

W A T E R  
Q U A L I T Y  
MID-TERM GRADE: B | FINAL GRADE: B

Watershed Trading	B+
Concentrated Animal Feeding Operations	D
U.S. Army Corps of Engineers	C+
EPA's Strategic Plan (on Water)	A

When the Bush administration took office in 2001, water quality policy was dominated by the Environmental Protection Agency's top-down, command-and-control regulation. For more than thirty years, the fate of the nation's rivers and streams had been determined by rules that focused on inputs, not outcomes. But things began to change, at least a little. This change was noted in the mid-term report card.

#### THE MID-TERM REPORT

Just before leaving office, the Clinton administration had attempted to push through a water quality regulation that would have required every state to identify stressed rivers and streams and then to specify the total maximum daily loads (TMDL) of pollu-

tion to be allowed in those streams. Some 40,000 streams and stream segments would have been affected by the TMDL requirements.

This proposed regulation would have required technology-based standards to be met at every discharge point, but once the technology regulations were satisfied, the rule allowed for a system of nutrient trading. One discharger of nitrogen or phosphorous, say, might purchase additional treatment from another in stressed watersheds. In short, the regulation could have set in motion a very crude market process for achieving water quality goals.

The TMDL rule failed to pass muster with the Bush administration, and an alternative market-based policy emerged in its place. This new policy offered considerably more promise for fans of free market environmentalism.

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While a water quality trading policy was being launched in the EPA's Office of Water, however, other parts of the Bush EPA were still pursuing command-and-control regulation. The agency's final rule for concentrated animal feed operations (CAFOs) contained top-down regulation, but used performance standards in place of the more costly technology-based standards that had been the norm. The move to performance standards was an improvement, but the Bush team still lost points for not making CAFO an integral part of its emerging watershed management approach, which encouraged nutrient trading as a way to reduce control costs.

The U.S. Army Corps of Engineers has been busy working on a system of nationwide permits for controlling the impact of new construction on wetlands. Instead of allowing greater flexibility in mitigating wetland impact, the Corps' final rule imposed rigid standards and weakened the use of market incentives. This particular episode produced a very low mid-term grade for the Bush team. Meanwhile, the EPA and the Corps of Engineers continued to modify and proliferate new rules.

Taken together, the mid-term actions generated a solid B grade.

### ASSESSING THE FULL FOUR YEARS

Several important questions remained to be answered in the Bush team's last two years. One question had to do with the water quality trading policy and the focus on watersheds instead of individual streams

and segments. Would the EPA push forward with real market-based actions, or was the watershed policy just a flash in the pan? A second question had to do with confronting the command-and-control pattern of environmental control so fundamental to U.S. environmental policy, and so extraordinarily costly. Would the Bush EPA screw up its courage and do more than tinker at the margins?

### WATERSHED TRADING

As should be expected, the last two years of water quality regulation are much like the first two years: a mixed bag. But real resources and leadership, not just rhetoric, have been applied to implementing the trading-based watershed policy (EPA 2003a, 1; EPA 2004). Along with funding to support the policy implementation, the agency announced trading projects in Chesapeake Bay, the Lower Colorado River, in rivers and coastal areas in Connecticut, Alabama, North Carolina, Wisconsin, and Massachusetts. The EPA also moved to develop an electronic trading system for the emerging markets (EPA 2003a, 5).

Going beyond this, the Bush team has creatively worked around one of the most costly constraints that seemed to limit the usefulness of the trading policy. Recall that the Clinton TMDL regulations, which were set aside by the Bush administration, called for limits on the total amount of pollution allowed in designated waters; they would not allow trading to occur until each point-source had met the requirements of

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its EPA-approved permit. In the last two years, however, the Bush administration approved the use of watershed permits on a case-by-case basis (Environmental Trade Network n.d.).

This means that an entire watershed or system of polluters will be covered by a permit that sets a constraint on the system but allows trading between point and nonpoint sources. Then, the community of water quality users can collectively find the lowest way to reduce pollution while staying within the limitations set by the watershed permit. This innovative policy change expands trading and related water quality improvement opportunities.

Working within the limits of the law, members of the Bush team have not been able to go the full distance in developing watershed-based water quality management systems. That would mean eliminating requirements that point-source dischargers install and operate specified technologies before being allowed to engage in trades and allowing the watershed manager to make all water users pay, including withdrawers of water, dischargers of waste, and recreational users. Fees based on the cost imposed by those who affect water quality would change incentives. They would encourage users to economize on water, cause dischargers to find production technologies that use less water, and increase the search for more cost-effective pollution control devices. Having to pay to discharge would also accelerate the search for trading opportunities with others in the same watershed.

***Watershed Trading* B+**

## CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO)

The EPA's CAFO rule, which was discussed in the mid-term report, received some praise for allowing operators some flexibility in selecting the technology they would use to meet the regulation. The mid-term report expressed concern, however, about the role of the Department of Agriculture's Environmental Quality Incentives Program, which basically provides taxpayer funds to farmers when they invest in pollution control activities. The worry was that funding might be open-ended, leading to disincentives for farmers to seek cost-effective controls.

As it turns out, environmentalists attacked the performance standard included in the CAFO rule, and the USDA called for increased funding for CAFO pollution controls, while urging an improved system for allocating funds (*Daily Environment Reporter* 2003b, A-8.) In short, the Department of Agriculture faces the standard problem of allocating valuable resources among competing users when the price charged is zero.

The CAFO rule, which applied to more than 15,500 farm operations, brought an outcry from elsewhere, too. According to the General Accounting Office, there are simply not enough enforcement resources available within the EPA or the states to put the regulation into effect (*Daily Environment Reporter* 2003a, A-6). When the EPA announced the rule, the agency had estimated that benefits would be between \$240 and \$335 million, with costs expected to hit \$335 million. But that was before the GAO's call for more resources.

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The CAFO rule illustrates some of the worst characteristics of combining command-and-control regulation and subsidies to defray costs. The regulations promise to lead to high-cost results that could be obtained with far fewer resources. In an ideal world, rules of liability and common law could address the problems posed by CAFOs, and regulation would be virtually unnecessary. In that world, farmers who imposed costs on the environment would be forced to stop and to pay for the damages they caused. Common law environmentalism gets the incentives right. The CAFO rule gets the incentives wrong. The Bush administration gets a lower CAFO grade this time: D.

***Concentrated Animal Feeding  
Operations D***

**U.S. ARMY CORPS OF ENGINEERS**

Throughout the years of the Bush administration, tension between wetlands protection and destruction has often pitted one federal agency against another. The Corps of Engineers is regularly involved in massive projects that have to do with shoreline recovery, drainage of swamps, dredging of channels, and restoration of lands previously drained. The EPA is just as often involved in challenging the Corps on the basis of wetlands destruction, and the U.S. Fish and Wildlife Service is often seen opposing the Corps out of concern for protecting endangered species habitat. The tension that develops across these agencies illus-

trates the fact that an environmental improvement often comes at the expense of an environmental loss.

Wetlands loss and recovery, Everglades restoration, and shoreline recovery were dominant Corps of Engineers issues for the Bush team. Bush administration actions were conditioned partly by a Supreme Court decision denying federal jurisdiction over isolated wetlands, a decision that affected roughly 20 percent of the wetlands in the lower 48 states (U.S. Army Corps of Engineers 2003). The Bush administration took the Court's action as an opportunity to cut the Corps budget and to require that the Corps pursue "only projects that have a very high net economic or environmental return to society" (Franz 2003).

Of course, the administration's action was not viewed favorably by those who saw the end of their favorite pork-barrel projects (Cohne 2003b). Bowing to both pork barrel and environmental pressures, the administration backed away from revising rules that would have opened wetlands protection to the states (Cohne 2003a). What might have been an abandonment of a strictly interpreted "no net loss" wetlands rule was given up; the status quo survived the challenge. The Bush administration's 2005 proposed budget restored \$10 million to the Corps of Engineers for wetlands regulation.

Over the course of its term of office, the Bush administration has fought an on-again, off-again battle with the Corps of Engineers' penchant for building, draining, restoring, and regulating. At times, the administration seemingly seeks to rein in the Corps. Then, at other times, the adminis-

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tration and the Corps become united in carrying out politically important goals. Still, the drift of actions does challenge the status quo. The administration receives a grade of C+ for Corps policy.

*U.S. Army Corps of Engineers* C+

### THE EPA'S STRATEGIC PLAN

To reform its regulatory system, an agency can operate on several levels. First, there are highly focused regulations, such as those targeting a specific industry activity such as CAFO, where market-based approaches may be substituted for technology-based regulation. Then there are broader opportunities for taking a market approach, as in the case of watersheds. Even broader yet are policy statements organized for the purpose of preconditioning agency action. The second half of the Bush term saw the EPA's strategic plan emerge (EPA 2003b). The water quality components of the plan indicate that incentive-based market approaches are fully endorsed for controlling point and nonpoint-sources of water pollution.

The EPA's strategic plan allows states to become innovative if they desire to do so, or to stay with the older command-and-control regime if they prefer. The plan also strengthens an earlier agency emphasis on monitoring outcomes. The Bush EPA fully recognizes that trading requires information on the part of all parties to the transaction. Finally, needed attention and resources are being devoted to monitoring water quality out-

comes. To the administration's credit, the Bush EPA strategic plan emphasizes outcomes, cost-effectiveness, and markets.

The strategic plan offers at least the promise of meaningful progress in the direction of more effective water quality policy, especially as it relates to monitoring outcomes. For too long, the EPA has had to rely on mathematical models for estimating ambient water quality in streams, lakes, and coastal waters. Unfortunately, for all forms of life, the EPA's models can miss the mark by huge amounts. The most recent example of this is seen in the monitoring results for the Chesapeake Bay, one of the nation's most stressed bodies of coastal water. According to recent news reports, the EPA's models indicate progress is being made in recovering water quality in the Bay. But according to University of Maryland scientists, who are actually measuring water quality and marine life outcomes, the Bay is losing ground (Whoriskey 2004).

The EPA's reliance on modeling instead of measuring relates to budgets, priorities, and the form of regulation mandated by Congress. There is little political payoff to allocating more funds to assessing water quality in comparison with the payoff from allocating funds for more sewage treatment plans. The political system is shortsighted and addicted to bricks and mortar. Support of science takes a back seat to actions in the field that seem to show evidence of doing something about pollution. Then there is command-and-control regulation, with its focus on inputs, not outcomes. A new focus on watersheds brings with it a focus on outcomes, but changing the focus is an uphill

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struggle opposed by the basic statute under which the EPA's water programs operate.

***EPA's Strategic Plan*** A

**THE FINAL GRADE**

When viewed in the context of statutory constraints, the Bush administration has given strong emphasis to the use of market forces for improving water quality. It has given cause for celebration to those who recognize the power of property rights and markets in protecting precious environmental assets. The administration has also stepped away from past patterns by announcing an EPA strategic plan that emphasizes the importance of good data as well as getting incentives right. But the Bush team has been less able to bring cost-effective reforms to federal wetlands policy and to the old-time command-and-control regulation embodied in effluent guidelines.

When these actions are considered together, the Bush administration has done more than just tinker at the margin. The Bush team has brought meaningful market-based reforms to at least some important components of water quality regulation.

***Water Quality*** B

**RECOMMENDATIONS  
FOR THE NEXT ADMINISTRATION**

The Bush administration has shown that progress toward the use of markets and

property rights can be made within the boundaries of the statutes that define the regulatory framework. However, the progress made, no matter how laudable, is temporary because it is based on EPA policy statements, not regulations or law. The Bush administration's failures to bring meaningful change have more often than not been the result of barriers formed by statutes and regulation. The Bush team has worked within the limits of the law.

It is now time for bolder action. The next administration should:

- Seize the high ground by pushing for statute changes that emphasize decentralized watershed approaches managed by the states, that permit variances from command-and-control regulation (so long as the proposed alternative can be shown to be as effective and less costly), and that, by law, focus on outcomes, not inputs.
- Introduce legislation that requires the EPA to use watershed permitting that sets standards for the quality of water, not for specific point sources and where water quality managers use fees and a trading-based watershed approach in managing water quality.
- Call for increases in funding for monitoring water quality in the nation's rivers, streams, and coastlines, with a requirement that data

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be gathered and reported systematically on an annual basis.

- Introduce legislation that emphasizes the value of wetlands by requiring that full market-based compensation be paid for all wetlands destroyed by federal action or whose use is taken from private landowners by federal regulation.
- Introduce legislation that removes all statute-based shields that limit the use of common law by citizens who seek to protect their environmental rights, whether in interstate or intrastate controversies.

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