Swamp Rules: The End of Federal Wetland Regulation?

By Jonathan H. Adler

t is hard for many to believe that maryland developer James J. Wilson could be an environmental criminal. Wilson is characterized in the press as "a conscientious, environmentally sensitive" developer. His

planned communities are known for their parks, scenic trails, and open space. St. Charles, one of Wilson's most recent developments in Charles County, Maryland, provided for 75 acres of wetland preservation, in addition to housing for several thousand families. "In my experience with developers all over America, I have met few who have as much concern for

the environment as Jim Wilson," land-use consultant James Parker told the Baltimore Sun.

The federal government took a less charitable view of Wilson's development in Charles County. Wilson "wantonly destroy[ed]" several dozen acres of wetlands that were "very critical to the continued health of the Potomac River watershed and the Chesapeake Bay," according to U.S. attorney Lynne Battaglia. In 1995, the Justice Department indicted Wilson and his company, Interstate General Co. (igc), for depositing fill material in "waters of the United States" without a federal permit, in violation of Section 404 of the Clean Water Act. One year later, Wilson was sentenced to 21 months in federal prison and fined \$1 million. The court fined igc an additional \$3 million.

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Wilson appealed his conviction, alleging that the federal government had no jurisdiction over his development. Federal prosecutors maintained Wilson's development posed an unacceptable threat to the Chesapeake Bay, but Wilson's attorneys noted that the development is several hundred yards from the nearest creeks and miles from any of the Chesapeake Bay's tributaries. Although parts of the St. Charles development had wetland characteristics, including hydrologic soils and hydrophytic plants, there is no clear connection between the land at St. Charles and "waters of the United States," which are protected under Section 404 of the Clean Water Act. Without such a connection, the federal government has no basis for regulating Wilson's development. Federal authority over "waters of the United States" stems from Congress's constitutional power to regulate "commerce among the several states." It is a stretch to interpret this grant of authority as the justification for regulating nearly every slightly wet spot of land in the country. Because the Corps' regulations define "'waters of the United States' to include intrastate waters that need have nothing

to do with navigable or interstate waters," the Fourth Circuit Court of Appeals invalidated the rules and overturned Wilson's conviction.

Wilson's is not the only successful challenge to the federal government's regulatory authority over wetlands. Last year, the National Mining Association successfully challenged the so-called "Tulloch Rule," which prohibited dredging of wetlands. The D.C. Circuit Court of Appeals found that the rule, which the U.S. Army Corps of Engineers promulgated in 1993 as part of a consent decree, exceeded the Corps' authority to regulate the filling of wetlands under the Clean Water Act. The Corps, backed by environmental groups, argued that it is impossible to dredge or excavate a wetland without trace amounts of material falling back into the wetland. This was too much for the court, as a law prohibiting the addition of dredge or fill material could not very well prohibit the removal of material. In the court's words, "Congress could not have contemplated that the attempted removal of 100 tons of [dredged material] could constitute an addition simply because only 99 tons of it were actually taken away."

To top it off, landowners are beginning to win "takings" claims against the federal government for wetlands regulations. In several recent cases, landowners who had been denied the right to develop private land because of a federal wetlands designation successfully sued for compensation from the federal government under the Fifth Amendment's takings clause ("... nor shall private property be taken for public use without just compensation.") More takings suits are in the works, as is litigation to expand the Wilson ruling and ensure that it is enforced.

The recent string of court losses has been a shock to federal regulators and much of the environmental community. Environmentalists fear that a restriction of federal regulatory authority over wetlands will lead to environmental ruin. Natural Resources Defense Council attorney Drew Caputo claims that court-imposed limitations on federal authority will be a "really bad thing for wetlands." In a similar vein, Howard Fox of the Earth Justice Legal Defense Fund (formerly known as the Sierra Club Legal Defense Fund) warns that without regulation by the EPA and Army Corps of Engineers, wetlands will be at the mercy of greedy developers. "To kick this back to the states opens up a bidding war to attract industry by lowering water pollution standards," Fox told the Washington Post. The invalidation of the Tulloch rule was likewise lamented as creating new opportunities for environmental destruction.

The conventional wisdom certainly holds that federal regulation is necessary because state efforts and nonregulatory initiatives are insufficient to safeguard environmental values. By that view, competitive pressures will trigger a "race to the bottom" preventing states from enacting costly wetland protection programs, and only proscriptive land-use controls can ensure that wetlands are conserved. The view is plausible, and is akin to that which justifies most federal environmental programs,

but it is also misinformed.

The history of wetland conservation efforts suggests that states were hardly the environmental laggards that many suppose. Not only did many states begin to enact wetland protections before the federal government, but states continue to develop new approaches to wetland conservation even as the federal program atrophies. Moreover, there are substantial nonregulatory conservation efforts. Indeed, it is quite likely that such programs are restoring sufficient wetland acreage that America has achieved "no net loss" of wetlands.

Taken together, state programs, nonregulatory federal programs, and private conservation efforts appear quite capable of filling the gap left by the atrophy of federal regulation. New limitations on federal wetlands regulation do not necessarily mean the end of effective wetlands protection.

THE FEDS GET THEIR FEET WET

today the protection of wetlands is a top environmental priority. There is broad recognition that wetlands perform vital ecological functions, including flood control, water filtration, and species habitat. It was not always that way, however. As environmental analyst Kent Jeffreys commented, "Throughout most of American history, the federal government has viewed true wetlands as an obstacle to progress." For years, the federal government enacted policies to eliminate wetlands. The Swampland Acts of 1849, 1850, and 1860, for example, transferred to states tens of millions of acres of wetlands to be drained for agricultural purposes. Agricultural programs, subsidized disaster insurance, and various flood control and channelization projects further abetted the destruction of wetlands, as did local efforts to control mosquitoes and disease. Robert Stavins and Adam Jaffe estimate that some 30 percent of the loss of forested wetlands in the lower Mississippi Valley was the result of federal programs.

Given the extensive subsidization of wetland destruction, it should be no surprise that the country experienced dramatic wetland conversion rates. Indeed, the Department of Agriculture estimates that annual wetland conversions were as high as 800,000 acres per year in the continental U.S. before 1954. In the 1950s, for a variety of reasons, net wetland conversion slowed to an estimated 458,000 acres per year, but America's stock of wetlands was still diminishing rapidly. By 1954, wetland acreage in the lower 48 states had dropped by more than 30 percent since the nation's founding.

As wetlands were disappearing at a dramatic rate, America's environmental conscience was awakening. Lands that had been disparaged as swamps and bogs were now recognized as essential wildlife breeding grounds, buffer zones, and water filters. Conservationists began to call for wetland protection, with some success. The first wetlands protection statute was enacted in 1963 in Massachusetts. That early law required a state permit for filling or dredging coastal wetlands. In 1965, the state legislature enacted controls on inland wetlands as well. Connecticut, Georgia, and Washington soon followed with wetland conservation measures of their own.

Although state wetland conservation efforts began in the 1960s, federal regulations would not issue until 1975, and even then only as a result of litigation. When the Clean Water Act of 1972 was enacted, few in Congress thought that Section 404, which bars the deposit of dredge or fill material in navigable waters, authorized the U.S. Army Corps of Engineers to regulate the filling of wetlands. According to former wetland regulator Bernard Goode, "If Congress meant in 1972 for Section 404 to protect wetlands, it kept that secret to itself." Yet by the time the Clean Water Act was enacted, several states were experimenting with wetland conservation programs.

In 1975, the Natural Resources Defense Council sued the Corps of Engineers for failing to assert jurisdiction over wetlands under the Clean Water Act. A federal district court agreed, holding in NRDC v. Callaway that Congress "asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution"; the Corps declined to appeal. Thus a federal court, not Congress, gave the federal government extensive authority to regulate wetlands. By the time the regulations were issued, every coastal state but Texas had enacted coastal wetland protections of some kind, and 11 more states had enacted statutes to protect freshwater wetlands as well. Congress would not get around to rubber-stamping the expansion of the Corps' authority until 1977, and even then it stopped short of explicitly authorizing federal regulation of wetlands. Indeed, as of this writing, Congress has never given the Corps such direct instruction.

WHAT RACE TO THE BOTTOM?

theoretically, states should not have begun regulating wetlands before the federal government got into the act; instead there should have been a "race to the bottom" that precluded state conservation efforts. The "race to the bottom" theory is rather simple: States will compete with one another to attract industry by lowering regulatory burdens to create a more friendly business climate. Such competition, the theory goes, will generate a downward spiral of environmental protections as firms seek out those states with the weakest environmental protections. The theory holds that states are faced with a prisoner's dilemma: Although all states would be better off if they collectively maintained stringent environmental safeguards, each state has the incentive to relax its standards, even though not all states will successfully attract additional economic investment. Federal standards are thus necessary to prevent states from competing in this fashion.

The race to the bottom theory has many flaws, not the least of which is its equation of costly regulation with

environmental protection. Recent state experimentation with environmental reforms demonstrates clearly that it is possible for states to reduce the regulatory burden imposed on firms without lessening environmental safeguards. Moreover, as New York University law professor Richard Revesz has demonstrated in several influential law journal articles, the theory proves too much. Insofar as states compete with one another for business, they compete in many areas, from tax policy to education to workplace regulation. Foreclosing welfare-reducing competition in one sector—environmental regulation will not eliminate rivalry among states but will simply serve to shift it to another policy context. If the race to the bottom theory holds that federal regulation is necessary to prevent lax state environmental regulation, a similar justification can be made to nationalize virtually every question in public policy.

If the race to the bottom theory were true then one would not expect states to exceed federal standards. Yet they do, regularly. From minimum-wage laws to environmental regulations, states often elect to enact policies that are more costly to private businesses than is required under federal law. Clearly, then, states are competing for more than new business. They are also seeking to improve the quality of life for residents and to become more attractive to tourists. Economic growth is only one of many goals. Many states may lower the cost of regulations to attract business, but they also seek to maintain environmental quality to attract residents (taxpayers) and meet popular demand for a clean and healthy environment.

In the case of wetlands, the race to the bottom theory would predict that few, if any, states would enact wetland regulations more stringent than those administered by the Corps of Engineers, and that those states with the most wetlands would be the least likely to enact protections. As Oliver Houck and Michael Rolland argue in the Maryland Law Review, "As a general rule, the larger a state's wetland inventory, the more important it is to the nation, but the less important saving it may appear to the state itself—indeed, the more onerous the burden of protecting it will appear." A state in which more lands are to be regulated as wetlands has comparatively more to lose than a state in which a smaller proportion of its lands will be affected as a wetland regulation program will limit development on a greater proportion of its lands.

The experience of state wetland regulation fails to confirm the race to the bottom theory. Indeed, the record of state wetland regulation is the opposite of what the theory predicts. "Most of the states with the largest wetland acreages have adopted wetland regulatory efforts for all or a portion of their wetlands," notes Jon Kusler of the Association of State Wetland Managers. According to the federal National Wetlands Inventory, wetlands constitute 10 percent or more of the land in 15 states. Every one of those states, save Alaska, enacted its first wetland protection statute before 1975, when the Corps was granted

regulatory jurisdiction by a federal court. As of 1994, according to Kusler, none of the states had "repealed or substantially undercut its wetland statutes," despite any competitive pressures that the states might have faced. Wetland protection efforts in most of those states address both inland and (where applicable) coastal wetlands.

Of course, many states did not enact wetland conservation programs before the court-ordered expansion of Section 404, and some states have yet to enact any sort of wetland protection at all. But that fact alone suggests little. The mere existence of a federal regulatory program likely provides states with a substantial incentive not to regulate themselves. Once a federal program is in place, states are likely to devote their resources to other priorities, rather than duplicate the federal efforts. Once a federal program is in place, any deficiencies in the program seem more likely to generate pressure to reform the federal program than to induce calls for state action. In that sense, it is quite possible that federal regulatory efforts may crowd out state efforts by pushing them below the levels at which they would be were the federal government not involved.

Despite such incentives not to act, many states have enacted wetland programs to supplement or augment federal efforts. For instance, several states, such as Maryland and New York, regulate wetland buffer zones; the federal government does not (nor could it under the Fourth Circuit's opinion in Wilson). Many states also protect wetlands through shoreline or coastal zone protection programs as well, and several states have "critical area" programs that impose special land-use controls in portions of the state deemed to have special ecological significance. In many states, wetland protection is addressed in local zoning ordinances as well.

Without doubt, some state programs are more effective than others, and some of the state programs that preceded NRDC v. Callaway were less stringent than the resulting federal restrictions. But it is difficult to argue that states have been particularly laggard in addressing concerns about wetlands. States were no slower to act than the federal government, especially when one considers that federal wetland regulations were the result of a court judgment, not a majority vote in Congress. As understanding of the environmental importance of wetlands grew in the 1960s and 1970s, states began to act to protect those wetland values important in their part of the country.

State officials, even if they lack the same level of expertise as their federal counterparts, have an inherent advantage in identifying local environmental priorities. Insofar as wetlands perform local ecological functions, state and local officials are in a better position than federal regulators to recognize the importance of those functions. Not all wetlands are created equal; wetland types, and the functions they perform, vary from place to place. Which wetlands are vital to protect in a given area is information that is more readily available at the state and local level. As then-wetlands program manager for the state of New York remarked in 1985, "Local governments are better able to assess the potential impacts of wetland modification." State and local officials are also better situated to determine which sorts of measures will do the most good. As Henry Butler and Jonathan Macey concluded in their study of environmental federalism, "Federal regulators never have been and never will be able to acquire and assimilate the enormous amount of information necessary to make optimal regulatory judgments that reflect the technical requirements of particular locations and pollution sources."

To put the economies of scale of wetland protection into perspective, consider the enormity of the regulatory responsibility the Corp of Engineers would assume were it to attempt to protect the approximately 100 million acres of wetlands in the continental United States. In 1996, the Corps' regulatory division had fewer than 1,200 full-time equivalent employees. Assume, for the sake of argument, that the regulatory division could set aside its other regulatory duties and focus solely on wetlands. Each Corps official would be responsible for approximately 90,000 acres of wetlands spread over approximately 1.7 million acres of land. Irrespective of an official's intentions or authority, that would be a daunting task.

State wetland conservation efforts certainly have their limitations, as do all regulatory efforts at any level of government. The issue is not whether state wetland protection efforts achieve all that the most ardent environmentalist would like, but whether a greater reliance on state efforts, in lieu of federal regulation, would lead to environmental ruin. Given that the economies of scale of wetland protection favor localized, as opposed to national, efforts, and given the actual record of state programs. it is difficult to conclude that federal regulations are inherently superior, particularly when one considers the legacy of federal regulation.

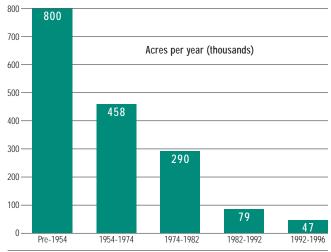
ARE FEDERAL REGULATIONS WORTH CONSERVING?

federal wetlands regulations have faced withering criticism over the past decade. To developers and property rights activists, Section 404 imposes a repressive burden that often disenfranchises small landowners. Although the Corps denies only a small portion of wetland fill permits, over half of the individual permits submitted are withdrawn before the Corps responds. It is the rare instance in which the Corps approves or rejects a permit application within the 60-day window that federal regulations require. In one instance, the Corps sat on an application to fill 0.0006 acres of wetlands—approximately 26 square feet, or half the size of a ping-pong table—for 450 days before it was withdrawn.

Environmental activists have not been happy with federal wetlands regulation either. Writing in Audubon in 1995, Ted Williams charged that Section 404 "is a hoax perpetrated and perpetuated by a wasteful bloated bureaucracy" that "spews wetland destruction permits as if it were a piñata." This criticism may go too far—in 1995 the Corps processed wetland permits for only 26,000 acres, yet an estimated 150,000 acres were converted. That is, some 80 percent of gross wetland losses occurred without the Corps' involvement, leading environmental groups to pursue litigation strategies to induce more stringent regulation, such as that which produced the now-invalid Tulloch Rule. But as discussed above, the Corps has neither the staff nor the resources to regulate wetlands comprehensively. There is only so much a centralized federal regulatory program can accomplish.

Defenders of Section 404 note that wetland losses have dropped dramatically since the inception of federal wetland regulation. That is certainly true, but wetland loss rates began to decline well before a federal judge decided that Section 404 of the Clean Water Act regulated wetlands. (See Figure 1.) As noted earlier, it is estimated that net wetland losses before World War II totaled approximately 800,000 acres per year. In the 1950s and 1960s, conversion rates dropped to an estimated 458,000 acres per year, and in the 1970s they dropped still further, to an estimated 290,000 acres per year. Although environmental activists repeatedly testify that the United States continues to lose hundreds of thousands of wetlands acres per year, the last U.S. Department of Agriculture National Resources Inventory estimated a net loss rate of under 80,000 acres per year from 1982 to 1992, even without the Tulloch Rule that was to be created in 1993. A more recent usda report concluded that "the United States is within 47,000 acres per year of achieving 'no net loss' of wetland acreage," even if state, local, and purely private restoration efforts are excluded (see chart). Because such efforts are substantial, it is most likely the

Figure 1 Estimated Net Annual Conversion Rates of Wetlands in the 20th Century



Note: Totals do not include wetland restoration by private conservation organizations or state or local governments.

Source: U.S. Department of Agriculture

case that more wetlands are created each year than are converted to other uses.

If federal regulation under Section 404 of the Clean Water Act does not explain the attainment of "no net loss," then what does? The congressional Office of Technology Assessment concluded in a 1984 report that the drop in wetland conversion rates in the post-war period was "due primarily to declining rates of agricultural drainage." Some analysts suggest that the Swampbuster program, which cuts off most federal agriculture subsidies to farmers who convert wetlands, played a substantial role in the trend. But Swampbuster was not enacted until 1985 and could therefore only have played a role in later reductions. The decline in wetland conversion rates seems to correlate with increases in agricultural productivity. That should be expected, for as farmland productivity increases the demand for new cropland falls, as does the demand to convert wetlands into farmland. One would also expect that farmers would experience diminishing marginal returns from the draining of wetlands, as those lands with the greatest agricultural potential were presumably the first ones to be drained. The result is clear: It is simply not as profitable to drain wetlands for the planting of crops as it once was. Yet these factors alone cannot explain the trend toward "no net loss" of wetlands.

CONSERVATION WITHOUT REGULATION

land-use regulations are clearly the most conspicuous type of wetland protection program. They generate controversy and spawn litigation, irrespective of whether they effectively achieve their goals. Often overlooked are the various nonregulatory government programs and private conservation efforts that seek to work with landowners rather than against them. Such programs appear to be a more cost-effective and less bureaucratic means of conserving wetlands, and could well make up for the loss of federal regulatory authority.

The federal government enacted a handful of nonregulatory conservation programs before World War II for the purpose of preserving duck habitat. Although these programs may have been good for ducks, it is doubtful that they did much to conserve other wetland functions, particularly when other federal programs encouraged wetland conversion.

In the 1980s, Congress created a new generation of wetland conservation programs: the North American Waterfowl Management Plan in 1986, the Partners for Wildlife program in 1987, and the Wetland Reserve program in 1990. Those programs all operate similarly, that is, they fund the restoration and conservation of wetlands on private land. Typically, the program covers the costs of restoration and the purchase of an easement to ensure that the restored wetlands are protected. Private organizations, such as Ducks Unlimited, often work in conjunction with the programs to help ensure that the restoration is effective. All conservation agreements

under the programs are purely voluntary.

The three programs alone restored an estimated 160,000-plus acres of wetlands per year from 1992 through 1996, at the relatively low cost of \$1,000 per acre or less. By contrast, the cost of Section 404 mitigation projects—whereby landowners are required to "mitigate" wetland conversions by funding the creation of new wetlands as a condition of a fill permit—can reach as high as \$30,000 per acre, not including the legal and other costs borne by the permit applicant. The cost per recovered acre is probably much higher than \$30,000 because Section 404 mitigation projects have a reported failure rate as high as 50 percent. Requiring a developer to mitigate does not mean that there is actually mitigation.

Restoring wetlands can be a difficult process; it takes more than simply making land "wet" to create a functioning wetland. The high failure rate of mitigation is to be expected because the landowner who is forced to mitigate focuses on what is necessary to obtain permit approval. Whether the mitigation project actually serves an ecological purpose is largely irrelevant. Voluntary conservation programs, on the other hand, are focused on creating and maintaining particular ecological functions, such as species habitat or water filtration.

Of course, not all wetland restoration is the result of federal policy. Several states have nonregulatory conservation programs of their own. More significantly, private conservation organizations, such as Ducks Unlimited, Delta Waterfowl, Chesapeake Wildlife Heritage, and others, have been funding wetland conservation and creation for decades. Ducks Unlimited restored or enhanced over 50,000 acres of wetlands in 1994 alone. Private companies seeking to burnish their environmental image fund wetland conservation as well. Dow Chemical, for example, won a conservation award in 1995 for restoring thousands of acres of wetlands on its various properties around the country.

Ironically, federal wetland regulations are often a barrier to private conservation efforts. Regulatory requirements delayed Sebastiani Vineyards' plans to restore 90 acres of wetlands in California's Sonoma Valley and more than tripled the eventual cost. Bill Ellen, a wetlands consultant, was even jailed for technical violations of Section 404 when constructing duck ponds on private land. Because federal regulations apply equally to "natural" and artificially constructed wetlands, some landowners may well fear that to restore wetlands on their property is to invite federal land-use control. The existence of such perverse incentives against conservation has been well documented under other environmental laws, and is likely to occur under Section 404 as well. Thus, the extent of private wetland conservation and restoration would likely be greater were federal regulations not in the way.

THE FUTURE OF 404

congressional authorization of the clean water Act expired in 1990, and some legislators are eager to

revisit the law. Environmental activist groups, in particular, want Congress to restore some of the federal regulatory authority taken from the Corps by the courts. As of this writing, it appears that some industry groups, such as the National Wetlands Coalition, may go along, at least on the restoration of the Tulloch Rule. Environmental activists are also seeking to restrict regulatory provisions that exempt some small landowners from Section 404's reach.

Granting additional regulatory authority to the Corps of Engineers would be a mistake. Indeed, if Congress reauthorizes the Clean Water Act, it should question the need for Section 404 altogether. Voluntary wetland restoration programs, modeled on the successful efforts of private conservation groups, are less expensive and more effective than federal land-use control. Transferring the \$70-80 million spent by the Corps administering Section 404 to nonregulatory programs would likely be a boon for wetlands and landowners alike. Moreover, the record suggests that states are willing and able to play a substantial role in protecting wetlands and could fill any potential gaps left by eliminating the federal program. Indeed, there is reason to believe that both the states and private groups would do more if the federal government would get out of the way.

Recent court decisions limiting federal regulatory authority should not be seen as an environmental threat. They present an opportunity to begin forging a new approach to environmental protection. It is time for the country to take it.

readings

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