State Environmental Programs: A Study in Political Influence and Regulatory Failure

Lynda L. Butler
William & Mary Law School, llbutl@wm.edu
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LYNDA L. BUTLER*

INTRODUCTION

In recent years scientists, legal scholars and other interested parties have repeatedly expressed concern about the condition and health of the nation's natural resources. Numerous studies have indicated that those resources are experiencing serious environmental degradation and that government action is needed immediately to stop and hopefully reverse the damage.¹ Noting the inadequacy of past efforts to end the decline, the studies typically call for a greater commitment to environmental protection and recommend that states assume a more active role in the management of their

* Associate Professor of Law, Marshall-Wythe School of Law, College of William and Mary. B.S., College of William and Mary, 1973; J.D., University of Virginia, 1978.

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natural resources. To achieve these goals, the studies further recommend the adoption of standards and restrictions to govern use of natural resources and the development of comprehensive management plans for certain critical resources. Although some states have responded with aggressive environmental programs, many have been reluctant to expand their roles in natural resource management. This reluctance often manifests itself in a state’s outright refusal to adopt an environmental program or in the adoption of regulatory programs of limited scope and effectiveness. State

2. See, e.g., Governor’s Comm’n, supra note 1; National Wetlands Report, supra note 1, at 1-7.


6. Once again, the Virginia experience provides excellent examples of both points. See supra note 5.
action, it seems, conflicts frequently with scientific knowledge and understanding.\(^7\)

The striking contrast between the recent calls for a more serious commitment to management of natural resources, on the one hand, and the traditional reluctance of state governments to assume a more active regulatory role, on the other hand, provides the impetus for this Article. Several factors external to the state regulatory system could explain why states have failed to meet the challenge of environmental regulation. One possible explanation is that many state governments lack the financial resources required to implement comprehensive environmental programs. Though inadequate financial resources clearly would prevent a state from adopting environmental programs, this explanation does not account for all state inaction. In the past, even when significant federal funding has been available, some states still have resisted the adoption and implementation of resource management programs.\(^8\) A second explanation is that the conflict between regulatory need and state inaction is, at least for some environmental problems, a false one because no effective state solution exists. Because state governments currently face environmental problems that cannot be solved by individual state action, this explanation has some appeal.\(^9\) Perfect solutions, however, are not necessary to promote environmental protection, for scientific studies suggest that even weak regulatory programs can provide surprising benefits.\(^10\)

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9. The environmental problems surrounding the Chesapeake Bay demonstrate how cooperative interstate action sometimes is necessary. Studies indicate, for example, that the Bay's water quality is affected by farming practices in New York. See Butler, The Proceedings of the Water Rights Symposium, 24 WM. & MARY L. REV. 767, 788 (1983). In 1987, the governments of Maryland, Pennsylvania, Virginia, the District of Columbia and the United States finally signed a compact to clean up the Chesapeake Bay. See generally CHESAPEAKE EXECUTIVE COUNCIL, THE FIRST PROGRESS REPORT UNDER THE 1987 CHESAPEAKE BAY AGREEMENT (Jan. 1989) [hereinafter 1987 BAY AGREEMENT].

10. The Virginia legislature, for instance, responded initially with a very limited regulatory program for the Chesapeake Bay. Essentially all that program did was ban the use of
third explanation is that scientific knowledge and technology are too undeveloped and incomplete to support comprehensive regulation. Although science admittedly has not provided all the answers, this explanation ignores the fact that some states have not even acted on the wealth of scientific data that is already available to them.\textsuperscript{11}

If external factors such as financial impossibility, environmental impracticability and imperfect information do not adequately explain the conflict between regulatory need and state inaction, what then accounts for the pervasive reluctance of state governments to engage in effective resource regulation? This Article considers that question, focusing on possible factors internal to the state regulatory system. The nature and extent of these factors must be explored—and their legitimacy evaluated—if effective resource management is to occur. Without a better understanding of these internal barriers to environmental regulation, many state regulatory efforts will continue to be inefficient and ineffective.

Understanding the regulatory failure of state governments involves a two-step process. The first step is the identification of reasons for the regulatory ineffectiveness of states. The second step requires the evaluation of the legitimacy of those reasons. In conducting the identification and evaluation process, this Article uses as its model state the Commonwealth of Virginia, a jurisdiction that, until recently, has been one of the most traditional and conservative of states.\textsuperscript{12} With its wide variety of natural resources, Virginia represents a type of ecological crossroads. Beaches, mountains, barrier islands, wetlands, estuarine systems, and inland and phosphate. The ban produced surprisingly quick benefits, and ultimately a more comprehensive program was enacted. See VA. CODE ANN. §§ 62.1-193.1 to -193.3 (1987) (cleaning agents statute enacted in 1987); id. §§ 10.1-2100 to -2115 (1989) (Chesapeake Bay Preservation Act enacted in 1988); 1987 BAY AGREEMENT, supra note 9, at 21 (noting that the phosphate ban reduced certain phosphorus concentrations by about 50%).

11. Early studies on the health of the Chesapeake Bay, for example, were published in the first part of the 1970s; yet Virginia did not enact comprehensive legislation until 1988. See supra notes 1 & 10.

12. Some may view this as the assumption of a worst-case scenario. Even under such a view, the choice of Virginia still would be productive because the use of a worst-case scenario increases the likelihood of achieving a more complete picture of the effectiveness of state environmental programs. More importantly, the few states that have effective environmental regulation are of little concern to this Article, which focuses on the remaining state programs.
coastal waters all appear in one state. Due in part to the diversity and splendor of its natural resources, Virginia has experienced significant growth in its human and economic resources. Though the economic development generally is welcomed, it has been occurring in an atmosphere of little to no environmental safeguards, with some rather obvious consequences. Natural resources, once abundant and healthy, are showing the strain of development. In recent years this strain has finally reached a crisis level, forcing the state to think seriously about environmental regulation. Finally, Virginia's conservative to moderate political climate appears to reflect the mood of the country. With its reverence for private property rights, its preference for fiscal responsibility and cautious government, and its willingness to engage in incremental experimentalism, Virginia appears to be a political barometer for much of the country. Virginia's ecological diversity, economic growth, political climate and mounting environmental problems make it an ideal state to examine in evaluating state environmental programs.

Using Virginia as a vehicle for identifying and evaluating internal barriers to effective regulation required an empirical investigation into its regulatory system. The investigation focused on the attitudes, perceptions and views of state and local officials responsible for environmental and land use regulation. Although per-


14. For a discussion of the impact of man's presence on Virginia's tidal zone, see id. ch. 4.

15. For recommendations on how Virginia should respond, see Governor's Comm'n, supra note 1, at 23-28.

16. Twenty-six officials from state environmental agencies were interviewed. These officials represented twelve different administrative entities, including, among others, the Attorney General's Office, the Commission of Game and Inland Fisheries (now the Board of Game and Inland Fisheries), the Council on the Environment, the Marine Resources Commission, the State Air Pollution Control Board and the State Water Control Board. Departments involved in the interview process included Agriculture and Consumer Services, Air Pollution Control, Conservation and Historic Resources (now Conservation and Recreation), Economic Development, Game and Inland Fisheries, Transportation, Waste Management, and Mines, Minerals, and Energy. Ten local government officials also were interviewed. An attempt was made to select a representative sampling of Virginia's localities to ensure that the divergent interests of all localities would be taken into account. All but three of the interviews of state and local officials were conducted in person and generally lasted about one hour. The other three officials were interviewed by mail. A few officials were interviewed more than once. Finally, interviews or meetings were held with three interest groups or their representatives.
sonal interviews of officials were the primary method of investigation,\textsuperscript{17} interviews and meetings with interest groups also occurred. In addition, the investigation included studies of specific environmental or land use issues. The primary purpose of the empirical investigation was to identify the key barriers to effective regulation that face officials responsible for environmental programs. Barriers were identified regardless of whether they actually exist under the law. A misconception about the existence of a barrier to environmental regulation is just as much an obstacle to effective regulation as an actual legal barrier. The two are distinguished, however, in evaluating the legitimacy of the perceived barriers.

The results of the identification and evaluation process is somewhat surprising. They suggest that regulatory failure in the environmental area pervades virtually every aspect of state regulatory systems—from local governments to state administrators, legislators and courts. No level of government seems to have escaped the regulatory mindset of little or no action that has prevented effective resource regulation. The internal factors contributing to this mindset fall into four basic categories:\textsuperscript{18} (1) inadequacies in overriding constitutional principles, (2) barriers in state environmental legislation, (3) deficiencies in state judicial principles and perspectives, and (4) problems within the state administrative process and structure. Though a number of reasons explain why these internal barriers exist, political considerations appear to have had the most widespread effect.

I. **OVERRIDING CONSTITUTIONAL PRINCIPLES**

The investigation into the attitudes of officials from the model state suggests that constitutional principles pose serious obstacles

\textsuperscript{17} The identity and comments of specific interviewees are confidential.

\textsuperscript{18} This Article focuses on internal barriers—that is, on barriers to effective regulation existing within the legal system. The empirical investigation revealed two other types of barriers external to the legal system. One type concerns more practical obstacles arising because of limited resources. Those resources include natural and financial resources, as well as more intangible forms like information. The second type involves attitudes and misconceptions existing among regulators, the regulated community and the citizenry at large. Those attitudes and misconceptions deal with a variety of topics ranging from cultural biases to political and policy matters. When relevant, the resource and attitude barriers are incorporated into the analysis of the legal barriers.
to effective environmental regulation. Two key areas of concern exist. Perhaps the more serious one involves the just compensation principle of federal and state constitutions. Each just compensation clause basically prohibits the taking of private property for public use without payment of just compensation and thus constrains a state's regulatory power. The second area of concern involves the effectiveness of environmental provisions found in many state constitutions. Rather than limiting state action, these provisions act as a source of state regulatory authority. Both areas of concern are discussed below.

A. The Just Compensation Principle

The just compensation provisions of the federal and state constitutions appear simple enough on their face. The federal version provides that private property shall not be "taken for public use, without just compensation." In addition to having a similar prohibition, some state versions also protect property from being damaged for public purposes without payment of just compensation.

Despite the provisions' apparent simplicity, model state officials considered the provisions to be significant barriers to effective regulation. As several explained, the provisions were too vague to provide any meaningful guidance to regulators. Nor did the officials believe that case law filled the substantive void. State and federal courts have been among the first to admit that they have failed to develop a formula to guide officials in determining whether a regulatory program infringes impermissibly on private property rights. Without adequate guidance, officials understandably viewed the just compensation principle as a barrier to effective reg-

19. U.S. Const. amend. V.
21. See, e.g., Goldblatt v. Town of Hempstead, 369 U.S. 590, 594 (1962); Morris County Land Improvement Co. v. Township of Parsippany-Troy Hills, 40 N.J. 539, 554-55, 193 A.2d 232, 241 (1963); Just v. Marinette County, 56 Wis. 2d 7, 14-16, 201 N.W.2d 761, 767 (1972); see also D. Mandelker, Land Use Law § 2.25 (2d ed. 1988) (noting the absence of a set formula among state courts). State takings law parallels federal law in many ways. See generally id. §§ 2.25-.34 (discussing state court takings doctrine). In Virginia, for example, the courts generally apply the same factors and tests even though the Virginia takings clause also protects private property from being damaged for public use without just compensation. See generally 1 A. Howard, Commentaries on the Constitution of Virginia 218-29 (1974) (discussing Virginia takings law).
ulation. Because of its vagueness, the principle thwarted efforts by regulators to predict the validity of innovative and untested regulatory programs.\textsuperscript{22}

In the view of model state officials, recent Supreme Court cases further compounded the problem of vagueness by expanding protection for private property rights under the federal compensation clause. One of these cases, \textit{Nollan v. California Coastal Commission},\textsuperscript{23} held that a permit condition requiring a grant of public access across privately owned waterfront land was an impermissible exercise of the state's police power under the federal takings clause. According to the Court, the permit condition failed to bear even a rational relationship to legitimate public purposes.\textsuperscript{24} In a second case, \textit{First English Evangelical Lutheran Church v. County of Los Angeles},\textsuperscript{25} the Supreme Court concluded that a property owner could recover compensation for property temporarily taken in violation of the takings clause. Until \textit{First English}, many legal scholars, land use planners and lawmakers predicted that a state or local government would not have to pay compensation for property later found to be taken by a regulatory measure if the government abandoned the measure.\textsuperscript{26} The Court in \textit{First English} declared those predictions to be erroneous.

Several officials from the model state had serious misgivings about the recent cases—especially \textit{First English}—which they believed would cause an increase in litigation and have a chilling effect on government regulation of land use. The vagueness of the compensation principle and the apparent expansion of \textit{Nollan} and \textit{First English} have made legislators and administrators in the model state hesitant to adopt new regulatory programs. Local officials, in particular, feared the impact of the cases. Even if

\textsuperscript{22} Cf. D. Mandelker, \textit{supra} note 21, § 2.02 (noting the failure of most courts to adopt "a clear taking theory"). \textit{See generally id.} §§ 2.01-.34 (discussing the taking problem).
\textsuperscript{23} 483 U.S. 825 (1987).
\textsuperscript{24} The Court stated that the permit condition had to meet a substantial relationship test to withstand scrutiny under the takings clause. \textit{Id.} at 834. Because the condition did not bear even a rational relationship, it failed to meet the heightened test. \textit{Id.} at 838.
\textsuperscript{25} 482 U.S. 304 (1987).
lawmakers were willing to overcome their reluctance and adopt new programs, the recent case law still would affect their actions. As one official explained, lawmakers who foresaw an increased risk of litigation would be more likely to weaken the regulatory programs that they adopted by, for example, including broad grandfather clauses; yet the weaker the program, the less effective it becomes.

Another problem identified by a few Virginia regulators concerns the skewing of takings challenges in favor of private property rights and against environmental programs. In the view of these regulators, the skewing occurs because present land use patterns inhibit attempts to improve resource management and regulation. The patterns create false, but arguably reasonable, expectations in private landowners that regulation of their land will not change significantly to their detriment. Because environmental regulation is relatively new, landowners have difficulty understanding the legitimacy of increased restrictions on their property rights. They view environmental regulation as an improper interference with property rights, rather than as a legitimate exercise of the state's police power.

Officials from the model state correctly perceived the compensation principle of the federal and state constitutions to be a barrier to effective regulation. Neither the language of the compensation clauses nor the case law interpreting the language provides much guidance to state and local officials contemplating new regulatory programs. While a few identifiable tests have emerged, they do not provide an overall benchmark for determining whether government regulation is valid without compensation. One such test, for example, would find a taking whenever the government has physically occupied or appropriated private property without just compensation. Because many regulatory situations do not involve a


physical invasion, this test is helpful only in a limited number of situations. A second test would uphold uncompensated government infringement of private property if the government has regulated a noxious or harmful private use. 29 This standard also has limited utility, for it serves as a useful predictor of court challenges only when the private use can, without much disagreement, be classified as harmful. 30 If the use did not originate as a harmful use or if reasonable persons would differ over whether the use was ever really harmful, then subsequent government regulation of the use is more difficult to justify. A third test would find a taking when government action has gone too far in diminishing the value of private property by leaving the property owner with no economically viable use. 31 Because the economic impact of government regulation varies according to the particular situation, the diminution in value test, more than any other, fails to eliminate the ad hoc nature of takings inquiries. 32 Thus, none of the standards have much predictive value.

Recent challenges to innovative land use measures adopted in Virginia and other states demonstrate the low predictive value of takings case law. Private property owners seem to challenge virtually every new measure as an invalid exercise of the police power and as a taking of private property rights. 33 Though many of the

32. See generally Michelman, supra note 27, at 1190-93 (discussing and criticizing the diminution in value test); Sax, supra note 27, at 50-60 (critiquing the diminution in value test).
33. Private parties have, in recent years, filed numerous challenges to Virginia’s land use and environmental measures. One of the most recent involves a challenge to the regulations of the Chesapeake Bay Local Assistance Board. Adopted pursuant to the Virginia Chesapeake Bay Preservation Act, those regulations were challenged immediately. See Committee of Concerned Citizens for Property Rights v. Chesapeake Bay Local Assistance Bd., Ch. No. 8069 (York County, Va. Cir. Ct. filed Nov. 3, 1989); Chesapeake Bay Preservation Area Designation and Management Regulations, 6 Va. Regs. Reg. 11, 11-24 (Oct. 9, 1989). For other Virginia challenges, see Virginia Land Investment Ass’n No. 1 v. City of Virginia Beach, No. 86-LA-2212 (Virginia Beach, Va. Cir. Ct. Mar. 31, 1989) (challenging Virginia Beach zoning ordinances under the equal protection and due process clauses), consolidated on appeal and
challenges have not been successful, the very existence of the


challenges is enough to call into question the validity of other land use measures and to discourage state and local governments from further land use regulation.\textsuperscript{35} Even spurious challenges raise the cost of environmental regulation.

Further evidence of the low predictive value of takings case law can be found in the misconceptions and conflicting views voiced by model state officials during the investigative process. Some regulators believed that as long as state and local governments followed statutory law, their actions would not effect a taking. Others expressed the view that a taking could not arise unless the government denied a private landowner a necessary development permit. Still others believed that takings law was a matter of semantics and that successful challenges could be averted with appropriate word usage.


\textsuperscript{35} Annual requests by Virginia localities for clarifications and expansions of enabling legislation amply demonstrate this point. \textit{See, e.g.}, H.B. 1521, Va. Gen. Assembly, Reg. Sess. (1989) (stricken from docket) (a bill to allow certain counties to provide for variances and special exceptions) (available from Virginia General Assembly, Legislative Information Office); H.B. 1574, \textit{id.} (passed-by indefinitely) (a bill to expand the purposes of zoning ordinances); H.B. 1889, \textit{id.} (stricken from docket) (a bill to expand the zoning powers of certain counties); \textit{Va. CODE ANN. §§ 15.1-489, -490, -491.02} (1989) (enabling certain localities to govern hazardous air navigation).
Recent decisions of the United States Supreme Court do little to enhance the clarity and predictability of takings case law. One of these decisions, *First English*, clearly increases the risks and costs of land use planning. After *First English*, state and local governments bear the risk of erroneous land use decisions regardless of whether they effect a temporary or permanent taking.\(^\text{36}\) If a court declares a land use measure to be a taking, the government must pay compensation for the period during which the measure was effective. The government can no longer avoid paying compensation by withdrawing the defective regulation. Nor can the courts restrict a private owner's remedy to invalidation of the ordinance for the period prior to invalidation.\(^\text{37}\) Even a temporary taking merits compensation.

While *First English* may have increased the government's risk of litigation and the costs of an erroneous land use measure, the decision does not affect the probability that a court will find a taking. One of the important factual limitations of *First English* is the Court's assumption that a taking existed.\(^\text{38}\) The Court said it had "no occasion to decide whether . . . the county might avoid the conclusion that a compensable taking had occurred."\(^\text{39}\) The only issue before the Court was the question of whether a temporary taking required compensation. *First English* thus does not lower the threshold for finding a taking.

\(^{36}\) The Court defined a temporary regulatory taking as a regulatory taking that is "ultimately invalidated by the courts." *First English*, 482 U.S. at 310.

\(^{37}\) Prior to *First English*, the California Supreme Court had decided that a landowner could not bring an inverse condemnation action in state courts based upon the regulatory taking theory. In the court's view, it could not require compensation until a regulation or ordinance had been held to be excessive in an action for declaratory relief or a writ of mandamus and the government had nevertheless decided to proceed with enforcement of the regulation or ordinance. See Agins v. City of Tiburon, 24 Cal. 3d 266, 275-77, 598 P.2d 25, 29-31, 157 Cal. Rptr. 372, 376-78 (1979), aff'd on other grounds, 447 U.S. 255 (1980). Based upon this earlier decision, the trial court in *First English* decided that, when an ordinance deprived a landowner of all use, the law limited the landowner's remedies to declaratory relief or mandamus. *First English*, 482 U.S. at 309.

\(^{38}\) See *First English*, 482 U.S. at 312-13 & n.6. The Court also assumed that the ordinance in question deprived the landowner of all use. See id. at 313. Given the public safety concerns underlying the ordinance, the Court may not find a taking in similar situations if given the chance.

\(^{39}\) Id. at 313.
Nollan, the other recent takings case, arguably does change the threshold by heightening the test for establishing a valid police power regulation. Traditionally, the test involved a substantive due process inquiry into whether a government regulation was reasonably related to public health, welfare, safety or morals.\(^{40}\) In applying this due process nexus test, modern courts tend to presume a police power regulation to be valid if "there is any rational basis for the action of the legislature."\(^{41}\) In Nollan, the United States Supreme Court used a different nexus test in evaluating the validity of the challenged regulation under the takings clause. Under the approach in Nollan, a "land-use regulation does not effect a taking if it 'substantially advance[s] legitimate state interests' and does not 'den[y] an owner economically viable use of his land.'"\(^{42}\) Writing for the majority, Justice Scalia explained in a footnote that this standard was indeed "different" from the due process nexus test.\(^{43}\) Dissenting opinions by Justices Blackmun and Brennan disagreed with the majority's distinction between the due process and takings nexus tests. According to the dissent, only one test of validity traditionally has existed—the due process rational basis test.\(^{44}\)

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42. 483 U.S. at 834 (quoting Agins v. Tiburon, 447 U.S. 255, 260 (1986)).

43. Id. n.3. Scalia noted that one prior decision "appear[s] to assume that the inquiries are the same, but that assumption is inconsistent with the formulations of our later cases." Id. at 835 n.3.

44. Id. at 842-48 (Brennan, J., dissenting); id. at 865-66 (Blackmun, J., dissenting). First English adds to the controversy. In First English, Justice Stevens argued, in his dissent, that the primary source of constitutional protection from arbitrary government action is the due process clause and not the takings clause. First English, 482 U.S. at 323, 339-41 (Stevens, J., dissenting).
Although the majority's distinction between the due process and takings standards strongly suggests that it heightened the general level of judicial scrutiny in takings cases, the facts of Nollan suggest that a more limited interpretation of the decision's impact is also plausible. In Nollan, the California Coastal Commission required the owners of a beachfront lot to grant the public lateral access across their lot as a condition to the issuance of a building permit. Because public beaches bordered the lot on the north and south, lateral access would allow the public to pass from one public beach area to the other.\(^4\) In reviewing the Commission's permit decision, the Supreme Court concluded that the condition of public access resulted in a permanent physical occupation which could not be justified even under a reasonable relationship test.\(^4\) Justice Scalia explained that the permit condition failed to promote any of the public purposes allegedly served by the condition. According to the Commission, those purposes included preserving the public's visual access to the beach, helping the public to overcome any psychological barrier to using public beaches created by intensified coastal development and minimizing beach congestion caused by development.\(^4\) In the Court's view, the condition of lateral access did not promote any of these purposes.\(^4\)

The existence of a physical invasion in Nollan arguably limits the decision's impact. When government action results in physical occupation of private property, the Court is much more willing to find a taking.\(^4\) Even an insignificant invasion can result in a taking. Neither the economic impact nor the public benefit of the invasion must be substantial or important.\(^5\)

At least one Virginia court has interpreted Nollan as using an analysis different from the usual takings approach and "more familiar to an equal protection argument." Thompson Assocs. v. Board of Supervisors, Ch. No. 103227 (Fairfax County, Va. Cir. Ct. June 28, 1988), reprinted in 12 Va. Cir. Cr. Or. 318, 323 (W. Bryson ed. 1988). But, in that court's opinion, the test used in Nollan is "the lowest form of constitutional scrutiny." Id.

45. For a statement of the facts, see Nollan, 483 U.S. at 827-31.
46. Id. at 838-42.
47. Id. at 828-29.
48. Id. at 838-42. The Court had difficulty understanding "how a requirement that people already on the public beaches be able to walk across the Nollans' property" furthers any of the avowed public purposes. Id. at 838.
Similarly, the impact of *Nollan* may be limited by the fact that the permit condition required the “actual conveyance of property.” As the majority explained, this fact creates a “heightened risk that the purpose is avoidance of the compensation requirement, rather than the stated police power objective.” The apparent suggestion is that only government action resulting in the actual conveyance of private property would be subject to *Nollan*’s heightened judicial scrutiny. Government action not requiring such a conveyance seemingly would be subject to a lesser standard of judicial scrutiny.

But even if *Nollan* and *First English* do not make the task of establishing a taking substantively easier, they nevertheless increase the likelihood of spurious lawsuits. When the two opinions were released, private interest groups immediately proclaimed the decisions to be landmark rulings and significant victories for private rights. The majority in *First English* even conceded that its decision “will undoubtedly lessen to some extent the freedom and flexibility of land-use planners and governing bodies.” Regardless of whether these observations prove to be correct, it is nevertheless clear that interest groups and government officials alike perceive the decisions as expanding constitutional protection of property rights. At the very least then, *Nollan* and *First English* will make state and local officials reluctant to pursue even legitimate land use plans. To deal with the increased risk of litigation, state and local governments will have to decide whether to refuse to adopt new land use measures or to weaken them.

Even without the added weight of *First English* and *Nollan*, takings case law still would favor private property rights in traditional jurisdictions. This skewing results in part from cultural factors that have shaped attitudes about property rights and land use

51. *Nollan*, 483 U.S. at 841.
52. Id.
55. Model state officials interviewed during the investigative process generally supported these observations. For the most part, those officials feared the impact of the recent takings decisions, especially *First English*. The officials tended to give a broader interpretation to the decisions than perhaps necessary. Further, some even believed that the decisions rendered most zoning ordinances invalid.
regulation. In many states, for example, citizens still view private property rights in land with great deference. Private landowners generally expect to have the freedom to do what they want with their property and do not believe that the state normally has the power to restrict use of privately owned land without payment of just compensation. These expectations appear to have arisen in part from the "pioneer tradition," or the early American bias against the wilderness. This cultural bias reflected a fundamental survival instinct; wilderness areas needed to be developed to ensure man's physical and moral survival. Although American culture has moved gradually away from this way of thinking, the bias underlying the pioneer tradition has become engrained in the concept of private property. Furthermore, to the extent that society now recognizes the need to protect natural resources, many private parties have come to believe that nongovernmental action is sufficient. At one time, this belief may have had some basis in fact, for Virginia and other states appear to have had a tradition of a few large landowners providing protection for natural resources. But,

57. As Roderick Nash explained in his well-known book Wilderness and the American Mind:

Two components figured in the American pioneer's bias against wilderness. On the direct, physical level, it constituted a formidable threat to his very survival. . . . Safety and comfort, even necessities like food and shelter, depended on overcoming the wild environment. . . . The pioneer, in short, lived too close to wilderness for appreciation. Understandably, his attitude was hostile and his dominant criteria utilitarian. The conquest of wilderness was his major concern.

Wilderness not only frustrated the pioneers physically but also acquired significance as a dark and sinister symbol. They shared the long Western tradition of imagining wild country as a moral vacuum, a cursed and chaotic wasteland. As a consequence, frontiersmen acutely sensed that they battled wild country not only for personal survival but in the name of nation, race, and God.

Id. at 24.

58. An example of the impact of the pioneer tradition on the concept of private property can be found in the traditional judicial rule requiring strict construction of zoning ordinances because they are in derogation of private property rights. See D. Mandelker, supra note 21, § 1.12, at 11.

59. This tradition may have resulted from the general system of landholding that developed during the colonial and early statehood periods. In Virginia, for example, that system tended, at least initially, to concentrate landholdings in a relatively few people. Furthermore, for a long time the system required the performance of certain services or tenures as a
though prior social practices may explain the expectation of non-governmental protection, they no longer justify a laissez-faire approach to environmental regulation. Landowners have become too numerous and environmental problems too complex for the tradition of nongovernmental protection to continue.

Legal and political factors also have contributed to the development of an absolutist view of property rights. During the age of liberty of contract, the courts generally protected private contracts from interference by lawmakers. Gradually, as private parties increasingly expressed their intent regarding land transactions in the form of contractual provisions, they came to expect the same freedom for real property.⁶⁰ Local land use patterns further reinforced this belief. Years of little or no regulation created false, but arguably reasonable, expectations in private landowners that land use regulations could not significantly change their rights without violating constitutional principles.⁶¹ In many localities the failure to

condition of ownership. Over time these tenure obligations were eliminated, but by then the practice of using the land system to achieve social, political and economic goals had become firmly entrenched. See generally L. Butler & M. Livingston, supra note 13, ch. 8 (discussing the development of Virginia's land grant system). New York's early system of landholding also resulted in a few landowners controlling large tracts of land. See generally M. Harris, Origin of the Land Tenure System in the United States 208-15 (1970) (discussing headright grants in New York). Lax enforcement of tenure obligations and extravagant land grants hindered the settlement and development of New York. Id. at 213-14.

In addition to the general system of landholding, a system of special-purpose grants developed during the colonial era. The special-purpose granting system involved the practice of transferring land in return for the fulfillment of certain special purposes. These purposes included military service, frontier protection, the establishment of churches and schools, and the development of industry. See generally id. at 255-72 (discussing special-purpose grants). Although resource protection did not motivate these grants, it was an incidental benefit of at least some of the grants. See generally L. Butler & M. Livingston, supra note 13, § 8.1, at 262-68 (discussing the use of special grants in Virginia to promote various land policies).

The sociological dynamics of rural communities also may have contributed to this tradition. Cf. T. Rudei, Situations and Strategies in American Land-Use Planning 53-56 (1989) (discussing the development of nongovernmental land use controls in a rural community).


⁶¹ Private landowners' challenges to the royalty program of the Virginia Marine Resources Commission demonstrate this point. See infra note 65. For a case now before the
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regulate has resulted in a political climate that discourages increased regulation.

The development of traditional property law also has affected how private parties view land. After the states abolished the tenure system, individual landowners held their property outright and no longer owed any affirmative obligations to the original owner simply because of that party's prior interest. Together with the freedom of contract movement, this change in the property system helped to foster the view that land was a commodity to be used freely or sold in the marketplace. Supporters of environmental regulation have a different perspective of land, viewing it as a finite resource instead of a commodity.

The private rights orientation of the common law creates several serious regulatory problems. Among other problems, the absolutist view of private property rights has led to the perception that any governmental deprivation or impairment of those rights is invalid. This perception in turn encourages landowners to challenge regulatory programs even when they deal with state-owned lands or promote significant public interests. In several states, for example, private waterfront landowners have challenged efforts to regulate state-owned subaqueous beds. Because the regulatory programs for state beds restrict the exercise of private use rights in the beds, holders of the rights have argued that the restrictions are invalid under the due process and takings clauses. PRIVATE LANDOWNERS

United States Supreme Court in which a private party basically makes the same point in the federal context, see infra note 336.

62. See generally M. HARRIS, supra note 59, at 367-93 (discussing adjustments to the land system during the revolutionary period).

63. See F. BOSSelman & D. CALLIES, supra note 4, at 23-24. This traditional view is consistent with the pioneer tradition discussed earlier. See supra notes 56-58 and accompanying text.

64. See generally F. BOSSelman & D. CALLIES, supra note 4, at 21-25 (discussing the traditional and modern view of land).

65. See, e.g., In re Broad & Gales Creek Community Ass'n, 300 N.C. 267, 276-79, 266 S.E.2d 645, 652-54 (1980); In re Mason, 78 N.C. App. 16, 24-29, 337 S.E.2d 99, 104-06 (1985). In recent years, private landowners in Virginia have resisted enforcement of the state's subaqueous lands program. Section 62.1-3 of the Virginia Code declares it "unlawful . . . for anyone to build, dump, or otherwise trespass . . . or encroach upon or take or use any materials [from state-owned beds of the] bays and ocean, rivers, streams [and] creeks" unless the use is authorized by statute or permit. VA. CODE ANN. § 62.1-3 (Supp. 1989). Among other uses, § 62.1-3 authorizes the erection of dams and the placement of private piers for noncommercial purposes by riparian owners. Id. Nonexempt uses require authori-
similarly have challenged programs designed to promote important public safety concerns. Efforts to restrict development in environmentally fragile areas, for instance, have met strong opposition even when the areas naturally undergo volatile changes and are subjected repeatedly to life-threatening physical forces.66

Although the absolutist view of private property rights may have worked well in the 1800s when resources were plentiful and environmental degradation was minimal, this view is not effective in dealing with environmental problems today. Perhaps the primary reason for the view's ineffectiveness is that it does not recognize the market failure occurring in the environmental area. A market failure generally arises when an imperfection in the marketplace prevents parties from reaching an efficient result.67 When such an imperfection exists, parties do not voluntarily reach the results they would have reached in a perfect world.

In the environmental area, a market failure arises in large part because of the presence of "externalities" and because of the inaccurate and incomplete information relied upon by private users. An externality is a "cost or benefit that the voluntary actions of one or more people imposes or confers on a third party or parties

zation from the Virginia Marine Resources Commission (VMRC). Pursuant to its § 62.1-3 regulatory power, the VMRC has imposed rents, royalties and other charges on waterfront landowners granted permits to encroach on or otherwise use state-owned beds for commercial purposes. The need for the regulatory program is more compelling than ever. In the past decade, the number of encroachment applications has risen from roughly 700 to about 2,200. See 3 VA. NAT. RESOURCES NEWSL., Winter 1989, No. 6, at 6. Recent challenges, however, may slow the program. Because some of the uses affected by the royalty program are recognized as common law property rights belonging to waterfront landowners, those landowners have challenged the royalty program. See generally Report of the Governor's Study Commission on Virginia's Royalty Assessment Program (1988) [hereinafter Royalty Report] (on file with the author) (discussing the challenges to the royalty program).

Private expectations admittedly are weaker when state-owned resources are involved. But as the challenges to the royalty program demonstrate, private property owners nevertheless adhere to the absolutist view even when their rights are in public resources.


without their consent.\textsuperscript{68} When harmful externalities exist, as in the land use context, private parties who are aware of the externalities that their uses generate have no incentive to pay for the external costs, or for that matter to minimize the costs through self-restraint, because third parties already bear the costs involuntarily. In making resource decisions, the private parties thus ignore the external costs of their uses.\textsuperscript{69} In the environmental area, the fact that private parties may not even be aware of the full external costs of their uses further compounds the problem of externalities. Private parties often lack a fundamental understanding of the impact of their individual uses on the environment and of the relationship of those uses to other parties’ uses. This imperfect information may explain their continued adherence to the absolutist view, which seems to assume that private uses have few, if any, spillover effects on third parties. In any event, because of their imperfect information, private landowners may further discount the costs and the overall expected loss of their uses. Moreover, private parties cannot easily value the intangible benefits of environmental regulation or objectively compare them to the more tangible benefits of private development and use. Once market value becomes the focal point of comparison, environmental regulation becomes a losing proposition. In the minds of many private parties, the tangible benefits of development will outweigh the intangible, nonmonetary benefits of environmental regulation.

Through land use regulation, government has the opportunity to correct some of the imperfections of the marketplace in the environmental area. By forcing landowners to consider the full costs of their uses, government can help to ensure that a market failure is averted and an efficient result is achieved. To the extent that private land uses have identifiable external costs, government should be allowed to force private parties to internalize those costs through appropriate regulation.\textsuperscript{70} If government is allowed to step

\textsuperscript{68} Id. at 45.

\textsuperscript{69} This, in turn, explains why the market fails when external costs are involved. See id. at 45-46.

\textsuperscript{70} Although the quantitative problem of measurement still remains, government can at least provide a rough approximation of external environmental costs. Government, for example, can measure these costs by focusing on prevention costs—that is, on the costs of minimizing or preventing the environmental injury. Just because an accurate measurement
in and at least partially correct the market failure, the likelihood of an efficient result occurring will increase. In evaluating takings challenges, then, the courts need to recognize the existence of the market failure and the desirability of corrective government action.

Correcting the market failure will require a change in cultural attitudes and perceptions about private property rights. To achieve such a change, the public needs to become better educated about the environmental consequences of private uses and about the legal relationship existing between private property rights and the government's police power. Achieving such a change also will require recognition of a moral or civil responsibility that property owners owe to society in general.\(^1\) Until private landowners begin to accept the notion of a land ethic as part of their property rights, challenges to land use regulations will continue to increase. Hopefully through education, property owners will recognize the need to view private property rights as correlative rather than absolute and will eventually come to accept their ethical responsibilities, as resource users, to the environment and to present and future generations.

B. Environmental Provisions in State Constitutions

In addition to the takings clauses, state constitutional provisions on the environment also have served as a source of concern for environmental regulators. In the late 1960s and early 1970s, when the environmental protection movement was particularly strong,\(^2\) federal and state governments began to consider whether to recognize environmental quality as a constitutional value. Although federal consideration never amounted to more than legislative debate, state consideration produced concrete results. By the early 1970s,

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\(^1\) For a discussion of a common law doctrine that incorporates this notion, see L. Butler & M. Livingston, supra note 13, ch. 5. See generally Symposium: Stewardship of Land and Natural Resources, 1986 U. Ill. L. Rev. 301-668 (discussing recognition of the stewardship concept from a philosophical and a resource perspective).

\(^2\) In 1970, for example, Americans held their first Earth Day. The momentum of that national festival contributed to the establishment of the Environmental Protection Agency, to the passage of the Clean Air Act of 1970, and to the adoption of tougher water legislation. Cohn, Earth Takes Center Stage, Wash. Post, Apr. 15, 1990, at A1, col. 5.
environmental quality had become a constitutional value in a number of states.\textsuperscript{73}

Today, most states have added some sort of environmental provision to their constitution.\textsuperscript{74} The provisions vary widely from state to state, with some provisions being very broad and others being more specific and detailed. Though the variations make precise categorization difficult, four general categories of environmental provisions have emerged.\textsuperscript{75} One category consists of the broadly worded provision that either declares state policy to include environmental protection or recognizes a right to environmental quality.\textsuperscript{76} This type is often coupled with an instruction to the legislature to implement appropriate legislation.\textsuperscript{77} Brevity and vagueness are two characteristics of the first type of provision. A second category of environmental provision is the integrated, fairly comprehensive version. This type usually includes some details on specific resources or public interests, as well as a general declaration of pol-


\textsuperscript{74} See Ala. Const. art. I, § 24, & amend. 227; Alaska Const. art. VIII, §§ 1-18; Ariz. Const. art. X, §§ 1, 2, 9; Ark. Const. amend. 35; Cal. Const. art. I, § 25, art. X, §§ 2-4, art. XA; Colo. Const. art. XVI, §§ 5-8, art. XVIII, § 6; Fla. Const. art. II, § 7, art. IV, § 9, art. X, § 11; Ga. Const. art. III, § 6, § II(a)(1); Haw. Const. art. XI, §§ 1, 2, 3, 6, 7, 9, 11; Idaho Const. art. XV, §§ 1-7; Ill. Const. art. XI, §§ 1, 2; La. Const. art. VI, § 17, art. IX, §§ 1-9; Mass. Const. amend. arts. XLIX, L; Mich. Const. art. IV, § 52, art. IX, § 35, art. X, § 5; Mo. Const. art. III, §§ 37(b)-(c), (e), 47, 48, art. IV, §§ 35, 36, 40(a), 43(a), 47(a); Mont. Const. art. II, § 3, art. IX, §§ 1-4; Neb. Const. art. XV, §§ 4-6; Nev. Const. art. IX, § 3; N.M. Const. art. XV, §§ 1, 2, art. XVI, §§ 1-3, art. XX, § 21; N.Y. Const. art. XIV, §§ 1-5; N.C. Const. art. XIV, § 5; Ohio Const. art. II, § 36; Okla. Const. art. XXVI, §§ 1-4; Ore. Const. arts. XI-D, -E, -H, -I(1); Pa. Const. art. I, § 27, art. VIII, §§ 15, 16; R.I. Const. art. I, § 17; S.C. Const. art. XIV, § 4; Tex. Const. art. XVI, § 59; Utah Const. art. XVII, § 1, art. XVIII, § 1; Va. Const. art. XI, §§ 1-3; Wis. Const. art. IX, § 1; Wyo. Const. art. I, § 31, art. VIII, §§ 1-5. \textit{See generally} 1 \textit{Law of Environmental Protection}, supra note 5, § 6.01[2][b] (discussing state constitutional provisions); N. Robinson, \textit{Environmental Regulation of Real Property} § 3.07 (1988) (discussing state constitutions and the environment).

\textsuperscript{75} Some provisions fall into more than one category. Article I, § 27, of the Pennsylvania Constitution, for example, recognizes both a right to environmental quality and a public trust in certain natural resources. Pa. Const. art. I, § 27.

\textsuperscript{76} See, e.g., N.Y. Const. art. XIV, § 4; N.C. Const. art. XIV, § 5; Va. Const. art. XI, § 1.

\textsuperscript{77} See, e.g., Ill. Const. art. XI, § 2; Pa. Const. art. I, § 27; R.I. Const. art. I, § 17.

\textsuperscript{78} See, e.g., Ill. Const. art. XI, § 1; Mich. Const. art. IV, § 52; N.Y. Const. art. XIV, § 4; Va. Const. art. XI, § 2.
A third category includes provisions that are narrowly tailored to focus on one particular resource or public use. This type of provision usually ratifies traditional law, recognizing well-established public rights like fishing and navigation. Finally, the fourth category is the public trust version. This type recognizes a public trust either in the environment or in certain natural resources.

The elevation of environmental quality to constitutional stature could have far-reaching consequences. Because the federal Constitution has no equivalent environmental provision, state constitutions offer great potential in the area of environmental law. State courts will not have to concern themselves with parallel federal law in interpreting environmental provisions in their constitutions. To many, state constitutional law offers a more acceptable approach to recognizing the fundamental importance of environmental values. Historically, state and local governments have exercised regulatory power over land use matters. As the scope of federal environmental statutes has expanded, the states' land use powers have eroded somewhat. While the link between federal land use regulation and the environment cannot be ignored, the presence of environmental provisions in state constitutions provides the opportunity for greater state involvement in land use and environmental matters. The environmental provisions thus reinforce the role of the state in the regulatory process, acting as reminders of the im-

79. See, e.g., ALASKA CONST. art. VIII, §§ 1-18; HAW. CONST. art. XI, §§ 1, 2, 3, 6, 7, 9, 11.
80. See, e.g., ALA. CONST. art. I, § 24 (right to navigate); CAL. CONST. art. I, § 25 (right to fish); R.I. CONST. art. I, § 17 (right to fish); S.C. CONST. art. XIV, § 4 (right to navigate); VA. CONST. art. XI, § 3 (right to use natural oyster beds); WIS. CONST. art. IX, § 1 (right to navigate). See generally L. BUTLER & M. LIVINGSTON, supra note 13, chs. 5-6 (discussing the traditional common law bases for public rights).
81. See, e.g., ARIZ. CONST. art. X, §§ 1, 2; FLA. CONST. art. X, § 11; PA. CONST. art. I, § 27.
82. See Howard, supra note 73, at 196-98. But cf. 1 LAW OF ENVIRONMENTAL PROTECTION, supra note 5, § 6.01[2][b], at 6-9 (describing environmental provisions in state constitutions as having "very little observable impact").
83. See generally 1 LAW OF ENVIRONMENTAL PROTECTION, supra note 5, ch. 6 (discussing state environmental programs and their relationship with federal laws).
84. See id. § 6.01 (discussing the emerging importance of state environmental law). For further discussion of the link between land use and the environment, see infra notes 138, 226, 387-88, 402, 407 and accompanying text.
portance of grassroots democracy in the development of environmental policy.\textsuperscript{85}

Despite the obvious importance of state constitutional law to the environmental area, the incorporation of environmental provisions into state constitutions has not brought about the anticipated results.\textsuperscript{86} Nor have the results been uniform, for judicial and administrative enforcement has varied significantly from jurisdiction to jurisdiction. In many states, courts and administrators have been reluctant to interpret the provisions as self-executing, and therefore legally binding, absent legislative action. Reasons typically advanced include the absence of detailed guidelines in the provisions, the need for judicial restraint, separation of powers and judicial incompetence to resolve environmental matters without legislative direction.\textsuperscript{87} In other jurisdictions, however, courts have demonstrated a willingness to interpret the environmental provisions as a mandate to strike down, or at least review closely, state action conflicting with the provisions.\textsuperscript{88}

The reluctance of many courts to interpret the environmental provisions forcefully is somewhat surprising, given the history of the provisions and the pattern of judicial activism that at least some of the courts have displayed in other areas of the law. From an environmental perspective, the judicial reluctance seriously undermines resource protection programs. If legislation does not require an administrator to consider the environmental policies of the constitutional provisions, then the administrator in a judicial restraint jurisdiction could take action having serious environmental consequences. Without judicial intervention, the environmental policies would have little or no effect on the administrator. The ineffectiveness of the policies in a judicial restraint jurisdiction is

\textsuperscript{85} See H. ROLSTON III, ENVIRONMENTAL ETHICS 246-62 (1988) (discussing the need for democratic decisionmaking in developing environmental policy).

\textsuperscript{86} For a discussion of some of those anticipated results, see Howard, supra note 73.


\textsuperscript{88} See, e.g., Moore v. State, 553 P.2d 8 (Alaska 1976); Alyeska Ski Corp. v. Holdsworth, 426 P.2d 1006 (Alaska 1967); Seadade Industries, Inc. v. Florida Power & Light Co., 245 So. 2d 209 (Fla. 1971); Florida Power Corp. v. Gulf Ridge Council, 385 So. 2d 1155 (Fla. Dist. Ct. App. 1980). The provisions also can be used to legitimate government action. For further discussion of this point, see infra notes 128-29 and accompanying text.
demonstrated easily by focusing on the model state experience. A comparative analysis of more liberal approaches, then, will suggest some alternative and environmentally more effective ways to interpret the constitutional provisions.

1. The Virginia experience

In 1970, the people of Virginia voted to add an environmental provision to their state constitution.89 Found in article XI of the Virginia Constitution, the provision declares, in section 1, that it shall be the policy of the Commonwealth to conserve, develop, and utilize its natural resources, its public lands, and its historical sites and buildings [and] to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth.90

Section 2 then authorizes the General Assembly to implement appropriate legislation to further those policy goals.91 The legislative history of the provision indicates that the drafters thought the provision established a trust over public lands and waters. In an exchange between several legislators, the floor sponsor of the provision in the Virginia Senate noted that section 1 "is certainly holding public lands and waters in trust."92

Despite the apparently clear intent of the drafters, the Virginia Supreme Court has narrowly interpreted the environmental provision. In the recent decision Robb v. Shockoe Slip Foundation, the court concluded that section 1 of article XI was nothing more than a nonbinding policy statement that government officials could consider, if they so chose, in carrying out their responsibilities.93 The controversy in Shockoe Slip focused on the failure of state officials to consider the environmental policies of article XI, section 1.

89. See Howard, supra note 73, at 205-07 (discussing the history of the provision).
91. Id. § 2.
92. Proceedings and Debates of the Senate of Virginia Pertaining to Amendment of the Constitution 377 (extra session 1969, regular session 1970); see also id. at 372-78 (setting forth the debate); Howard, supra note 73, at 219 (discussing the debate).
93. 228 Va. 678, 324 S.E.2d 674 (1985). Other state courts have reached a similar decision in considering their own environmental provision. See Note, supra note 87, at 356-63.
before deciding to demolish state-owned buildings. The plaintiff sought to enjoin the demolition, arguing that the buildings had historic significance and that article XI, section 1, therefore applied, requiring consideration of its policies. In rejecting the plaintiff's arguments, the court explained that the section raised too many unanswered questions to be self-executing. According to the court, a "constitutional provision is self-executing when it expressly so declares," when it is "declaratory of common law" or when it "specifically prohibit[s] particular conduct." Because article XI, section 1, did not expressly declare itself to be self-executing and because the section was neither prohibitory in tone nor declaratory of the common law, it could only be self-executing if it provided sufficient rules for implementing its policy goals. Section 1 did not provide those rules, but rather "beg[ged] statutory definition." As further support, the court pointed to section 2 of article XI, which in the court's view recognized the need for future legislative action.

Numerous model state officials described section 1 of article XI as a vague and ineffective regulatory tool. Because of its vagueness, agency officials did not feel secure in relying on the provision as a source of regulatory authority. As they explained, the provision does not direct any state or local agency to take responsibility for implementing its policies. Nor does it provide sufficient details to guide agencies that follow its policies. Without such guidance, many regulators thought that the provision could only properly be considered by a policy formulation agency, such as the state's Council on the Environment—that is, by a body with no real regulatory authority or accountability. Further, even the provision's policy goals are confusing and somewhat contradictory. As one official pointed out, the goals include both conservation and utilization of natural resources—two goals often in conflict with one an-

94. Shockoe Slip, 228 Va. at 682, 324 S.E.2d at 676-77.
95. Id. at 681, 324 S.E.2d at 676.
96. Id. at 682, 324 S.E.2d at 676.
97. Id., 324 S.E.2d at 677.
98. Id. at 682-83, 324 S.E.2d at 677.
Without additional guidance, agencies would not have any objective means for resolving conflicts between the two goals.

Most of the government officials commenting on article XI thus agreed with the *Shockoe Slip* decision and believed that section 1 of article XI should not be self-executing. In their view, a contrary decision would have caused significant uncertainty and imposed tremendous costs on state agencies. Such a decision would have required each agency to develop its own standards and methods of compliance. This development process could result in a wide range of criteria and would involve a significant time and resource commitment. In all likelihood, delays in the development and enforcement of other programs would result. If, on the other hand, the agencies tried to minimize this commitment by simply relying on existing environmental laws to ensure compliance with article XI, the provision would only be as effective as those laws. It would not have any meaning independent of present legislation. If, on the other hand, agencies tried to develop new criteria, they would be torn between fulfillment of the two policy goals of article XI without having any objective way to resolve conflicts. Model state officials thus generally believed that a self-execution determination would have been meaningless without more specific legislative guidance.

A few officials, however, lamented the adverse effects of *Shockoe Slip*. According to those officials, the decision made article XI meaningless and reversed, or at least distorted, the relationship between the state legislature and the state constitution. Until the General Assembly decides to act, the provision has little independent significance. Yet the provision appears in the Virginia Constitution, a document that defines the fundamentals of state govern-

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99. Some officials did not see any conflict between the goals of environmental preservation and economic development. Although the two goals are not mutually exclusive, neither are they totally consistent. In recent years, high-ranking state officials have recognized the complicated relationship between the two. *See, e.g.*, Campbell, *Baliles Sees Link Between Economy, Environment*, Richmond Times-Dispatch, Apr. 26, 1989, at B-3, col. 1 (discussing the views of former Governor Baliles on the collaborative and competitive relationship between the two). For a discussion of ways to accommodate the two goals, see L. BUTLER & M. LIVINGSTON, *supra* note 13, § 4.4.
ment by, for example, empowering the General Assembly. On a more practical level, one regulator also noted that the decision magnifies problems caused by weak or ineffective environmental regulation.

Article XI of the Virginia Constitution is vague and confusing. The provision sets forth some general policies to govern use of Virginia's natural and historic resources without providing guidance for implementing those policies. The vagueness of article XI, however, is not as serious a barrier to regulation as many model state officials believe. As one state official noted, the uncertainty of article XI does not necessarily mean that Virginia’s regulation of natural resources is ineffective. Nor does it mean that regulators cannot rely on the policies of article XI. Virginia already has a statutory and administrative framework that begins to bridge the gap between regulation and article XI.

The Virginia Environmental Quality Act, enacted in 1972 soon after sections 1 and 2 of article XI became effective, provides part of this statutory and administrative framework. The present version of the statute does not contain any section setting forth the policies of the Act. A review of the Act’s legislative history, however, reveals that earlier versions began by explaining that the legislation was passed “[i]n furtherance of Article XI of the Constitution of Virginia and in recognition of the vital need of citizens of the Commonwealth to live in a healthful and pleasant environment.” The earlier versions then reaffirmed the objectives of article XI, declaring it the policy of the Commonwealth “to promote the wise use of its air, water, land and other natural resources and to protect them from pollution, impairment or destruction so as to improve the quality of its environment.” In addition, statutory policy included an obligation on the part of the state government


104. Id.
"to initiate, implement, improve, and coordinate environmental plans, programs, and functions of the State in order to promote the general welfare of the people of the Commonwealth and fulfill the State's responsibility as trustee of the environment for the present and future generations."  

In furtherance of these policies, earlier versions directed that, "to the fullest extent practicable, the laws, regulations, and policies of the Commonwealth shall be interpreted and administered in accordance with the policies" of the Virginia Environmental Quality Act. Further, state officials were to coordinate their efforts to effectuate the Act's policies.

Though the current version of the Act has modified or eliminated these provisions, it continues the basic statutory purposes and obligations through the provisions governing the Council on the Environment (COE). The primary purpose of the COE is to "promote the wise use of the Commonwealth's air, water, land and other natural resources and the protection of natural resources from pollution, impairment or destruction." In fulfilling this purpose, the administrator of the COE must coordinate "administrative practices" among state environmental agencies and develop "uniform management and administrative systems" to "assure coherent environmental policies."

The COE also is responsible for reviewing environmental impact statements submitted by state agencies, commissions and other governmental units. The Council thus must take a broad view of Virginia's environmental problems, policies and regulatory efforts.

Although the COE does not have responsibility for any particular regulatory program, its policymaking efforts can result in legislation that expands or modifies the duties of state agencies having

105. Id.
107. Id.
108. The COE was created by the original Virginia Environmental Quality Act. See id. §§ 10-179 to -185, 1972 Va. Acts 1133, 1134-36.
110. Id. § 10.1-1204(2). Another section of the environmental quality statute defines "state environmental regulatory agencies" as including the Department of Air Pollution Control, the Department of Conservation and Recreation, the Department of Health, the Marine Resources Commission and the State Water Control Board. Id. § 10.1-1206(O).
111. Id. § 10.1-1204(1).
112. See id. §§ 10.1-1208, -1209.
authority over specific environmental programs. One of the COE's duties is to make recommendations to the governor "concerning the policies necessary to influence the environmental choices" substantially affecting the Commonwealth to ensure an effective balance between "environmental protection and economic well-being." Further, even when the COE's legislative proposals are not enacted, its activities nevertheless have an impact on environmental regulation and on the agencies responsible for that regulation. The COE's duties include advising the governor and General Assembly and, on request, other employees and public bodies of the Commonwealth "on matters relating to environmental quality and the effectiveness of actions and programs designed to enhance that quality." In addition, the administrator of the COE must develop ways to coordinate various management and regulatory programs.

The COE currently plays a crucial role in the development of Virginia's environmental policies and programs. That role is due in large part to the high priorities that recent administrations have given the environment. For effective regulation to continue, the COE's role needs to be solidified and strengthened. Virginia must have at least one agency that takes a broad view of environmental matters and has both the ability and the responsibility to look at the big picture in an objective manner. The COE can remain objective only by continuing to be a policymaking agency with no responsibility for particular regulatory programs. Thus, to solidify the COE's position, the General Assembly should continue to limit the COE's responsibilities to "nonregulatory" functions.

113. Id. § 10.1-1207(1)(b).
114. Id. § 10.1-1207(2).
115. See id. § 10.1-1204(1), (2); see also id. § 10.1-1205(1) (requiring the administrator of the COE to "[c]oordinate all state communications with federal agencies relating to environmental problems").
116. The legislature also could solidify the position of the COE by making it an invaluable, if not indispensable, part of the regulatory process. To accomplish this goal, the legislature might consider expanding the information-gathering responsibilities and capabilities of the COE. The COE, for example, could serve as a depository of past environmental studies and data as well as an initiator of new studies. Further, to provide access to the deposited information, the COE could implement a retrieval system. If the COE had easily accessible and relevant information on file, environmental agencies eventually would realize that they could cut costs and avoid duplication of effort and resources by using the information. Im-
tion, the legislature needs to ensure that the COE's role in environmental matters becomes a permanent one that is not dependent on the philosophies of a particular administration. Although such dependency may be legitimate for many other government programs, the policymaking and oversight tasks assigned to the COE reflect constitutional values.

Although the Virginia Environmental Quality Act admittedly provides only an incomplete framework for implementing article XI, the Act's very existence suggests that Virginia officials have overstated the case for judicial restraint. Virginia regulators have attributed the need for judicial restraint to the vagueness of the article XI provisions. Yet their analysis does not even adequately account for existing statutory law. Nor have they seriously considered the legitimacy of alternatives to strict judicial restraint. As the next section demonstrates, the path of judicial self-restraint chosen by the model state ignores an important tool of environmental regulation: the environmental provisions of state constitutions.

2. Alternatives to strict judicial restraint

For a court to enforce an environmental provision without any legislative direction, it must decide that the provision imposes an ongoing duty to promote the environmental interests reflected in the provision. Those opposing this idea typically argue that the task of defining a state's constitutional duty of environmental protection raises nonjusticiable political questions within the exclusive domain of the legislative or executive branches. The political question doctrine recognizes that some questions of government lie

plementing these suggestions, however, would require an increase in the financial and human resources of the COE.

In recent years, the state government admittedly has begun to improve the position of the COE. For example, it has expanded the COE's ability to provide technical assistance. See 2 VA. NAT. RESOURCES NEWSL., Spring 1988, No. 3, at 4. Among other services, the COE will provide information about environmental and land use matters to local officials and administrators. Part of this assistance will be achieved through the establishment of a library containing plans and ordinances. See 2 VA. NAT. RESOURCES NEWSL., Fall 1988, No. 5, at 7.

outside the proper scope of judicial review. Traditionally, the courts have applied the doctrine to obscure issues that can be answered only by unenforceable judgments or by complex solutions beyond the capabilities of the courts and to issues that would require the decisionmaker to choose between political philosophies. By invoking the political question doctrine, courts give the legislative and executive branches an opportunity to resolve these types of issues.118

Interpretation of environmental provisions in state constitutions arguably does not involve any of the traditional categories of political questions. The policy question of whether to confer constitutional status on the value of environmental preservation has already been resolved through the adoption of the provisions. Although a generally worded provision like article XI, section 1, may not provide much guidance to those interpreting it, courts can use accepted methods of constitutional and common law interpretation119 to provide substantive content in an objective manner. That the provision admittedly raises many unanswered questions does not necessarily mean that courts cannot provide solutions. Positivist legal principles are available for the courts' use. While courts may not be capable of developing a comprehensive solution, they can give some limited guidance.

At the very least, the courts could use environmental provisions in state constitutions to resolve doubts created by ambiguous statutes and regulations in favor of the environmental values reflected in the provisions.120 Alternatively, the courts could construe the provisions as imposing a general duty on regulators to consider the policies embodied in the provisions in carrying out the regulators'  

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118. See Krier, supra note 117, at 37; see also 3 ENCYCLOPEDIA OF THE AMERICAN CONSTITUTION 1420-22 (1986) (discussing the concept of "political question"). See generally Scharpf, Judicial Review and the Political Question: A Functional Analysis, 75 YALE L.J. 517 (1966) (discussing competing theories of judicial review and how they relate to the political question doctrine).

119. Accepted methods would include an examination of legislative history and adherence to the principle of stare decisis. The courts, for example, could use the common law public trust doctrine to interpret article XI. For a discussion of this option, see infra notes 285-306 and accompanying text.

120. Some courts already use their environmental constitutional provision in this manner. See, e.g., State v. Eluska, 724 P.2d 514, 515 n.6 (Alaska 1986); City of Miramar v. Bain, 429 So. 2d 40, 42 (Fla. Dist. Ct. App. 1983).
administrative responsibilities. To ensure compliance with this obligation, courts could follow a “rule of reasonableness”; regulators would satisfy their general duty if reasonable minds agreed that the regulators diligently considered the environmental policies of the state constitution prior to taking final agency action that implicated the policies.\textsuperscript{121} Evidence of such diligence could include efforts to minimize conflicts between the proposed action and the environmental provisions. The actual specifics of the consideration process, however, would be left to the regulators. If a less demanding standard were preferred, courts could apply the traditional administrative law standard of review for policymaking. Under that standard, courts would ask whether agency action was arbitrary and capricious in failing to consider the environmental policies of the appropriate state constitution.\textsuperscript{122}

In a 1984 decision, for example, the Louisiana Supreme Court concluded that the environmental provision found in the Louisiana Constitution “imposes a duty of environmental protection on all state agencies and officials” and “mandates the legislature to enact laws to implement” this policy.\textsuperscript{123} The Louisiana Constitution has a generally worded provision stating:

The natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people. The legislature shall enact laws to implement this policy.\textsuperscript{124}


\textsuperscript{122} See 2 C. Koch, Jr., supra note 121, § 9.17; Howard, supra note 73, at 216-17. See generally 2 C. Koch, Jr., supra note 121, § 9.6 (discussing arbitrariness). For a new perspective on judicial review of the exercise of administrative discretion, see id. § 9.22 (Supp. 1987).

\textsuperscript{123} Save Ourselves, Inc. v. Louisiana Envtl. Control Comm’n, 452 So. 2d 1152, 1156 (La. 1984).

\textsuperscript{124} La. Const. art. IX, § 1.
The 1984 decision, *Save Ourselves, Inc. v. Louisiana Environmental Control Commission*, involved a dispute over state issuance of a permit to construct and operate a hazardous waste disposal facility. In remanding the permit decision, the Louisiana court explained that a state agency "is duty bound to demonstrate that it has properly exercised the discretion vested in it by the constitution."\(^{125}\) To meet the constitutional duty of environmental protection, the agency must, prior to approving action that would affect the environment, "determine that adverse environmental impacts have been minimized or avoided as much as possible consistently with the public welfare."\(^{126}\) In the dispute before it, the court could not tell from the record whether the agency issuing the permit had made such a determination. The court noted the record's silence on such matters as consideration of alternate projects, alternate sites and mitigation measures. The record also failed to reveal any attempt by the agency to "quantify environmental costs and weigh them against social and economic benefits."\(^{127}\) Without evidence of such inquiries, the agency could not establish that it had even recognized its constitutional duty, much less given sufficient weight to environmental concerns.

Yet a court's conclusion that the enforceability of an environmental provision in a state constitution raises nonjusticiable political questions does not necessarily mean that the questions lack solutions or that the provision is without any real substance or impact. A constitutional right or value can have meaning independent of the courts. As one commentator explained, "[A] constitution is surely more than a set of propositions about the structure and limits of government and about concrete rights in the people."\(^{128}\) In addition to defining the limits and structure of government and the rights of the people, a constitution also serves a symbolic or legitimating function. If a value has constitutional stature,
it should affect the decisions of conscientious regulators and gradually influence public opinion in its favor.129

Additionally, even without a judicially enforceable duty, environmental provisions in state constitutions still provide a basis for defining the public interest in environmental protection. To the extent that plaintiffs challenge environmental regulations under due process and takings clauses, courts can consider the public interest defined in an environmental provision to resolve the challenges.130 Because the interest is constitutional in origin, it generally should command as much respect as the private property rights protected under the due process and takings clauses. The constitutional stature of the public interest thus should increase the likelihood that a government regulation will be upheld.

Furthermore, as part of the executive branch, state agencies should have some power to resolve political questions raised by environmental provisions of their constitutions. Even the political question doctrine does not restrict resolution of political questions to the legislative branch; the doctrine only precludes judicial review of those questions.131 To the extent that sufficient legislative authority exists, then, the political question doctrine should not constrain state agencies.

In the case of Virginia’s article XI, for example, sufficient legislative authority appears to exist to permit active promotion of article XI values by state agencies. Through the statutory and administrative framework established by the Virginia Environmental Quality Act, state environmental agencies generally can help to implement the policies of article XI, section 1.132 The recommendations and guidelines developed by the COE provide external, positivist criteria for state agencies to apply; subjective or internal standards need not be used. Because the COE develops its guidelines and

129. Id.


131. 3 ENCYCLOPEDIA OF THE AMERICAN CONSTITUTION 1420-22 (1986) (discussing the concept of “political question”).

132. Like the courts, state agencies could use article XI, § 1, to resolve doubts in favor of article XI values. See supra notes 119-20 and accompanying text.
recommendations in the context of article XI and under the direction of the Virginia Environmental Quality Act, reliance on those guidelines and recommendations should not raise substantial doubts about the validity of the criteria or the emergence of an all-powerful, unaccountable superagency. Indeed, by relying on the COE's guidelines and policy statements, other state agencies would avoid an unnecessary and wasteful duplication of effort and would help to establish uniform environmental policies and management systems. Although the COE cannot develop detailed guidelines for each environmental agency, it can at least provide some basic content for article XI policies.

The ideal solution to the problem of vague environmental provisions admittedly would be for the appropriate state legislature to clarify the meaning of the provisions through statutory enactments.133 If the enactments required consideration of the environmental values reflected in the state constitution, the legislation also would need to define basic procedural and substantive standards to govern the consideration process. By providing a legislative solution, the state legislature could achieve a degree of uniformity that would not necessarily exist under judicial and agency initiatives. Additionally, to the extent that the environmental provisions authorize legislative action, well-drafted legislation should not face serious challenge.134

Absent such legislative action, though, some may legitimately doubt whether traditional jurisdictions ever will interpret the environmental provisions of their constitution under any approach other than strict judicial restraint. Even if the provisions were detailed, which is not necessarily desirable in state constitutions,135 conservative courts still would tend to restrict the effect of the provisions. At the very least though, regulators need to realize that

133. An alternative solution would be to provide more detail in state constitutions. For an example of more detailed environmental provisions in a state constitution, see ALASKA Const. art. VIII. But cf. Grad, The State Constitution: Its Function and Form for Our Time, 54 Va. L. Rev. 928, 958-72 (1968) (discussing some of the disadvantages of detailed constitutional provisions); Note, supra note 87, at 366-67 (arguing against detailed constitutional provisions).

134. Many environmental provisions in state constitutions call for legislative action. See Tobin, supra note 73, at 481-82.

135. See supra note 133.
legitimate alternatives to strict judicial restraint exist. Further, they need to realize that environmental provisions of state constitutions act as a barrier to effective resource regulation, but not necessarily for the reasons identified by conservative judges and regulators.

The vagueness of the provisions admittedly supports the decision to treat the provisions as nonbinding. But that support is not as strong as many believe, for external criteria and methods are available for providing substantive content to the environmental provisions. Reasonable alternatives to the *Shockoe Slip* approach do exist, although supporters of strict judicial restraint generally have failed to give the alternatives serious consideration.

Lawmakers thus need to realize that they have a choice to make and that the choice involves a range of alternatives. The choice is not an either/or proposition; varying degrees of judicial activism exist. Lawmakers in Virginia and many other jurisdictions have opted for the least active level of judicial intervention. Yet even in a judicial restraint jurisdiction, acceptable alternatives exist—alternatives that would be much more responsive to the constitutional policy of environmental protection. Environmental provisions in state constitutions thus remain a legal barrier only in part because of their vagueness. Also contributing to the problem is the unnecessarily restrictive view of the judiciary's role in environmental decisionmaking.

II. STATE ENVIRONMENTAL LEGISLATION

A second type of problem within the legal system concerns legislative efforts to regulate natural resources. As responses by an overwhelming number of model state officials suggest, these efforts can pose serious barriers to effective environmental regulation. On a general level, the potential legislative barriers relate to two basic topics: (1) the overall approach of the legislature to natural resource regulation and (2) present legislative authority to regulate. Because the content of state legislation varies significantly from jurisdiction to jurisdiction, the discussion of these legislative barriers centers around the model state. To the extent that the legislation of other states differs, the discussion of the model state should provide a baseline for evaluating the effectiveness of that legislation.
A. Legislative Approach

The first serious barrier raised by state environmental legislation concerns the basic legislative approach to environmental regulation. As the Virginia experience suggests, this approach traditionally has been too piecemeal and fragmented to be effective. The Virginia legislature for years has focused on specific environmental or resource problems, typically passing legislation narrowly tailored to deal with the problems as they became crises. A good example of this crisis-oriented perspective is the legislature’s fragmented and inconsistent approach to the land use and resource needs of localities.\(^{136}\) In many instances, the Virginia General Assembly has considered the needs on a one-on-one basis, as particular localities have requested expanded regulatory authority to deal with specific problems. Further, in responding to the requests, the legislature generally has restricted the availability of increased regulatory powers to localities with the most pressing problems. By taking this approach, the state legislature has ignored the existence of similar, but less acute, problems in other localities.\(^{137}\)

Perhaps because of this problem-oriented approach, the legislatures of Virginia and many other states historically have defined the scope of resource and environmental legislation in artificial terms. State legislatures traditionally have separated land use issues from environmental matters, ignoring the relationship between the two. They have handled natural resources in a similar manner, developing separate legislative solutions for the different

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136. Another good example of the crisis-oriented approach of the Virginia legislature is its reaction to efforts to reform the state’s water laws. Interest in reforming Virginia’s common law water allocation system tends to peak during times of drought. See Butler, Allocating Consumptive Water Rights in a Riparian Jurisdiction: Defining the Relationship Between Public and Private Interests, 47 U. Pri. L. Rev. 95, 101 n.12 (1985). Other states in the eastern United States have demonstrated a similar mentality. See generally id. at 96-103 (discussing the traditional water law systems of eastern states).

types of resources. Their apparent thinking is that when the physical characteristics of resources are discernibly different, problems involving the resources must be unrelated.\textsuperscript{138}

Officials from the model state found the problem-oriented approach to be inadequate for a number of reasons. First, they thought that the tendency to focus on specific problems has resulted in the absence of long-range planning and incomplete regulatory programs. Many officials believe that effective resource regulation requires a more comprehensive and coordinated approach. Second, they noted that the ad hoc approach of the legislature has produced inconsistent management decisions\textsuperscript{139} and has led to a fragmented, inefficient and unclear administrative structure. Confusion over jurisdiction and regulatory purpose apparently exists among at least some of the Virginia agencies responsible for environmental regulation and resource management.\textsuperscript{140}

The concerns expressed about the traditional legislative approach to environmental regulation are significant. As noted above, the crisis-oriented approach taken by traditional jurisdictions has resulted in fragmented and inconsistent regulation of natural resources.\textsuperscript{141} In addition, the traditional legislative approach has failed to consider fully the scientific implications of the problems that it addresses and the solutions that it adopts. On topics ranging from tidal boundaries\textsuperscript{142} to water allocation systems\textsuperscript{143} and crit-

\begin{itemize}
\item \textsuperscript{138} The common law approach to water rights reflects this thinking. That approach classifies each type of water resource according to its place in the hydrologic, or water circulation, cycle and develops separate legal doctrine for each major classification. See Butler, supra note 136, at 105 & n.20. See generally Ausness, Water Rights Legislation in the East: A Program for Reform, 24 WM. & MARY L. REV. 547, 548-53 (1983) (discussing the common law approach). Many states in the eastern United States still follow the common law approach to a significant extent. See generally Ausness, supra (discussing reform efforts in the eastern United States).
\item \textsuperscript{139} Inconsistent decisions, for example, have occurred in the administration of Virginia's regulatory program for subaqueous beds. See Royalty Report, supra note 65, at 12-14 (discussing the inconsistent approach to royalty assessments).
\item \textsuperscript{140} For further discussion of perceived problems within the administrative structure, see infra Section IV.
\item \textsuperscript{141} See supra notes 136-38 and accompanying text. For a thorough critique of the effects of fragmentation on state regulation of water, see Gellis, Water Supply in the Northeast: A Study in Regulatory Failure, 12 ECOLOGY L.Q. 429 (1985).
\item \textsuperscript{142} See L. BUTLER & M. LIVINGSTON, supra note 13, § 1.2 (discussing scientific and legal approaches to defining tidal boundaries).
\end{itemize}
...cal environmental areas, lawmakers have tended to ignore underlying scientific principles and to search instead for solutions that promote expectations about private property rights. At the very least, those scientific principles indicate that the traditional divisions among the different types of resources are artificial. The scientific community has long accepted the notion that ecosystems are highly complex and that different resources within an ecosystem are interrelated. Effective regulation of the resources thus requires a comprehensive approach.

Some improvements in the legislature's regulatory perspective admittedly have occurred in recent years. One of the best examples of an improved legislative perspective can be seen in the efforts of Maryland, Pennsylvania, Virginia, the District of Columbia and the federal government to preserve the Chesapeake Bay. These efforts reflect a clear departure from the ad hoc approach typical of past state environmental legislation. The accomplishments of these jurisdictions include the execution of a 1987 agreement to meet specific goals and timetables for restoring the Chesapeake


144. See generally L. Butler & M. Livingston, supra note 13, § 2.4 (discussing the tensions between scientific and lay perspectives on defining critical ecological zones); id. § 3.4 (discussing the need to consider natural forces affecting coastal areas in defining property rights); M. Sagoff, supra note 7 (discussing the conflicting demands imposed on ecologists). The recent debate over the regulation of striped bass, also known as rockfish, highlights the differences between the traditional and scientific approaches to resource regulation. See generally Goldsborough, Broad Issues Surface During Rockfish Debate, 14 CBF News, June 1989, No. 2, at 14 (published by the Chesapeake Bay Foundation) (discussing the traditional and scientific approaches to rockfish regulation).

145. Another example of an improved legislative perspective can be found in the Virginia legislature's recent reorganization of agencies dealing with environmental and resource problems. In 1986, the Virginia General Assembly placed most of these agencies under the direction of the newly created Secretary of Natural Resources. See Act of Apr. 7, 1986, ch. 492, 1986 Va. Acts 927 (presently codified at Va. Code Ann. §§ 2.1-51.7 to -51.9 (1987 & Supp. 1989)). A few agencies with regulatory responsibilities over natural resources are not under the authority of the Secretary of Natural Resources. The Department of Forestry, for example, is under the authority of the Secretary of Economic Development. See Va. Code Ann. § 2.1-51.40 (Supp. 1989). Further organizational changes occurred in 1989. See, e.g., id. §§ 10.1-2200 to -2214 (1989) (creating a Department of Historic Resources).
Bay. In addition, several of the jurisdictions have adopted comprehensive legislation to protect the Bay's watershed. Maryland, for example, enacted the Chesapeake Bay Critical Area Protection Program in 1984. Among other features, the Program designates an area 1000 feet landward from the tidal waters of the Chesapeake Bay and its tributaries, as well as the lands under those waters, as the initial target of critical area planning. In addition, the Program directs the promulgation of criteria to minimize the environmental impact of development in the target area.

Virginia adopted similar legislation in 1988. Entitled the Chesapeake Bay Preservation Act, the Virginia statute creates a Chesapeake Bay Local Assistance Board and directs that Board to develop criteria to assist localities in regulating land use and protecting water quality. The statute further requires localities in Tidewater Virginia to comply with the criteria by incorporating water quality measures into their comprehensive plans, zoning laws and subdivision ordinances. Local governments lying outside the Tidewater area are authorized, but not required, to do the same. Efforts like these to adopt a more comprehensive approach and to incorporate scientific principles into legal standards must continue in order for effective environmental regulation to occur.

These types of improved regulatory efforts are not without their problems, though. Tremendous variation exists, for example, among the states' Chesapeake Bay programs. The plans differ not

146. See 1987 BAY AGREEMENT, supra note 9. For a discussion of the jurisdictions' progress in meeting the goals and timetables, see id.
148. Id. § 8-1807(a).
149. Id. § 8-1808(b), (d). Demanding criteria have now been developed. See MD. ADMIN. CODE tit. 14, §§ 14.15.01 to 14.15.11 (1988); see also MARYLAND CHESAPEAKE BAY CRITICAL AREA COMM’N, A GUIDE TO THE CHESAPEAKE BAY CRITICAL AREA CRITERIA (May 1986). For a discussion of the Maryland regulations and statute, see Note, The Chesapeake Bay Preservation Act: The Problem with State Land Regulation of Interstate Resources, 31 WM. & MARY L. REV. 735, 753-55 (1990).
152. Id. § 10.1-2107.
153. Id. § 10.1-2109.
154. Id. § 10.1-2110.
only in scope and intensity, but also in emphasis.155 Overall, Maryland appears to have made the strongest commitment to Bay preservation. Its laws define a larger protected zone and impose more comprehensive requirements on development.156 In addition, the Maryland Program requires the state's executive branch to make a financial commitment to local governments to enable them to comply with the statute.157 In contrast, Virginia has had difficulty even developing regulations to implement its Chesapeake Bay Preservation Act. In September of 1989, the state finally adopted regulations that environmentalists and private rights advocates alike have criticized.158

Also problematic is the way a state sometimes undermines improvements in its regulatory efforts through subsequent action. Recent Virginia legislation demonstrates this point. In 1986, Virginia finally secured federal approval of its Coastal Resources Management Program (CRMP).159 Although the plan does not envision new legislative programs, it does link existing regulatory programs dealing with critical resources.160 One of the existing programs can be found in the state's Coastal Primary Sand Dune Protection Act.161 Approximately one year after the federal government approved Virginia's CRMP, the state amended the coastal dune statute to allow more construction of protective bulkheads by beachfront property owners. Because of the amendment, federal approval of Virginia's CRMP is now in jeopardy.162


156. See Note, supra note 149, at 753 (comparing the Maryland and Virginia programs).


159. See Va. CRMP, supra note 5.

160. See id. pt. I(A), (B).


162. See infra note 319. If the federal government rescinds Virginia's CRMP status, the state could lose millions in federal funds. Since approval of its program, Virginia has qualified for more than $6 million in funds. Richmond Times-Dispatch, Sept. 13, 1989, at B-2, col. 5.
The problem-oriented approach of a traditional legislature also can result in an inefficient and fragmented division of responsibility among environmental and resource management agencies. The Virginia experience provides ample evidence of this consequence. Consistent with its problem-oriented approach, the Virginia legislature has delegated regulatory responsibility for specific problems affecting a particular resource without regard for the relation of that resource to other resources. The Virginia Marine Resources Commission, for example, has responsibility for management of subaqueous lands,\textsuperscript{163} while the State Water Control Board regulates the quality of waters above those lands.\textsuperscript{164} At least some state officials believe that this division of responsibility leaves both agencies with insufficient jurisdiction to deal with complex situations. Apparently neither agency can handle effectively problems that affect the resource under its regulatory power but that arise from the resource regulated by the other agency. Furthermore, the regulators are not the only ones to bear the burdens of the inefficient and vague division of responsibility. Under the present division, members of the regulated community have discovered that they must deal with a number of agencies to obtain approval for proposed uses. Adoption of the Virginia CRMP has helped, because it requires networking among environmental agencies,\textsuperscript{165} but this effort is only a beginning.

Some have argued that significant improvements in the legislative approach to environmental regulation cannot occur because of the nature of the democratic process. As one model state official explained, the Virginia legislature has tended, until recently, to focus on environmental protection only when one of its members has had a background in environmental matters or when a special interest group has brought an environmental issue to the legislature's attention. To the extent that a special interest group provides the impetus for legislative action, the resulting enactments tend to create weak environmental programs with broad exemptions and lim-

\textsuperscript{164. See id. §§ 62.1-44.2 to -44.34:13.}
\textsuperscript{165. See Va. CRMP, supra note 5, pt. I(A), (B); see also Exec. Order No. 13 (86), at 4, reprinted in Va. CRMP, supra note 5, pt. II (requiring consistency with the CRMP); Letter from Frederick S. Fisher to Keith J. Buttleman 11-12 (May 30, 1986), reprinted in Va. CRMP, supra note 5, pt. II (discussing networking and conflict resolution).}
ited scope. Further, even though the state legislature now focuses on environmental matters with more regularity, the legislature is still too diverse, in the view of some skeptics, to reach an effective statewide consensus on environmental issues. A legislator's response to an environmental problem generally depends on the politics of the situation and not on the severity of the problem or the importance of a solution to environmental preservation. Also, given the large number of issues that a state legislature must consider in a very limited period of time, the democratic process understandably takes a long time. In the view of some critics, then, the legislative approach to environmental regulation generally cannot be improved with any degree of certainty; the political agenda of the legislators exerts too much control over the substance of environmental legislation for permanent improvements to occur.

These arguments restrict unnecessarily the role of government in environmental regulation. Coupled with decisions like *Shockoe Slip*, the arguments necessarily imply that the only branch of government suitable for environmental regulation is the executive branch. State agencies, however, must act within their statutory authority, and to the extent that they have not been given express or implied authority, the agencies are powerless to act. Furthermore, in many states the question of environmental regulation is not solely a matter of the current political agenda. As explained earlier, numerous state constitutions now proclaim environmental preservation to be a fundamental value. In those states, the political process has already made its policy choice in favor of environmental protection. Political influences that clearly undermine this choice arguably do not reflect the type of democratic decisionmaking needed to implement environmental policies adopted by the majority through the constitutional amendment process.

166. As an example, one Virginia official interviewed during the study pointed to the legislature's handling of the hydraulic clam dredging issue. See also Goldsborough, supra note 144 (discussing the effects of politics on fisheries management). The response of agency officials also may depend on the politics of the situation. See L. Butler & M. Livingston, supra note 13, § 4.4, at 93-94 (discussing the reaction of the Virginia Marine Resources Commission to the gill net controversy). For further discussion of the political influence problem in the context of local and state agency decisionmaking, see infra Section IV.

167. For a discussion of this decision, see supra notes 93-98 and accompanying text.

Given the constitutional stature of environmental protection in many states and the serious decline in the health of the nation's natural resources, a more aggressive and comprehensive legislative approach clearly is warranted. All branches of state government must accept the challenges of stewardship reflected in constitutional provisions like article XI, section 1, of the Virginia Constitution. Comprehensive environmental legislation would help to overcome the political pressures affecting environmental regulation. The legislatures of Virginia and other states admittedly have been prone to special interest groups and have tended to deal with environmental matters only when prompted by individual interests. But once a comprehensive regulatory framework is established, changes in the political philosophies of legislators will become less important. Only strong majoritarian changes will matter. Special interest groups surely will continue to use the state legislature as a battleground to attack established programs and to resist new ones. The likelihood of those attacks succeeding, however, should diminish once efforts to educate legislators about the scientific implications of development are improved. A better flow of information should help legislators to realize the full costs of unregulated use.

A stronger, more integrated regulatory framework also can help to minimize the adverse effects of politics and to overcome inefficiencies in the present legislative approach. To achieve such a framework, the legislature will need to continue to improve coordination and communication among state environmental agencies.

169. More comprehensive environmental legislation already exists in some states. See generally 1 LAW OF ENVIRONMENTAL PROTECTION, supra note 5, ch. 6 (discussing state environmental laws and programs). To the extent that environmental matters reflect national or even global problems, one state's efforts may not be adequate. Cf. Note, supra note 149 (discussing the need for regional regulation of interstate resources).

170. Through comprehensive legislation, improper or inappropriate political influences on environmental regulation can be overcome by grassroots democratic decisionmaking, thus meeting the need recognized by many for collective choice in the development of environmental policy. Cf. H. ROLSTON III, supra note 85, at 246-62 (discussing this need).

171. The adoption of a coastal resources management program, for example, helps to improve coordination and communication. See supra note 165 and accompanying text. Another way to improve coordination and consistency would be to implement state consistency reviews of regulatory plans to ensure compatibility with state policies and standards. Cf. CHESAPEAKE BAY LAND USE ROUNDTABLE, LAND USE INITIATIVES FOR TIDewater VIRginia 13 (Nov. 1987) [hereinafter ROUNDTABLE REPORT] (making such a suggestion).
As the Virginia experience demonstrates, those agencies sometimes do not appear to be fully informed about the regulatory efforts of other agencies. Nor do they always appear to understand where they fit into the state's overall scheme of environmental regulation. Policymaking agencies like Virginia's Council on the Environment are in a perfect position to improve coordination among state environmental agencies. State legislation already has given those agencies oversight responsibilities and typically has directed the agencies to coordinate administrative practices and develop uniform management systems.172 Once the financial and human resources of those agencies are improved, they should become more effective at fulfilling their duties.173 Improved coordination, in turn, will result in better communication and a more effective flow of information.174

B. Legislative Authority to Regulate

The second significant barrier raised by state environmental legislation involves present legislative authority to regulate. As the Virginia experience indicates, current environmental legislation can raise three basic concerns: (1) the inadequacy of delegations of

172. See supra notes 108-15 and accompanying text (discussing Virginia's COE). Although the identity of the policymaker varies from state to state, many jurisdictions appear to place policymaking responsibility with the agency or department having significant regulatory authority over natural resources. See, e.g., Md. Nat. Res. Code Ann. §§ 1-101, -204, -301 to -304 (1989). Like Virginia, the federal government has an agency with policymaking and oversight responsibilities. Under federal law, the Council on Environmental Quality advises the executive branch on environmental matters and coordinates federal compliance with the National Environmental Policy Act. See 1 Law of Environmental Protection, supra note 5, § 9.03.

173. Legislatures tend to allocate very limited resources to policymaking agencies having no actual regulatory authority. See, e.g., 1 Law of Environmental Protection, supra note 5, § 9.03[1]. Virginia recently has made some improvements in the financial and human resources of its COE. See supra note 116.

174. If Virginia is any indication, state governments desperately need to improve the flow of information among government officials. When information-gathering activities are pursued, the resulting data base or study tends to be filed away and forgotten. Establishing a central registration system could alleviate this problem. Under such a system, the state could take essential bibliographic information from studies, register it at a central place and then make it available to interested parties. Alternatively, the state could adopt a central filing and retrieval system. Under this alternative, the state would file studies in a central place and provide access through a central catalogue. For recent efforts to improve the flow of information, see supra note 116.
authority to state environmental agencies; (2) the ineffectiveness of legislation authorizing regulation by local governments; and (3) the incomplete and ineffective scope of state environmental legislation.

1. Delegations of authority to state environmental agencies

The Virginia experience suggests that the inadequacy of legislation authorizing natural resource regulation by state agencies can be one of the most critical barriers to effective environmental regulation. All model state officials commenting on the matter agreed that the regulatory authority of state environmental agencies was unclear and incomplete. Officials, for example, noted that legislation authorizing agency regulation tended to provide confusing jurisdictional standards. Statutory provisions often failed to define key terms and sometimes referred to several different agencies without clarifying the relationship among the agencies. In addition, an agency's regulatory powers were not always well-defined, and jurisdictional provisions either were difficult to interpret or reflected artificial bases for allocating regulatory authority. Further uncertainty resulted from conflicts between statutory provisions defining policy and those setting forth regulatory details for the appropriate agency.

Several model state officials also believed that the legislature unnecessarily restricted the regulatory authority of agencies. Some statutory guidelines, for instance, did not reflect scientifically relevant information and therefore could not effectively deal with actual regulatory situations. Statutory guidelines also tended to restrict the discretion of regulatory agencies to respond to actual environmental or resource problems. Furthermore, even when agencies had express regulatory authority, statutory provisions sometimes significantly limited the agencies' enforcement powers.

The concerns expressed about the delegation of regulatory authority to state environmental agencies are significant. The delegations tend to be incomplete and uncertain. A good example of such a delegation is section 62.1-3 of the Virginia Code, which sets forth the regulatory authority of the Virginia Marine Resources Commission (VMRC) over parties using state-owned submerged
lands.\textsuperscript{175} With some exceptions, section 62.1-3 authorizes the VMRC to issue permits for reasonable uses of state-owned beds.\textsuperscript{176} In deciding whether to issue a permit, the VMRC must consider the provisions of article XI, section 1, of the Virginia Constitution, as well as such factors as the effect of a proposed project on other permissible uses of state beds and waters, and on living resources, wetlands, water quality and nearby properties.\textsuperscript{177} Under section 62.1-3, however, the VMRC does not have the power to regulate the use of waters above the beds.\textsuperscript{178} It can only regulate nonexempt uses of state-owned beds. Because uses of state waters can adversely affect submerged beds, this limitation on the VMRC’s section 62.1-3 regulatory power can result in incomplete and ineffective regulatory solutions.

The language of section 62.1-3 suggests three distinct sources of regulatory power: a proprietary basis, a police power basis and a trust or stewardship basis. The proprietary basis arises from the language in section 62.1-3 limiting the VMRC’s permit authority to “beds of the bays and ocean, rivers, streams, creeks, which are the

\textsuperscript{175} Another example of an inadequate delegation involves Virginia’s recently created Chesapeake Bay Local Assistance Board (Board). Virginia’s Chesapeake Bay Preservation Act directs the Board to develop criteria to protect water quality in Tidewater Virginia. VA. CODE ANN. § 10.1-2107 (1989). Pursuant to its statutory charge, the Board considered whether to adopt proposed septic tank restrictions. After considerable public opposition to the restrictions, the Board decided against adoption, apparently concluding that the restrictions raised issues within the domain of the health department. See Campbell, \textit{Senate Group Reviews Rules on Bay Quality}, Richmond Times-Dispatch, Aug. 18, 1989, at B-1, col. 1; Latané III, \textit{Building Industry Wins 2nd Look at Plan to Save Chesapeake Bay}, Richmond Times-Dispatch, Mar. 23, 1989, at A-1, col. 4. This example demonstrates the difficulty of changing traditional perspectives on environmental regulation. Even when a jurisdiction has made a serious commitment to comprehensive regulation, traditional perspectives may affect how the commitment is implemented.

The problem of vague legislative delegations also exists in the federal government. \textit{See} 1 C. Koch, Jr., \textit{supra} note 121, § 1.22, at 41 (1985).

\textsuperscript{176} VA. CODE ANN. § 62.1-3 (Supp. 1989). Some exceptions include the erection of dams, the construction of navigation and flood-control projects by appropriate federal agencies, and the placement of private piers for noncommercial purposes by riparian owners. \textit{Id}.

\textsuperscript{177} \textit{Id}.

\textsuperscript{178} \textit{See id}. Nor does any other state agency have direct responsibility for protecting certain public uses of state waters. \textit{See} VA. MARINE RESOURCES COMM’N, EVALUATION OF ROYALTY ASSESSMENTS FOR AUTHORIZED ENCROACHMENT IN, ON OR OVER STATE-OWNED SUBMERGED LANDS 4 (Agency Service Agreement Project, Apr. 1985) [hereinafter 1985 VMRC REPORT].
property of the Commonwealth."\textsuperscript{179} This language clarifies that the VMRC's regulatory authority under section 62.1-3 extends only to state-owned beds. The police power basis results from language declaring unauthorized uses of state-owned beds to be unlawful.\textsuperscript{180} The language indicates that, absent express statutory authorization, the VMRC has the power to decide which private uses of state-owned beds should be allowed. Such a power to choose between potentially conflicting uses is one of the accepted goals of the police power.\textsuperscript{181} Finally, the trust or stewardship basis exists because of the section's reference to article XI, section 1, of the Virginia Constitution. That provision declares that "it shall be the policy of the Commonwealth to conserve, develop, and utilize its natural resources, its public lands, and its historical sites and buildings" and "to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth."\textsuperscript{182} Both the language and the history of article XI, section 1, suggest that the provision incorporates the concept of stewardship, or the notion that the government should preserve and protect natural resources for present and future generations.\textsuperscript{183} By directing the VMRC to consider article XI, section 1, in making its permit decisions, section 62.1-3 offers the stewardship concept as a possible ground for denial of a permit.

Despite the broad jurisdictional bases suggested by the language of section 62.1-3,\textsuperscript{184} the VMRC apparently has adopted a more limited interpretation of its regulatory powers under the section. As

\textsuperscript{179} VA. CODE ANN. § 62.1-3 (Supp. 1989).
\textsuperscript{180} See id.
\textsuperscript{182} VA. CONST. art. XI, § 1.
\textsuperscript{183} Some legal scholars have interpreted article XI, § 1, as doing even more—declaring a public trust over public lands and waters. See Howard, supra note 73, at 219; see also supra note 92 and accompanying text (discussing the public trust interpretation). Even though the Virginia courts have not accepted the public trust argument, see Robb v. Shockoe Slip Found., 228 Va. 678, 324 S.E.2d 674 (1985), the legislature has, in the past, indicated its acceptance of the stewardship interpretation. See Act of Apr. 10, 1972, ch. 774, § 10-177, 1972 Va. Acts 1133, 1134. For further discussion of the stewardship and public trust concepts, see infra notes 270-75, 285-306 and accompanying text.
\textsuperscript{184} The legislative history of § 62.1-3 supports the broad interpretation of the section's jurisdictional bases. See Royalty Report, supra note 65, at 6-8.
one agency document indicates, the VMRC's construction focuses on the proprietary language of section 62.1-3. Specifically, the documentary evidence suggests that the VMRC interprets the language linking section 62.1-3 jurisdiction to state-owned beds as defining the primary, if not sole, jurisdictional basis of the section. Some VMRC officials apparently believe that the ownership language limits the VMRC's powers to proprietary responsibilities and excludes purely regulatory functions allowed under the police power. The restrictive view taken by these officials demonstrates the degree of confusion that can result from even a relatively uncomplicated delegation of regulatory authority. Such confusion not only makes it more difficult for agencies to carry out their statutory responsibilities; it also increases the risk that agency action will be challenged. Effective environmental regulation requires clearer and more complete delegations of authority.

In addition to the vagueness problem, statutory delegations to environmental agencies unnecessarily restrict agency powers. Regulatory details provided by legislatures traditionally have ignored scientific knowledge about the underlying regulatory problem. This failure restricts an agency's ability to deal effectively with a problem. Regulatory guidelines that ignore prevailing scientific knowledge do not allow the agency to cope with the physical facts contributing to the environmental problem. In addition, delegations of regulatory authority sometimes limit the power of the agency to act. Although this type of limitation may be appropr-


186. This observation is based, in part, on confidential communications. Proprietary responsibilities would include the powers and obligations normally associated with land ownership. Purely regulatory functions would involve governmental efforts to regulate owners and users of land irrespective of government's ownership of the affected land.


188. As an example, one model state official pointed to Va. Code Ann. § 28.1-23 (Supp. 1989), which prevents the VMRC from adopting regulations that conflict with statutory law. Apparently, the official interpreted § 28.1-23 as including direct and indirect conflicts. Under this interpretation, a conflict would arise whenever regulations are not authorized by or otherwise consistent with express statutory provisions. Cf. S.C. Code Ann. § 48-39-200 (Law. Co-op. 1987) (restricting regulatory authority under comprehensive coastal legislation to critical areas in the coastal zone "[n]otwithstanding any other provisions" in the statute).
ate under certain defined circumstances, it can result in serious regulatory problems if worded too broadly. Such a restriction would prevent an agency from dealing with problems that are related to the subject of the statute but that are not covered by specific statutory provisions. Instead of dealing with such problems as they arise, the agency must wait at least until the next legislative session for appropriate legislation. By that time, however, a problem could have reached the crisis level. Finally, even when regulation is allowed, the enforcement powers of the regulatory agency may be too limited.\textsuperscript{189} More agency discretion and power are needed before effective regulation can occur.

When delegations are both vague and unnecessarily restrictive, regulators face a particularly troubling situation. Legislative use of vague delegations makes practical sense. Besides lacking the necessary expertise to provide more details, legislators also have little time to devote to developing specific guidelines for each legislative program.\textsuperscript{189} Vague statutory delegations also remove difficult political questions from the legislative arena. As one commentator explained, "[V]ague statutes permit . . . [the legislature] to duck political responsibility. By writing broad statutes and leaving the hard details to agencies, . . . [the legislature] avoids political controversy."\textsuperscript{191} But, though legislative use of vague delegations may have merit in some situations,\textsuperscript{192} the use of delegations that are restrictive as well as vague does not. By coupling vague delegations with restrictive and inflexible regulatory powers, state legislatures have made an empty political choice, for then no government body has both the power and the responsibility to define the "hard details" missing in the regulatory programs. If a state legislature chooses to use vague delegations, then it must give the responsible agency sufficient flexibility to develop appropriate regulatory details. Without such flexibility, effective environmental regulation will be difficult, if not impossible.

\textsuperscript{189} Model state officials gave numerous examples of this problem. Many of the examples focused on the inability of state agencies to impose sanctions through the administrative process. For further discussion of this problem, see infra note 338 and accompanying text.\textsuperscript{190} C. Koch, Jr., supra note 121, § 1.22, at 41 (1985).

\textsuperscript{191} Id.

\textsuperscript{192} See generally Mashaw, Prodelegation: Why Administrators Should Make Political Decisions, 1 J.L. Econ. & Organization 81 (1985) (discussing the delegation debate).
2. The regulatory authority of local governments

The Virginia experience also suggests that legislation authorizing regulation by local governments has serious inadequacies. Numerous model state officials identified the uncertain and restrictive nature of that legislation as a significant barrier to effective environmental regulation. Because the enabling legislation for local governments defines their regulatory authority in vague terms, many local officials either believe that their regulatory authority is too limited or are uncertain about its scope.

Although the uncertain and restrictive nature of enabling legislation would by itself pose a serious barrier, these inadequacies are further magnified by a judicial rule of construction still applicable in the majority of jurisdictions. Known as Dillon's Rule, the judicial doctrine provides that local governments can only exercise those powers conferred expressly or by necessary implication. Judge Dillon developed the rule limiting the powers of local governments because he doubted their competence to promote the public good. Besides viewing municipalities as poor managers, Dillon believed that they posed twin risks. Not only were local governments inherently susceptible to domination by private economic power; they also posed a serious threat of encroachment to private interests. Concerned about abuse by both democratic rule and private economic power, Dillon advocated strict state control of local governments, enforced through judicial supervision, as a solution to the risks posed by local governments.

As the Virginia experience demonstrates, Dillon's Rule significantly limits the regulatory efforts of localities. Because of the rule, many Virginia localities feel compelled to resolve the uncertainties of their enabling legislation against the exercise of regulatory


power and thus hesitate to engage in land use regulation. Those that take the risk and adopt land use measures to deal with serious resource problems typically find themselves facing litigation. Thus, when coupled with uncertain and restrictive enabling legislation, continued adherence to Dillon's Rule prevents localities from adopting innovative and effective regulatory measures.¹⁹⁵

Other jurisdictions have experienced similar frustration with Dillon's Rule.¹⁹⁶ The Supreme Court of Utah, for example, recently decried the paralysis felt at the local government level because of Dillon's Rule.¹⁹⁷ The court noted that the rule "causes local officials to doubt their power, and it stops local governmental programs from developing fully."¹⁹⁸ Because of these concerns, the court decided to abandon Dillon's Rule of strict construction. Other state courts have not been as understanding, actually contributing to the problems of localities through unpredictable interpretations of enabling legislation. As one observer of the Missouri judiciary explained, local governments not only have a difficult time defining their express powers; they also face the added problem of predicting whether a power was granted at all.¹⁹⁹ Strict construction of municipal powers under Dillon's Rule thus cripples the effectiveness of local governments throughout the country.

The concerns expressed about the inadequacy of local enabling legislation thus are significant. Even when enabling legislation is

¹⁹⁵. Furthermore, even when innovative techniques are authorized by statute, the enabling legislation tends to be limited in scope. See, e.g., VA. CODE ANN. §§ 15.1-491(a), -491.2 (1989) (effectively authorizing one proffering system for Northern Virginia and the Eastern Shore and another more limited version for the rest of the state); see also M. Mashaw, VIRGINIA COUNTY SUPERVISORS' MANUAL Table 3.1, at 29 (4th ed. rev. 1982) (identifying the forms of government used by Virginia counties as of 1981). See generally id. ch. 3 (discussing the organizational forms of county government in Virginia). For a comprehensive study of the Virginia judiciary's reaction to local land use decisions, see L. BeVier & D. Brint, JUDICIAL REVIEW OF LOCAL LAND USE DECISIONS IN VIRGINIA (Institute of Government, University of Virginia, 1981).

¹⁹⁶. See generally Frug, supra note 194, at 1113-17 (discussing some of the academic challenges to Dillon's Rule).


¹⁹⁸. Id. at 1119.

fairly clear, doubts about its scope can arise. In jurisdictions following Dillon's Rule, local governments typically resolve those doubts against the exercise of regulatory authority. When the enabling legislation is not clear, an even greater number of doubts arise. Unless the locality is willing to risk litigation, the locality will resolve doubts against the exercise of power. Attempts to settle the doubts in any other way can take a considerable amount of time. Issues involving the regulatory powers of local governments generally require resolution by the legislature or the judiciary, both of which have lengthy dispute resolution processes. Dillon's Rule thus magnifies the problems caused by uncertain or incomplete enabling legislation.

To the extent that local governments are critical to effective resource management, lawmakers must reexamine and either abandon or liberalize Dillon's Rule. The doctrine may have been

200. One commentator advises that "[i]f there is reasonable doubt as to whether or not authority has been granted, the question is likely to be construed against" the local government. M. Mashaw, supra note 195, at 10; see also 1 J. Dillon, supra note 193, § 89, at 145 ("Any fair, reasonable doubt concerning the existence of power is resolved by the courts against the [municipal] corporation, and the power is denied.") (footnote omitted); O. Reynolds, supra note 193, § 52, at 149-50 ("Under this rule of interpretation, it is often said that doubts or ambiguities in statutes or home-rule documents should be resolved against the existence of any municipal power.") (footnote omitted). For examples of the types of litigation that localities can expect to face, see cases cited supra in notes 33-34.

201. One Virginia locality's efforts to adopt a legally valid program for the transfer of development rights demonstrates the need to seek a legislative or judicial solution. That locality sought advice from the state attorney general about the validity of the program. The resulting opinion made it clear that express legislative authority was needed and that only a court could resolve the validity of the program as applied in a specific set of circumstances. See 1985-1986 Op. Va. Att'y Gen. 112. See generally Spring, Transferable Development Rights (TDR) and Density Transfer Programs: Loudoun County's Vision for Filling the Development Envelope and Preserving Open-Space, REAL PROPERTY SECTION NEWSL., May 1989, at 11 (Virginia State Bar) (discussing the county's continuing efforts to adopt a TDR program). Advisory opinions from the judiciary do not appear to be more effective. See generally Kennedy, Advisory Opinions: Cautions About Non-Judicial Undertakings, 23 U. Rich. L. Rev. 173 (1989) (discussing advisory opinions and expressing concern about an unrestricted advisory opinion process).

202. The Model Land Development Code, while increasing state participation in land use regulation, continues to recognize the importance of local governments to land use matters. MODEL LAND CODE, supra note 3, § 1-101(1), § 7-101 commentary. Some commentators dispute the usefulness of local government involvement in land use regulation. See, e.g., Delugó, Local Land Use Controls: An Idea Whose Time has Passed, 36 Me. L. Rev. 261, 261-65 (1984). For further discussion of the role of local governments in environmental regulation, see infra Section IVC.
consistent with prior attitudes about property rights and police power regulation that developed years ago when resources were abundant. The rule, however, does not function well in a world of increased development and dwindling supplies of natural resources. The effect of the rule is to force localities to wait for clear and express legislative direction before dealing with pressing resource problems. The legislative process, however, is too time-consuming to respond to the wide array of resource problems that constantly arise within a state.

In addition to handicapping environmental regulation by local governments, Dillon's Rule is not as effective a constraint on abusive local government practices as first envisioned. Instead of checking overly aggressive local governments, the rule prevents responsible localities from dealing with legitimate resource concerns. Overly aggressive local governments would be more likely than nonaggressive governments to resolve doubts about enabling legislation in favor of government action. The attitudes prevalent among officials of an aggressive local government would cause the officials to overestimate the legitimacy of their actions and to have false optimism about the risk of litigation. Nonaggressive local governments, on the other hand, would tend to avoid the risk of litigation, erring on the side of inaction when doubts surround the nature or extent of their regulatory authority. Today abusive local governments are more effectively controlled by the political process.

Changes to Dillon's Rule could occur directly or indirectly. If the consensus of the legislature is that Dillon's Rule should not be saved, then a constitutional amendment could abolish the rule and confer on local governments all powers not denied them by the state constitution, by their charter or by laws enacted by the state legislature. The legislature then could define by statute those


204. See generally id. at 58-60 (defining risk-averse behavior).

205. See generally Frug, supra note 194, at 1120-49 (discussing the possibility of granting cities real power).

powers denied to localities.207 Several states have taken this approach. Iowa, for example, has added a constitutional provision stating that the "rule or proposition of law that a municipal corporation possesses and can exercise only those powers granted in express words is not a part of the law of this state."208 Alternatively, if a constitutional amendment has not been added, a state's judiciary could abolish Dillon's Rule, which, after all, is a creation of the courts, and substitute a more liberal rule of construction. At least one state court has taken this approach, declaring the rule to be "antithetical to effective and efficient local and state government."209 If the judiciary prefers not to face the question of abolishing or even liberalizing Dillon's Rule and upsetting years of legal tradition, then the state legislature could either abolish the rule through statutory amendment or leave it intact and indirectly avoid its effect through clearer and more detailed enabling legislation.210 Even under a restrictive interpretation of Dillon's Rule, local governments can exercise powers expressly given to them. In recent years, for example, some state legislatures have begun the practice of including model ordinances in environmental legisla-

207. For an example of such a statute, see id. at 229 n.35. If Dillon's Rule is abolished, the legislature would need to decide whether to treat all localities the same. One Virginia official argued that only those localities that have shown they are comfortable with natural resource regulation should benefit from the abolition of Dillon's Rule.


209. State v. Hutchinson, 624 P.2d 1116, 1126 (Utah 1980). Other state courts have also addressed the question of whether to broaden their judicial interpretation of enabling legislation. See, e.g., Liberati v. Bristol Bay Borough, 584 P.2d 1115 (Alaska 1978) (concluding that the legislative intent of the constitutional convention was to overrule Dillon's Rule of narrow interpretation); Tipco Corp. v. City of Billings, 197 Mont. 339, 642 P.2d 1074 (1982) (recognizing that the 1972 Constitution of Montana expanded the powers of local governments and thus necessitated a broader construction of municipal power).

210. To the extent that Dillon's Rule is based on the constitutional concept of delegated powers, the last two alternatives may be problematic. See generally D. MANDELKER, supra note 21, § 6.02 (discussing the delegation problem in the context of land use controls). But cf. Frug, supra note 194 (arguing that municipal powerlessness is properly explained as a slowly evolving political choice).
tion. By continuing this practice of providing model ordinances, state legislatures can clarify and, where appropriate, increase the regulatory powers of localities without relinquishing any traditional control over local governments.

Abolishing or modifying Dillon's Rule to give localities more flexibility in dealing with resource problems, however, will not cure all the problems surrounding local enabling legislation. Putting aside the adverse consequences of Dillon's Rule, the fact remains that local enabling legislation is, at times, restrictive and vague. For example, although an individual locality may have some power to regulate and protect water supplies within its jurisdiction, it traditionally cannot protect the supplies from harmful activities occurring outside of its jurisdiction. It traditionally cannot protect the supplies from harmful activities occurring outside of its jurisdiction. Because water resources are not distributed according to political boundaries, changes to Dillon's Rule still would not enable an individual locality to deal effectively with serious and widespread pollution problems.


213. Virginia localities, for example, generally do not have extraterritorial powers. Virginia law sometimes allows localities to form regional water and sewer authorities. See id. §§ 15.1-1239 to -1270 (1989). Many localities, however, have not taken advantage of this legislation. Their hesitance may be due, at least in part, to a sense of distrust among localities and the fear that their interests would be sacrificed for the interests of other localities in the authority. But cf. Yanggen & Amrhein, Groundwater Quality Regulation: Existing Governmental Authority and Recommended Roles, 14 Colum. J. Envtl. L. 1, 57-58 (1989) (discussing extraterritorial land use controls that Wisconsin localities may adopt to protect against groundwater contamination).

214. Because all types of water resources are part of one hydrologic cycle, activities that pollute a water supply in one locality eventually will affect water resources in neighboring localities. See generally Butler, supra note 143, at 468-79 (discussing the role of environmental values in water allocation systems). Given this fact, many proponents of water law reform advocate a centralized regulatory system. Although many of their arguments are persuasive, an effective system does not need to concentrate all regulatory power in one central state agency. See generally id. at 446-47 (discussing the issue of a centralized system). To
some instances, localities may be able to piece together regulatory authority from several different legislative acts, but without related legislation even that option is not available. The restrictive nature of local enabling legislation generally does not allow innovative regulatory measures and sometimes even prevents willing parties from engaging in effective resource management. Thus, even if Dillon's Rule were abolished, a clearer and more comprehensive approach to local enabling legislation still would be necessary.

3. The scope of state environmental legislation

Finally, the Virginia experience suggests that the incomplete and ineffective scope of environmental legislation can present serious regulatory problems. Among other problems, model state officials noted that Virginia's environmental statutes simply have too many exemptions to be effective. Examples identified by Virginia officials include the exemptions to the state's Erosion and Sediment Control Law, subaqueous lands permitting process and Coastal Primary Sand Dune Protection Act. Because exempt uses can affect environmental quality as much as nonexempt uses, the existence of numerous or broad exemptions can seriously impair the regulatory effect of environmental programs.

the extent that localities retain regulatory authority over water resources, the problem of restrictive and vague enabling legislation will require consideration.

215. For an example of how this can be done, see Spring, supra note 201, at 13-14 (discussing how the Virginia Open-Space Land Act can be used in conjunction with zoning legislation to create a density transfer program). See also 1985-1986 Op. Va. Att'y Gen. 112, 114-15 (discussing how the Open-Space Land Act validates certain police power interests that would be served by a proposed Transfer of Development Rights plan, but concluding that express enabling legislation is needed for the plan).


217. See VA. CODE ANN. § 62.1-3 (Supp. 1989) (exempting various uses from the permit requirements).

218. See id. § 62.1-13.25 (§ 3 of suggested zoning ordinance, which exempts various uses from the permit requirement).

219. Many of the activities exempted from the subaqueous lands permitting process, for example, can have significant environmental consequences. See 1985 VMRC Report, supra note 178, at 12-13 (discussing the need to eliminate most, if not all, statutory exemptions).
Serious omissions in coverage also make Virginia's environmental legislation incomplete and ineffective. As with the exemptions, model state officials considered these omissions to be significant barriers to effective environmental regulation. As one official explained, the gaps in coverage help to encourage an uncooperative atmosphere among agencies and thus result in uncoordinated regulation and turf-guarding. Because the scope of natural resource legislation is restricted and incomplete, environmental agencies tend to take a narrow view of their responsibilities and to ignore the regulatory programs of other agencies unless a statute directs otherwise.

Virginia officials identified numerous examples of gaps in the coverage of environmental legislation. Many of these examples focused on vital or irreplaceable resources such as air, water and historical sites, or on environmentally sensitive resources such as wetlands and coastal dunes. Concerning water resources, for example, one official observed that Virginia does not have an effective administrative process for distributing and managing water resources or for settling disputes among users or right holders.\(^\text{220}\) As in many eastern states, common law doctrines still control the allocation of interests in most of Virginia's water resources.\(^\text{221}\) As a consequence, conflicting users must resort to the judicial system to resolve their disputes.\(^\text{222}\) With respect to air resources, another official noted


\(^{222}\) The uncertainty of the common law water allocation system is one of the primary arguments made in support of reform efforts. That uncertainty arises from some of the common law standards and from the ad hoc nature of the judiciary's dispute resolution system. See generally Butler, supra note 136, at 125-37 (discussing some of the reasons for the common law's uncertainty).
that Virginia law omitted an important type of air from regulation: indoor air. That Virginia law omitted an important type of air from regulation: indoor air.223 Others commented on the inadequate scope of historic resource legislation224 and water quality legislation,225 as well as on the overall failure of state environmental laws to consider the relationship between land use and the environment.226

Critical area legislation was a popular topic of concern. Model state officials stressed repeatedly the urgency of the situation, noting that many environmentally sensitive resources either are not protected by legislation or are covered by statutes that are not well-tailored to the unique characteristics of those resources. Virginia's Wetlands Act provides a good example of the first situation. The Act protects wetlands in tidal areas, but omits nontidal wetlands from its coverage.227 Although nontidal wetlands also are vital and environmentally sensitive resources,228 recent attempts to include them within the scope of the Wetlands Act have failed.229


224. One interviewee, for example, noted that the legislation protecting historic resources did not apply to privately owned resources unless the landowner consented. The interviewee also criticized the definition of historic district as unclear and incomplete. Cf. id. §§ 10.1-2200 to -2216 (setting forth historic resource legislation).

225. A recent report, for instance, observed that Virginia's statutory law does not effectively protect state waters from pollution and sedimentation caused by "land development activities and continuing urban uses." Roundtable Report, supra note 171, at 20.

226. For an example of this type of failure, see supra note 225. By now the link between land use and the environment is well-documented. See generally L. Butler & M. Livingston, supra note 13, § 3.2 (discussing the relationship between land use and the geological characteristics of the Chesapeake Bay and other coastal resources of Virginia), § 3.3 (discussing the relationship between land use and the chemical characteristics of the Chesapeake Bay); N. Robinson, supra note 74, ch. 2 (discussing the relationship between development and basic ecosystems); The Poisoned Well, supra note 1, chs. 24, 31 (discussing the relationship between land use and groundwater quality).


Virginia's barrier islands provide a good example of the second situation. Because barrier islands typically have vegetated wetlands and dunes, the state's wetlands and coastal dune statutes would seem adequate to protect the islands. Neither act, however, is sufficiently tailored to the unique characteristics of barrier islands to provide adequate protection. In contrast to other areas having wetlands and dunes, barrier islands typically have two additional ecological zones that appear with the wetlands and dunes in a relatively confined area. Further, unlike other coastal lands, barrier islands frequently experience significant and drastic changes in their physical and ecological characteristics. Thus, even if the state's wetlands and dune statutes normally were effective, they would not fit the volatile and unique situation present on barrier islands.

Finally, model state officials thought that Virginia's environmental legislation generally was too disorganized to be effective. As several of them noted, environmental statutes are scattered throughout the Virginia Code and appear in various titles without any apparent organizational scheme. This lack of organization understandably encourages each agency to focus on its own separate statutory provisions without giving much thought to related programs. According to the officials, only one state agency has a mandate broad enough to encourage integration and coordination of


230. See generally L. Butler & M. Livingston, supra note 13, § 2.4, at 42-43 (discussing the ecological zones of a barrier island); Note, supra note 66, at 378-80 (discussing the physiography of barrier islands).

231. See L. Butler & M. Livingston, supra note 13, § 2.4, at 42-43.

232. See Note, supra note 66, at 378-80. Virginia localities having barrier islands within their jurisdiction have recognized the volatile nature of barrier islands as well as their importance to the mainland. See, e.g., Accomack County, Va., Amendment to Zoning Ordinance preamble, art. 6A (Apr. 15, 1987).
environmental laws. Yet that agency, the Council on the Environment, has no specific regulatory authority.233

Similar problems in scope exist in other jurisdictions. As in Virginia, the resource management and environmental laws of other states tend to contain far too many exemptions and omissions. Water permit legislation in eastern states, for example, typically contains numerous exemptions that undermine the effectiveness of the legislation.234 Furthermore, many jurisdictions fail to provide adequate protection for wetlands, sometimes omitting nontidal wetlands from their legislation and usually allowing some harmful activities to remain unregulated.235 Other omissions in scope also are pervasive.236 Virginia thus is not alone in facing the problem of inadequate environmental coverage.

The exemptions and omissions often found in environmental legislation result in large part from the political process. These exemptions and gaps in coverage typically result from attempts to make environmental legislation politically more acceptable.237 To the extent that omissions and exemptions reflect compromises needed to secure passage, curing the problem of incomplete and

233. For a general description of the COE's responsibilities, see supra notes 108-15 and accompanying text.
234. See Ausness, supra note 138, at 577-79.
237. The consent requirement incorporated into various water improvement statutes probably resulted from such a compromise. See Va. Code Ann. §§ 15.1-37, -323.1, -875, -1250.1 (1989) (giving localities the right to approve or disapprove of certain water projects). The more limited scope of the original version of Virginia's Wetlands Act also may have resulted from such attempts. Cf. L. Butler & M. Livingston, supra note 13, § 2.2, at 31 n.53 (discussing the original legislation). For another example, see infra notes 258-59 and accompanying text.
ineffective legislation will be very difficult. Such an attempt not only would have to deal with the substantive matters omitted from the present legislation; it also would have to identify and address the attitudes of those opposing expanded environmental regulation.\(^{238}\)

Despite the added problem of political opposition, efforts nevertheless must be taken to develop a more comprehensive, coordinated management program for natural resources. At a minimum, effective environmental regulation requires state legislatures to fill the more serious holes in coverage. The realities of the political system admittedly may necessitate weaker legislation than environmentalists would advocate. But to reflect the interests of all state citizens, environmental legislation must attempt to incorporate and balance a variety of concerns, including economic, environmental and scenic values; a democratic consensus is necessary if environmental regulation is to be societally and therefore ethically acceptable.\(^{239}\)

Development of more comprehensive and better coordinated environmental laws should help to alleviate the problem of turf-guarding that now exists among many environmental agencies. As Virginia's experience indicates, an uncoordinated and incomplete regulatory structure tends to produce an uncooperative atmosphere among environmental agencies.\(^{240}\) Instead of taking a holistic view, agencies in such a regulatory structure tend to focus only on their responsibilities and, as a result, become overly protective of their own programs. Improved coordination should create more positive feelings among agencies.

Many state governments have already taken some steps in this direction. Virginia and other coastal states, for example, have adopted federally approved programs to improve regulation of

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238. For a discussion of some of those attitudes, see supra notes 56-64 and accompanying text.

239. See generally Butler, supra note 143 (discussing the need to incorporate efficiency, fairness and environmental concerns into water reform legislation); H. Rolston III, supra note 85, at 242-62 (discussing the need for democratic decisionmaking in developing environmental policy).

240. During the investigative process, Virginia officials manifested this problem in a number of ways, including expressions of disdain, distrust and outright hostility towards other governmental entities.
coastal resources. Although the content of the programs varies from state to state, federal law requires all approved programs to "describe the organizational structure that will be used to implement and administer the management program." In addition, approved programs must provide for plan coordination and designate a single state agency with appropriate legal, fiscal and administrative capabilities to receive and administer program grants. Similar progress has occurred in other limited resource management contexts.

States could improve coordination through more effective use of policymaking and oversight agencies like Virginia's Council on the Environment. Because of their broad mandate, these agencies must take a comprehensive perspective in developing and evaluating environmental policy. Even when such an agency does not have regulatory authority for any specific environmental program, the agency still could easily expand its role in coordinating state environmental programs.

241. The federal Coastal Zone Management Act was enacted in 1972 to "preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations." 16 U.S.C. § 1452(1) (1988). Under the Act, states are encouraged to adopt coastal resource management programs that meet minimum federal standards. Id. § 1454. See generally 4 P. Rohan, supra note 4, ch. 26 (discussing coastal zone management); W. Want, supra note 5, ch. 13 (discussing state coastal laws); Symposium on Coastal Zone Management, 25 Nat. Resources J. 1 (1985).


243. Id. § 923.56.

244. Id. § 923.47(b). Virginia's Coastal Resources Management Program generally meets the coordination and administration requirements through provisions that explain the expected relationship among existing environmental agencies and require networking or communication among those agencies. See supra notes 160, 165 and accompanying text. Maryland's program is more ambitious, calling for new administrative structures and procedures. See generally Office of Coastal Zone Mgmt., Nat'l Oceanic and Atmospheric Admin., U.S. Dep't of Commerce, State of Maryland Coastal Management Program and Draft Environmental Impact Statement 16-17, 37-70, 391-404 (1978). Among other innovations, Maryland's program creates a project evaluation process for evaluating the consistency of individual projects with the state program and a program review process for evaluating the consistency of state laws with the program. See id. at 60-68. In addition, the program provides for formalization of goals, objectives and policies through an executive order and memoranda of understanding reached between the program's lead agency and other government units. Id. at 57-58.

245. For other examples of improved coordination in the environmental regulation area, see infra notes 346-48, 366, 372 and accompanying text.

246. Under Virginia's Coastal Resources Management Program, for example, the COE now is responsible for "administering the details of the program and acting as 'lead agency'
One serious gap in coverage concerns environmentally sensitive resources. Scientific studies have consistently indicated that critical environmental areas need more demanding regulation. Despite these studies, states have, for the most part, failed to develop comprehensive regulatory programs for critical areas. When states enact critical area legislation, it can be very limited in effect, providing primarily for the identification of critical areas and the development of possible land use criteria. Furthermore, although all states have adopted environmental laws for specific types of critical areas, these laws also can be restrictive. Besides being incomplete in scope, specific critical areas legislation often fails to reflect an integrated approach.

The inadequacy of critical area legislation is due at least in part to the reluctance of legislators to regulate land use in environmentally sensitive areas. The reaction of the Virginia General Assembly to its own critical area legislation best demonstrates this reluctance. In 1972, the General Assembly enacted legislation directing the Division of State Planning and Community Affairs to identify and delineate the state's critical environmental areas and to develop criteria to govern land use in those areas. Pursuant to its
statutory charge, the Division studied Virginia's critical environmental areas. In addition to developing criteria to identify those areas, the Division delineated 134 critical environmental areas within the state and recommended the enactment of legislation to protect those areas.252 The legislature not only rejected the recommendations, but also repealed the legislation.253 As one Virginia official explained, broad critical area legislation simply has no political appeal; legislation focusing on specific types of critical areas is much easier to accept politically.

Improving regulation of critical areas thus will require changing established attitudes about land use regulation.254 In most states, this process of change should start by focusing on the environmental provisions found in state constitutions. Legislators and regulators in these states need to be reminded that the policy of environmental protection is expressed in their constitutions. To the extent that the policy has acquired constitutional stature, it should have meaning independent of judicial or statutory law. At the very least, legislators should expressly recognize this fact in more environmental legislation. In states having environmental provisions in their constitutions, environmental legislation often fails to identify the constitutional provision as either a motivating force or a source of authority.255 Express recognition would remind localities, agen-
cies and courts of the legal importance of environmental preservation.

Assuming legislative attitudes can be changed, efforts to improve regulation of critical areas should focus on adopting and implementing clearer and more demanding environmental policies. Traditionally, many environmental laws either have inadequate policy provisions or fail to contain any at all. When a policy provision is included, it may be inadequate because it is only a general statement that the agency may consider in its deliberations or because the provision, though comprehensive, lacks an effective enforcement mechanism. Even if an environmental agency were willing to enforce such a policy provision, private parties affected by enforcement would probably challenge the action as improper. To a conservative regulatory agency, the threat of challenge may be enough to convince the agency not to enforce its policy provisions.

Both types of environmental laws can be demonstrated easily. The original version of Virginia's Environmental Quality Act, for example, was nothing more than a general policy statement of the need for environmental quality. To secure passage of the Act, proponents apparently had to eliminate the provisions for implementation and enforcement. Today's version of the Act is even more diluted; now the core policy provisions have been abridged or repealed. In contrast, Virginia's subaqueous lands legislation fails to contain any statement of policy, though the legislation does identify factors that should guide agency deliberations. Among the list of factors is a reference to the provisions of article XI, section 256.


257. Private landowners' challenges to Virginia's intensified submerged bed program demonstrate this point. For a discussion of these challenges, see Royalty Report, supra note 65.

258. For a discussion of the original version, see supra notes 101-07 and accompanying text. The original bill contained detailed provisions establishing a Department of Natural Resources that would have had extensive duties and powers. See S.B. 365, Va. Gen. Assembly, Reg. Sess. (1972) (available from Virginia General Assembly, Legislative Information Office).

1, of the Virginia Constitution. The effect of the provisions, or of any other factor, is not detailed. At best, the environmental policies of the subaqueous lands regulatory program remain hidden.

Neither type of statute effectively advances environmental preservation. For regulation of critical areas to be effective, the content and scope of critical area legislation must improve. General or comprehensive critical area legislation, for instance, must do more than simply commit to the policy of environmental protection; implementation and enforcement are also necessary. At present, even when environmental laws contain strong policy statements, the policies often do not prevent private use and development. Despite the existence of tough policies, the result of the regulatory process appears to be the same in many cases; permits are issued and development occurs even in environmentally fragile areas. Specific critical area legislation also cannot maximize its effectiveness without clearly expressed policy statements to guide regulators. At the very least, the statutes should contain policy provisions that focus on the particular resource being regulated and that reflect overriding environmental goals. Even if comprehensive critical area legislation is not adopted, states can enhance the effectiveness of specific critical area legislation by developing a consolidated and uniform set of goals, objectives and policies for state environmental programs. Until the gap between policy and practice is closed, environmental protection will remain just a good idea.

Finally, some of the more traditional states could improve the effectiveness of their environmental and natural resource laws by reorganizing them. A quick comparison of the basic organizational framework of the environmental laws of North Carolina and Virginia demonstrates the value of reorganization. In North Carolina, the legislature has created four primary subdivisions of laws relat-

261. The Cedar Island controversy provides an excellent example of this point. See generally Note, supra note 66 (discussing development of this and other barrier islands). The development controversies that are now arising in South Carolina in the aftermath of Hurricane Hugo may, in future years, provide another excellent example. See Richmond Times-Dispatch, Sept. 25, 1989, at A-1, col. 4 (discussing how Hugo has revived the issue of coastal protection).
262. Maryland already has recognized the need for such consolidation and uniformity. See supra note 244.
ing to the environment and natural resources: the conservation and development laws of chapter 113, the pollution control and environment laws of chapters 113A and 143, and the energy laws of chapter 113B. All four subdivisions reflect a comprehensive approach and a clear organizational structure. In Virginia, by contrast, statutory provisions affecting natural resources and the environment appear in a wide range of Code titles, including titles 2.1, 3.1, 10.1, 15.1, 21, 28.1, 29.1, 32.1, 41.1, 45.1, 58.1 and 62.1. Although some of these titles obviously deal with environmental matters, other titles focus primarily on nonenvironmental topics. Furthermore, even in the obvious cases, it is difficult to tell how each statute relates to other environmental provisions. This lack of organization and coherence understandably encourages agencies to take a narrow perspective and to view their regulatory programs in isolation. When environmental laws are scattered throughout a state code in an apparently unrelated manner, the laws portray an incoherent, limited and weak-hearted regulatory effort. The narrow perspective, in turn, encourages the agencies to guard their regulatory programs. A major reorganization of these environmental laws would help to remove some barriers to effective natural resource regulation.


264. Titles obviously dealing with environmental matters include, among others, title 10.1 (which deals with conservation), title 28.1 (which focuses on fisheries) and title 62.1 (which regulates water resources). Examples of titles dealing primarily with nonenvironmental topics include title 15.1 (which focuses on local governments), title 32.1 (which concerns public health) and title 58.1 (which involves taxation). The General Assembly recently improved the organization of Virginia's environmental laws by consolidating many of them into title 10.1, the conservation title. See Act of Apr. 20, 1988, ch. 891, 1988 Va. Acts 1874.

265. One organizational approach used in some states is to categorize environmental legislation, first, according to the type of resource being regulated (e.g., natural or historic), second, according to the type of use affected by the legislation (e.g., mining, forestry, agriculture, or fishing) and, third, according to the agency being given the regulatory authority (e.g., Virginia Marine Resources Commission).
III. Judicial Perspectives on Land Use and Environmental Regulation

A third type of problem within the legal system arises from judicial treatment of land use and environmental issues. As the model state study suggests, judicial efforts to deal with environmental matters can create serious barriers to effective regulation. Two principal factors appear to contribute to the problem of ineffective judicial principles: the courts' restrictive approach to land use and environmental regulation, and the lack of clarity and certainty in their principles.

A. Restrictive Approach

Model state officials provided several good examples of the judiciary's restrictive approach to environmental matters. One example concerned the judiciary's interpretation of the land use powers of local governments. As several officials noted, Virginia courts have narrowly defined the regulatory powers of local governments as set forth in their charters and enabling legislation. One official attributed this restrictive approach at least in part to the sloppiness of local government officials and noted that the willingness of the courts to uphold land use ordinances has increased as localities have become more careful in drafting and implementing the ordinances. Others attributed the restrictive approach primarily to the judiciary's rigid adherence to Dillon's Rule. As explained earlier, the rule limits a locality's powers to the powers conferred on it expressly or by necessary implication.\footnote{266. See supra notes 193-94 and accompanying text.} Because of the courts' stringent interpretation of Dillon's Rule, local governments find themselves increasingly unable to deal effectively with resource problems. Rigid application of the rule, for example, prevents localities from using impact fees to force developers to pay for the costs or impacts of their development on public resources and services. Under traditional case law, localities generally cannot require developers to pay for improvements to public services and
facilities—not even if their development contributed to the need for the improvements.\textsuperscript{267}

Model state officials also identified the courts' interpretation of article XI, section 1, of the Virginia Constitution as another example of the judiciary's restrictive approach. As one official observed, article XI, section 1, should be the ultimate barrier to the destruction of natural and historic resources. Yet when presented with the opportunity to recognize and promote that barrier, the Virginia Supreme Court chose to interpret the section restrictively, concluding that it merely presented a policy statement and was not self-executing.\textsuperscript{268} In explaining its decision, the court stressed that the section failed to lay down rules for enforcing its provisions and thus "beg[ged] statutory definition."\textsuperscript{269} State agencies thus do not have to consider the policies of article XI, section 1, in their regu-

\begin{footnotesize}
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\item See Cupp v. Board of Supervisors, 227 Va. 580, 318 S.E.2d 407 (1984) (holding that a locality could not require the construction of a service road as a condition to a favorable zoning ruling); Hylton Enterprises, Inc. v. Board of Supervisors, 220 Va. 435, 258 S.E.2d 577 (1979) (holding that under pre-1978 statutory law a county did not have any express or implied authority to require a developer to improve state roads abutting its development as a prerequisite to approval of its subdivision plans); Board of Supervisors v. Rowe, 216 Va. 128, 216 S.E.2d 199 (1975) (concluding that a county did not have the power to enact a zoning ordinance requiring private landowners, as a condition precedent to development, to dedicate a portion of their land to the county for the purpose of constructing roads and sidewalks when the need for the public facilities was not substantially generated by the proposed development). In the past, when a Virginia locality has tried to require a cash payment from a developer instead of a mandatory dedication of facilities constructed by the developer, lower courts have invalidated the fee requirement as an impermissible tax. See S. ROBIN, ZONING AND SUBDIVISION LAW IN VIRGINIA 49-50 (1980). Recently, however, a circuit court upheld a locality's power to assess a water impact fee. Tidewater Builders Ass'n v. City of Virginia Beach, No. 86-LA-1828 (Virginia Beach, Va. Cir. Ct. Apr. 15, 1988) (validating the fee, as a matter of law, under the due process, equal protection and taxation clauses and upholding the locality's authority to impose the water impact fee under Dillon's Rule), appeal filed, No. 900451 (Apr. 12, 1990). See generally L. BeVIER & D. Brion, supra note 195, at 126-27 (discussing zoning and the orderly provision of public services). For a broader discussion of the legal issues raised by laws conditioning project approval on contributions by developers, see Connors & High, The Expanding Circle of Exactions: From Dedication to Linkage, 50 LAW & CONTEMP. PROBS. 69 (1987).

Virginia's statutory law now authorizes some localities to require payment of impact fees for road improvements. See VA. CODE ANN. §§ 15.1-498.1 to -498.10 (1989) (effective July 1, 1990). In addition, statutory law allows developers to offer to make certain improvements to the infrastructure. See id. §§ 15.1-491(a), -491.2. The voluntary offering of improvements is known as proffering.

\item See Robb v. Shockoe Slip Found., 228 Va. 678, 324 S.E.2d 674 (1985).

\item Id. at 682, 324 S.E.2d at 677. For further discussion of the decision, see supra notes 93-98 and accompanying text.
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latory process absent legislation to the contrary. Despite the constitutional stature of the environmental protection value, the state court has preferred to let the legislature decide how that value should bind regulatory agencies.

The Virginia judiciary's interpretation of the public trust doctrine provided a third example of its restrictive approach to land use and environmental matters. Developed in large part by the United States Supreme Court, the public trust doctrine basically provides that each state holds certain resources, principally navigable waters and submerged lands, in trust for its people. Although many other state courts have eagerly accepted and even expanded the federal version of the doctrine, the Virginia Supreme Court has given inconsistent signals about the doctrine's viability under Virginia law. While some decisions of the Virginia Supreme Court are receptive to the doctrine, the court's most significant interpretation of the doctrine reflects a basic dislike for the doctrine and a clear reluctance to accept it. One official attributed the unclear status of the doctrine under Virginia law largely to the fact that development and resource exploitation have influenced the thinking of lawmakers. Because of the state's past abundance of resources and because of the need and continuing desirability of economic growth, lawmakers have tended to overlook the public trust doctrine as a tool for achieving environmental preservation.

The restrictive approach displayed by the Virginia judiciary also exists in a number of other jurisdictions. Unless an issue falls clearly within one of the traditional areas of judicial interven-

270. A fourth example concerned judicial enforcement of remedial provisions in environmental laws. One Virginia official noted the difficulty of implementing environmental laws and attributed it in part to the courts' reluctance to impose statutory remedies. For further discussion of this point, see infra note 339 and accompanying text.

271. See generally L. BUTLER & M. LIVINGSTON, supra note 13, ch. 5 (discussing the development of the public trust doctrine).

272. For a discussion of one jurisdiction's more progressive approach, see id. § 5.2.C.

273. See generally id. § 5.2.B (discussing the evolution of the public trust doctrine in Virginia).

274. See, e.g., Taylor v. Commonwealth, 102 Va. 759, 47 S.E. 875 (1904).

275. See Commonwealth v. City of Newport News, 158 Va. 521, 164 S.E. 689 (1932). This opinion was rendered almost 40 years before the adoption of article XI, § 1, of the Virginia Constitution. See L. BUTLER & M. LIVINGSTON, supra note 13, § 5.2, at 139-40. See generally id. § 5.2.B (discussing the development of the public trust doctrine in Virginia).
many courts follow a practice of judicial restraint. Because the policy of environmental preservation does not fall within one of those areas, the policy generally must receive legislative attention before these courts will promote the policy. Traditional state courts generally hesitate to develop new common law principles or even to expand established judicial doctrine to achieve environmental preservation. Further, even when legislative direction exists, the courts still may exercise considerable restraint in interpreting statutory intent.

The court decisions of other jurisdictions provide numerous examples of the judiciary's restrictive perspective in the environmental area. Even when legislative intervention exists, for example, many courts continue to adhere to traditional attitudes more appropriate in a pre-reform era. Some of the decisions involving takings challenges to wetlands laws demonstrate this point. Despite clear scientific evidence of the harm caused by the destruction of wetlands, some courts view wetlands laws primarily as restrictions on private property rights and not as safeguards against the environmental harm caused by private land uses. Although legislative reform admittedly cannot override the constitutional protection accorded property rights, judicial definition of the rights should reflect advances in scientific understandings. Furthermore, if a jurisdiction has incorporated the policy of environmental protection in its constitution, judicial definition of property rights should include an accommodation of the public interests reflected


277. See generally COUNCIL ON ENVTL. QUALITY, OUR NATION'S WETLANDS: AN INTERAGENCY TASK FORCE REPORT 19-47 (1978) (discussing wetlands' functions and uses); W. WANT, supra note 5, § 2.01[3] (discussing the valuable functions performed by wetlands).

278. See State v. Johnson, 265 A.2d 711, 716 (Me. 1970) (focusing on the loss of commercial use by private landowners and the existence of a public benefit instead of the harm caused by the landowners' alteration of wetlands); Morris County Land Improvement Co. v. Township of Parsippany-Troy Hills, 40 N.J. 539, 543-44, 193 A.2d 232, 235, 239-42 (1963) (recognizing the value of wetlands but focusing on the loss of reasonable use and the existence of a public benefit). The point is not to argue for the "public harm" takings test, but rather to stress the judiciary's adherence to traditional views.
in the constitutional provisions on the environment. Despite the existence of the constitutional provisions and the advances in scientific knowledge, some courts still hesitate to promote the public interest in environmental protection, preferring instead to defer almost unconditionally to private property rights.279

Many courts are equally, if not more, restrictive in their application of common law doctrine to environmental issues. For example, although most courts are not as reluctant as Virginia's to recognize or apply the public trust doctrine, some are similarly restrictive in their interpretation of the doctrine.280 These courts typically recognize the doctrine in certain traditional contexts, but generally refuse to extend the doctrine to new situations. In a 1982 decision, for instance, the Michigan Supreme Court refused to change the common law concepts of public trust and navigability to meet the public need for access to recreational waters.281 Either an extension of the public trust doctrine to non-navigable waters or an expansion of the navigability concept to include recreational boating would have resulted in greater public access to inland lakes. The court refused to modify the common law concepts, deciding instead that the legislature, as "a majoritarian body," was the proper forum for change.282

Such judicial restraint reflects a basic misunderstanding of the nature of environmental preservation, especially its relationship to land use. Although scientists have long recognized this relationship, courts traditionally have separated the two, treating land use regulation as nothing more than traditional zoning and environmental regulation simply as an attempt to protect certain common resources from their users.283 This approach tends to view environmental regulation of privately owned lands as impermissible land

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279. Cf. D. Mandelker, supra note 21, § 1.12, at 11 (discussing a strict construction rule traditionally applied by courts to avoid derogation of property rights). For further discussion of the private rights orientation, see supra notes 56-71 and accompanying text.

280. Another example is the judiciary's treatment of common law principles governing rights in water resources. Despite scientific advances and changing needs, many courts in the eastern United States refuse to modify those principles. See Butler, supra note 136, at 105-56.


282. Id. at 84-86, 327 N.W.2d at 852-53.

283. See supra notes 138, 226 and accompanying text; see also N. Robinson, supra note 74, § 5.02 (distinguishing between environmental controls and zoning).
use regulation and as improper government infringement of private property rights. The traditional judicial perspective to land use and environmental regulation ignores the detrimental effect that users of privately owned lands have on common resources, especially on living resources dependent on those lands. The traditional approach thus tends to restrict environmental regulation to common or public resources.

Other factors also suggest the need to reevaluate the judiciary's restrictive approach to environmental regulation. To the extent that environmental quality is a constitutional value, judicial restraint courts should rethink their hesitance to promote that value absent clear legislative direction. Even if a court is not willing to promote the value aggressively, it nevertheless should recognize the legitimating function of the constitutional provision. Once environmental protection achieves constitutional stature, the courts have a clear basis for liberally interpreting environmental legislation. For example, when an environmental statute is susceptible to two reasonable interpretations, one narrow and the other broad, a court generally could rely on the constitutional policy of environmental protection to choose the broader reading. Absent clear precedent, any other result would suggest improper judicial decision-making; the court would be promoting its subjective preferences over an objective expression of the majoritarian will.\footnote{See generally B. Ackerman, Private Property and the Constitution (1977) (defining and discussing different perspectives to legal analysis and judicial interpretation); R. Epstein, supra note 30, at 19-31 (discussing judicial review and constitutional interpretation); Michelman, Property as a Constitutional Right, 38 Wash. & Lee L. Rev. 1097, 1099-1101 (1981) (discussing methods of constitutional interpretation and sources of external criteria).} The constitutional stature of environmental preservation would similarly support greater judicial activism in interpreting common law doctrine. Instead of following traditional judicial principles, a court now would have a basis for modifying or expanding common law doctrine.

The public trust doctrine, in particular, could serve as an effective tool for judicial implementation of environmental policies in state constitutions. Even the courts that have hesitated to embrace the doctrine would accept the proposition that a state constitution

284. See generally B. Ackerman, Private Property and the Constitution (1977) (defining and discussing different perspectives to legal analysis and judicial interpretation); R. Epstein, supra note 30, at 19-31 (discussing judicial review and constitutional interpretation); Michelman, Property as a Constitutional Right, 38 Wash. & Lee L. Rev. 1097, 1099-1101 (1981) (discussing methods of constitutional interpretation and sources of external criteria).
can provide a basis for recognizing a public trust. Some environmental provisions in state constitutions explicitly refer to the existence of a public trust, while others do not. Unless an explicit reference exists, judicial restraint courts would be inclined to reject arguments that the environmental provisions recognize a public trust. Such a position ignores an important aspect of the public trust doctrine and of constitutional environmental provisions generally. Even under a conservative reading, the public trust concept and the environmental provisions are closely linked through their overriding philosophical commitment to the policy of stewardship—that is, to the notion that government should act as a steward of natural and historic resources for present and future generations. For analytical purposes, the courts need to distinguish between two related but different types of public interests: the more traditional "property" interest, which gives the public a right to use and occupy certain defined resources, typically publicly owned, and the interest of stewardship, which recognizes as legitimate public expectations of regulating even privately held re-

285. See, e.g., Commonwealth v. City of Newport News, 158 Va. 521, 543-45, 164 S.E. 689, 695-96 (1932); see also 2 A. Howard, supra note 21, at 1153-54 (discussing how the Virginia Constitution now provides such a basis).

286. See supra notes 74-81 and accompanying text.

287. In its recent decision in Robb v. Shockoe Slip Found., 228 Va. 678, 324 S.E.2d 674 (1985), the Virginia Supreme Court appeared to agree with this position. By concluding that Virginia's environmental provision was nonbinding, the court suggested that a trust relationship, with all its accompanying duties and obligations, did not exist. See id. at 682-83, 324 S.E.2d at 676-77. The court's position conflicts with the legislative history of article XI, § 1, which indicates that the drafters intended for the section to recognize a public trust over state lands and waters. See supra note 92 and accompanying text.

288. For a comprehensive discussion of the stewardship concept, see Symposium: Stewardship of Land and Natural Resources, 1986 U. Ill. L. Rev. 301.

289. The more traditional property interest arguably arises from two related but distinct public rights theories: the public trust doctrine and the commons concept. See generally L. Butler & M. Livingston, supra note 13, chs. 5, 6 (discussing the development of both theories). Of the two, the commons concept is the theory with the clearer link to property law. In contrast to the trust doctrine, the commons concept developed informally within the traditional property structure. See generally id. § 6.3 (comparing the two theories). But while traditional public trust law technically may not label the public interest in using trust resources as a property right, the public's use right has many of the characteristics of a property interest. See generally id. §§ 5.1, 5.3 (discussing the theoretical origins of the public trust doctrine).
sources for environmental purposes. At the very least, environmental provisions in state constitutions involve the second type of public interest. Because that type of interest also is an inherent part of the public trust doctrine, state courts can use the doctrine as a source of guidelines even if the courts choose not to recognize the first type of public interest under the environmental provisions of their state constitution. Judicial restraint courts have unnecessarily interpreted the public trust doctrine as involving only the more traditional property interest.

For a number of reasons, the public trust doctrine provides a useful tool for environmental regulation. As a nonstatic concept, the doctrine can change substantively to reflect new social values and public perceptions. Those opposing flexible use of the doctrine typically maintain that judicial modification of legal principles to reflect changing times is improper.

290. In some jurisdictions, the courts have already distinguished between the two types of public interests and have recognized the stewardship basis of the public trust doctrine. See, e.g., Orion Corp. v. State, 109 Wash. 2d 621, 640-41, 747 P.2d 1062, 1072-73 (1987), cert. denied, 486 U.S. 1022 (1988).

The stewardship interest also appears to have arisen in large part from two public rights theories—the public trust doctrine and the commons concept. See supra note 289. Of the two, the trust doctrine appears to reflect a stronger philosophical commitment. See generally L. BUTLER & M. LIVINGSTON, supra note 13, §§ 5.1.A, 5.3 (discussing the philosophical basis of the trust doctrine); id. § 6.3 (comparing the perspectives of the public trust doctrine and the commons concept).

291. For a discussion of some of those guidelines, see infra notes 302-06 and accompanying text. See also Howard, supra note 73, at 218-24 (explaining how the trust doctrine could be used to interpret article XI, § 1, of the Virginia Constitution); Johnson, Public Trust Protection for Stream Flows and Lake Levels, 14 U.C. DAVIS L. REV. 233 (1980) (suggesting guidelines for using the public trust doctrine to protect instream flow).


293. At the core of this opposition is a fundamental concern for the role of the judiciary in a democratic political system. See Sax, supra note 292, at 558-61 (discussing this concern and arguing that one function of the courts in the public trust area is democratization); see also Bott v. Natural Resources Comm'n, 415 Mich. 45, 84-86, 327 N.W.2d 838, 852-53 (1982) (discussing the benefits of legislative solutions over judicial responses). Strong advocates of judicial restraint also are concerned about the effect of judicial changes on well-established reliance and property interests. See id. at 77-78, 327 N.W.2d at 849 (discussing the need for strict observance of stare decisis when “past decisions establish ‘rules of property’ that induce extensive reliance”). For a discussion of some of the arguments typically made to sup-
ence to this position may have merit where statutory principles are concerned, it is troubling when applied to common law principles. If a court originally had the power to develop a doctrine, then surely it also must have the power to modify the doctrine as social needs and values change. To rule otherwise would mean that, absent legislative action, society would be locked into rules of law developed hundreds of years ago. Within certain constraints, the judiciary should have the power to reinterpret common law principles—especially when those principles were developed in part to ratify social practices, as the public trust doctrine was.

In addition to providing a flexible tool for environmental regulation, the public trust doctrine also helps to shift decisions affecting public trust resources to the legislature. Because the doctrine prevents the legislature from totally abdicating its public trust responsibilities, it forces the legislature to make choices regarding allocation and use. The trust concept similarly compels administrative officials to consider the implications of government action on public trust resources. Under the common law version of the

294. In changing common law rules, for example, courts would have to observe basic constitutional precepts reflected in the due process and takings clauses. See, e.g., Bott v. Natural Resources Comm'n, 415 Mich. 45, 80-84, 327 N.W.2d 838, 850-52 (1982) (considering whether a proposed change in law would affect a taking in violation of constitutional principles). For a discussion of the relationship between the public trust doctrine and the takings clause, see L. Butler & M. Livingston, supra note 13, § 5.2.A.

295. The United States Supreme Court, in particular, focused on social expectations in developing the trust doctrine. For a discussion of some of the key public trust opinions of the Court, see L. Butler & M. Livingston, supra note 13, § 5.2.A.

296. See 2 A. Howard, supra note 21, at 1155. But once the legislature exercises its decisionmaking power over trust resources, the public trust doctrine also may be used to validate appropriate decisions. See id.


298. See 2 A. Howard, supra note 21, at 1155-56. For an example of a case requiring government agencies to consider the public trust in making resource allocation decisions, see National Audubon Soc'y v. Superior Court of Alpine County, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983).
doctrine, the government cannot take action that substantially impairs the public trust interest.\textsuperscript{299} Although this "substantial impairment" standard historically has not been very difficult to meet,\textsuperscript{300} it at least makes the government accountable for its actions with respect to public trust resources.

Greater judicial reliance on the public trust doctrine admittedly will mean that without legislative intervention the state courts will have to define some basic standards to govern disputes involving public trust resources.\textsuperscript{301} In the past, the judiciaries and legislatures of some states have not eagerly embraced the doctrine. Thus, if the doctrine is to be used as a judicial tool for implementing the environmental policies of state constitutions and statutes, those judiciaries will have to break new ground and develop some principles of trust management. To the extent that the courts believe in judicial restraint, this prospect will be troubling.

State courts can ease their fears by realizing that, even within the framework of judicial restraint, they still can rely on the public trust doctrine to further environmental preservation. The United States Supreme Court has established the concept of stewardship through a public trust as one of the traditional areas of judicial intervention.\textsuperscript{302} Furthermore, judicial interpretation of the doctrine can proceed in a principled way.\textsuperscript{303} External criteria for developing

\textsuperscript{299} Illinois Cent. R.R., 146 U.S. at 435.

\textsuperscript{300} As a general matter, the courts only find a violation of the substantial impairment standard when the government either affirmatively abdicates or totally fails to consider its trust responsibilities. See, e.g., id. at 387 (finding a violation when government action totally abdicated trust responsibilities); National Audubon Soc'y v. Superior Court of Alpine County, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983) (finding a violation when government officials failed to recognize their trust responsibilities); cf. Bottineau County Water Resource Dist. v. North Dakota Wildlife Soc'y, 424 N.W.2d 894, 903 (N.D. 1988) (noting that the trust doctrine is intended only to control and not prevent development).

\textsuperscript{301} Of course, the best solution is for the legislature to take the initiative and define some of these standards. Some state legislatures have already taken this step. See, e.g., Wis. STAT. ANN. §§ 30.01-.99 (West 1989) (regulating use of navigable waters and submerged beds); id. §§ 33.001-.37 (providing for public inland lake protection and rehabilitation pursuant to the state's public trust duties).

\textsuperscript{302} See generally L. BUTLER & M. LIVINGSTON, supra note 13, § 5.2.A (discussing the Court's activist role in developing the trust doctrine).

\textsuperscript{303} See generally supra notes 117-30 and accompanying text (discussing how the judiciary can interpret general environmental provisions of state constitutions in a principled manner).
substantive principles of trust management are available to the courts. For example, the decisions of the United States Supreme Court reveal several basic principles.\textsuperscript{304} One principle is that a state's total abdication of public trust responsibilities is impermissible. A second principle is that government action affecting trust resources cannot substantially impair the public trust. Additional criteria can be found in the decisions of other jurisdictions. A 1983 Idaho decision, for instance, sets forth a two-part test for determining the validity of a government grant of public trust property.\textsuperscript{305} The test first focuses on the conveyed resources, asking whether the government grant of the resources still further navigation, commerce, or other public trust purposes. The test next examines the remaining public trust resources to determine whether the grant substantially impairs the public interest in those resources.\textsuperscript{306}

Objective criteria for defining the appropriate standard and method of judicial review also exist. For instance, in the Idaho decision mentioned above, the court indicated that decisions by unelected officials were subject to "closer scrutiny" than decisions by the legislature.\textsuperscript{307} Alternatively, state courts could borrow from administrative law principles to define the appropriate standard of review.\textsuperscript{308} Regardless of their choice, the courts could also use evidentiary principles as a procedural tool for reviewing disputes involving trust resources. To the extent that the disputes implicate environmental values found in state constitutions, the courts could promote the constitutional values by redefining the burden of

\textsuperscript{304} See supra notes 297-300 and accompanying text. For further discussion of how the courts can develop substantive principles of trust management, see 2 A. Howard, supra note 21, at 1154-56.


\textsuperscript{306} Kootenai, 105 Idaho at 626, 671 P.2d at 1089. In addition to the two-part substantive test, the Idaho court imposed certain procedural requirements on those regulating public trust resources. Before trust resources could be alienated or impaired, regulators had to meet basic notice and hearing requirements. Id. at 628, 671 P.2d at 1091.

\textsuperscript{307} Id. at 628, 671 P.2d at 1091.

\textsuperscript{308} See supra notes 121-22 and accompanying text (discussing some of those principles).
proof and by resolving doubts in favor of those values when they conflict with nonconstitutional values.\textsuperscript{309}

Although many of these criteria are not controlling precedent, state courts look routinely to outside sources for guidance in other areas of the law.\textsuperscript{310} To the extent that environmental quality is now a constitutional value, a state judiciary arguably has an even more compelling reason to look to outside guidance in the environmental area. The constitutional stature of environmental preservation should have some effect on the conscientious lawmaker.\textsuperscript{311} In the context of the courts, the effect should include implementing some of the ideas suggested above. Though the ideas may not result in a comprehensive solution, they at least enable the courts to promote the environmental values of state constitutions even when legislative direction is absent.

B. Lack of Clarity and Certainty

Model state officials also provided several good examples of problems caused by the lack of clarity and certainty in judicial principles. Once again, one example concerned the regulatory powers of local governments. In addition to its restrictive approach, the Virginia judiciary also has failed to provide clear guidance to local governments about the validity of many of their land use measures. One official, for instance, pointed out that case law does not clearly define the legal consequences of a locality's comprehensive plan.\textsuperscript{312} To complicate matters further, state judges at the lower court level sometimes conflict with one another in their approaches to resolving land use disputes. As one regulator explained, some judges take a liberal view of the police power and tend to hold private landowners subject to all reasonable zoning

\textsuperscript{309} Accord Krier, \textit{supra} note 117, at 37.

\textsuperscript{310} Indeed, in examining the public trust doctrine outside the context of article XI, the Virginia Supreme Court has displayed a willingness to consider the decisions of other jurisdictions. \textit{See}, \textit{e.g.}, City of Hampton v. Watson, 119 Va. 95, 100-02, 89 S.E. 81, 82-83 (1916) (relying on decisions of New Jersey and New York).

\textsuperscript{311} For further discussion of this point, see \textit{supra} notes 117-32 and accompanying text.

\textsuperscript{312} Of particular concern is the judiciary's failure to define the relationship between the comprehensive plan and land use decisions. \textit{See generally} L. BeVIER \& D. BRION, \textit{supra} note 195, at 125-26 (discussing this concern under Virginia law); D. MANDELKER, \textit{supra} note 21, §§ 3.14-.24 (discussing the relationship between the comprehensive plan and land use controls).
laws; others, in contrast, take the perspective of the private property owner and start with the proposition that a property owner can do virtually anything he wants with his land. A second example of the judiciary's uncertain approach concerns its takings jurisprudence. As one official observed, takings jurisprudence fails to provide a clear or certain test for distinguishing between protected property rights and legitimate exercises of the police power. Takings case law, whether of state or federal origin, is simply too unclear to be a useful predictor of the validity of many regulatory measures.313

As the earlier discussion of takings case law demonstrates, the concerns expressed by model state officials about the vague nature of judicial land use principles are valid in other jurisdictions as well. Because of the ad hoc approach of the judicial process, common law principles are inherently uncertain. Courts must address legal issues as they arise in individual disputes and thus cannot plan the development of the common law. Nor can the courts provide comprehensive solutions that go beyond the scope of the dispute before them. By their nature, then, judicial decisions have low predictive value.314

The limited utility of the judicial decisionmaking process, however, is not necessarily a negative point. Incremental decisionmaking, especially when used in new or complex areas of concern, has its advantages. Because judicial decisions are limited in scope, they tend to minimize the risk of an erroneous decision. The less comprehensive a legal solution is, the lower the expected loss of a poor decision. Comprehensive decisionmaking, by contrast, magnifies

313. See supra notes 19-55 and accompanying text. Another example of unclear judicial principles concerns Virginia's tidal resources. Although Virginia began in 1780 to adopt statutory principles to define the boundary between private and public rights in tidal lands, the Virginia Supreme Court has yet to provide a clear interpretation of those principles. See generally L. BUTLER & M. LIVINGSTON, supra note 13, ch. 19 (discussing public and private rights in Virginia's shorelands). This uncertainty understandably has created some misconceptions about tidal and coastal law among regulators. For instance, one official inaccurately described the Virginia legislature as giving away the intertidal zone (land between the low and high water marks) in 1819. See generally id. § 19.2 (discussing the effect of the 1819 boundary legislation).

314. See generally B. CARDOZO, THE NATURE OF THE JUDICIAL PROCESS (1925) (discussing how courts decide cases and other aspects of the judicial process).
the effects of an incorrect choice. As the solution becomes broader in scope, the effects of an erroneous decision increase. 315

State courts, however, can improve the effectiveness of their decisions. Whether they are part of statutory or common law, legal rules should serve a predictive function. Unless parties can predict with relative certainty and reasonable frequency the validity of their actions under the law, they will either ignore or resist the law, or they will retreat from their activities. Effective judicial decisions not only should address the precise legal issue before them; they also should provide some guidance for future disputes. Well-reasoned and well-explained opinions will provide useful insights into how future disputes will be resolved. Overly concise, poorly reasoned, or ambiguous opinions, on the other hand, will have little, if any, predictive value. 316

IV. STATE ADMINISTRATIVE PROCESS AND STRUCTURE

A fourth type of problem within the legal system concerns the administrative process and structure of environmental programs. As the responses of model state officials suggest, that process and structure can pose significant barriers to effective resource management and environmental regulation. Three basic aspects of the administrative process raise serious concerns: (1) the implementation and enforcement phase; (2) administrative procedures; and (3) the local rule component of the regulatory framework.

A. The Implementation and Enforcement Phase

The first area of concern is the implementation and enforcement of environmental laws. The model state inquiry demonstrates that

315. For further discussion of the comprehensive versus incremental debate, see A. Bonfield, supra note 7, § 1.1.2; Butler, supra note 143, at 451-58; Butler, supra note 9, at 785-93. See generally Wellington, supra note 117 (discussing the risks and the values of judicial review).

the process can be vague, complex and ineffective. Agencies responsible for implementing environmental laws typically face the difficult task of deciding how to balance the often competing values of environmental protection and economic development with little guidance from lawmakers.\footnote{Virginia's constitutional and statutory provisions adopt such a balancing approach. See, e.g., Va. Const. art. XI, § 1; Va. Code Ann. § 10.1-2100 (1989); id. § 62.1-13.1 (1987); id. § 62.1-11 (Supp. 1989); cf. supra note 99 and accompanying text (discussing the relationship between the two goals).} Further, even when an effective balance is reached, enforcement efforts sometimes prove to be inadequate.\footnote{A recent study of land use initiatives in Tidewater Virginia supports this point. The study finds that, despite the existence of an appropriate legal and administrative framework, efforts to control point source pollution in the Bay still suffer from compliance and enforcement problems. Roundtable Report, supra note 171, at 3. The long history of pollution problems at the Avtex Fibers plant in Front Royal, Virginia, also provides a poignant example of this point. Although the State Water Control Board (SWCB) has documented over 2000 violations of pollution and worker safety regulations, Avtex did not cease operations until November 1989. Chesapeake Rivers Report, supra note 229, at 4. In January 1989, the state obtained a consent decree from Avtex for violations of wastewater discharge pollution limits. Final Consent Decree, Commonwealth v. Avtex Fibers, Inc., Ch. No. N-7156-3 (Richmond, Va. Cir. Ct. Jan. 17, 1989). The SWCB subsequently discovered violations not only of the consent decree, but also of other pollution standards. In November 1989, the SWCB revoked Avtex's permit to discharge wastewater into the Shenandoah River and obtained a favorable court ruling imposing fines and penalties. Commonwealth v. Avtex Fibers, Ch. No. N-8233 (Richmond, Va. Cir. Ct. Nov. 22, 1989); Final Order Issued to Avtex Fibers Front Royal, Inc., Va. State Water Control Board (Nov. 9, 1989).} Regulatory agencies inconsistently apply environmental standards in issuing permits\footnote{One example of such inconsistency exists in Virginia's sand dune protection program. According to a 1987 study, "[L]ack of consistency in applying permit guidelines and the legislature's willingness to grant exemptions . . . have led to confusion and criticism" of the Virginia program. Roundtable Report, supra note 171, at 19. The legislature recently demonstrated this willingness when it amended the coastal dune statute to allow the construction of protective bulkheads by more residents of Sandbridge Beach. See Act of Mar. 26, 1987, ch. 499, 1987 Va. Acts 731 (presently codified at Va. Code Ann. § 62.1-13.28(B) (Supp. 1989)); see also Act of Apr. 11, 1988, ch. 740, 1988 Va. Acts 983 (amending the Sandbridge provision). Because of the Sandbridge amendment, the federal government is reassessing its approval of Virginia's Coastal Resources Management Program. See 2 Va. Nat. Resources Newsl., Fall 1989, No. 6, at 4.} or fail to monitor compliance with permit conditions after issuance.\footnote{Inadequate monitoring exists, for example, in Virginia's wetlands program. One study recommended "[s]trengthen[ing] monitoring and enforcement of wetlands permits by adding enforcement staff at the state and local level" and by making the appropriate decisionmaking process subject to the Administrative Process Act. Roundtable Report, supra note 171, at 18.} The Virginia experience provides striking evidence of this point. Although the state's envi-
nvironmental laws have become more demanding, the ultimate result of the permit process still seems to be virtually the same as that reached under more lax laws; private development of environmentally fragile areas occurs despite the tougher laws.\footnote{321} Finally, confusion in implementing and enforcing environmental laws arises from the overlapping jurisdictions of federal and state governments and from the many discrepancies existing between federal and state standards. According to one Virginia official, the discrepancies sometimes render state standards meaningless.\footnote{322}

To an extent, the implementation and enforcement problems identified by model state officials are inherent in all environmental regulatory efforts. Because the effects of environmental degradation are often subtle, diffused and long term,\footnote{323} precise definitions of the scope and nature of regulatory efforts are difficult to make. In addition, conservation efforts by definition involve a difficult balancing task. In contrast to the more extreme preservation goal, conservation measures attempt to promote environmental protection while accommodating economic and other potentially conflicting values. The goal of conservation measures is not to protect natural resources from use, but rather to prevent exploitation through planned management. Thus, whereas preservationists believe that natural resources should be preserved with little, if any, regard for

\footnote{321} Cf. supra Section IIA and notes 256-62 and accompanying text (discussing similar problems in the legislative context). Some development requests admittedly have been denied because of the laws. See, e.g., Richmond Times-Dispatch, Nov. 29, 1989, at B-2, col. 4 (discussing the decision of the Westmoreland County Wetlands Board to deny a permit request because of the project's anticipated harm to wetlands). Most requests, however, seem to be granted if appropriate action is taken to reduce adverse environmental consequences. Cf. id. (explaining how the same local wetlands board suggested that permit approval might occur after appropriate changes to the proposed development project are made).

\footnote{322} To illustrate his point, the official noted that Virginia agencies exempt from various state environmental requirements may nevertheless be subject to federal requirements. One area of environmental regulation that has had serious discrepancies in the past is wetlands regulation. Recent revisions of EPA's state wetlands regulations have eased some of the tensions caused by the discrepancies. For a discussion of these revisions, see infra note 347 and accompanying text.

In addition to tensions between state and federal authorities, model state officials also identified political and jurisdictional disputes between state and local governments as barriers to effective regulation. Accord \textit{Roundtable Report}, supra note 171, at 3.

\footnote{323} For examples of the subtle and uncertain effects of environmental degradation, see Butler, supra note 143, at 474-75.
the resource needs of man, conservationists recognize the legitimacy of balancing environmental interests with other concerns.\textsuperscript{324}

Despite the inherent uncertainty of environmental regulation, some of the implementation problems of state environmental programs nevertheless can be attributed to an ineffective administrative process. Government regulation of barrier islands demonstrates that ineffectiveness. Consider the regulatory process governing a Virginia barrier island known as Cedar Island.\textsuperscript{325} In recent years, at least eight government bodies have exercised regulatory jurisdiction over Cedar Island.\textsuperscript{326} Because barrier islands contain a number of fragile and environmentally significant resources,\textsuperscript{327} the islands are governed by a complicated and sometimes confusing regulatory structure. State wetlands and coastal dune statutes can apply, as well as state soil and water conservation laws, local zoning ordinances and numerous federal laws.\textsuperscript{328}

\textsuperscript{324} Preservationist views are best reflected in the wilderness movement. \textit{See generally} R. \textsc{Nash}, \textit{supra} note 56, at 238-71 (discussing the debate over wilderness preservation). One of the most significant victories of the wilderness movement occurred when the "forever wild" covenant was added to the New York Constitution. Found in article XIV, \$ 1, the covenant provides in pertinent part:

\begin{quote}
The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed. N.Y. \textsc{Const.} art. XIV, \$ 1. The provision also authorizes certain uses. \textit{Id. See generally} P. \textsc{Schaeffer}, \textit{Defending the Wilderness} (1989) (discussing the effects of the "forever wild" covenant on the Adirondack Park). A comparison of the New York provision with the environmental provision in the Virginia Constitution highlights the differences between the preservationists and conservationists. Whereas the New York provision declares protected forests to be forever wild, the Virginia provision defines the policy of the Commonwealth to be the conservation, development and use of its natural resources, public lands and historical sites and buildings. \textit{Compare} N.Y. \textsc{Const.} art. XIV, \$ 1 \textit{with} Va. \textsc{Const.} art. XI, \$ 1.
\end{quote}

\textsuperscript{325} \textit{See generally} Note, \textit{supra} note 66, at 401-04 (discussing the Cedar Island permit process).

\textsuperscript{326} The government bodies included Accomack County’s Board of Supervisors, Board of Zoning Appeals, and Wetlands Board, as well as the state’s Department of Conservation and Historic Resources, Marine Resources Commission, Soil and Water Conservation Commission, and Commission of Game and Inland Fisheries, and the federal government’s Army Corps of Engineers. \textit{See id.}

\textsuperscript{327} \textit{See} L. \textsc{Butler} & M. \textsc{Livingston}, \textit{supra} note 13, \$ 2.4, at 42-43; \textit{Note, supra} note 66, at 378-80.

\textsuperscript{328} \textit{See} Note, \textit{supra} note 66, at 389-401 (discussing the statutes and regulations affecting development of Virginia’s barrier islands). Today, Virginia’s Chesapeake Bay Preservation Act also would apply. \textit{See} Va. \textsc{Code Ann.} §§ 10.1-2100, -2101, -2109 (1989). \textit{See generally} 4
The result of all this legislative attention is that a large number of state, federal and local agencies may play a role in regulating the development of barrier islands.

Although the legislative and regulatory framework would appear to provide adequate environmental protection for barrier islands, the results of the permitting process for Cedar Island suggest otherwise. Despite evidence of serious environmental consequences and substantial risk of loss, federal and state regulators have authorized development on Cedar Island. Because of their volatile and unique nature, barrier islands are not adequately protected by the same standards that regulate other wetlands and coastal dunes; yet those standards governed the Cedar Island permitting process. Nor does the local zoning ordinance now in effect for Cedar Island provide sufficient protection. The ordinance effectively grandfathers existing lots, and although this grandfathering probably was needed to appease the ordinance's opponents, it significantly undermines the ordinance's environmental goals.

The inadequate environmental protection accorded Cedar Island may result in part from the unique resource problems presented by barrier islands and from the inexperience of Virginia regulators in handling such problems. Apparently recognizing the need for more specialized standards, the Virginia Marine Resources Commission (VMRC) responded to the Cedar Island case by promulgating Barrier Island Policy and Supplemental Guidelines. Shortly after their promulgation, the policy statement and guidelines were challenged as procedurally and substantively deficient. Of particular concern are the charges that the guidelines were adopted without adequate study and without a majority of commissioners present. Perhaps because of these criticisms, the VMRC recently announced its intention to review the barrier island policy.

P. Rohan, supra note 4, § 26.01 (discussing federal and state regulation of coastal resources); W. Want, supra note 5, ch. 13 (discussing state wetlands and coastal laws).

329. See generally Note, supra note 66, at 378-80 (discussing the ecological and physical characteristics of barrier islands as well as the risks posed by development).

330. See supra notes 230-32 and accompanying text.

331. See Accomack County, Va., Amendment to Zoning Ordinance (Apr. 15, 1987).

332. See Note, supra note 66, at 399-400.

333. See id. at 400-01.

As the Cedar Island case demonstrates, regulators have yet to develop an effective program to protect Virginia’s barrier islands. Although some of the ineffectiveness may be due to the absence of environmental laws specifically designed to govern barrier islands, much of the ineffectiveness results from a complicated and unwieldy regulatory structure and from a vague state administrative process. When large numbers of government bodies are involved in regulating a resource, inefficiencies are bound to occur. In the context of Virginia’s barrier island regulatory program, the inefficiencies became apparent when the state’s barrier island guidelines were challenged shortly after their promulgation. Only a vague and inefficient administrative process explains the adoption of standards as important as the barrier island guidelines at a meeting apparently held without a majority of commissioners.335

One aspect of the environmental administrative process that is particularly troubling is its enforcement structure. Even when legislatures pass adequate environmental laws, ineffective environmental regulation still occurs. Promising environmental laws that have survived difficult political battles become meaningless in the absence of effective regulatory enforcement. Because of weak enforcement efforts, environmental statutes can remain in effect for years and fail to achieve any noticeable improvement in environmental quality.336

The cause of an inadequate enforcement structure varies. Sometimes ineffective enforcement is due to an agency’s failure to respond appropriately to its delegated responsibilities.337 To the extent that this explanation is accurate, the culpable agency must be reminded of its statutory duties. Other times, however, ineffective

335. Political factors, of course, may influence whether a regulator chooses to attend a crucial meeting. For a discussion of how comprehensive, flexible administrative procedure legislation can help to minimize the negative effects of political forces on environmental rulemaking, see infra notes 373-77 and accompanying text.

336. Air pollution laws illustrate this point. A lengthy delay by the EPA in enforcing the Clean Air Act has led one party to argue that it should be shielded from future sanctions. The party has stressed its compliance with an unapproved state pollution plan. See United States v. General Motors Corp., 876 F.2d 1060 (1st Cir. 1989), cert. granted, 110 S. Ct. 537 (1989) (No. 89-369).

337. Some would argue that the regulations adopted by Virginia’s Chesapeake Bay Local Assistance Board illustrate this point. See Appeal Made to Strengthen Virginia Preservation Act, supra note 158, at 1-2.
enforcement may not be the fault of any particular environmental agency, but rather the result of legislative or judicial action. Political considerations, for instance, may prompt a state legislature to limit the enforcement capabilities of an environmental agency. Statutory provisions limiting administrative sanctions or requiring regulators to seek judicial remedies may reflect such motivation.\(^\text{338}\) Or, even if environmental legislation includes adequate enforcement powers, courts may hesitate to impose full sanctions against violators of environmental laws, especially when the violator provides significant economic benefits to the community.\(^\text{339}\) Regardless of the reason for the limited enforcement efforts, the effects on environmental quality can be profound.\(^\text{340}\)

One of the primary causes of the implementation and enforcement problems is the substantive uncertainty of environmental laws.\(^\text{341}\) Although much of that uncertainty appears in legislative and judicial rules of law,\(^\text{342}\) it also exists in administrative regulations, guidelines and opinions. In the model state, for example, recent attorney general opinions provide little, if any, clarification to those seeking guidance in land use and other regulatory matters.\(^\text{343}\) Nor does the Virginia Administrative Process Act give clear signals to those attempting to understand its procedural requirements.\(^\text{344}\)

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339. One Virginia official observed that state courts appear to be reluctant to impose stiff penalties on violators of environmental laws. He suggested that this reluctance may result because the courts subconsciously compare environmental violations to criminal matters.

340. Enforcement of state pollution laws against the Avtex Fibers plant in Front Royal, Virginia, took years. Although the plant eventually shut down, it continued to violate pollution laws during the enforcement process. Indeed, at one point, Avtex was violating a consent decree obtained by the State Water Control Board. See supra note 318.

341. Some other causes relevant to the second and third areas of criticism will be discussed later. See infra notes 355-57, 384-86, 401-05 and accompanying text.

342. See supra notes 175-86, 190-92, 312-14 and accompanying text.


344. A quick comparison of the administrative procedure statutes of Virginia and Idaho reveals the complexity and vagueness of the Virginia version. For example, whereas Idaho's
Though some of this uncertainty admittedly is inherent in the concept of environmental protection, some also is due to poor treatment of legal issues. Development of more certain administrative standards for environmental regulation should help to alleviate some of the problems of implementation and enforcement.

Discrepancies between federal and state regulatory systems have compounded the implementation problems caused by an ineffective state administrative process. At a minimum, the dual structure has created a legal quagmire for the regulated community; a wide variety of administrative entities, standards and procedures typically face those attempting to comply with environmental programs. While the problems caused by the dual regulatory structure are not likely to disappear, the structure should not be as burdensome as it currently is. Benefits to the states also can result from the dual system. By focusing on the overlap in regulation, for example, states can lower their environmental regulation costs. To the extent that tougher federal standards exist, state governments need not duplicate federal efforts. Additionally, even when federal standards are not tougher and thus do not necessarily serve state interests, state agencies can still lower their overall costs of environmental regulation by adopting jurisdictional agreements with federal agencies on enforcement activities. Such agreements could coordinate regulatory efforts where overlap exists and therefore avoid significant duplication of resources.

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Even if an interested party can understand Virginia's Administrative Process Act, she still faces the monumental task of finding administrative regulations adopted pursuant to the Act. Virginia does not have a code of administrative regulations.

345. See supra notes 323-24 and accompanying text.

346. The agreements could, for example, provide for the sharing of data, research and expertise in programs in which overlap exists. Some legal obstacles to these agreements may exist. For instance, agreements providing for the consolidation of permit hearings may violate administrative law requirements. Such a problem apparently arose under Virginia law when a statutory provision authorized a multiple permit process. See infra notes 364-66 and
In recent months tensions between state and federal environmental agencies have eased somewhat. Revisions to EPA's state wetlands regulations demonstrate the new atmosphere of cooperation developing between federal and state counterparts. Among other improvements, the revisions increase the flexibility of states and eliminate unnecessary requirements. Similar cooperative efforts exist in other regulatory programs.

Another factor that contributes to the implementation problems is the existence of misconceptions about the need for increased environmental regulation. Such misconceptions surfaced during the model state investigation when, despite evidence to the contrary, some government officials described Virginia as a state with fairly tough environmental laws. As support, one official compared Vir-

accompanying text; cf. supra note 322 and infra notes 347-48 and accompanying text (discussing how some federal/state tensions have been eased).

Apparently reacting to these legal obstacles, several local, state and federal agencies adopted a joint permit application to govern activities in Virginia waters. Adopting agencies include the Army Corps of Engineers, the Tennessee Valley Authority, the Virginia Marine Resources Commission, the State Water Control Board and local wetlands boards. Parties using the application generally need to complete only one application for those agencies. The application, however, stresses that it does not eliminate the need to get separate permits from each agency involved in the permit program. Some duplicative procedures are avoided by using the joint application. In addition to joint monthly processing meetings, the application also provides for joint state/federal public notice. Each agency, however, may still hold its own public hearings and will consider the comments received in response to the public notice in reaching its permit decision. See U.S. Army Corps of Engineers, Information Guide & Joint Permit Application for Activities in Waters of the Commonwealth of Virginia (NAO application form 1065/VMRC 30-300, revised May 10, 1985).


348. The EPA, for instance, selected Virginia to be a lead state for the federal air toxic pollution program. As a lead state, Virginia will coordinate information-gathering efforts with other states in its region. See 3 Va. Nat'l Resources Newsl., Spring 1989, No. 3, at 4. Additionally, the National Oceanic and Atmospheric Administration approved Virginia's request to incorporate § 401 certification of applications for § 404 permits into the state's Coastal Resources Management Program. 6 Va. Regs. Reg. 399 (Nov. 6, 1989).

349. Excellent evidence of this attitude can be found in the responses of some regulators to a recent EPA study ranking Virginia as one of the worst states in emissions. See Campbell, U.S. Rules 'Hamper' Pollution Cleanup, Richmond Times-Dispatch, Apr. 16, 1989, at
Virginia's programs to those of other southern states. Similar misconceptions undoubtedly exist in other states.

Several different factors could explain the misconceptions about the need for increased environmental regulation. To an extent, the misconceptions reflect false optimism about a state's environmental health. The false optimism may be due in part to the self-interests of current regulators, who understandably may fear change and prefer the status quo to the uncertainty of new or expanded programs. To protect their interests, regulators may overestimate the strength and effectiveness of current programs. In addition to false optimism, the misconceptions also may reflect a reluctance to interfere with private property rights. As explained earlier, a private rights orientation has pervaded the legal and social fabric of America. Given that this private rights mentality has become an important part of the common law property system, it would not be surprising to find that the mentality affects environmental regulators as well. Finally, the misconceptions could reflect an inaccurate and incomplete process for assessing environmental quality. Even if one state does have a more demanding environmental regulation program than another, that fact does not address the adequacy of the more demanding state's program. To conduct an accurate environmental assessment, regulators should focus on recent studies of the health of their natural resources and on other relevant scientific evidence.

In addition, if comparisons with other programs are to be made, regulators should consider the programs of a large number of states.


351. See supra notes 56-64 and accompanying text.

352. For some examples of those studies, see supra notes 1-3 and accompanying text.

Regardless of the cause of the implementation problems, states must begin to address them. At the very least, the problems create an atmosphere of hostility and resistance not conducive to effective regulation. Once private property owners realize that implementation and enforcement efforts are resulting in disparate treatment of those similarly situated, they will understandably begin to resist future enforcement efforts. Inconsistent enforcement of environmental laws creates feelings of frustration and unfairness, while inadequate implementation engenders false, but arguably reasonable, expectations about the strength of private property rights.\textsuperscript{354} Alleviating these feelings of hostility and injustice requires a consistent and continuous implementation process.

\section*{B. Procedural Deficiencies}

The second area of concern involves the administrative procedures that environmental regulators use. The Virginia experience demonstrates that the procedures can be inefficient and burdensome. One model state official noted that a typical development project can involve regulatory oversight by several state and local agencies, each with its own special procedures, regulations and guidelines.\textsuperscript{355} Another observed that procedural problems, as opposed to substantive environmental concerns, usually thwart development projects. Still others expressed concern about the methods used to select regulators. More particularly, they noted that the provisions for determining the membership of some regulatory bodies do not accurately reflect the different constituencies in the regulated community. Further, the provisions can result in the selection of decisionmakers who face a conflict between their professional interests and the public interest.\textsuperscript{356} Finally, one official com-

\textsuperscript{354} A good example of such expectations and feelings has arisen in the context of the Clean Air Act. For a discussion of that example, see supra note 336.

\textsuperscript{355} The Cedar Island case illustrates this point. See supra notes 325-35 and accompanying text.

\textsuperscript{356} Virginia law, for example, provides that at least one member of the Marine Resources Commission “shall be a person who, at the time of his appointment and for at least five years prior thereto, has earned his livelihood from working on the waters of the Commonwealth.” VA. CODE ANN. § 28.1-4 (Supp. 1989). Although the legislature understandably
plained that agency guidelines do not have the force of law when they fail to qualify as regulations subject to the Virginia Administrative Process Act. Although the official was not advocating greater procedural requirements, he nevertheless believed that agency decisions and actions generally should carry significant legal consequences.

Procedural deficiencies clearly do exist in the environmental regulatory systems of Virginia and other states. As explained in the context of Virginia's barrier island regulatory program, the overlapping jurisdiction of numerous federal, state and local agencies creates an inefficient and complex administrative process. Furthermore, the numerous exceptions to state administrative procedure acts tend to result in vague and inconsistent regulatory processes. Some of this vagueness also is due to the existence of

prefers to have at least one commissioner with experience in the fisheries industry, that experience can result in a conflict of interests when fishery regulations are being considered. The State Air Pollution Control Board also has "traditionally enjoyed cordial, if not cozy, relations with the industries it regulates." Ruberry, supra note 349, at A-8, col. 1. Indeed, these relations have existed despite a statutory provision stating that "[n]o officer, employee or representative of any industry, county, city or town which may become subject to the regulations of the Board shall be appointed to the Board." VA. CODE ANN. § 10.1-1302 (1989).

357. Under the Virginia Administrative Process Act, a "rule" or "regulation" is defined as "any statement of general application, having the force of law, affecting the rights or conduct of any person, promulgated by an agency in accordance with the authority conferred on it by applicable basic laws." VA. CODE ANN. § 9-6.14:4(F) (1989). Some state officials have narrowly interpreted this definition, concluding that it does not apply to agency guidelines that do not restrict or impede an agency's power to consider a permit application on its own merits. This interpretation appears to be based on the phrase "force of law," which basically adopts the federal administrative law distinction between "legislative" and "nonlegislative" rules. See generally 1 C. Koch, Jr., supra note 121, § 3.52 (discussing that distinction). For a broader definition of "rule," see MODEL STATE ADMIN. PROCEDURE ACT § 1-102(10) (1981). See generally A. Bonfield, supra note 7, § 3.3 (discussing the model act's definition of "rule").

Under Virginia law, even if agency action meets the definition of "regulation," it may nevertheless be exempt from the Act's rulemaking procedures. Regulations prescribing internal practice or procedure, for example, are exempt. VA. CODE ANN. § 9-6.14:4.1(C)(2) (1989); see id. § 9-6.14:4.1(C) (setting forth other exemptions).

358. See generally 1 LAW OF ENVIRONMENTAL PROTECTION, supra note 5, § 6.03[2] (discussing state procedures and institutions affecting implementation of environmental laws). For a thorough treatment of the state rulemaking process, see A. Bonfield, supra note 7.

359. The law of wetlands regulation provides another excellent example of the problems created by overlapping jurisdiction. See generally W. Want, supra note 5, chs. 3, 4 (discussing the complexities of state and federal wetlands regulation).

unpublished informal procedures, statements of policy and interpretive opinions. To the extent that these procedures, statements and opinions do not concern an agency's internal management and are used by the agency in the discharge of its functions, they should be made available for public inspection. Unpublished administrative procedures and standards create an unhealthy air of secretiveness and often result in political manipulation of the regulatory process.

Efforts to provide for coordinated procedures have encountered legal obstacles in some jurisdictions. The Virginia General Assembly, for example, tried to improve coordination of environmental regulation by authorizing a unified multiple permit process. Although the process can apply whenever "a project requires a state permit or certificate from more than one state environmental regulatory agency," the process is not currently used. Apparently, the regulated community does not perceive a need for a unified process. Perhaps more importantly, some regulators doubt the legal validity of a unified decisionmaking process when separate

361. For an example of such a state requirement, see Idaho Code § 67-5202(2) (1989). The Model State Administrative Procedure Act is more demanding. It exempts interpretive rules from the notice and comment procedures, but still requires compliance with the rulemaking provisions governing explanatory statements, format, agency records, filings, effective date of rules and petitions for adoption. See Model State Admin. Procedure Act §§ 3-109(a), 3-110 to -117 (1981). Newly adopted interpretive rules also must meet the Act's publication requirements. See id. § 2-101. See generally A. Bonfield, supra note 7, § 6.9 (describing and justifying the interpretive rule provisions of the model act).

362. For further discussion of this problem, see infra notes 373-77 and accompanying text.

363. Some of these legal obstacles involve state administrative provisions requiring each agency's action to be based on its own record of relevant material. See Letter from James E. Ryan, Jr., Va. Dep. Att'y Gen., to Gerald P. McCarthy, Administrator, Governor's Council on the Environment (Mar. 25, 1977) (on file with the author) (discussing such a record requirement in the context of permit decisions) (requirement now codified at Va. Code Ann. § 9-6.14:12(B) (1989)); see also A. Bonfield, supra note 7, § 6.12.1(a) (explaining and justifying such a record requirement in the context of rulemaking). Other legal obstacles may be motivated by arguments for procedural diversity advanced by some state administrative law experts. See id. § 1.2.3 (1986) (discussing the longstanding debate over the desirability of procedural uniformity versus procedural diversity).


365. Id. § 10.1-1206(A). For a list of agencies considered to be "state environmental regulatory agencies" for purposes of the multiple permit provisions, see supra note 110.
permit decisions are required by law. In their view, avoiding these legal problems would require procedures almost as cumbersome as those normally applicable.

Interpretations of state administrative law that would prevent procedural streamlining and even moderate attempts at uniformity should be rejected by the appropriate legal entity. Scholars of state administrative law have recognized that some procedural uniformity is sound from legal and policy perspectives. As long as the unified procedures allow each responsible agency to carry out its delegated responsibilities and do not attempt to govern all aspects of an agency's operation, the procedures should not violate basic principles and policies of administrative law. Development of a uniform set of administrative procedures helps to ensure fairness and enables private parties to feel comfortable with the regulatory process. If the procedures are properly drafted, they will not unduly hamper legitimate exercises of regulatory power; an effective set of unified procedures should only act as a check upon improper conduct, such as abuses of discretion. Additionally, a unified set of procedures should result in more coordinated regulation and thus less duplication of resources.

But even if state administrative law prevents effective use of a unified permit process, steps can be taken to alleviate the procedural deficiencies now existing. Where a sufficient legislative basis exists, the agency responsible for carrying out the unified process could continue to coordinate environmental regulation. Such co-

366. This doubt is based on an attorney general opinion letter, which lists several concerns with the coordinated permit approach. Among other potential legal problems, the opinion notes that the coordinated procedure "would be susceptible to legal challenge" if the record upon which an agency permit decision is made "contains information which is not relevant to the issues that it must resolve." Letter from James E. Ryan, Jr., Va. Dep. Att'y Gen., supra note 363. Several state and local agencies appear to have circumvented the opinion by adopting a joint permit application process. See supra note 346.

367. To the extent that these interpretations are based on explicit statutory language, legislative action would be necessary. For recommended legislation authorizing a multiple permit process, see Model Land Code, supra note 3, §§ 2-401 to -403.

368. See A. Bonfield, supra note 7, § 1.2.3 (1986) (discussing the tension between the need for uniformity and the need for diversity in state agency procedures and agreeing with arguments for uniformity).

369. See id. § 1.2.3, at 24-25.

370. In the case of Virginia, for example, the responsible agency—the Council on the Environment—could continue to act as a staff to the Secretary of Natural Resources and as a
ordination should focus on the administrative procedures governing environmental rulemaking. Requiring a uniform format for rules adopted by all agencies or designating an agency to act as a clearinghouse for each major environmental program are ways to improve the existing administrative process. Additionally, where such a legislative basis is absent or tenuous, the state should consider passing appropriate legislation to enable one agency to unify procedures and coordinate environmental regulation. Alternatively, if the state legislature would prefer not to give such authority to one agency, the legislature could choose to improve coordination and eliminate procedural deficiencies by authorizing an inter-agency task force to develop uniform procedures to guide environmental agencies.

The adoption of more comprehensive but flexible administrative procedures also would improve coordination and eliminate many procedural deficiencies. Regulators who tend to resist the imposition of additional procedural requirements need to realize that additional requirements do not necessarily entail notice and comment procedures. Informal procedures often can be more effective. Regulators also need to realize that in the rulemaking context administrative procedures are not counterproductive or overly restrictive. Although a state’s administrative procedure act generally defines how certain state regulators must proceed, the statute does not restrict their substantive powers. Additionally, comprehensive but flexible administrative procedures would help to minimize the negative effects of political pressures on the rulemaking

371. The model act requires a uniform form, style and numbering system. Model State Admin. Procedure Act § 3-111(d) (1981). In addition, all rules must be filed in a central place. Id. § 3-114(a). See generally A. Bonfield, supra note 7, §§ 6.11.3, 6.14.1 (discussing the style, form and filing requirements of the model act).

372. For example, some Virginia and federal agencies have informally designated the Virginia Marine Resources Commission as a clearinghouse for programs regulating activities in state waters. See supra note 346 (discussing the joint permit application).

373. See generally A. Bonfield, supra note 7, § 1.1.2 (explaining the different theories of the administrative lawmaking process and arguing for the comprehensive rationality model).

374. Cf. 1 C. Koch, Jr., supra note 121, § 3.26 (arguing for procedural flexibility). See generally A. Bonfield, supra note 7, § 6.9.2(b), (c) (discussing the justifications for and objections to relaxing the notice and comment requirements for interpretive rules).

375. See A. Bonfield, supra note 7, § 1.2.4 (1986).
process. As long as a state administrative procedure act narrowly defines the type of rule that is subject to its provisions, political manipulation of the regulatory process will be possible. A comprehensive administrative procedure act that covers all types of rulemaking activities would minimize the problem of political manipulation by requiring complete openness about the rulemaking process.\textsuperscript{376} A flexible act that varies procedures according to whether or not rulemaking activity is "legislative," in the sense of having the force of law, would ensure that agencies do not have to face lengthy notice and comment procedures for every rulemaking activity.\textsuperscript{377}

In addition to minimizing the problem of political manipulation, compliance with effective administrative procedures can result in other significant benefits.\textsuperscript{378} Procedural safeguards help to minimize feelings of frustration and resentment that arise when private parties have no opportunity to comment on proposed regulations and agency decisions. The denial of an opportunity to be heard tends to infuriate parties adversely affected by government action. Parties who lose under a regulatory decision need to feel that the procedures used to make the decision were fair. Procedurally sound decisions are easier to accept and thus protect the agency from challenge. Furthermore, administrative procedures provide an

\textsuperscript{376} Cf. id. § 1.1.2 (arguing for a comprehensive model of the administrative lawmaking process). Not all political influences are negative. If, for example, a regulator reaches a decision based on the views of the general public, that regulator has been influenced by the political will of the people. This type of political influence speaks to the essence of the democratic process and seems to be an appropriate consideration in the rulemaking process. See 1 C. Koch, Jr., supra note 121, § 4.77; see also A. Bonfield, supra note 7, § 5.2.3 (1986) (discussing the need for politically responsible rules).

\textsuperscript{377} See generally A. Bonfield, supra note 7, § 6.9.2 (discussing the interpretive rule exemption to the notice and comment requirements); 1 C. Koch, Jr., supra note 121, §§ 3.1-.27 (discussing the concept of agency rulemaking and the need for procedural flexibility).

\textsuperscript{378} The existence and extent of these benefits will depend on the type of administrative procedure. If, for example, an agency is developing regulations or policy guidelines or is engaged in other rulemaking activity, adherence to administrative procedures will yield significant benefits. See A. Bonfield, supra note 7, § 1.2.3, at 26-27 (1986). But if an agency is using formal adjudication (as it would in making permit decisions), the administrative process may be very burdensome and inefficient. See generally 1 C. Koch, Jr., supra note 121, § 2.16 (discussing the advantages of rulemaking over adjudication). Even in the latter situation, though, fairness benefits can result. See infra text following note 378. For a discussion of the differences between adjudication and rulemaking, see 1 C. Koch, Jr., supra note 121, § 2.3.
efficient way to gather information on regulatory problems and help to ensure that the decisionmaker considers all perspectives before deciding how to proceed. Simply by giving appropriate notice, state agencies can alert private parties to the need to submit information and identify issues raised by a particular problem. Procedurally sound decisions thus can promote efficiency and fairness concerns while lowering the risk of successful litigation.

The benefits of improved procedures demonstrate clearly that state administrative procedures generally should apply, in varying degrees, to more agency decisions. For example, an agency’s informal procedures for discharging its duties should be subject to a public inspection requirement. Additionally, although state agencies still should be able to ignore administrative law requirements and adopt emergency guidelines for situations requiring immediate attention, guidelines addressing long term problems generally should be subject to administrative law. By combining more comprehensive coverage with procedural flexibility, states can ensure that procedural obstacles to effective environmental regulation are minimized.

379. See generally 1 C. Koch, Jr., supra note 121, § 2.16 (discussing the efficiency and fairness advantages of rulemaking).

380. See supra notes 361-62 and accompanying text.

381. The Virginia Marine Resources Commission, for example, should be able to adopt guidelines to handle emergencies arising in Virginia’s marine fisheries industry without having to conduct lengthy proceedings. But in declaring that an emergency situation exists, the Commission must be careful not to confuse long term problems with sudden emergencies. For an example of such a situation, see L. Butler & M. Livingston, supra note 13, § 4.4, at 94-95. Other jurisdictions also recognize an exception for emergency situations. See, e.g., Idaho Code § 67-5203(b) (1989).

382. Recently, the Virginia legislature recognized the need for more procedural safeguards in one regulatory context. The General Assembly passed legislation that requires the Virginia Marine Resources Commission to comply with the Administrative Process Act in authorizing “any general permit or guidelines” pursuant to title 62.1 (which deals with waters of the state). Act of Apr. 8, 1987, ch. 652, 1987 Va. Acts 1099, 1101 (presently codified at Va. Code Ann. § 9-6.14:4.1(E) (1989)). In expanding the coverage of its administrative procedure statute, the Virginia General Assembly should consider the arguments for procedural flexibility that administrative law scholars have advanced. See, e.g., A. Bonfield, supra note 7, § 6.9.2 (advocating more relaxed procedural requirements for interpretive rules); 1 C. Koch, Jr., supra note 121, § 3.26 (making a case for procedural flexibility). Expansions in coverage that require compliance with formal procedures may not necessarily be beneficial. See A. Bonfield, supra note 7, § 6.9.2(b).
C. The Role of Local Governments in Environmental Regulation

The third area of concern is the role of local governments in environmental regulation. During the model state investigation, a significant number of Virginia officials described this role as inefficient and ineffective. As several officials explained, the local government structure in Virginia is too fragmented to permit effective natural resource regulation. Virginia has a large number of local governments, most of which are highly independent. In such a setting, the local rule approach predictably results in a competitive atmosphere and discourages regional cooperation. Nor does the local government structure provide a scientifically effective basis for resolving complex environmental matters. Problems of environmental degradation and resource allocation rarely confine themselves to political boundaries, even at the state level.383

Model state officials identified bad management, limited resources384 and the permissiveness of local enabling legislation as primary causes of ineffective local rule. Because localities are not always required to adopt management plans or zoning ordinances,385 a wide variety of regulatory strategies exists among Vir-

383. The environmental problems of the Chesapeake Bay amply demonstrate this point. For further discussion of some of those problems, see L. BUTLER & M. LIVINGSTON, supra note 13, §§ 3.2.A, 3.3.

Several states have recognized the ineffectiveness of the local rule approach in the context of water resources. See, e.g., IOWA CODE ANN. § 455B.262(1) (West 1990); MINN. STAT. ANN. §§ 105.38-39 (West Supp. 1990); see also A MODEL WATER CODE commentary at 72-73 (F. Maloney, R. Ausness & J. Morris 1972) (advocating a centralized state approach). Virginia recently recognized the need for state control over water resources in certain limited contexts. In its 1989 session, the Virginia General Assembly enacted legislation establishing a low flow permitting system. The legislation authorizes the State Water Control Board to declare certain areas as surface water management areas. If such a declaration is made, nonexempt water users in the area must obtain a permit to withdraw water. During periods of low flow, permittees may be subject to conditions imposed to preserve the instream flow. Surface Water Management Areas Act of 1989, ch. 721, 1989 Va. Acts 1697 (presently codified at VA. CODE ANN. §§ 62.1-242 to -253 (Supp. 1989)). See generally Butler, supra note 143, at 446-48 (discussing the local control issue).

384. Model state officials described resources as being limited in every sense of the word, including financing, expertise, human resources and technical assistance.

385. Although Virginia localities must adopt comprehensive plans, the content of those plans may vary according to the needs and preferences of a particular locality. A local government's comprehensive plan may include, among other items, a plan for land use, transportation, community facilities, historic preservation and redevelopment. VA. CODE ANN. § 15.1-446.1 (1989). Virginia's environmental laws also typically give localities flexibility in
ginia's local governments. At one extreme, a few localities have developed comprehensive environmental and land use plans. These local governments have exercised virtually all of the regulatory powers the localities have, as well as some they arguably do not have. At the other extreme, some localities have done little, if any, resource management and environmental protection. These localities have not even identified critical environmental areas or adopted basic zoning ordinances authorized by statute.

A few cynical officials perceived this failure to regulate as nothing more than the absence of political courage. They believed that local governments generally preferred to avoid tough regulatory issues and often tried to convince the state government to deal with issues that localities could handle by zoning. Thus, even when they wanted to restrict particular uses, the localities often felt politically compelled to allow the uses and refrain from regulation.\[386\] The uncertain and limited powers of local governments provided these localities with an excuse for not regulating.

Model state officials also pointed to the division of regulatory authority between state and local governments as contributing to the ineffectiveness of local rule in the resource and environmental area. This division traditionally distinguishes between land use matters and environmental problems. Localities are allowed to deal with certain land use matters, while environmental issues generally are reserved for the state.\[387\] To the extent that land uses have an impact on the environment, the division does not provide a sensible way to allocate regulatory responsibility because it does not allow local governments to deal effectively with the consequences of those uses.

Nor can localities depend on the state government to represent their interests in handling a problem outside the scope of their deciding how and whether to act. See, e.g., id. § 62.1-13.5 (Supp. 1989) (setting forth a wetlands zoning ordinance that localities may adopt); id. § 62.1-13.25 (setting forth a coastal dune zoning ordinance that certain localities may adopt).

386. As an example, one Virginia regulator noted that many local governments hesitate to regulate uses that would enhance the localities' economy. Some model state officials also characterized local governments as creating an impossible situation for the state government; state environmental agencies can regulate localities, but only if the regulations accomplish what the localities want.

387. For a discussion of the inadequacies of this approach, see supra notes 138-54 and accompanying text.
powers. The interests of state and local governments often diverge. An urban locality, for example, may prefer to promote the quality of life within its limits by prohibiting certain land uses. The state, on the other hand, may want to permit the uses because of their significant economic benefits. A rural locality, conversely, may prefer to promote economic interests, while the state may choose to protect sensitive environmental resources still present in the rural area. Because of the divergence of state and local interests, reliance on the traditional distinction between land use and environmental regulation can result in unbalanced and conflicting regulatory decisions. Thus, even when localities are willing to regulate, their efforts may be ineffective.

The concerns expressed by Virginia officials about the local rule approach to environmental regulation apply to other states as well. Like Virginia, many other states have used the distinction between land use and environmental matters to allocate regulatory authority for natural resources. Like Virginia, other states have relied on local governments to implement important aspects of resource management programs. In those states as well, local governments generally have been ineffective in dealing with environmental and resource problems. Too many variations exist in the localities' treatment of land use matters for their efforts to result in adequate regional or statewide solutions. Although legislative deference to local rule may be politically more acceptable than state-mandated and state-controlled regulation, it tends to be environmentally ineffective.

388. See N. ROBINSON, supra note 74, §§ 5.02, 18.01-.02; cf. F. BOSSelman & D. CALLIES, supra note 4, at 1-4 (discussing the historical development of local control over land use and the effect on environmental regulation); Note, An Assessment of the Role of Local Government in Environmental Regulation, 5 UCLA J. ENVTL. L. & POL'Y 145 (1986) (discussing the division of regulatory authority between federal, state and local governments). See generally N. ROBINSON, supra note 74, §§ 18.01-05 (discussing regional environmental land use controls).

389. See MODEL LAND CODE, supra note 3, art. 7 commentary at 284-91; F. BOSSelman & D. CALLIES, supra note 4, at 1-4; Note, supra note 388, at 157-81.

390. See generally Delogu, supra note 202 (advocating the withdrawal of land use control from local governments). But see Note, supra note 388 (arguing for increased local government participation in environmental regulation). For an argument that state land regulation of interstate resources is inadequate, see Note, supra note 149.
Many of the concerns about the local rule approach suggest their own solution. For example, mandatory, state-administered programs would minimize the role of local governments in the environmental protection and resource management areas, and therefore eliminate some of the concerns. For some states, such a solution may be too controversial and troubling to be a realistic possibility. Political considerations underlying the local rule approach may simply override any adverse environmental consequences arising from the approach.  

Regardless of a jurisdiction's views on local rule, some improvements in the role of local government in environmental regulation need to occur. Even in a system abrogating local control over resources involved in environmental problems, local government participation is necessary. One improvement concerns the philosophical commitment of local governments to environmental programs. For effective regulation of natural resources to occur, local governments must develop a stronger and more uniform commitment to environmental protection. Such a commitment can arise only if localities develop a better understanding of the nature of environmental problems and of the value of comprehensive plans and other regulatory tools. A greater commitment also requires more involvement by localities in the planning and information-gathering stages of environmental regulation. At the outset, localities with little or no prior history of environmental regulation may prefer an incremental decisionmaking process. In the administrative area as well, such an approach can minimize the adverse consequences of an erroneous decision. At the very least, the decisionmaking process should include identification and mapping

391. One environmental ethics scholar has argued that the development of environmental policy should occur through democratic decisionmaking. See H. Rolston III, supra note 85, at 246-49.


393. Localities, for example, need to realize that a good comprehensive plan can reduce not only the risk of litigation, but also the magnitude of adverse environmental impact. See generally D. Mandelker, supra note 21, ch. 3 (discussing the comprehensive plan).

394. Cf. A. Bonfield, supra note 7, § 1.1.2 (discussing the benefits of incremental administrative lawmaking, but advocating the comprehensive rationality model); supra note 315 and accompanying text (discussing the benefits of incrementalism in the context of the judicial system).
of critical environmental areas—that is, areas of natural, scenic and ecological value imperiled by development projects. In addition, the process should include identification of buffer zones between developed areas and critical resources, as well as areas suitable for parks, wildlife refuges, scenic drives and other recreational uses, for navigational and related uses, and for commercial use. In identifying these areas, localities should distinguish among areas that have intense development, limited development and virtually no development. Established development patterns can provide a helpful basis for environmental planning.

In addition to a stronger philosophical commitment, states need to improve the structure of local government, which is often too fragmented and arbitrary to allow effective resource regulation. As model state officials pointed out, the existence of a large number of local governments discourages regional solutions. Further, because of its historical development, the local government structure may distinguish arbitrarily between different categories of local political subdivisions in defining their powers. The regulatory powers of counties and cities, for example, sometimes differ in ways that have little relevance to the characteristics of the localities.

395. This definition of a critical environmental area is based in part on legislation recommended by a 1972 Virginia report. See CRITICAL AREAS REPORT, supra note 252, at 84. That legislation proposes the establishment of a Critical Areas Review Board to control development within critical environmental areas. Id. at 84-85. The recommended legislation defines "development" as including the "construction or alteration of land which takes place on a parcel or parcels of ten (10) or more acres," the "construction of any building or buildings with a gross floor area of 40,000 square feet or more," "any construction requiring another permit from a state or federal agency," and the "subdividing of land into three or more parcels with two or more of the parcels being less than five (5) acres." Id. at 84. "Adverse development" is defined as "any development which will significantly alter the visual character, the natural qualities, or the productive capacity of a critical environmental area and that may be detrimental to the public health, safety and welfare." Id. at 85; cf. Md. Nat. Res. Code Ann. § 8-1807 (1990) (defining the Chesapeake Bay Critical Area from more of a geographic perspective). For further discussion of critical area legislation, see supra notes 247-53 and accompanying text.

396. All of these elements are part of the minimum requirements that a Maryland locality must meet in developing a critical area protection program. See Md. Nat. Res. Code Ann. § 8-1808(c) (1990).

397. Maryland's Chesapeake Bay legislation basically uses this approach. See id. § 8-1808.1.
counties can be much larger in size and population than neighboring cities, yet have fewer regulatory powers.398

Even if a state legislature decides to continue the local rule approach, it should consider changing the local government structure to eliminate or at least minimize the problems caused by its fragmented and arbitrary approach to land use matters. Among other changes, a legislature could encourage regional cooperation by giving a locality standing to participate as an interested party in the decisionmaking process of a neighboring locality whenever that locality's land use decisions could affect the resources and environment of the first locality.399 The legislature also could eliminate some of the arbitrariness of the local government structure by giving the same basic land use powers to comparable localities. At least in the environmental area, more uniform regulatory powers are needed to permit regional cooperation and achieve desired results.400

398. In Virginia, for example, the police powers of counties generally are more limited than cities' powers despite the existence of large populated urban counties and despite legislation granting to counties the authority and powers exercised by cities and towns. For examples of demographic differences existing in Tidewater Virginia, see L. Butler & M. Liv- ingston, supra note 13, § 4.1. The Virginia Supreme Court narrowly construed this legislation to exclude certain types of powers. See Board of Supervisors v. Corbett, 206 Va. 167, 142 S.E.2d 504 (1965) (construing § 15.1-522); M. Mashaw, supra note 195, at 11. The differences between the powers of Virginia cities and counties admittedly have diminished over time. See id. at 3, 6-7. The 1971 Virginia Constitution played an important role in this process by recognizing the similarities of the two categories of local governments. See id. at 3. Some differences still remain, however. See, e.g., Act of Mar. 3, 1980, ch. 47, 1980 Va. Acts 50, 50-51 (enacting § 15.1-467, which does not appear in the published Code) (allowing the subdivision regulations of some municipalities to apply in some counties); id. at 51 (enacting § 15.1-468, which does not appear in the published Code) (authorizing some municipalities to review the subdivision regulations of certain neighboring counties).


400. Many state legislatures have begun to realize this point, passing legislation encouraging regional cooperation. See, e.g., Va. Code Ann. §§ 15.1-1239 to -1270 (1989) (authorizing the formation of regional water and sewer authorities). See generally Model Land Code, supra note 3, at 284-91 (discussing the states' gradual recapture of land use control); F. Bosselman & D. Callies, supra note 4, at 5-20 (describing innovative state land use pro-
Another possible change would be to clarify the regulatory powers of local governments. As explained earlier, uncertainty surrounds these powers because of the incomplete, vague nature of enabling legislation and the courts' narrow interpretation of the legislation. Lacking clear authority to regulate in many areas, localities often hesitate to adopt measures needed for effective environmental protection and resource management. Further, the localities that do choose to adopt innovative or unconventional measures typically face challenges in both the administrative and judicial processes. Thus, for local governments to participate effectively in the environmental regulation process, state legislatures need to consider ways to reduce the uncertainty surrounding local regulatory powers.401

Finally, efforts to improve the role of local governments in environmental regulation should include reexamining the balance of power between state and local governments.402 Among other issues, the reexamination should focus on the traditional distinction between environmental and land use matters. As the Virginia experience demonstrates, the division of regulatory responsibility between state and local governments traditionally ignores the relationship between land use and the environment and assumes that resource and environmental problems confine themselves to political boundaries. The reexamination should also consider the political susceptibility of local governments. Quite understandably, local governments tend to be more susceptible than state agencies to political pressures exerted by property owners.403 To the extent that localities lack the political will to regulate, another level of
government that could more effectively remove the issue from the political arena would be helpful. Yet, under a traditional local rule approach, state environmental agencies may not be able to override local land use decisions, and even when state agencies have a decisionmaking role, the agencies often must wait to make permit decisions until after the appropriate local government has acted. Improving the balance of power between state and local governments therefore will require making the balance more responsive to political and scientific realities.

A crucial part of the rebalancing process is the identification of environmentally preferred options. Whether a state government should respond to the balance of power problem by expanding its role in the land use area is a question best left to the political process. The allocation of regulatory responsibility between state and local governments raises two levels of concern. The first relates to the effectiveness of environmental regulation and the second involves the political appropriateness of the balance of power between state and local governments. While the democratic process appears to be the best way to resolve the second concern, identification of environmentally preferred options will help to ensure an informed political choice.

A number of environmentally preferred options are available to a state legislature once it has made the political choice to regulate a particular resource or adopt an environmental program. For example, the legislature could ensure that the state/local balance of power is effective from an environmental perspective by increasing the supervisory and enforcement responsibilities of state officials. Alternatively, the legislature could decide to leave implementation and enforcement responsibilities with localities, but make their re-

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406. See generally H. Rolston III, supra note 85, at 246-49 (discussing the need for collective choice in the development of environmental policy). Model state officials disagreed about the proper balance of power between state and local governments. Some believed that localities should play an even greater role in environmental and land use regulation, while others maintained that more statewide initiatives were needed.
sponsibilities mandatory rather than permissive. With this alternative a locality would have to implement a regulatory program enacted by the legislature, but would have some flexibility in carrying out its terms. Although localities would have to meet minimum standards, they could choose to exceed the standards. A third option would be to vary the balance of power between state and local governments according to the nature of the environmental problem. Local governments could control resolution of fact-specific questions that require local knowledge and input, such as the suitability of different tracts of land for particular uses. State officials, on the other hand, could have primary responsibility for issues of regional or statewide import, such as the setting of quality standards to govern land uses affecting common resources. Under this option, local rule would exist only when it would not frustrate the legislature's environmental policy choices. All three options promote the effectiveness of environmental programs by indirectly removing some of the political aspects of resource management from the local government arena.

CONCLUSION

This Article examines the regulatory failure of state environmental programs, focusing in particular on the effect of factors internal to the state regulatory process. The results of the study are somewhat surprising. They suggest that internal barriers to effective environmental regulation exist at every level of state government, from a state's court system to its legislative and executive branches, and its local government structure. Though the specific nature of the barriers varies significantly, they all reflect one overriding theme: political acceptability at the price of regulatory effectiveness. Whether the barrier is vague constitutional principles, ineffective state environmental legislation, deficient judicial perspectives or a problematic administrative process, political considerations play a significant role in the regulatory failure of state environmental programs.

407. The drafters of the Model Land Development Code preferred such a variable approach. Model Land Code, supra note 3, art. 7 commentary at 289-90 (advocating state control of major environmental matters and local control of minor environmental matters).
Not all political influences are negative or undesirable. Political influences resulting in the formation of a public consensus, for example, are precisely the type of influence envisioned by the concept of democratic decisionmaking. But political influences that inhibit grassroots democracy or undermine policy choices already made through the democratic process are inappropriate. Such improper influences may exist when local government officials are unwilling to jeopardize their political future by exercising delegated powers or when reelection concerns dictate legislators' political agenda. Similarly, inappropriate political influence may exist when administrative agencies use unpublicized procedures and standards to discharge their duties, creating the opportunity for political manipulation of the regulatory process. Effective environmental regulation requires the recognition of the differences between these two types of political influence. Given the nation's mounting environmental problems and the expanding role of the states in environmental regulation, it is more important than ever that the improper influences that are so pervasive in state environmental programs be eliminated or at least controlled.

Because the development of socially acceptable and therefore ethically responsible environmental laws requires democratic decisionmaking, some might argue that good and bad political influences cannot or perhaps should not be separated—that negative political influences, like positive ones, are a natural part of the democratic process. Besides providing a convenient excuse for regulatory inaction, this argument appears to ignore important aspects of the democratic process. Democratic decisionmaking is not—and should not be—synonymous with legislative action. Although the legislature should be primarily responsible for making environmental policy choices, other legitimate means also are available for developing and implementing environmental policy. In many states, voters have made a fundamental policy choice by adopting constitutional environmental provisions. Furthermore, once the state legislature has made general policy choices for a particular environmental or resource problem, the democratic process must, as a practical matter, allow the experts to define the hard details of regulation. Among other tasks, the democratic process must permit administrative agencies to develop the specifics of statewide programs, local governments to implement site-specific
programs, and courts to act as the final arbiter of questions of fairness and as the final check on the legislative and executive branches. Good political influences have already had their effect on environmental policymaking. Now is the time to further the choices made through the positive political process by recognizing and overcoming improper political influences.