pursuant to the Maryland Wetlands Act of 1970;107 and all areas within 1000 feet of the landward boundaries of the designated state and private wetlands and the heads of tides.108 Local jurisdictions, however, may exclude from the critical area developed urban areas, as well as areas at least 1000 feet from open water and separated from open water by wetlands that will protect tidal water and

104. See Maryland General Permit Non-Tidal Wetlands (MDGP-1), Baltimore Dist., Corps of Engineers (Jan. 31, 1991) [hereinafter Maryland General Permit].

105. See 1990 GOVERNOR'S COMM'N SUMMARY REPORT, supra note 73.


Pursuant to regulations promulgated by the Maryland Critical Areas Commission and approved by the General Assembly, localities adjacent to tidal water must classify land in the critical area into at least two categories—Limited Development Areas and Resource Conservation Areas—and may designate a third category, Intensely Developed Areas. The effect of the regulations is to guide new construction away from wetlands, farms, and forest land toward developed areas, or to places outside the critical area.

Although the focus of the Critical Area Act is on protecting tidal waters and wetlands, the Commission's criteria also address nontidal wetlands within the critical area. The criteria require that a twenty-five-foot buffer be maintained around those nontidal wetlands, and that disturbances to nontidal wetland drainage areas within the critical area be held to a minimum.

The Commission's criteria also require mitigation of any alteration to a nontidal wetland in order to conserve water quality and natural habitats. Local programs must protect nontidal wetlands important to plants, fish, wildlife, and water quality. Nontidal wetlands may also benefit from the criteria for habitat protection for

111. See generally Maryland’s Regulation of Forest Products Industries, supra note 106, at 68-73.
115. See id. § 15.09.02(C)(3)(ii).
threatened or endangered species, and species in need of conserva-
tion.\textsuperscript{116} Furthermore, all projects in wetlands or buffers must be water dependent.\textsuperscript{117} The Maryland General Assembly repeated and elaborated upon the concepts of protection for nontidal wetlands in the Critical Area program in the Nontidal Wetlands Protection Act of 1989.\textsuperscript{118}

2. \textit{Maryland Nontidal Wetlands Protection Act.}—In April 1989 the Maryland General Assembly followed the Critical Area Act with the Nontidal Wetlands Protection Act.\textsuperscript{119} The Nontidal Act was the first statute in the nation to express a goal of preventing net loss in nontidal wetland acreage and function.\textsuperscript{120} The Nontidal Act may also be one of the first to come close to achieving only a negligible net loss of nontidal wetlands;\textsuperscript{121} consequently, a detailed description and analysis of the Act's provisions and accompanying regulations is warranted.

\begin{itemize}
\item \textsuperscript{116} See id. § 15.09.03.
\item \textsuperscript{117} See id. § 15.09.01(C)(2); see also id. § 15.03.03 (listing criteria and requirements for water-dependent projects).
\item \textsuperscript{119} Id. The Act directed the DNR to promulgate conforming regulations. The DNR published the first proposed regulations on November 3, 1989. See 16 Md. Reg. 2369-94 (1989). The DNR published its first final regulations on December 29, 1989, which became effective on January 8, 1990. See id. at 2787-92. These first final regulations were published in the Code of Maryland Regulations (COMAR), in title 8, section 5.04, supplement number 12, dated September 29, 1990. On January 25, 1991, the DNR published emergency regulations substantially amending and renumbering the first final regulations. See 18 Md. Reg. 128-42 (1991). The emergency regulations became effective on January 1, 1991, and expired on May 31, 1991. See id. at 128. On February 22, 1991, the DNR published the second proposed regulations. See id. at 458-61 (printing only the changes from the emergency regulations, affecting subsections 5.04.03, .04, .16, .22, and .26). These second proposed regulations principally amended the sections on monitoring and bonding, and county delegation. See id. On April 23, 1991, the DNR adopted the final regulations with some nonsubstantive changes. See id. at 1007-09 (printing only the changes from the second proposed regulations affecting subsections 5.04.01, .08, .09, and .14 to .18).
\item \textsuperscript{120} See Md. Nat. Res. Code Ann. § 8-1202(b) (1990). The other goal of the program is to strive for a net resource gain in nontidal wetlands over present conditions. See id.
\item \textsuperscript{121} See generally Jon Kusler, \textit{No Net Loss: The States' Views}, Nat'l Wetlands Newsl., Jan.-Feb. 1990, at 8 (listing states that have policies or goals equivalent to no net loss of wetlands). Cf. Jim Robertson, Address at the Symposium on Maryland's Nontidal Wetlands Protection Act (Nov. 29, 1989) (videotape available in the University of Baltimore School of Law Library) (stating that the Nontidal Act alone will fail to achieve no net loss of wetlands in Maryland).\end{itemize}
a. Nontidal Wetlands, Regulated Activities, and Buffers.—The Nontidal Act defines “nontidal wetlands” in almost the same terms as the EPA definition, but excludes wetlands within the critical area established by the Critical Area Act. The Nontidal Act regulates the following activities within most nontidal wetlands or within a twenty-five-foot buffer around such wetlands: (1) removal of materials; (2) changing of drainage, sedimentation, flow, or flood retention characteristics; (3) disturbing the water level; (4) discharging material, filling, driving piles, or placing obstructions; (5) altering topography; and (6) altering the wetland’s character by destruction or removal of plants.

Agricultural and forestry activities are not “regulated activities” for purposes of the permit requirement. Nonetheless, the Nontidal Act does impose some controls and conditions on some farming and forestry practices.

The DNR designates nontidal wetlands for which the width of the buffer is extended to 100 feet. The Nontidal Act authorizes the DNR to expand the buffer where there are steep slopes, highly erodible soils, soils with development constraints, or nontidal wetlands of special state concern. The Act also allows the DNR to

122. See supra text accompanying note 6.
124. Md. Nat. Res. Code Ann. § 8-1201(h) (1990); see also 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(74)). The activities regulated under the Nontidal Act are significantly broader than just the discharge of dredged or fill material regulated under § 404 of the CWA.
126. See id. § 8-1205.
127. See id. § 8-1206(i)(1).
128. See id. § 8-1206(i)(2); see 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(63)) (defining nontidal wetlands of special state concern); id. (to be codified at Md. Regs. Code tit. 8, § 5.04.23) (expanding buffer for nontidal wetlands of special state concern, or adjacent to steep slopes or highly erodible soils); id. (to be codified at Md. Regs. Code tit. 8, § 5.04.26) (listing areas designated as nontidal wetlands of special state concern). All expanded buffers are expanded to the full 100 feet. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.23(A)). Only those nontidal wetlands designated by the DNR’s regulations as being of special state concern, or as
apply an expanded buffer for other activities or conditions that could adversely affect the wetland or aquatic ecosystem.129

b. Permit Requirement and Criteria.—After December 31, 1990, no person may conduct a regulated activity within a nontidal wetland or buffer without first obtaining a permit or an exemption letter from the DNR, unless the activity is exempted by regulation.130 The requirement for a nontidal wetlands permit supplements local zoning requirements and all other state, federal, and local permits.131

The DNR may not issue a nontidal wetlands permit unless the applicant demonstrates that the regulated activity is either water dependent, and access to a nontidal wetland is necessary for its basic function, or it is not water dependent, but has no practicable alternative site. In either case, the activity must only minimally alter or impair the nontidal wetland, must not degrade surface or groundwaters, and must be consistent with any applicable watershed management plan.132

(1) Water Dependency and Access.—The regulations define “water dependent activity” as one for which the use of surface water is “es-

adjacent to steep slopes or highly erodible soils, are protected by the expanded buffers. See id. (to be codified at Md. REGS. Code tit. 8, § 5.04.23).


130. Id. § 8-1206(b)(1); 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. Code tit. 8, § 5.04.02(A)). See supra note 119 for a discussion of the history of the regulations. Nonetheless, the regulations “grandfather” persons who contacted the Corps by December 31, 1990, and who ultimately receive a § 404 permit or the Corps’ determination that no permit is necessary, if the applicant does not alter the scope of the activity from that sanctioned by the Corps. See 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. Code tit. 8, § 5.04.08(D)).


132. See Md. Nat. Res. Code Ann. § 8-1207(a) (1990); 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. Code tit. 8, § 5.04.05(A)); see also Regan, supra note 113, at 38 (contrasting the test under the Nontidal Act with the standard for issuance of a § 404 permit by the Corps).
sential to fulfill a basic purpose of the proposed project." A "project" is the entire activity on a parcel of land including all proposed phases. The DNR determines whether a regulated activity is water dependent by considering whether an alternative water source is available that would have fewer adverse effects on nontidal wetlands, and whether use of surface water or the nontidal wetland is an essential element of the project. The applicant's definition of the project's purpose, however, does not bind the DNR's determination of water dependency.

If a regulated activity is water dependent, the DNR considers whether the activity requires access to a nontidal wetland by determining whether the activity may occur at another location that would "first avoid, then minimize" adverse effects on nontidal wetlands. Only the features of a regulated activity that are water dependent and require access to a nontidal wetland are excused from the practicable alternatives analysis.

(2) Practicable Alternatives and Initial Planning Phase.—The Non-tidal Act does not define "practicable alternatives." It places the burden upon applicants to demonstrate that the regulated activity has no practicable alternative, and requires the DNR to consider a number of factors: the availability of upland sites to accomplish the basic project purpose; the changes in the size, scope, configuration, or density of the project to accomplish its basic purpose; whether the applicant has reasonably attempted to remove constraints to alternatives, such as inadequate zoning or infrastructure; the economic value of the proposed activity in meeting a public need in the area; and the ecological and economic value associated with the nontidal wetland.

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134. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(71)).
135. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.05(B)(2)).
136. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.05(B)(3)).
137. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.05(C)(1)).
138. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.05(B)(4),(C)(2)).
139. The regulations define "practicable" as "available and capable of being done," considering "costs, existing technology, and logistics in light of overall project purposes." Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(69)). See supra note 119 for a discussion of the history of the regulations.
140. Md. Nat. Res. Code Ann. § 8-1207(b) (1990). The last consideration, which requires evaluation of estimates and projections and comparisons of incomparables, does not focus explicitly upon comparing the marginal benefits, for example, of one more shopping mall versus the marginal and cumulative adverse consequences of loss of natural wetlands. The regulations, though, focus the inquiry by directing the DNR to weigh
For non-water-dependent regulated activities, applicants must prove to the DNR that during the initial planning phase they searched for alternative sites that would avoid or reduce adverse effects to nontidal wetlands. The initial planning phase is the time in which prospective applicants evaluate the feasibility of a project “before committing the resources necessary for implementation.” Six specific events are described to help the applicant select an “initial planning phase.” The DNR, however, may determine for itself the appropriate span of the applicant’s planning phase. By requiring a finding that developers have sought alternative sites, the regulations attempt to direct developers’ attention to upland sites before they commit themselves to disturbing nontidal wetlands.

Once it has determined the activity’s initial planning phase, the DNR will then determine whether the project’s purpose reasonably can be accomplished on other sites, considering (1) whether the applicant can document a good faith analysis during the initial planning phase of alternative sites that would avoid or reduce the adverse effects on nontidal wetlands; (2) whether the applicant can document attempts to obtain necessary rights to conduct the regulated activities on these alternative sites; (3) the number and characteristics of alternative sites; (4) the proposed project’s siting requirements; (5) the governmentally imposed restrictions on the alternative sites; (6) the applicant’s efforts to reduce adverse effects on nontidal wetlands; and (7) the costs of mitigation for the project on the selected and alternative sites.

the proposed project’s contribution to a state or local economic priority and its promotion of public health, safety, or welfare, against the public benefits and public economic value that would be lost by the project’s adverse effects on the nontidal wetland. See 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. CODE tit. 8, § 5.04.05(D)(2)(d)).

141. See id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.06(A)(1),(2)). Water-dependent regulated activities that require access to a nontidal wetland are not subject to the practicable alternatives analysis or the alternative site analysis. See id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.05(B)(4),(C)(2)).

142. Id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.01(B)(50)).

143. See id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.06(A)(3)(b)).

144. See id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.06(A)(3)(d)).

145. See id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.06(A)(3)(a)). The regulations essentially adopt the EPA’s market entry theory for determining the availability of alternative sites under § 404 of the CWA. See Bersani v. Robichaud, 850 F.2d 36, 43 (2d Cir. 1988), cert. denied, 489 U.S. 1089 (1989).

146. 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. CODE tit. 8, § 5.04.06(A)(4)). Alternative sites not owned by the applicant during the initial planning phase still must be considered if the applicant could obtain rights to use those sites to fulfill the basic project purpose. Id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.06(A)(5)).
(3) Avoidance and Minimization.—The DNR will issue a Nontidal Act permit only when adverse effects on nontidal wetlands are "necessary and unavoidable." 147 Consequently, both water-dependent and non-water-dependent applications are subject to avoidance and minimization analysis. This analysis requires the applicant to prove that it has taken all necessary steps "first to avoid, and then to minimize" adverse effects on nontidal wetlands. 148 After reviewing the applicant's efforts, 149 the DNR evaluates the extent to which the proposed project actually will avoid or minimize adverse effects, by considering the following factors: (1) reduction in the affected area of nontidal wetlands; (2) harm to threatened or endangered species or species in need of conservation, or their critical habitats; (3) movement of indigenous wildlife; (4) use of the nontidal wetland by wildlife; (5) hydrologic effects; (6) functions of the affected and adjacent nontidal wetlands; (7) passage or relocation of high water flows; (8) groundwater flows; (9) fish spawning areas; (10) areas with significant plant or wildlife value; and (11) cumulative effects on nontidal wetlands. 150

In sum, given the detailed requirements of the water dependency and access test, the alternative site requirements, and the avoidance and minimization analysis, conducting regulated activities in nontidal wetlands or buffers appears infeasible for those unwilling or unable to engage the services of experts in wetlands issues. Thus the Nontidal Act erects a cost "hurdle" that may discourage many small-scale or low-value projects on nontidal wetlands.

(4) Water Quality and Watershed Management Plans.—To meet the water quality requirement, a proposed regulated activity must not cause an individual or cumulative effect that degrades the aquatic ecosystem, water quality, recreational or economic values, or public

147. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.06(B)(1)).
148. Id.
149. The DNR will review the applicant's efforts in view of (1) the project's spatial requirements; (2) features that dictate the placement or configuration of the project; (3) the relationship between the purpose of the project and the project's placement, design, or density; (4) "sensitivity of site design to nontidal wetlands"; (5) the applicant's efforts to reduce the scope of the project, remove or accommodate constraints such as zoning, infrastructure, or natural features, and otherwise avoid or reduce adverse effects; and (6) a comparison of the costs of mitigation for the project under the proposed design and under the alternative designs. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.06(B)(2)).
150. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.06(B)(3)).
welfare.\textsuperscript{151} A proposed regulated activity also must be consistent with any applicable watershed management plan.\textsuperscript{152} The watershed management plans are prepared in cooperation with local, state, and federal agencies, and must be approved by the DNR.\textsuperscript{153} Before approving a watershed plan, the DNR must hold a public informational hearing in the counties affected by the plan.\textsuperscript{154}

\textit{c. Permits.}—An applicant must complete and submit a joint federal and state application form.\textsuperscript{155} The DNR may require additional information to supplement an application. Some of these items may include a site plan showing the wetlands delineation,\textsuperscript{156} final elevations, photographs, and engineering data and plans.\textsuperscript{157}

Within forty-five days after receiving the application, the DNR notifies the applicant as to whether the application is complete, the information is sufficient, and the delineation is correct.\textsuperscript{158} The DNR also notifies the applicant of any additional or corrective information needed.\textsuperscript{159} Failure of the DNR to notify the applicant within forty-five days deems the application complete and the delineation

\begin{itemize}
\item \textsuperscript{151} See \textit{18 Md. Reg.} 1007 (1991) (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.07(A)}).
\item \textsuperscript{152} See \textit{id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.05(A)(4))}. Watershed management plans must include the following elements: (1) functional assessment of nontidal wetlands; (2) potential mitigation sites; (3) protection of nontidal wetlands; (4) cumulative impacts on nontidal wetlands; (5) water supply management; and (6) flood management. \textit{Id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.07(B)(5))}.
\item \textsuperscript{153} See \textit{id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.07(B)(3))}. The DNR may allow a person who owns an entire watershed to participate in preparing the watershed plan. \textit{See id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.07(B)(2))}. All affected landowners should be invited to participate in forming watershed plans.
\item \textsuperscript{154} \textit{Id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.07(B)(4))}.
\item \textsuperscript{155} See \textit{id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.02(B)(2))}. See \textit{supra} note 119 for a discussion of the history of the regulations.
\item \textsuperscript{156} See \textit{18 Md. Reg.} 1007 (1991) (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.02(D)(1)(a))}. Although the Nontidal Act specifically requires all applications to include a delineation of the nontidal wetlands, the regulations allow the DNR to waive a specific delineation. \textit{Compare id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.02(D)(1)(a)) with \textit{Md. Nat. Res. Code § 8-1206(c)} (1990)). In some cases, the DNR already may have accurate information about the boundaries of nontidal wetlands, and thus may not need another delineation, particularly for regulated activities with only minor effects.
\item \textsuperscript{157} See \textit{18 Md. Reg.} 1007 (1991) (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.02(D)(2), (4), (5), (17))}.
\item \textsuperscript{159} See \textit{18 Md. Reg.} 1007 (1991) (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.03(D)(1))}. If the application is incomplete, the DNR may return the application without reviewing the delineation. \textit{Id.} (to be codified at \textit{Md. Regs. Code tit. 8, § 5.04.03(D)(2))}.\end{itemize}
correct, but the DNR may extend the deadline if there are delays caused by bad weather or failure of other governmental agencies to complete their evaluations.\textsuperscript{160}

Once an application is complete, the DNR issues a public notice and provides an opportunity for the public to submit comments or request a public informational hearing.\textsuperscript{161} If requested, the DNR will hold a public informational hearing within forty-five days after the end of the public notice period.\textsuperscript{162}

The DNR rules upon an application within forty-five days after a public hearing, or within sixty days of receipt of a complete application if no one requests a public hearing.\textsuperscript{163} Nevertheless, in extenuating circumstances, the DNR may take an additional thirty days to rule upon an application.\textsuperscript{164} If the DNR grants a permit, it may impose conditions or limitations necessary for compliance with the Nontidal Act.\textsuperscript{165} The permit is also subject to mitigation and bond-


\textsuperscript{161} See Md. Nat. Res. Code Ann. § 8-1206(e) (1990); 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.03(G)). The public notice is published at the applicant's expense. \textit{Id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.03(G)(1)). Public notice is not required for activities that qualify for a letter of exemption. \textit{Id.}


A hearing on a permit application is not a contested case hearing under state law. Md. Nat. Res. Code Ann. § 8-1206(e) (1990); 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.03(H)(5)). An administrative appeal of a permitting decision, however, is a contested case hearing, which may be judicially reviewed. Frank Dawson, Address at the Symposium on the Maryland Nontidal Wetlands Protection Act (Nov. 29, 1989) (videotape available in the University of Baltimore School of Law Library); see also 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.04(B)(1)).


Mitigation and Bonding.—(1) Mitigation Requirements.—The permittee must submit a detailed mitigation plan. Mitigation may include converting upland to nontidal wetland, restoring a former wetland, or enhancing the functions of existing wetlands. Mitigation is not required for regulated activities completely exempt from permit requirements, or for “letter of exemption” activities. It also is not required for regulated activities occurring only in the buffer and not in nontidal wetlands.

The permittee may meet the mitigation requirement through in-kind creation or restoration in the following replacement ratios—1:1 for emergent nontidal wetlands; 2:1 for scrub-shrub, forested nontidal wetlands, or emergent nontidal wetlands of special state concern; or 3:1 for scrub-shrub or forested nontidal wetlands of special state concern. Alternatively, the permittee may meet a minimum in-kind replacement ratio of 1:1, plus replace lost wetlands functions by out-of-kind creation, restoration, or enhancement, including Best Management Practices (BMPs) for agricultural activities. The DNR, however, may waive the preceding mitigation requirements.

167. 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.14(B)(5)). See supra note 119 for a discussion of the history of the regulations. The plan should be submitted in two parts. Phase I of the plan must be submitted with the application. See 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.17(B)(1)). Phase I includes general descriptions, information, and justification for the proposed mitigation. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.17(B)(2)). The DNR then decides whether to accept Phase I, and gives the permittee suggestions on what Phase II should contain. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.17(B)(4)). Phase II is normally due within three months of the DNR’s final decision on the permit application. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.17(C)(2)). Phase II must include detailed information on the mitigation sites, practices, structures, schedules, hydrology, substrate, vegetation, monitoring, budget, protective mechanisms, and the permittee’s legal right to use the selected sites. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.17(C)(7)). The DNR must issue a decision on the Phase II plan within 45 days or the plan is deemed acceptable (unless the 45 day period expires before the DNR issues a permit). See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.17(C)(2)).
168. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(59)).
169. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.14(A)(1)).
170. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.14(A)(3)).
171. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(C)(1)). The first number in the replacement ratio is the acreage of nontidal wetlands to be created or restored, and the second number is the acreage of nontidal wetlands lost. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(B)).
172. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(C)(2)). This option will reduce the mitigation burden on applicants whose regulated activities will adversely af-
tion options and either allow mitigation through enhancement alone, if enhancement is the only mitigation available, or specify other mitigation requirements.¹⁷³

The mitigation activities may occur onsite or offsite but they must occur in the same county as the regulated activity and in areas identified in a comprehensive watershed management plan.¹⁷⁴ The regulations direct mitigation activities to upland sites that already have been altered significantly by human activities.¹⁷⁵ Permittees must avoid siting mitigation activities on forested lands, lands that might have been used for disposal of contaminated substances, or lands that are or may be a habitat for endangered or threatened species, or species in need of conservation.¹⁷⁶

(2) Standards for Mitigation and Monitoring.—Mitigation undertaken by permittees must be successfully completed in the time specified in the mitigation plan.¹⁷⁷ Five years after the activity, more than eighty-five percent of the site must be vegetated with plant communities similar to those of the lost nontidal wetlands.¹⁷⁸ Permittees must protect their mitigation sites from future development through deed restrictions, conservation easements, restrictive covenants, or conveyances to organizations capable of preserving the sites in perpetuity.¹⁷⁹

Permittees must also submit annual monitoring reports to the

fect wetlands that are difficult or time consuming to restore or recreate, such as forested nontidal wetlands.

¹⁷³ Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(C)(3),(4)). A permittee seeking to use enhancement as part of the mitigation may be required to assess the functions of the nontidal wetland before it is disturbed, and to show how the enhancement activities will replace the lost wetlands' functions. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(E)).

¹⁷⁴ See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(H)).

¹⁷⁵ See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(I)).

¹⁷⁶ See id. The restriction against using forested lands for mitigation seems to direct mitigation onto farmland. Louise Lawrence, Address at the Symposium on Maryland's Nontidal Wetlands Protection Act (Nov. 29, 1989) (videotape available in the University of Baltimore School of Law Library). That observation, though, seems to ameliorate concerns that the Nontidal Act, by increasing the cost of nonagricultural development on farmed nontidal wetlands, removed much of the land value of farmed nontidal wetlands. See id. In short, some farmland will be in demand for a new nonagricultural use—wetlands mitigation.


¹⁷⁸ See 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.15(J)(2)). Out-of-kind mitigation, when authorized, would presumably be excused from the mitigation requirement of achieving plant communities similar to those of the lost nontidal wetlands.

¹⁷⁹ See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.15(K)(1)).
DNR for at least five years after completion of the mitigation project. The DNR, however, may extend the monitoring period for three additional years if the mitigation project does not meet the revegetation standards. The DNR also may inspect the mitigation site at any time.

(3) Monetary Compensation.—The DNR may accept monetary compensation in lieu of mitigation only if wetland creation, restoration, or enhancement is not feasible. The DNR determines the amount of monetary compensation based on the anticipated cost of mitigation, including land acquisition, design, construction, monitoring, and maintenance.

Monetary compensation is paid into the DNR’s Nontidal Wetland Compensation Fund. The fund also receives monies from all civil and criminal penalties imposed for violations of the Nontidal Act. The DNR may use the fund only for the purchase, creation, restoration, and enhancement of nontidal wetlands.

(4) Mitigation and Failure to Avoid and Minimize Adverse Effects.—The DNR may not base a final decision on an application for a nontidal wetland permit solely on the benefits of mitigation or monetary compensation. This rule will tend to keep the DNR’s inquiry focused on water dependency, need for access, alternative sites, avoidance and minimization, and the other permit criteria. The rule thus will help the DNR avoid a situation similar to that which occurred in Bersani v. Robichaud. In Bersani, the Corps decided that an applicant’s proposal for mitigation eliminated the net adverse impacts of a non-water-dependent activity, and accordingly granted a section

180. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(A)(1)). The DNR may terminate the monitoring requirement in less than five years if the mitigation requirements have been fulfilled. Id.
181. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(A)(3)).
182. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(A)(5)).
184. 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.18(H)).
404 permit, which the EPA later vetoed. Under the DNR's rule, however, promises of mitigation are not enough to satisfy the water dependency and other permit criteria.

(5) Bonding.—Permittees other than government agencies must file a performance bond within sixty days of the DNR's approval of Phase II activities. The bond is payable to the state and conditioned upon successful completion of the mitigation plan. The amount of the bond is to be $20,000 per acre of nontidal wetland mitigation required as a condition of the permit. The DNR, however, may adjust the amount of the bond based on the actual cost of the Phase II mitigation or because of changes in the mitigation plan.

The surety's liability continues until the DNR approves the mitigation project and the surety receives written notice of successful completion. A bond may be forfeited if the DNR revokes the permit, the permittee fails to comply with an administrative order, or the permittee fails to comply with the approved mitigation plan.

(6) Mitigation Banking.—Mitigation may occur before undertaking regulated activities, but only on sites approved by the DNR after consultation with local, state, and federal agencies. This advance mitigation is called mitigation banking. The DNR, however, only approves mitigation banking sites when they are linked to identified projects. No bond is required for mitigation banking, but it is subject to the requirements for mitigation siting and project stan-

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190. See id. at 42.
191. 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(1)-(2),(4)).
192. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(3)).
193. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(5)(a)). The permittee may petition for a reduction in the bond amount based on actual or projected costs of mitigation. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(5)(b)).
194. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(5)(c)).
195. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(6)).
196. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.16(B)(8)(a)).
197. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.14(B)(9)).
198. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(60)).
199. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.14(B)(9)). The definition of "mitigation bank" is not always restricted to identified projects, but rather contemplates a system of debits and credits. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(60)). If the DNR operated a system of debits and credits, the mitigation "units" would be transferable, and not restricted to projects identified when the DNR approved the banked mitigation. If banked mitigation were transferable, future applicants would benefit because they could buy existing mitigation rather than post a $20,000 per acre bond and pay for mitigation activities. In addition, the DNR's nontidal
Mitigation banking is also subject to the same monitoring as other mitigation projects.

Some wetlands and some activities are not subject to the permit requirement. The wetlands that are excluded are those isolated areas of less than one acre, having no significant plant or wildlife value, if the developer notifies the DNR and uses BMPs. The activities that do not require Nontidal Act permits may be divided into two categories: first, activities exempt from the requirements for exemption letters, notification, mitigation, and BMPs; and second, activities that require exemption letters and BMPs, but are excused from mitigation.

The following "exempt" activities are excused from requirements for permits, letters of exemption, notification, BMPs, and mitigation: (1) forestry activities; (2) agricultural activities with minimal impacts; (3) approved mitigation projects required by the regulations program would benefit from the certainty that the mitigation would be completed, rather than merely promised when the DNR issues permits.

Owners of land suitable for mitigation would benefit because their lands would have the additional economic value of a new potential use—mitigation banking. Such an increase in value of suitable uplands would at least in part offset the loss in value of nontidal wetlands, particularly because most uplands suitable for mitigation are probably near nontidal wetlands, and thus are likely to be owned by the same persons. Mitigation banking, however, is controversial. See generally Focus Issue: Wetland Mitigation Banking, NAT'L WETLANDS NEWSL., Jan-Feb. 1992, at 4-12.

200. See 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. CODE tit. 8, § 5.04.14(B)(9)).

201. See id.

202. See id.

203. See Md. NAT. RES. CODE ANN. § 8-1206(a)(2) (1990). Isolated nontidal wetlands are not hydrologically connected to streams, tidal waters, tidal wetlands, or non-isolated nontidal wetlands. Id. § 8-1201(f); 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. CODE tit. 8, § 5.04.01(B)(52)). BMPs are conservation measures that control soil loss and water quality degradation, and minimize adverse effects to surface and groundwater, and to the chemical, physical, and biological characteristics of nontidal wetlands. Id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.01(B)(12)). But see infra text accompanying note 207 (Though by statute activities in such small, isolated nontidal wetlands require no permit, the regulations require a letter of exemption.).

204. See 18 Md. Reg. 1007 (1991) (to be codified at Md. REGS. CODE tit. 8, § 5.04.08).

205. Minimal impact agricultural activities include (1) repair and maintenance of structures; (2) activities conducted pursuant to public drainage regulations; (3) activities on areas that have lain fallow for up to five years; (4) activities on areas held out of production under a formal agricultural program; (5) construction essential to farming; (6) normal farming that does not convert previously unfarmed wetlands; (7) activities affecting isolated nontidal wetlands of less than one acre and having no significant plant or wildlife value; and (8) activities affecting less than 5000 square feet of nontidal wetlands. Id. (to be codified at Md. REGS. CODE tit. 8, § 5.04.19(B)); see also Md. NAT. RES. CODE ANN. 8-1205(a)(1)-(4),(7) (1990).
tions; (4) regulated activities conducted pursuant to a section 404 permit, general permit, or exemption letter from the Corps for which an application had been submitted prior to December 31, 1990; (5) activities within farmed nontidal wetlands inundated less than fifteen consecutive days during the growing season; and (6) certain other activities that have a minimal adverse effect on nontidal wetlands.\textsuperscript{206}

In comparison, the following activities are excused from the permit and mitigation requirements, but require letters of exemption and BMPs: (1) activities in isolated nontidal wetlands of less than one acre having no significant plant or wildlife value; (2) activities that result in a cumulative loss of no more than 5000 square feet of nontidal wetlands and buffer containing no significant plant or wildlife value; (3) installation of certain utility lines; (4) construction of overhead power lines; (5) mitigation projects not required under the regulations; (6) regulated activities that affect less than two acres of farmed nontidal wetlands, except in nontidal wetlands of special state concern or their expanded buffers; (7) repair of certain larger structures and fills; and (8) activities that will cause the loss of nontidal wetlands that were created by a permitted construction or mining activity for temporary purposes.\textsuperscript{207} An activity does not, however, qualify for a letter of exemption if it may result in significant individual or cumulative effects on nontidal wetlands, or if it fails to comply with BMPs.\textsuperscript{208} A person proposing to conduct "letter of exemption" activities must complete and submit the same application form required for nontidal wetlands permits.\textsuperscript{209} Persons proposing to conduct repeated activities that may qualify for letters of exemption, however, may submit a single application, and the DNR may issue one letter of exemption for all such activities.\textsuperscript{210}

\textsuperscript{206} Md. Nat. Res. Code Ann. § 8-1206(a)(1) (1990); 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.08). The exempted activities are (1) minor construction in landscape management areas affecting less than 1000 square feet of wetlands; (2) construction on existing impervious surfaces or within the buffer; (3) removal of up to 30% of the trees in the buffer; (4) vegetation control on rights of way; (5) weed control; (6) landscape management in the buffer; (7) soil investigation; (8) percolation tests; (9) survey markers; (10) other activities approved by the DNR; (11) maintenance of structures and fills; and (12) stormwater management facilities. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.08(F)). "Landscape management" is gardening or lawn maintenance, and a "landscape management area" is a lawn or garden. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.01(B)(53),(54)).

\textsuperscript{207} 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.09(B)).

\textsuperscript{208} Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.10(B)(2),(3)).

\textsuperscript{209} See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.02(B)(1)).

\textsuperscript{210} See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.10(C)(1),(2)).
(1) Agricultural Activities.—Agricultural activities not completely exempt from the regulations nonetheless receive two basic advantages: deferral of mitigation because of economic hardship, and technical assistance from the soil conservation districts. These activities, however, require approval of a soil conservation and water quality plan by the soil conservation district. The plan must contain BMPs to protect nontidal wetlands in compliance with the DNR’s regulations adopted in consultation with the Maryland Department of Agriculture.

(2) Mitigation for Non-Exempt Agricultural Activities.—The soil conservation and water quality plan for non-exempt agricultural activities must provide for mitigation of the loss of nontidal wetlands within three years. The person conducting the agricultural activity consults with the soil conservation district and develops the mitigation plan, which will be reviewed by the DNR, but is subject to the soil conservation district's final approval. In effect, the soil conservation district provides free technical consulting services to farmers for wetland BMPs and mitigation.

The DNR’s regulations require the same mitigation replacement ratio for nontidal wetlands lost to “letter of exemption” agricultural activities as for nontidal wetlands lost to regulated activities. Mitigation may take the form of monetary compensation, but only if the creation, restoration, or enhancement of nontidal wetlands is not a feasible alternative.

Mitigation may be deferred if the Maryland Department of Ag-


215. Lawrence, supra note 176. The additional duties under the Nontidal Act will substantially increase the workload of the soil conservation districts. Id. The technical consulting services of the soil conservation districts are not “free,” but are publicly funded. The farmers, however, do not pay the marginal costs of those services.

216. See 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, §§ 5.04.13(B)(4), 5.04.15(C)). In contrast, activities in farmed nontidal wetlands may be mitigated on a 1:1 ratio. Id. § 5.04.15(D).

griculture finds that the economic hardship of mitigation would jeopardize continued farming. The deferral lasts only until the economic hardship has passed, the farm changes owners or operators, or agricultural activities no longer take place on the nontidal wetland. After the deferral ends, the Department of Agriculture notifies the DNR, and the person conducting agricultural activities must implement the mitigation plan within three years of the loss of the nontidal wetlands, or within one year of the end of the deferral, whichever is later.

The Nontidal Act makes the soil conservation district, rather than the DNR, responsible for delineating the nontidal wetlands affected by agriculture or forestry activities. The soil conservation districts traditionally have assisted farmers, but some fear that the regulatory role of the soil conservation districts under the Nontidal Act could erode the farmers’ confidence and the districts’ effectiveness.

(3) Forestry Activities.—Forestry activities either are exempt completely from all requirements under the nontidal wetlands program, or are subject to BMPs contained in an approved sediment and erosion control plan. The completely exempt forestry activities include the following: repair and maintenance of existing structures for forestry activities; forestry activities on areas that are lying fallow or have lain fallow; forestry activities that do not require a sediment

222. Lawrence, supra note 176; see also 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.19(J)) (requiring that the soil conservation districts and the Maryland Department of Agriculture cooperate with the DNR to resolve violations of the regulations caused by agricultural activities).
and erosion control plan; and forestry activities begun before January 1, 1991, and conducted under a sediment and erosion control plan approved before that date.\textsuperscript{224}

All other forestry activities in nontidal wetlands or buffers must have a sediment and erosion control plan implementing BMPs that have been approved by the soil conservation district.\textsuperscript{225} The BMPs for forestry activities are required to control soil loss and sedimentation of nontidal wetlands; preserve water quality; protect flows of surface water or groundwater; prevent conversion of nontidal wetlands to uplands; and protect "the chemical, physical, or biological characteristics of nontidal wetlands."\textsuperscript{226} In approving BMPs, the soil conservation district must consider the ability of the soil to support equipment, to maintain surface and ground water levels, and to maintain "the ecological value of nontidal wetlands of special state concern."\textsuperscript{227}

Nontidal wetlands of special state concern receive special treatment. The DNR's Forest, Park, and Wildlife Service, in consultation with the local soil conservation district, is to delineate within such wetlands a primary protection area, within which no disturbance may occur, and a secondary protection area, where special restrictions apply.\textsuperscript{228} Nonetheless, harvesting timber within the secondary protection area cannot be prohibited as long as the harvester uses low-impact techniques.\textsuperscript{229}

A person conducting forestry activities must submit to the soil conservation district a proposed delineation of the nontidal wetlands according to the Federal Manual, and descriptions, schedules, and locations of the proposed activities, including rectification of proposed impacts.\textsuperscript{230} The soil conservation district then must

\textsuperscript{224} 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.20(B)). Nonetheless, forestry activities on areas that are lying fallow must implement BMPs, but need not have an approved sediment and erosion control plan. \textit{See id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.20(B)(2)-(4)).

\textsuperscript{225} \textit{Id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.20(A)). \textit{See generally Maryland's Regulation of Forest Products Industries, supra note 106, at 106-08.}

\textsuperscript{226} 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.20(C)).

\textsuperscript{227} \textit{Id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.20(D)). For suggested BMPs for particular forestry activities, see \textit{id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.20(E)).

\textsuperscript{228} \textit{See id.} (to be codified at Md. Regs. Code tit. 8, §§ 5.04.20(E)(4), 5.04.21(C)(3)).

\textsuperscript{229} \textit{See id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.20(E)(4)(b)). The low-impact techniques include group selection, single tree selection, natural regeneration, limited skidder access, and disturbance restrictions during breeding and nesting seasons. \textit{See id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.20(E)(4)(a)(ii)).

\textsuperscript{230} \textit{See id.} (to be codified at Md. Regs. Code tit. 8, § 5.04.21(A)). The submission
either approve the proposed delineation or conduct its own delineation. The sediment and erosion control plan must be approved if it is in accordance with the regulations. The person conducting forestry activities then submits the approved plan to the DNR.

A person conducting forestry activities must notify the soil conservation district when site conditions require a change in the BMPs. The soil conservation district then cooperates with the DNR to resolve violations of the regulations caused by forestry activities. Any forestry activities that cause violations are subject to enforcement provisions.

f. Permit Appeal and Review.—The DNR’s decision to grant, deny, or condition a permit may be appealed. The decision may only be appealed, however, by a person with legal rights, duties, interests, or privileges different from those of the general public. The appeal must be a request for a contested case hearing, filed with the permit decisionmaker within thirty days of the permit decision. The request must specify the grounds for the request, including an explanation of the petitioner’s standing, the relief apparently may or should include a proposed sediment and erosion control plan, complete with proposed BMPs.

231. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.21(C)(1)(a)). The soil conservation district may consult the DNR’s guidance maps to locate nontidal wetlands of special state concern. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.19(C)(2)).

232. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.19(C)(1)(b)). The Maryland Department of the Environment reviews proposed sediment and erosion control plans for forestry activities in nontidal wetlands owned by the state. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.19(C)(5)).

233. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.21(C)(4)(a)). Once a soil conservation district approves a sediment and erosion control plan, the DNR does not appear to have the authority to disapprove that plan. Approved plans are valid for two years unless specifically extended or renewed. Maryland’s Regulation of Forest Products Industries, supra note 106, at 107.


235. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.21(C)(8)).

236. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.21(C)(7)).

237. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(B)(1)). See supra note 119 for a discussion of the history of the regulations.

238. See 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.04(B)(1)). The restriction comes from Maryland’s law of standing to contest state administrative action, which is more restrictive than the federal standing criteria. Tom Deming, Address at the Symposium on Maryland’s Nontidal Wetlands Protection Act (Nov. 29, 1989) (videotape available in the University of Baltimore School of Law Library).

requested, and the evidence to be presented.240

Before granting a contested case hearing, the Director of the DNR's Water Resources Administration, or a designee, must determine whether the petitioner has standing, has raised an issue relevant to the decision on the permit application, and has filed a timely request.241 Any hearing granted is conducted pursuant to the Maryland Administrative Procedure Act242 and corresponding regulations.243 The DNR's decision on the basis of the contested case hearing is final for purposes of judicial review.244

g. Permit Modification.—The DNR may modify an existing permit pursuant to a request by the permittee, or on the DNR's own motion.245 Minor modifications involving no change in the effects on nontidal wetlands do not require public notice or review.246 All other modifications are "major modifications," which require the same public notice and opportunity for hearings as initial permit applications.247

If the DNR notifies the permittee of its intent to modify a permit, the permittee has fifteen days in which to request a contested case hearing.248 If the permittee requests a modification, the DNR has thirty days to grant or deny the request.249 The permittee then must request a contested case hearing within fifteen days.250

240. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(B)(3)).
241. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(D)(1)). If the Director denies a request, the requester has 10 days to file written exceptions and a request for oral arguments. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(D)(4)). If the requester fails to file exceptions within 10 days, the denial becomes the DNR's final decision on the hearing request. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(D)(3)(c)). If the Director's final decision on the request for a contested case hearing is adverse to any party other than the DNR, that party may seek judicial review. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(D)(5)).
244. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.04(B)(5)).
245. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.11(A),(B),(C)). See supra note 119 for a discussion of the history of the regulations. The DNR may modify a permit on its own motion when it receives new information, or when it has amended a relevant regulation. See 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.11(B)(2)(a),(b)).
247. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.11(E)(1),(2)).
248. Id.
249. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.11(C)(4)).
250. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.11(C)(5)).
h. Enforcement.—Violations of the Nontidal Act or permit conditions may be subject to administrative action or to civil or criminal actions in state court.\textsuperscript{251} After notification of the violation and an opportunity for a hearing, the DNR may revoke a permit for cause.\textsuperscript{252} "Cause" includes misrepresentation, a violation of permit conditions, failure to disclose a material fact, failure to post a bond, failure to comply with an administrative order, substantial deviation from the specifications of the permit, or preventing the DNR from inspecting the site.\textsuperscript{253}

The DNR may also issue "stop work orders" to any person engaged in a regulated activity who violates the Act, the regulations, an order, or a permit.\textsuperscript{254} Stop work orders are limited to regulated activities and thus cannot be issued against agricultural or forestry activities.\textsuperscript{255}

The DNR may bring civil actions in state court for penalties of up to $10,000 per day of violation, and injunctive relief, including the restoration of unlawfully disturbed areas.\textsuperscript{256} Criminal sanctions are also available, because any violation of the Nontidal Act, the regulations, an order, or a permit is a misdemeanor.\textsuperscript{257} A first offense is punishable by a fine of up to $10,000, and the fine for a subsequent offense is no more than $25,000.\textsuperscript{258} A court may also order the violator to restore the nontidal wetlands.\textsuperscript{259}

\textsuperscript{252} Id. § 8-1210(b); 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.25). See supra note 119 for a discussion of the history of the regulations.
\textsuperscript{254} See Md. Nat. Res. Code Ann. § 8-1210(c) (1990); 18 Md. Reg. 1007 (1991) (to be codified at Md. Regs. Code tit. 8, § 5.04.24(B)(3)(c)). The DNR may also order a violator to cease the violation, stabilize the site, restore the illegally affected wetland, or submit a written report on the violation or plan for correction. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.24(B)(3)(a),(b),(d),(e)).
\textsuperscript{256} Id. § 8-1210(d)(1),(2). But see Regan, supra note 113, at 39 (discussing Hirsch v. Maryland Dep't of Natural Resources, 288 Md. 95, 118, 416 A.2d 10, 21-22 (1980), which held that the DNR's failure to comply with the notice requirements of the Maryland Wetlands Act of 1970 was a defense to a suit brought by the DNR to compel the restoration of illegally filled tidal wetlands).
\textsuperscript{259} See id.
i. Delegation to Counties.—After December 31, 1994, the DNR may delegate all or part of its authority under the Nontidal Act to any county that enacts a nontidal wetland protection program meeting the DNR’s minimum standards.\(^{260}\) Delegation from the DNR is effective for up to two years, and may be renewed for additional two-year periods.\(^{261}\) The DNR, however, retains both authority to direct a county’s decision on a nontidal wetlands permit application,\(^{262}\) and authority to make permitting decisions for activities that may qualify under a state program general permit from the Corps.\(^{263}\) Although the DNR may conduct investigations and oversight inspections of nontidal wetlands sites, and take enforcement actions against violators,\(^{264}\) counties with delegated authority may also obtain similar enforcement authority.\(^{265}\) Delegated counties must submit annual reports to the DNR concerning their nontidal wetlands programs.\(^{266}\) In addition, if after opportunity for an informal hearing the DNR finds that the county is not administering the program consistent with the agency’s standards, the DNR may withdraw the county’s delegated authority.\(^{267}\)

Although the DNR cannot delegate Nontidal Act authority to the counties before 1994, it has instituted a cooperative agreement with Prince George’s County.\(^{268}\) Under a Memorandum of Under-

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263. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.22(C)(4)). If allowed by the Corps, though, the DNR may grant a county the authority to issue nontidal wetlands permits for activities within the state program general permit. See id. (to be codified at Md. Regs. Code tit. 8, § 5.04.22(B)(3)). If a county receives that authority, it also must establish a nontidal wetland compensation fund that will be independent of the fund maintained by the DNR. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.22(A)(9)).

264. Id. (to be codified at Md. Regs. Code tit. 8, § 5.04.22(E),(F)).


268. See Md. Dep’t of Natural Resources & Prince George’s County, Md., Memorandum of Understanding (Dec. 21, 1990).
standing (MOU), the DNR will send the County's Department of Environmental Resources (DER) all applications for Nontidal Act permits and letters of exemption involving projects in Prince George’s County.269 The County will “participate” in determining if the application is complete and the delineation is correct.270 It will also hold any requested public informational hearings and receive public comments on the permit applications.271 After compiling the administrative record, the County then makes a recommendation to the DNR.272 The DNR, however, issues the final decisions on permit applications.273 Part of the agreement also requires the county to submit detailed annual reports to the DNR about the county’s activities under the MOU, the effects on wetlands of those activities, and the county’s relationship with the DNR.274

This test program is an important first step. It should yield information that could help Prince George’s and other counties determine whether they wish to apply for full delegation of Nontidal Act authority by 1994. Similarly, the DNR should also gain insight into the levels of technical support and oversight that will be necessary when instituting the delegation program in 1994.

j. The Corps’ Maryland General Permit.—On January 31, 1991, the Corps issued a general permit under section 404(e) of the CWA.275 This general permit authorizes discharges of dredged or fill material modifying up to five acres of wetlands, if the discharge receives a permit or letter of exemption from the state under the Nontidal Act.276 Discharges of dredged or fill material that do not require a permit or a letter of exemption under the Nontidal Act are not authorized by the general permit.277 In addition, the Maryland Department of the Environment has issued a section 401 water quality certification for all activities that comply with the general

269. See id., paras. A.4 & D. The county is not given the right to review permit modifications or temporary emergency permits. Id., paras. E & F.
270. See id., para. A.7.
272. See id., paras. B.3., C.1.
273. See id., para. C.2.
274. See id., para. I.
275. Maryland General Permit, supra note 104; see Federal Water Pollution Control Act, 33 U.S.C. § 1344(e) (1988) (granting the Secretary the authority to issue general permits on a statewide basis).
276. See Maryland General Permit, supra note 104, § III. A Maryland Waterway Construction Permit will also suffice. Id.
277. See id. § III(A). Such discharges, though, may qualify for other general permits or exemptions from § 404 permits.
The Corps has imposed additional constraints on the use of the general permit. The proposed discharge must be free of toxic quantities of pollutants, must occur away from intakes for public water supplies, must not disrupt the movement of indigenous aquatic species unless the purpose of the fill is to impound water, and the fill or structure must be properly maintained. If the proposed discharge may affect federally protected species or their critical habitat, the Corps must comply with section 7 of the Endangered Species Act before authorizing the discharge under the general permit. If the proposed discharge may affect properties listed, or eligible for listing, in the National Register of Historic Places, the Corps must comply with section 106 of the National Historic Preservation Act before authorizing the fill under the general permit. The general permit is also subject to a veto by the EPA under section 404(c) of the CWA.

An applicant must complete and file a joint permit application with the DNR and the Corps. The Corps' evaluation of the application parallels the process outlined in the DNR's amended regulations. Within forty-five days, the Corps or the DNR will notify the applicant as to whether the proposed project qualifies for the general permit. If the fill would substantially modify between one and five acres of nontidal wetlands, the Corps will send copies of the application to the FWS, the EPA, the National Marine Fisheries Service, and the Maryland Historical Trust. Those agencies have thirty days to comment on the application. The Corps will try to resolve any objection within forty-five days of receipt of the application. If the Corps cannot resolve an objection, the application does not qualify under the general permit, and the Corps will institute normal application evaluation procedures.

278. See id. § III(B).
279. See id. § III(D).
281. Maryland General Permit, supra note 104; see also 16 U.S.C. § 1536.
284. Maryland General Permit, supra note 104, § III(G).
285. Id. § IV(A).
286. Id. § IV(B).
287. Id. § IV(B)(2).
288. Id.
289. Id.
290. Id. § IV(B)(4).
also exclude from the general permit discharges modifying less than one acre if the wetlands perform important public functions.\(^{291}\) Wetlands considered important to the public interest include those that serve vital biological functions, those set aside for environmental study or as sanctuaries or refuges, those that preserve beneficial drainage or sedimentation characteristics, those that significantly shield other areas from waves or storms, those that store storm and flood waters, those that are important groundwater discharge or recharge areas, those that significantly purify water, and those that have unusual characteristics.\(^{292}\) Similarly, if the Corps determines that "more than minimal individual or cumulative impacts are occurring to non-tidal wetlands or waters," it may suspend, revoke, or modify the general permit either in its entirety or as applied to specific projects.\(^{293}\) The Corps may also impose special conditions for any activity authorized under the general permit to protect the public interest.\(^{294}\)

In addition, the general permit imposes some BMPs on authorized activities.\(^{295}\) The Corps' BMPs basically echo requirements of the Nontidal Act and the DNR's regulations, with the following variations: the discharge must not cause the relocation of water unless the purpose is to impound water; if the discharge creates an impoundment, adverse effects on the aquatic system caused by accelerated or restricted flows must be minimized; and discharges into the breeding areas of migratory waterfowl must be avoided.\(^{296}\)

The general permit expires on January 31, 1994, unless it is renewed.\(^{297}\) In 1993, the Corps will re-evaluate the general permit to determine whether the authorized projects have caused individual or cumulative adverse effects, whether they promoted the policy of no net loss of wetland functions and values, and whether the general permit program is meeting the Chesapeake Bay Program Wetlands Policy Implementation Plan.\(^{298}\) Finally, amendments to the Nontidal Act or regulations that would expand the extent of discharges under the state program are not covered by the general permit until the Corps completes a public interest review.\(^{299}\)

291. See id. § IV(B)(3).
292. See id. § IV(B)(3)(a)-(h).
293. Id. § IV(B)(7).
294. Id. § IV(B)(8).
295. Id. § V.
296. See id. § V(C),(D),(F).
297. Id. § VII(C).
298. Id. § VII(A).
299. Id. § VII(B).
The general permit probably will result in more streamlined review of most applications for small-scale projects in wetlands. The Corps’ restrictions on the general permit, though, have the effect of constraining the state’s discretion. For example, Maryland is structuring its relations with its own counties to conform to the Corps’ general permit. The General Assembly postponed the county delegation program until 1994 because the Corps’ 1991 general permit would not apply to Nontidal Act permits or letters of exemption issued by counties. The General Assembly seems to anticipate, however, that by 1994 the Corps will agree to extend the general permit to cover actions by delegated counties.

k. Summary.—Maryland has a thorough regulatory program that guides development away from nontidal wetlands and their buffer areas. Maryland’s Nontidal Act shifts to developers some of the costs that otherwise would be inflicted on those downstream from the development and on society as a whole. The costs incurred by the applicant include proving that the proposed project is water dependent or that upland sites are impracticable, showing that the project would disrupt the minimum quantity and quality of wetlands, and completing the required mitigation program or making monetary contributions in lieu of mitigation activities. Those standards should encourage developers to seek upland sites and thus reduce net loss of wetlands.

3. The 2020 Commission Report.—In 1989, Maryland Governor William Donald Schaefer established a Commission on Growth in the Chesapeake Bay Region to study the twenty percent population growth projected for the Bay watershed by the year 2020. The Commission issued a report recommending comprehensive state and local land use planning to provide for growth while protecting Maryland’s natural resources. In addition, the Commission proposed detailed legislation to implement its proposals. It then issued a supplemental report which explained that land use is the key

301. 1990 Governor’s Comm’n Summary Report, supra note 73, at 4-5.
to Maryland’s future in controlling air and water pollution and conserving natural resources such as the Bay, and possibly saving $1.1 billion in infrastructure costs over the next thirty years. 303 The legislature, however, did not enact the Commission’s proposed legislation. 304

Instead, the 2020 Bill was referred for summer study. 305 The General Assembly established a Special Joint Committee on Growth Management to consider the proposals. 306 The Joint Committee is considering protecting sensitive areas (including nontidal wetlands) separately from comprehensive growth management. 307 It appears doubtful that the Joint Committee will produce a comprehensive growth management bill because growth management is more politically controversial and more likely to cost the state money. A “fiscally neutral” sensitive areas bill seems more likely.

Nonetheless, the proposals of the 2020 Commission suggest an important insight. Environmental protection is often portrayed as a zero sum game—more environmental protection means less money, both for the regulated industries and for society as a whole. Under-controlled land use, however, is probably a negative sum game—sprawling development seldom seems to pay for the public's costs of providing services and infrastructure, much less for the diminution of natural resources or for the externalized costs of additional pollution.

The 2020 Commission report points to a positive sum game—redevelopment and growth within the limits of existing infrastructure. This should meet the needs of the expected increase in population, but at a much lower out-of-pocket cost to the public, while preserving more natural resources and constraining the increase in pollution. 308 The savings of tax dollars alone should recommend the Governor’s Commission report to states expecting an increase in population. It would be ironic if the last forty years of sprawl

303. See 1991 GOVERNOR'S COMM’N REPORT, supra note 83.
304. See Md. H.B. 214, 1991 Sess.; Md. S.B. 227, 1991 Sess. These bills were introduced and read for the first time in January of 1991, see id., but no further action has taken place.
305. Liebesman & Singer, supra note 302, at 43.
307. Id.; see also Maryland Exec. Agencies, State and Federal Land Management Programs and Protection of Sensitive Areas in Maryland, Presentation to Special Joint Committee on Growth Management (Sept. 3, 1991).
308. See 1991 GOVERNOR’S COMM’N REPORT, supra note 83.
development in Maryland leave the state unable to invest in managing growth for the next thirty years.

B. Virginia's One-And-A-Half-Tiered Program

Virginia's initiatives to protect nontidal wetlands consist of giving localities the power to promote water quality goals through land use planning, and proposing water quality regulations that would protect nontidal wetlands. Virginia's Chesapeake Bay Preservation Act was a radical step for that state in expanding its localities' authority to manage development for protection of environmental quality. The Preservation Act is mandatory in every city and county adjacent to tidal water in the Bay watershed. The Act also authorizes localities outside of Tidewater Virginia to adopt land use controls for water quality. The localities' response to the Preservation Act has been mixed, and as a result, the Act is unlikely to result in consistent state-wide protection for nontidal wetlands.

Virginia failed to pass a nontidal wetlands bill, but it has amended its State Water Control Law. The amended Law authorizes the State Water Control Board to issue water protection permits that constitute state water quality certification under section 401 of the CWA. The Water Control Board did propose water protection permit regulations that included a nontidal wetlands program. Those proposed regulations, though, were withdrawn amid criticism. Revised regulations were published on December 16, 1991. In the meantime, it requires an extraordinary effort of the Board to veto a section 404 permit.

1. Chesapeake Bay Preservation Act.—Virginia's General Assembly passed the Chesapeake Bay Preservation Act in 1988, requiring local governments in Tidewater Virginia to protect the state's waters, including nontidal wetlands. Under Virginia law, a state

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310. See id. § 10.1-2108.
311. Id. § 10.1-2100.
312. See id. § 10.1-2110.
313. See HORTON & EICHBAM, supra note 8, at 158-61.
315. See id. § 62.1-44.15:5.
317. VA. CODE ANN. §§ 10.1-2100 to 10.1-2115 (Michie 1989). The Preservation Act applies in the 29 counties (and the towns within those counties) and 17 cities of Tidewater Virginia, as provided in § 10.1-2100(A). The Preservation Act was in part the result of a process of mediated consensus building begun in 1986. Patricia R. McCubbin, Comment, Consensus Through Mediation: A Case Study of the Chesapeake Bay Land Use Round-
statute, such as the Preservation Act, is necessary to give local governments the authority to protect the environment. Unfortunately, the Preservation Act is unlikely to be as effective as Maryland's Critical Areas Act, and many acres of nontidal wetlands within Tidewater Virginia are likely to be lost before the Virginia General Assembly enacts stronger legislation.

The Preservation Act calls for a cooperative state-local program, but puts most of the burden on local governments. The Act establishes the Chesapeake Bay Local Assistance Board (Local Assistance Board). The Local Assistance Board promulgates criteria for local governments to use when delineating the Preservation Areas within each locality, and when ruling upon applications to re-

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318. See, e.g., Robb v. Shockoe Slip Found., 324 S.E.2d 674, 676-77 (Va. 1985) (holding that the Virginia Constitution, art. XI, § 1, declaring the policy of the state to protect and conserve natural and historical resources, is not self-executing, but requires an act of the General Assembly to make it effective); City of Hampton v. Watson, 89 S.E. 81, 82 (Va. 1916) ("It is for the state [rather than local governments] to say what uses shall be made [of water] and by whom, subject always to the right of the public, and for the state, through the legislative branch of the government, to say how much pollution it will permit.

319. See MD. NAT. RES. CODE ANN. §§ 8-1801 to -1816 (Supp. 1991); Paul D. Barker, Jr., Note, The Chesapeake Bay Preservation Act: The Problem with State Land Regulation of Interstate Resources, 31 WM. & MARY L. REV. 735, 760-63 (1990); Bay Wetlands at Risk, CHESAPEAKE BAY FOUNDATION NEWS, Oct. 1990, at 4 ("Unfortunately, Virginia's Chesapeake Bay Preservation Act is sometimes mistaken for a wetlands protection statute, whereas it actually is a water quality protection act which focuses on land use.

320. The Preservation Act was not intended to be Virginia's primary statute for regulation of nontidal wetlands. Telephone Interview with Honorable John W. Daniel, III, former Virginia Secretary of Natural Resources (Mar. 18, 1991). Virginia has a separate statute regulating tidal wetlands. See supra note 7 and accompanying text.

321. VA. CODE ANN. § 10.1-2100 (Michie 1989); see also W. Tayloe Murphy, Jr. & Michael McKenney, Response to Legal Issues Affecting Local Governments in Implementing the Chesapeake Bay Preservation Act, 24 U. RICH. L. REV. 385, 390-91 (1990) (asserting that the "cooperative" state-local program is mandatory for the local governments because the state reserves "oversight" authority).

322. See VA. CODE ANN. § 10.1-2102 (Michie 1989). The Local Assistance Board consists of nine residents of Tidewater Virginia appointed by the Governor and confirmed by the state General Assembly. Id. § 10.1-2102(A). The staff of the Local Assistance Board is organized within the Office of the Secretary of Natural Resources as the Chesapeake Bay Local Assistance Department. Id. § 10.1-2105.
zone, subdivide, or develop land in those areas.\footnote{323}

\paragraph{a. The Preservation Area.}—The Local Assistance Board created three categories of land that comprise the Preservation Area.\footnote{324} Each Tidewater locality must delineate both a Resource Protection Area (RPA) and a Resource Management Area (RMA), and may also

\footnote{323. See id. §§ 10.1-2103(5), -2107. Commentators disagree on whether the Board’s criteria are binding on the Tidewater localities. Benson and Garland maintain that the Board’s criteria are merely directory. See Benson & Garland, supra note 318, at 15-23. Murphy and McKenney, though, respond that the Board’s criteria are regulations binding upon the localities. See Murphy & McKenney, supra note 321, at 390-91; accord McCubbin, supra note 917, at 833, 846-47. The language of the Preservation Act supports the position of Murphy and McKenney. See VA. CODE ANN. §§ 10.1-2103(4),(5),(7),(8), -2107(A),(B), -2107(A),(B), -2109, -2111 (Michie 1989).

In promulgating criteria for localities, the Board has issued a series of proposed and final regulations. The authority of these regulations has been challenged in state courts. The regulations, however, seemed to have survived these attacks relatively unsathed. See, e.g., Committee of Concerned Citizens v. Chesapeake Bay Local Assistance Bd., Final Decree, Ch. Nos. 8219 & 8069 (Cir. Ct. York County, Va., Aug. 2, 1991) (upholding the validity of the second final regulations in the face of a challenge alleging that the Board acted before the 30-day suspension period had expired).


The Board repromulgated the second final regulations as the third final regulations on December 3, 1990. See 7 Va. Regs. Reg. 699-712 (1990). These regulations were to become effective on expiration of the Board’s emergency regulations, which had been promulgated on November 15, 1990, but had not yet been published. See id. § 6.5, at 712. Also on December 3, 1990, the Board amended its unpublished emergency regulations by reducing from 24 to 12 the number of months from the adoption of the emergency regulations that local Tidewater governments had to adopt a full land use management program. See 7 Va. Regs. Reg. 1138 (1990). The Board published the emergency regulations as amended on December 31, 1990, effective from December 10, 1990 through December 9, 1991. See id. 1138-49.


324. See 7 Va. Regs. Reg. §§ 3.1-3.4, at 3781-82 (1991); see also Carl F. Bowmer, Implementing the Chesapeake Bay Preservation Act, VA. LAW., Jan. 1991, at 15, 16 (describing the permitted activities in each of the three categorized areas).}
designate Intensely Developed Areas (IDAs). The local governments, however, have discretion to delineate the components of the Preservation Area.

(1) RPAs.—RPAs consist of "sensitive lands at or near the shoreline" with intrinsic water quality value. At a minimum, RPAs must include tidal wetlands, nontidal wetlands contiguous to tidal wetlands or tributary streams, tidal shores, other "sensitive lands" important to the quality of state waters, and a vegetated buffer, which would normally extend at least 100 feet landward of each of the other components.

(2) RMAs and the Guidance Policy.—RMAs include lands contiguous to RPAs, which if improperly used may cause significant water quality degradation or diminish the functional value of RPAs. In delineating RMAs, localities must consider including the following areas: flood plains, highly erodible soils and steep slopes, highly permeable soils, nontidal wetlands not included in the RPAs, and other contiguous lands necessary to protect the state's waters. Some local governments have designated RMAs as a zone of a fixed width landward of RPAs, or have designated the entire non-RPA area of the locality as an RMA.

The Local Assistance Board issued a guidance policy on local designation of RMAs. The Guidance Policy identifies factors that


State agencies' actions must be consistent with local land use ordinances that comply with the Act and the criteria. See Va. Code Ann. § 10.1-2114 (Michie 1989). This consistency requirement may provide some incentive for localities to cooperate with the Preservation Act program.

It has not yet been decided whether to adjust, and how to adjust, the boundaries of the preservation areas and their component RPAs and RMAs when the streams, shorelines, or wetlands move by accretion, avulsion, shoreline retreat, or sedimentation. See Evans, supra note 318, at 40-41.
327. 7 Va. Regs. Reg. § 3.2(A), at 3781.
328. Id. § 3.2(B), at 3781-82. The RPAs are estimated to total almost 221,400 acres. Evans, supra note 318, at 39.
329. 7 Va. Regs. Reg. § 3.3(A), at 3782.
330. Id. § 3.3(B).
332. See Chesapeake Bay Local Assistance Board, Guidance Policy: Board De-
the Board should consider in evaluating whether local RMA designations are consistent with the Preservation Act and regulations.333 The Guidance Policy's factors are meant to help localities identify the minimum size of an RMA that will satisfy the regulations.334

The Local Assistance Board decided not to impose a minimum width for RMAs, but rather to allow localities to delineate RMAs that are sufficient to protect water quality without being overinclusive.335 The Guidance Policy describes Maryland's Critical Area Act as a prescriptive regulation including growth management requirements, in contrast to Virginia's Preservation Act,336 which creates a flexible regime focusing on water quality.337 The Guidance Policy also states that discussions with the Maryland Critical Area Commission staff and developers in Maryland indicated that Maryland's rigid 1000-foot critical area definition is overly inclusive in some instances, and inadequate for protection of water quality in others.338 The Local Assistance Board did not want to suggest a minimum width of the RMA for fear of tempting localities to skip the resource mapping phase and to adopt the suggested RMA without analyzing the need for protection of sensitive resources.339 The Local Assistance Board also expressed concern that some localities have proposed RMAs as small as 100 feet wide, or the remainder of any parcel in an RPA.340

To deter such proposals, the Guidance Document advises localities to identify sensitive environmental features (including nontidal wetlands) and evaluate their potential impact on water quality before setting the RMA boundary.341 The localities have the burden of showing how the proposed RMAs will achieve significant water quality protection, and why eligible components were ex-

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333. See id. at 1.
334. See id. at 2.
335. See id.
337. See Local Assistance Board Guidance Policy, supra note 332, at 2.
338. See id.
339. See id.
340. See id. at 3.
341. See id. at 4.
cluded from the RMA. 342 Although individual analysis is the optimum method for delineating RMAs, the Guidance Document provides that inclusion of at least all RMA land types contiguous to the RPA would meet the intent of the regulations. 343 For localities with few RMA land types, or those with limited mapping resources, the RMA should be set sufficiently wide to protect water quality, including stormwater control through BMPs. The RMA should also include major areas of vacant, developable land and land targeted for redevelopment, even if such lands are not near the shoreline. 344 Furthermore, localities should consider extending the RMA boundaries to include the remainder of any parcels that would otherwise be partly in the RMA. 345 When the entire parcel is in the RMA, application of the performance standards will be easier and more equitable, according to the Guidance Policy. 346

(3) IDAs.—In addition to RPAs and RMAs in the preservation area, the regulations allow local governments to designate IDAs. 347 IDAs are areas that are already developed, or may be redeveloped in efforts to concentrate future construction. 348 An area qualifies for an IDA if existing development has left more than fifty percent of the area with impervious surfaces, if the area is presently served by public water and sewer, or if housing density is at least four dwelling units per acre. 349 The IDAs should become target areas for development, reducing the demand on more environmentally sensitive lands.

b. Performance Criteria.—RPAs, RMAs, and IDAs are subject to different land use regulations, called performance criteria. 350 The goals of the performance criteria are to prevent a net increase in nonpoint source pollution from new development, to achieve a ten percent reduction in nonpoint source pollution from redevelopment, and to reduce nonpoint source pollution from agriculture and forestry activities by forty percent. 351

Use, development, or redevelopment of land within an RMA

342. Id.
343. See id.
344. See id. at 5-7.
345. See id. at 7-8.
346. See id.
348. Id.
349. Id.
351. Id. § 4.1, at 3782.
requires the local government's satisfaction that the activities will meet general performance criteria to control erosion and nonpoint source pollution. The general performance criteria require, among other provisions, that new development disturb only the minimum area necessary to meet the desired use, that vegetation be preserved to the maximum extent possible, and that impervious surfaces be kept to a minimum. The general performance criteria also provide that any development that would exceed 2500 square feet of land disturbance must have its development plan reviewed by the local government. Local governments cannot authorize grading or other on-site regulated activities until the developer has obtained all other wetlands permits required by law.

Land currently used for agricultural activities must have a soil and water quality conservation plan approved by 1995. The general performance criteria exempt forestry activities from these regulations if they adhere to the water quality protection procedures prescribed by the Virginia Department of Forestry.

Performance criteria for RPAs include the general performance criteria, but forbid land development unless it is water dependent or constitutes redevelopment. Development within an RPA also requires a water quality impact assessment. A development project in an RPA must retain a 100-foot buffer area of vegetation, or establish such a buffer area if one does not already exist. In lieu of a

352. Id. § 4.2, at 3782-84; see also Bowmer, supra note 324, at 16 ("Under the Regulation, affected localities are required to . . . adopt certain performance criteria applicable to [the Preservation Areas]"); Barker, supra note 319, at 751-52 (describing the general performance criteria required in the Preservation Areas).


354. Id. § 4.2(4), at 3783 (requiring that the review process be consistent with VA. CODE ANN. § 15.1-491(h)); see also id. § 5.6(F), at 3788 (requiring review of development plans by the Board for compliance with the Preservation Act and regulations).

355. See id. § 4.2(11), at 3784. Accordingly, if a CWA § 404 permit is necessary, it must be issued before the local government issues a Preservation Act permit or a building permit.

356. Id. § 4.2(9), at 3783 (requiring that the plan be based upon the United States Soil Conservation Service Field Office Technical Guide).

357. See id. § 4.2(10), at 3784; Evans, supra note 318, at 45.


359. Id. § 5.6(E), at 3788. A water quality impact assessment (WQIA) is also required for development in an RMA if unique characteristics of the site or the intensity of the proposed development or use warrants such an assessment. Id. The local governments are to specify the content and procedures for the WQIA, but WQIAs must be sufficiently specific to demonstrate compliance with the criteria of the local program. See id.

360. Id. § 4.3(B), at 3784-85. The buffer area in § 4.3(B) is different from the buffer area that is part of the definition of an RPA in § 3.2(B)(5). The buffer area required by § 4.3(B) appears to surround the development, not just protect the downslope. See Ev-
100-foot buffer, a fifty-foot buffer and best management practices (BMPs) may be used if they would achieve the "equivalent" of a 100-foot buffer, which is defined as a seventy-five percent reduction of sediments and a forty percent reduction of nutrients. On agricultural lands, the agricultural buffer area may be reduced to a minimum width of twenty-five feet when a soil and water conservation plan, approved by the local Soil and Water Conservation District, has been implemented on the adjacent land, and will achieve the same protection for water quality as a 100-foot buffer.

The performance criteria, however, cannot defeat the vested rights of landowners "under existing law." The vested rights exception, though, appears to excuse compliance only where adherence to the performance criteria would render reasonable development of the property impossible.

c. Review and Enforcement.—The Local Assistance Board has authority to review programs proposed by Tidewater localities for consistency with the Preservation Act and the performance criteria. Only the Board may enforce the Act or the criteria against the localities through administrative or judicial proceedings; the Act does not provide a private right of action. The regulations contemplate that such administrative or judicial proceedings will result in orders requiring that the locality come into compliance.

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361. See 7 Va. Regs. Reg. § 4.3(B), at 3784; see also Evans, supra note 318, at 43 n.183 (criticizing as over-optimistic the effectiveness that the regulations attribute to 100-foot buffers). Nonetheless, the high effectiveness deemed for those areas requires that more effective BMPs be adopted before the buffer may be reduced to 50 feet in RMAs.

362. See 7 Va. Regs. Reg. § 4.3(B)(4), at 3785; see also Evans, supra note 318, at 46.


364. See Bowne, supra note 324, at 18-19 (discussing unpublished opinions of the Attorney General of Virginia); Murphy & McKenney, supra note 321, at 393-94; see also McCubbin, supra note 317, at 848 n.142 (interpreting "vested rights" as referring to the legal boundary between noncompensable governmental regulation and regulation that requires compensation under the Fourteenth Amendment to the United States Constitution).


provides for no other penalty, nor for direct state promulgation, im-
plementation, or enforcement of a program for a recalcitrant locality.368

d. Summary.—The water dependency and the 100-foot buffer
requirements are likely to give the most effective protection to non-
tidal wetlands in the Preservation Act. From another point of view,
however, those requirements may have effectively downzoned about
211,400 acres of Tidewater Virginia.369

2. Non-Tidewater Application of the Preservation Act.—The Preser-
vation Act authorizes, but does not require, local governments
outside of Tidewater Virginia to employ the criteria developed by
the Local Assistance Board. These localities are also authorized to
incorporate protection of the quality of state waters into their com-
prehensive plans and zoning and subdivision ordinances consistent
with the Act.370 Non-Tidewater localities that adopt the Board’s cri-
teria, or otherwise include protection of the quality of state waters in
their land use plans and ordinances, are not subject to review by the
Local Assistance Board or enforcement by the state.371

The General Assembly’s authorization was necessary because
Virginia follows Dillon’s Rule; the rule provides that localities pos-
sess only those powers expressly granted by the state, necessarily or
fairly implied by or incident to the express powers, and essential to
the purpose of local government.372 Of the few non-Tidewater lo-

368. Murphy and McKenney, however, assert that if the local governments fail to co-
operate in the Act’s mandates for protection of the natural resources, “then the Com-
monwealth has no option under the responsibility articulated by the Act except to
perform the required natural resources protection itself.” Murphy & McKenney, supra
note 321, at 391.

369. Evans, supra note 318, at 43-44. See generally Walter F. Witt, Jr., Downzoning—
“downzoning” and suggesting that wetlands regulations may constitute such action);
Southeastern VA. Planning Dist. Comm’n, Economic Implications of Wetlands

370. See VA. CODE ANN. § 10.1-2110 (Michie 1989); accord 7 Va. Regs. Reg. § 1.1, at
3779 (1991); Letter from Mary Sue Terry, Attorney General of Virginia, to the Honorable
George F. Allen, Delegate, Commonwealth of Virginia, at 2, 5-6 (July 2, 1991) (af-
firming constitutionality and validity of buffer area requirements of Preservation Act
regulations adopted by non-Tidewater localities) [hereinafter Att’y Gen. Op. on Non-
Tidewater]; see also Jeter M. Watson, Virginia’s Chesapeake Bay Preservation Act, Nat’l

371. See VA. CODE ANN. § 10.1-2109 (Michie 1989) (requiring only those counties, cit-
ties, or towns in Tidewater Virginia to designate Preservation Areas).

372. See 1 JOHN F. DILLON, COMMENTARIES ON THE LAW OF MUNICIPAL CORPORATIONS
§ 237(89) (5th ed. 1911); see also supra note 318 and accompanying text.
alities believed to be interested in using their recently granted powers, only Albemarle County has adopted a Preservation Act program.373

The Albemarle County ordinance defines RPAs to include tributary streams, nontidal wetlands contiguous to tributary streams, and a 100-foot buffer area along nontidal wetlands and streams.374 The ordinance presumptively applies only to the lands identified as RPAs on the RPA map adopted by the county board of supervisors.375 Applicants for development projects or other land use activities, however, remain responsible for specific delineations of RPAs, which the county water resources manager may overrule based on field data.376 On December 16, 1991 the Water Control Board published revised proposed regulations that would set forth procedural requirements, while allowing the Board to address many substantive issues on a permit-by-permit basis.377

If other non-Tidewater localities were to use their powers under the Preservation Act, they would do well to follow Albemarle

373. Telephone Interview with Stanley R. Balderson, Executive Deputy Director, Chesapeake Bay Local Assistance Department (Sept. 9, 1991).
374. See Albemarle County, Va., Water Resource Protection Areas Ordinance, § 6(a) (June 19, 1991) (to be codified at ALBEMARLE, VA., CODE ch. 19.2). Among the purposes of the ordinance are protection and improvement of water quality within the county by reducing the effects of human activity upon nontidal wetlands. Id. § 2. A "tributary stream" is a perennial stream depicted as a continuous blue line on the most recent U.S. Geological Survey 7.5 minute topographical map of the area. Id. § 4. Intermittent streams could be outside the RPA unless they qualify as adjacent nontidal wetlands.
375. See id. §§ 5, 6(b),(c).
376. Id. § 6(b),(c). Applicants have 10 days to appeal adverse decisions of the water resources manager to the county board of supervisors. Id. § 10.

The permittee shall take all reasonable steps to (i) avoid all adverse environmental impact [sic] which could result from the activity, (ii) minimize the adverse environmental impact where avoidance is impractical, and (iii) provide mitigation of the adverse impact on an in kind basis where impacts cannot be avoided.

Id. § 2.2(C), at 861-62. The second proposed regulations do not define "mitigation" or "in kind basis." See id. § 1.1, at 855-56. Only the following standards would appear to govern the issuance of an individual water protection permit for a regulated activity pursuant to the second proposed regulations: compliance with state law; no discharge of radiological, chemical, or biological warfare agent or high-level radioactive material; no pollution of surface waters or violation of the Water Control Board's standards, regulations, or policies, id. § 1.5(B), at 857; consistency with the CWA; and protection of instream beneficial uses, VA. CODE ANN. § 62.1-44.15:5(B) (Michie 1989). Nonetheless, the Water Control Board would have authority to condition, modify, revoke, reissue, and terminate permits under the second proposed regulations. 8 Va. Regs. Reg. §§ 2.2, 2.4, 4.1, 4.2, 4.4., at 861-67 (1991).
County's example. As one alternative among many, however, they could declare the whole locality, or an area of a set width around all streams and wetlands, to be an RMA, instead of delineating an RPA. The general performance criteria applicable to RMAs impose modest environmental controls on land use without the possible downzoning effect of the RPA performance criteria.\(^7\)

In sum, the Preservation Act consists of authorization for all localities to employ land use controls to protect water quality, and requirements that Tidewater localities adopt and implement the Local Assistance Board's criteria. There is, however, little enforcement authority at the state level and the Preservation Act offers less protection to nontidal wetlands located in the Tidewater region than does the Maryland Critical Area Protection Program.\(^3\) Fortunately, the Virginia General Assembly has defeated three bills that would have weakened the requirements of the Preservation Act.\(^6\)

3. Protection for Nontidal Wetlands Outside the Preservation Areas.— Outside of Preservation Areas, and aside from other local zoning controls, privately owned nontidal wetlands in Virginia have only three sources of protection: the Corps' authority to deny or condition a section 404 permit; the EPA's authority to veto a section 404 permit; and the state's authority to veto or condition a section 404 permit.\(^3\) None of those protections, however, are working consistently to preserve nontidal wetlands.

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379. See, e.g., Barker, supra note 319, at 760-63 (comparing the two statutes).


381. See Alan D. Albert & George B. Wickham, Wetlands Regulation in Virginia, Va. Law., Jan. 1991, at 10. The state owns the beds of rivers and creeks that have not been expressly granted to private parties. Va. Code Ann. § 62.1-1 (Michie 1987). The state's ownership extends to the ungranted beds of nontidal as well as tidal waters. Schermerhorn v. Dozier, 251 F. 839, 843 (4th Cir. 1918). It is unlawful to dump into, build in, encroach upon, or dredge the state-owned beds of rivers, creeks, and streams without statutory authority or a permit from the Virginia Marine Resources Commission (VMRC). Va. Code Ann. § 62.1-3 (Michie 1989 Supp.). The VMRC's jurisdiction, however, is limited to the beds of perennial, navigable waters, up to the ordinary high water line. Telephone Interview with Jennifer McCarthy, Environmental Engineer, VMRC (Oct. 11, 1991). The VMRC's jurisdiction could help fill an important regulatory gap for some nontidal wetlands. Isolated nontidal wetlands, adjacent nontidal wetlands landward of the ordinary high water line, and others outside the state's ownership, though, are not protected by the VMRC.
a. *The Ware Creek Case*.—One example of problems in protecting these nontidal wetlands is the Ware Creek Reservoir case,\(^\text{382}\) which arose prior to the effective date of the Preservation Act regulations. As a result of concerns about future shortages of drinking water, James City County, Virginia applied for a section 404 permit to dam Ware Creek in order to create a reservoir on the border of James City County and New Kent County.\(^\text{383}\) Three years later the Corps issued its final environmental impact statement on the proposed project.\(^\text{384}\) By then, the EPA had become dissatisfied with the proposal.\(^\text{385}\) Nonetheless, the Corps issued a section 404 permit for the reservoir project in July 1988.\(^\text{386}\) In late 1988 the Virginia State Water Control Board issued a section 401 certification for the Ware Creek reservoir, but the EPA vetoed the permit under section 404(c) of the CWA.\(^\text{387}\)

The county sought judicial review of the EPA's veto. The court reversed the EPA's veto, and ordered the Corps to issue the section 404 permit.\(^\text{388}\) The court criticized the EPA for presuming that the county had practicable alternatives to creation of the Ware Creek reservoir.\(^\text{389}\) In essence, the court placed upon the EPA the burden of proving the availability of practicable alternatives, rather than requiring the applicant to prove the absence of such alternatives.\(^\text{390}\)

The court also found that the three "engineering" alternatives suggested by the EPA—three small dams on Ware Creek, increased use of ground water, and desalination of brackish water—were not available to the county: the EPA had declared its opposition to any dams on Ware Creek; the State Water Control Board had prohibited

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\(^\text{382}\) James City County v. EPA, 758 F. Supp. 348 (E.D. Va. 1990) (reversing the EPA’s veto of a Clean Water Act § 404 permit for a reservoir project, because the record illustrated a lack of practicable alternatives to the project). See generally Robert D. Comer, *Emerging Trends in EPA’s Veto Authority under Section 404(c) of the Clean Water Act*, Nat. Resources & Env't, Spring 1991, at 67, 68 (discussing the Ware Creek case).

\(^\text{383}\) James City County, 758 F. Supp. at 350.

\(^\text{384}\) Id.

\(^\text{385}\) Id.

\(^\text{386}\) Id.

\(^\text{387}\) Id. The Chesapeake Bay Local Assistance Board did not have regulations in effect until October 9, 1989. See supra note 323.

\(^\text{388}\) See James City County, 758 F. Supp. at 353.

\(^\text{389}\) See id. at 352-53.

\(^\text{390}\) Arguably, the court's decision comports with the EPA's acceptance of the burden to justify a § 404(c) veto. See 45 Fed. Reg. 85,336, 85,338 (1980); 44 Fed. Reg. 58,076, 58,080 (1979); accord Comer, supra note 382, at 68. The effect of the decision, however, is to allow the Corps to neglect its responsibility to evaluate the practicality of alternatives, and to allow the Corps to make assumptions about practicable alternatives that the EPA must affirmatively disprove.
any additional groundwater withdrawals; and desalinization was too costly.391 The court rejected the EPA's "non-engineering" alternative with a single sentence: "[I]t is clear that conservation, while a laudable concept, certainly could not meet the increasing water needs of a county with an already unreliable water supply."392

Courts are often understandably reluctant to look far back into an applicant's decisionmaking opportunities. Nonetheless, if the Corps may presume the absence of alternatives, and the EPA must prove availability of alternatives, then the EPA's section 404(c) veto will do little to control environmentally harmful projects.

b. Water Quality Certification to Protect Nontidal Wetlands in Virginia.—(1) The 1988 Virginia Nontidal Wetlands Bill.—In 1988, the administration of then-Governor Gerald Baliles introduced a bill to protect Virginia's nontidal wetlands.393 The House of Delegates passed the bill without difficulty.394 In the state Senate, however, the bill went to the Committee on Agriculture, Conservation and Natural Resources,395 which carried the bill over into 1989.396 Meanwhile, the development community pressed its opposition vigorously. It characterized the bill as no-growth legislation, and circu-

391. See James City County, 758 F. Supp. at 352-53.
392. Id. The present water supply appears to be "unreliable," because the county does not have complete control over its supply; it must cooperate with the City of Newport News. James P. Waite III, Note, Water Conservation: The Forgotten Solution to Water Supply Deficits in Southeastern Virginia, 9 VA. ENVTL. L.J. 381, 411 (1990).
394. Telephone Interview with the Honorable John W. Daniel II, former Virginia Secretary of Natural Resources (Mar. 18, 1991); see Va. H.B. 1037, 1988 Sess. (amendment in the nature of a substitute proposed by the House Committee on Conservation and Natural Resources on February 11, 1988); Va. H.B. 1037, 1988 Sess. (engrossed as amended by the House on February 14, 1988). The engrossed bill would have authorized the Director of the Department of Conservation and Historic Resources to promulgate a program to regulate activities that may adversely affect nontidal wetlands in Tidewater Virginia, and to mitigate adverse effects on those nontidal wetlands. The engrossed bill also called for a permit system, with exceptions for agricultural and low-impact activities that do not convert wetlands into uplands. Agricultural activities, though, would have been subject to BMPs. Local governments would have been eligible for delegation of authority to administer the permitting system. Silvicultural activities on nontidal wetlands in Tidewater Virginia would have been regulated separately, under an article requiring prior notification to the State Forester and adherence to BMPs. Violation of the bill, regulations, administrative orders, or permit conditions would have been subject to administrative enforcement, injunctive relief, court-imposed civil penalties, or prosecution for a misdemeanor. In short, the Nontidal Wetlands bill would have allowed the state to regulate a scope of activities far wider than the discharge of dredged or fill material, but only in nontidal wetlands in Tidewater Virginia, not statewide.
395. Telephone Interview with John Daniel, supra note 394.
396. Id.
lated a videotape on the issue which, although controversial, was persuasive.\textsuperscript{397}

The bill's opponents also benefitted from the publicity surrounding a section 404 case in Virginia, \textit{Tabb Lakes, Ltd. v. United States}.\textsuperscript{398} The narrow issue in \textit{Tabb Lakes} was whether certain wetlands were "waters of the United States" within the reach of the CWA.\textsuperscript{399} The Corps issued a guidance memorandum that included as an indicator of "waters of the United States" the use or potential use of the waters as habitat by migratory birds that cross state lines.\textsuperscript{400} The district court held that the migratory bird indicator was a substantive regulation that was not promulgated by proper notice and comment rulemaking.\textsuperscript{401} In Virginia, the opponents of wetlands regulations argued that the case showed that no one could delineate wetlands with confidence.\textsuperscript{402}

During 1989, the Senate Agriculture Committee did not vote on the nontidal wetlands bill, and was not disposed to approve it.\textsuperscript{403} The Administration then withdrew the bill without waiting for the Senate committee vote.\textsuperscript{404}

The Administration's intent was to use the available tools to control adverse effects on nontidal wetlands.\textsuperscript{405} Nontidal wetlands in the Tidewater region were subject to the Preservation Act, and the state could use its section 401 certification to regulate other nontidal wetlands.\textsuperscript{406} The General Assembly eventually approved additional funding for the State Water Control Board to develop and strengthen the state's section 401 program.\textsuperscript{407}

\textbf{(2) The 1990 Report of the Virginia Nontidal Wetlands Roundtable.}—In 1989, the General Assembly authorized the Virginia Nontidal Wetlands Roundtable to study and report on the management of

\textsuperscript{397} \textit{Id.}
\textsuperscript{399} \textit{See id.} at 727.
\textsuperscript{400} \textit{Id.} at 728.
\textsuperscript{401} \textit{See id.} at 729 (declaring that the Corps did not have jurisdiction over the wetlands, and granting summary judgment for plaintiffs). \textit{But see United States v. Hobbs [1991], 32 Env't Rep. Cas. (BNA) 2091, 2094 (E.D. Va. 1990} (referencing, in a post trial motions decision, an earlier finding that the 1989 Federal Manual for delineation of wetlands was guidance material only, and not a legislative regulation).
\textsuperscript{402} Telephone Interview with John Daniel, \textit{supra} note 394.
\textsuperscript{403} \textit{Id.}
\textsuperscript{404} \textit{Id.}
\textsuperscript{405} \textit{Id.}
\textsuperscript{406} \textit{Id.}
\textsuperscript{407} \textit{Id.}
nontidal wetlands resources.\textsuperscript{408} The roundtable approach previously produced the consensus needed to pass the Preservation Act,\textsuperscript{409} so it might have produced a viable alternative to the Baliles Administration's nontidal wetlands bill. In 1990, however, the roundtable approach resulted in no proposed regulatory legislation.\textsuperscript{410}

Instead, the 1990 Roundtable Report contained thirteen recommendations, which included the following: enhanced funding and staffing for the State Water Control Board "for its Section 401 water quality certification responsibilities related to nontidal wetlands";\textsuperscript{411} decertification of the Corps' Nationwide Permit Number 26;\textsuperscript{412} a state policy of no net loss of acreage and function, and a long term goal of "net resource gain in wetland acreage"; incentives to preserve nontidal wetlands; and no assumption of the section 404 regulatory program.\textsuperscript{413}

Discussing section 401 certification, the report stated that

\textquotedblleft even though the [State Water Control Board] has had [section 401 certification] authority for some time, it has not had the resources to pursue the responsibility effectively. As a consequence uncertainty remains as to the extent the SWCB Section 401 water quality certification process might achieve a reduction in destruction or despoliation of nontidal wetlands.\textsuperscript{414}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{408} See \textit{Virginia Nontidal Wetlands Roundtable, Report to the Governor and the General Assembly of Virginia}, H. Doc. No. 54, at 2 (1990) [hereinafter VA. Roundtable Report]. The Roundtable included members of the Virginia House of Delegates, state senators, the Secretary of Natural Resources, and individuals affiliated with other state agencies, land use industries, and environmental groups. \textit{Id.} at 21.
\item \textsuperscript{409} McCubbin, \textit{supra} note 317, at 843.
\item \textsuperscript{410} See \textit{VA. Roundtable Report, supra} note 408, at 2. The failure of both the Nontidal Wetlands bill and the Nontidal Wetlands Roundtable seems to indicate a widespread reluctance in Virginia to accept state-wide environmental protection restricting use of land.
\item \textsuperscript{411} \textit{Id.}
\item \textsuperscript{412} \textit{See} \textit{id.}; \textit{33 C.F.R.} \textsuperscript{330.5(a)(26)} (1990) (automatically permitting discharges of dredged or fill material into nontidal waters, including wetlands, above the headwaters and causing substantial adverse modification to less than 10 acres of waters or wetlands). The Corps' nationwide permits are subject to state certification or waiver under \textsection 401. \textit{Id.} \textsuperscript{330.5(b)(11), 330.9.} Nationwide permits expire five years after their effective dates, unless modified or extended. Army Corps of Engineers Final Rule on Amendments to Nationwide Permit Program, 56 Fed. Reg. 51837, 51838 (1991) (amending \textit{33 C.F.R.} \textsuperscript{330.12}).
\item \textsuperscript{413} \textit{VA. Roundtable Report, supra} note 408, at 3.
\item \textsuperscript{414} \textit{Id.} at 6.
\end{enumerate}
\end{footnotesize}
(3) The 1989 Virginia State Water Control Amendment.—The primary state protection for nontidal wetlands outside Preservation Areas is the section 401 state water quality certification requirement, which is a prerequisite for obtaining section 404 permits.415 In April 1989 the Virginia General Assembly amended the State Water Control Law to authorize the State Water Control Board to issue water protection permits that would constitute state certification under section 401 of the CWA.416 The amended State Water Control Law is better suited to regulating consumptive uses of surface water than to protecting nontidal wetlands from dredging, filling, draining, or other threats. Nonetheless, it applies to all section 401 certifications.417

The Water Control Board may issue a water protection permit for any activity requiring a section 401 certification, if the proposed activity is consistent with the CWA and will protect instream beneficial uses.418 The amendment lists a number of beneficial uses of the state's instream flows.419 A water protection permit may impose conditions, including restrictions on withdrawals of water.420

Before issuing a water protection permit, the Board must consult with several state agencies, including the Department of Game and Inland Fisheries, the Department of Conservation and Recreation, the Virginia Marine Resources Commission, the Department of Health, and the Department of Agriculture and Consumer Services.421 The consultations must include discussions of the need to balance instream uses with offstream uses.422 The Act, however, exempts existing uses and future uses that were certified under section 401 before July 1, 1989.423

(4) The 1990 Proposed Water Protection Permit Regulations.—In October 1990 the Board proposed regulations to implement the amended State Water Control Law, including a nontidal wetlands permitting program.424 The proposed regulations, however, were

417. Id. § 62.1-44.15:5(A).
418. See id. § 62.1-44.15:5(B).
419. See id. See infra text accompanying note 443 for a listing of these uses.
420. See Va. Code Ann. § 62.1-44.15:5(B). The highest priority uses are “[d]omestic and other existing beneficial uses.” Id.
421. Id. § 62.1-44.15:5(C).
422. Id.
423. See id. § 62.1-44.15:5(D).
withdrawn amid considerable criticism.

Environmentalists complained that the proposed rules would have excluded from regulation forty percent of the state’s 750,000 acres of wetlands.425 State Senator Joseph V. Gartlan, Jr. also criticized the proposal.426 Senator Gartlan, though supporting legislation to manage nontidal wetlands, viewed the draft regulations as exceeding the Board’s authority.427 He argued that the withdrawal of the Virginia Nontidal Wetlands Protection Bill in 1989 negated the assumption that the 1989 amendment to the State Water Control Law authorized a nontidal wetlands regulatory system.428 His argument appears to be that the General Assembly would not have rejected a specific nontidal wetlands bill, only to turn around and authorize the State Water Control Board to promulgate a nontidal wetlands program based on water quality. Senator Gartlan viewed the State Water Control Law amendment as limited to water quality issues, which he distinguished from the land use issues associated with regulating activities in wetlands.429 His comments also criticized the Board’s proposal for exempting too many acres of wetlands from the proposed review program.430

Governor L. Douglas Wilder published comments favoring the intent of the proposed regulations to protect nontidal wetlands, but withholding any recommendation.431 The Board eventually withdrew the proposed regulations for reconsideration.432 Revised proposed regulations were brought before the Board on September 23, 1991, and were published for public comment on December 16, 1991.433

425. Tom Campbell, Environmentalists Attack Proposed Rules on Wetlands, RICHMOND TIMES-DISPATCH, Dec. 23, 1990, at B3; accord Chesapeake Bay Foundation Comments Concerning: VR 680-15-02 Virginia Water Protection Permit Regulations, at 2 (Dec. 21, 1990) (estimating that 50% to 75% of all § 404 permit applications would be excluded from the review process under the proposed regulations).


427. See id. at 3-4.

428. See id. at 1, 4.

429. See id. at 3.

430. See id. at 3-5.


(5) The Attorney General's Opinion on the Board's Authority to Regulate Wetlands.—On June 19, 1991, the Virginia Attorney General issued an opinion on the authority of the State Water Control Board to regulate wetlands in Virginia.434 State Senator Gartlan had asked the Attorney General three questions: (1) may the Board define "state waters" or "surface water" to include wetlands; (2) does the Board have the statutory authority to establish a comprehensive wetlands regulatory program; and (3) does the Board have authority to refuse to issue a CWA section 401 certification for a Corps' section 404 permit on any basis other than water quality?435

The Attorney General concluded that the Board had the authority to define by regulation "state waters" and "surface water" to include wetlands.436 The Attorney General also found, however, that the Board lacked authority to regulate wetlands on any basis other than that allowed by section 401 of the CWA, and the State Water Control Law.437 The opinion ignored the other statutory purposes of the Water Protection Permit,438 presumably because the opinion found that the legislative history indicates that the State Water Control Law was not intended to provide the Water Control Board "with any broader authority than it possesses under [section] 401."439 The Attorney General concluded that the Board's decision to grant or deny a certification was limited to the criteria specified in section 401(a) of the CWA.440 On the other hand, the Attorney General allowed that in conditioning the issuance of a certification, the Board may also consider the provisions of the State Water Control Law.441

The policies and purposes of the State Water Control Law are to:

435. Id. at 1.
436. Id. at 2-5 (citing 40 C.F.R. § 122.2 (1990) and 33 C.F.R. § 328.3 (1990)), 6-7 (citing Va. CODE ANN. § 62.1-44.3 (Michie 1989)).
437. See id. at 7-8 (citing Va. CODE ANN. § 62.1-44.15:5(B) (Michie 1989)).
440. See id. at 8-10. CWA § 401(a)(1) requires certification from the state where the discharge occurs, and requires that the discharge comply with §§ 301, 302, 303, 306, and 307 of the CWA. See 33 U.S.C. § 1341(a)(1). Of those sections, only § 303, which requires the states to adopt water quality standards subject to the review of the EPA, is applicable to most activities involving a § 404 permit. See id. § 1313(a).
(1) protect existing high quality state waters and restore all other state waters to such condition of quality that any such waters will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game fish, which might reasonably be expected to inhabit them, (2) safeguard the clean waters of the Commonwealth from pollution, (3) prevent any increase in pollution, (4) reduce existing pollution, and (5) promote water resource conservation, management and distribution, and encourage water consumption reduction in order to provide for the health, safety, and welfare of the present and future citizens of the Commonwealth.442

Pursuant to the Attorney General's opinion, the purposes set forth in the State Water Control Law limit the authority of the Water Control Board, both in regulating activities in wetlands, and in conditioning the Corps' section 404 permits.

The Attorney General's opinion, relying on legislative history, did not discuss the extent to which the 1990 amendment to the State Water Control Law may have expanded both the purposes of the Law and the authority of the Water Control Board. The 1990 amendment provides that:

The Board shall issue a Virginia Water Protection Permit for an activity requiring [section] 401 certification if it has determined that the proposed activity is consistent with the provisions of the Clean Water Act and will protect instream beneficial uses. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is a beneficial use of Virginia's waters.443

Nonetheless, the Attorney General concluded that neither section 401 nor the State Water Control Law authorizes the Water Control Board to institute a comprehensive nontidal wetlands regulatory program such as the one the General Assembly failed to enact in 1989.444 Although that conclusion is probably correct, the emphasis should be on "comprehensive." The State Water Control Law requires something more extensive than a chemical analysis of the water, but something less encompassing than Maryland's Nontidal Wetlands Act. The Virginia General Assembly has given the

442. VA. CODE ANN. § 62.1-44.2 (Michie 1989).
443. VA. CODE ANN. § 62.1-44.15:5(B) (Michie 1991 Supp.) (emphasis added).
Water Control Board the unenviable task of finding the correct middle course. Protecting those "instream beneficial uses," however, cannot be achieved by a narrow focus on "water quality."

c. Present State Protection of Nontidal Wetlands.—The General Assembly has authorized the State Water Control Board to issue water protection permits to certify CWA permits. The Board may impose conditions in permits to protect beneficial instream uses, including some of the functions of nontidal wetlands. The Water Control Board must also consult with other state agencies that may be attuned to protecting the functions of nontidal wetlands. Although the Board has statutory authority to manage nontidal wetlands, there are no regulations in place to implement such a program. The Water Control Board’s lack of implementing regulations means that no section 401 certification can be denied at the staff level; only the Board itself can deny a certification. Denial or extensive conditioning of a permit under such circumstances would take an extraordinary effort by the Water Control Board.

Nonetheless, at the state’s request, the Corps has modified its Nationwide Permit Number 26 in Virginia to require individual state water quality certifications for all discharges of dredged or fill material causing substantial adverse modification of between one and ten acres of waters or wetlands above the headwaters, or isolated wetlands. Thus the state is responsible for approving, denying, or conditioning applications for section 401 certifications for small-scale projects in many nontidal wetlands.

d. Comprehensive Assessment of Nontidal Wetlands Programs.—There is no indication that the Virginia General Assembly will enact a nontidal wetlands bill or comprehensive land use controls in the near future. Nonetheless, in March 1990, the General Assembly did enact a bill directing the State Council on the Environment to conduct a comprehensive assessment of existing state and federal programs to identify their effects on nontidal wetlands, how they interact and overlap, where opportunities exist for coordination of existing pro-

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446. See id. § 62.1-44.15:5(B).
447. See id. § 62.1-44.15:5(C).
programs, and where new or enhanced programs are needed.\textsuperscript{451} The Council must identify management efforts "in regard to types of wetlands, including but not limited to:" isolated hardwood wetlands and small shrub wetlands; activities affecting those wetlands; and functions of those wetlands.\textsuperscript{452} The Council's reports could serve as the basis for legislation to protect nontidal wetlands.

\textbf{CONCLUSION}

Maryland and Virginia are pursuing different courses toward protecting nontidal wetlands and appear to be making different degrees of progress. Maryland has made more progress toward fulfilling its commitments under the 1987 Bay Agreement. Virginia, however, seems to be doing the best it can with its available statutory authority. Both states have encountered difficulty obtaining consensus on statewide growth management and land use planning.

State and federal nontidal wetlands protection initiatives are important, both to those concerned with the environmental quality of the Bay watershed, and to those concerned with land values and development. Permitting schemes for nontidal wetlands will probably remain necessary, despite a collective desire to be free from them. Regulatory programs alone, though, will probably not direct enough development away from sensitive areas, such as nontidal wetlands, to prevent further deterioration of the Chesapeake.

On the other hand, Maryland's 2020 Report and the Report of the Year 2020 Panel point to a solution. By planning and managing growth, rather than reacting to it as it happens, Maryland and Virginia could take control of their destinies, protect nontidal wetlands and the Bay's ecosystem, and relegate the federal government to a supporting role.

\textsuperscript{451} See VA. CODE ANN. § 10.1-1201(A) (Michie 1991 Supp.).
\textsuperscript{452} \textit{Id.} § 10.1-1201(B). Reports are due annually until 1994. \textit{Id.} § 10.1-1201(C).