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Best Practices as Regulatory Regime: The Case of Agricultural Nonpoint Source Pollution

by David Zaring

In traditional administrative law, agencies pass rules and courts review them. But what if agencies stopped acting by rule and started leading by example? The federal response to agricultural water pollution offers a case study in how this increasingly popular form of administration can work, by regulating not through rule, but through suggestion—specifically suggestion via best practices.

As most environmental observers know, runoff remains the most serious and least regulated form of water pollution in the United States.¹ Of the principle sources of runoff pollutants, agricultural runoff is the most notable. The U.S. Environmental Protection Agency (EPA or Agency) has concluded that “[a]griculture is the leading source of pollutants in assessed rivers and streams, contributing to 59[%] of the reported water quality problems and affecting about 170,000 river miles.”²

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1. As the U.S. Environmental Protection Agency (EPA or Agency) has observed on its nonpoint source pollution website, “nonpoint sources constitute the leading sources of water pollution in the [United States] today.” See <http://www.epa.gov/owow/nps/Section319III/intro.htm> (citing 1998 Water Quality Inventory). See also 68 Fed. Reg. 60653, 60653 (Oct. 23, 2003) (“Nonpoint source pollution continues to be, and is increasingly recognized by the public as, the largest remaining source of water quality impairments in the nation); see also U.S. GENERAL ACCOUNTING OFFICE (GAO), WATER QUALITY: FEDERAL ROLE IN ADDRESSING—AND CONTRIBUTING TO—NONPOINT SOURCE POLLUTION (1999) (GAO/RCED-99-45) (“Most of these remaining water quality problems are largely attributable to pollutants from nonpoint sources—diffuse sources that include a variety of land-based activities such as timber harvesting, agriculture, and urban development.”) As Victor Flatt has observed: “The continuing problems with pollution are mostly associated with [nonpoint] source control.” Victor B. Flatt, *Spare the Rod and Spoil the Law: Why the Clean Water Act Has Never Grown Up*, 55 ALA. L. REV. 595, 597 (2004). See also Jeffrey M. Gaba, *New Sources, New Growth, and the Clean Water Act*, 55 ALA. L. REV. 651, 651 (2004) (“Nonpoint sources, such as agricultural runoff, have never been the subject of effective regulation under the CWA, and they now constitute the major source of pollution that contributes to the failure to achieve water quality goals.”).

2. 65 Fed. Reg. 43586, 43587 (July 13, 2000). The Agency has assessed agriculture as “a source of pollution for 48% of the impaired river miles reported in the [United States],” 1-1, at <http://www.epa.gov/owow/nps/agmm/chap1.pdf>. Moreover, the problem has been a persistent one. See George A. Gould, *Agriculture, Nonpoint Source Pollution, and Federal Law*, 23 U.C. DAVIS L. REV. 461, 462 (1990) (noting that “little progress has been made in reducing agricultural pollution” even though the problem has been recognized for some time). For a more technical discussion of the most common forms of agricultural nonpoint source pollution, see U.S. EPA’s *National Management Measures to Control Nonpoint Source Pollution From Agriculture*, at <http://www.epa.gov/owow/nps/agmm/chap2.pdf>.

But runoff, be it agricultural or any other kind, is treated differently than the other forms of water pollution addressed by the Clean Water Act (CWA).³ The CWA only imposes specific federal limitations on pollution from point sources, which are defined as “any discernible, confined[,] and discrete conveyance.”⁴ Nonpoint source pollution includes everything else and, to the consternation of many observers, it has never been subject to federal prohibition.⁵

The U.S. Congress has, however, declared that “it is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented . . . so as to enable the goals of this [Act] to be met through the control of both point and nonpoint sources of pollution.”⁶

The CWA accordingly presents a dilemma for EPA regulators. Congress and commentators have urged them to solve the problem of nonpoint source solution. But they have not been given statutory authority to make hard rules to do so.⁷

Accordingly, the Agency, at the behest of Congress, has developed a complex set of best practices instead of rules to deal with nonpoint source pollution. Best practices can mean a number of different things to different agencies: to EPA, the best practices used to deal with agricultural and other forms of runoff are best management practices (BMPs) designed to “reduce pollutant loadings” in navigable waters that come from nonpoint sources, that is, pollution that doesn’t come from a pipe or other discrete conveyances.⁸

The result is a form of federal soft law—guidance through policy statements and designations of approval. It is

3. 33 U.S.C. §§1251-1387, ELR STAT. FWPCA §§101-607. See also *Natural Resources Defense Council v. Train*, 396 F. Supp. 1393, 5 ELR 20401 (D.D.C. 1975), *aff’d*, 564 F.2d 573, 7 ELR 20702 (1st Cir. 1977) (holding that EPA must distinguish between point and nonpoint sources before applying appropriate regulatory program).

4. 33 U.S.C. §1362(14). The CWA goes on to indicate that discernible, confined, and discrete conveyances include, “but [are] not limited to any pipe, ditch, channel, tunnel conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”

5. As the U.S. Court of Appeals for the Tenth Circuit has explained: “Congress has not chosen to give EPA the authority to regulate nonpoint source pollution.” *American Wildlands v. Browner*, 260 F.3d 1192, 1197, 31 ELR 20860 (10th Cir. 2001). See also *Sierra Club v. Meiburg*, 296 F.3d 1021, 1026, 32 ELR 20776 (11th Cir. 2002) (describing interaction between nonpoint source statutory scheme and EPA’s total maximum daily load (TMDL) scheme).

6. 33 U.S.C. §1251(a)(7).

7. As the U.S. Court of Appeals for the Ninth Circuit has explained: “Section 319 does not require states to penalize nonpoint source polluters who fail to adopt [BMPs]; rather it provides for grants to encourage the adoption of such practices.” *Natural Resources Defense Council v. EPA*, 915 F.2d 1314, 1318, 20 ELR 21372 (9th Cir. 1990).

8. 33 U.S.C. §1329(b)(2).

also a form of law that relies for its content on approaches to dealing with nonpoint source pollution developed by the states or urged by experts. BMPs do not require adherence by regulated entities, in this case states, but rather suggests common ground.

This scheme, one might think, should lead to chaos, as different water pollution regulators deal with the serious problems of agricultural runoff in random, noncoercive, and uncoordinated ways.

But chaos is not what we see when we look at the BMPs regime overseen by EPA. Instead, we see a relatively coordinated approach to nonpoint source pollution that is, whatever its flaws (and of course, there are plenty of flaws), complex but coherent.

The regime accordingly deserves a closer look, and not just because it is useful to understand how a soft federal approach to a serious environmental problem works. As it turns out, best practices-style approaches have become increasingly popular across the spectrum of federal environmental regulation.

In the past two years, for example, EPA's performance track mentor system seeks to pair facilities that have adopted effective pollution prevention efforts with facilities interested in mimicking their approach to environmental compliance.⁹ Under the program, "[m]entees are matched together with performance track sites that volunteer their time and resources to share their experiences and expertise in environmental best practices."¹⁰ EPA also recommends the use of best practices in establishing standards for disposal of nuclear waste,¹¹ and urges that they be followed for hazardous waste from academic laboratories and research institutions.¹² It has also suggested a set of best practices for community environmental watchdog organizations seeking agency funding.¹³ In addition, it also takes recommendations from regulated industries: EPA adopted best practices that the railcar industry had independently established for the construction and testing of gasoline-carrying railcars.¹⁴

Other agencies use best practices with other specific environmental problems. To take some recent examples, the U.S. Department of the Interior requires that best practices be used when attempting to rescue migratory birds at the scene of oil and hazardous waste spills,¹⁵ and has solicited

the submission of best practices from offshore drilling operations in creating rules for their offshore mineral management program.¹⁶ The U.S. Department of Agriculture (USDA) requires the use of best practices in managing scrapie outbreaks in sheep and goat flocks and similar regulations for diseases among cattle and swine.¹⁷ The U.S. Nuclear Regulatory Commission has urged employees in the nuclear industry to create best practices for a "safety conscious work environment" and has held workshops and published informational packets to help create and popularize those practices.¹⁸

What are we to make of this newly prevalent form of regulation? Imposed by statute, but enforced by no one, the CWA's best practice program represents a rather elaborate, and yet uncoercive example of addressing a regulatory problem through exchanges of information, disclosure requirements, and money.

As best practices appear across the field of environmental regulation, it is these aspects of the regime that will strike observers as fundamental. Thus, instead of rulemaker, EPA plays the role of funder of nonpoint source best practices, as well as, in a limited way, endorser of them, via the promulgation of particular practices that it and other regulators find to be effective.

In what follows, I focus on agriculture because it is the most serious cause of nonpoint source pollution, and for reasons of parsimony: it narrows the focus of my case study to a problem familiar to environmental observers, and yet manageably targeted at a particular form of economic activity, with particular environmental costs.¹⁹

I. The Statutory Scheme

First, I consider the statutory framework of the BMPs regime, as well as the regulatory guidance provided by EPA in implementing that regime. As we will see, the regime imposes limited requirements on both states and EPA, with the most stringent state-directed ones being those that EPA has tied to its disbursement of funds under the regime.

Congress' principal contributions to the regime are twofold: first, the initial disclosure requirements that it levied on states requires them to report annually on their nonpoint source pollution problems, and the progress of their solutions. Second, the money appropriated by Congress funds the BMPs adopted by states to deal with the pollution problems they have identified, and affords EPA, as holder of the

9. National Environmental Performance Track Outreach Award Application, Mentoring Program Registration, and Customer Satisfaction Questionnaire, 69 Fed. Reg. 1281, 1282 (Jan. 8, 2004), available at <http://www.epa.gov/performance-track/mentoring.htm#what>.

10. *Id.*

11. Approaches to an Integrated Framework for Management and Disposal of Low-Activity Radioactive Waste: Request for Comment, 68 Fed. Reg. 65120, 65150 (Nov. 18, 2003) (note the explicit discussion of the benefits of best practices as opposed to regulation).

12. Announcement of a Public Stakeholder Meeting on Management of Hazardous Waste in Research and/or Academic Laboratories, 68 Fed. Reg. 33121, 33122 (June 3, 2003) (announcing meeting to "build on" best practices devised by EPA and federal contractor).

13. Federal Interagency Working Group on Environmental Justice: Environmental Justice Revitalization Projects, 67 Fed. Reg. 20406 (Apr. 24, 2002).

14. Standards of Performance for Bulk Gasoline Terminals and National Emission Standards for Gasoline Distribution Facilities, 67 Fed. Reg. 59434, 59437 (Sept. 20, 2002) (proposing to adopt industry devised standards); see also 68 Fed. Reg. 70960 (Dec. 19, 2003) (final rule) (adopting the standards).

15. Migratory Bird Permits: Regulations Governing Rehabilitation Activities and Permit Exceptions, 68 Fed. Reg. 61123, 61139-40 (Oct. 27, 2003) ("Facilities used at the scene of oil or hazardous waste

spills . . . should conform as closely as possible with the facility specifications contained in the [s]ervice policy titled Best Practices for Migratory Bird Care During Oil Spill Response.").

16. Minerals Management Service Outer Continental Shelf Connect Initiative, 68 Fed. Reg. 46656, 46658 (Aug. 6, 2003).

17. Animal and Plant Health Inspection Service [(APHIS)]: Scrapie in Sheep and Goats; List of Consistent States, 65 Fed. Reg. 49770, 49772 (Aug. 15, 2000) ("details describe best practices for investigating and quarantining scrapie outbreaks that are based on APHIS procedures employed during many years of program experience dealing with animal disease outbreaks") (proposed rule); see also 66 Fed. Reg. 43964 (Aug. 21, 2001).

18. Best Practice to Establish and Maintain a Safety Conscious Work Environment; Request for Comments and Announcement of Public Meeting, 69 Fed. Reg. 7025 (Feb. 12, 2004).

19. In addition, I have written about the problems of agricultural nonpoint source pollution before. See David Zaring, *Federal Legislative Solutions to Agricultural Nonpoint Source Pollution*, 26 ELR 10128 (Mar. 1996).

purse strings to this money, an oversight role over the schemes of the states.

What follows is an admittedly technical tour through the hard rules created by Congress and EPA to implement §319 of the CWA, the section designed to address nonpoint source pollution.

Pursuant to §319, in order to reduce nonpoint source pollution “to the maximum extent practicable,” states must assess their nonpoint source pollution problems, after which they may identify BMPs²⁰ to deal with the problems, devise programs to implement BMPs, and finally submit a schedule of annual implementation milestones to EPA.²¹

While the states are devising, submitting, and then launching their plans, EPA is required to report to Congress on “the progress made in reducing pollution in the navigable waters resulting from nonpoint sources and improving the quality of such waters.”²² The section also provides for EPA to disburse federal funds to assist the states in implementing programs to reduce nonpoint source pollution.²³

So, with planning requirements for the states and oversight and funding requirements for EPA, the statutory scheme might be characterized as one featuring a stick of limited size, a carrot of limited, but nonetheless compelling, allure, and an emphasis on nonrequired planning and coordination that has nonetheless created a regime with standards that appear across jurisdictions.²⁴

The stick is limited because §319 does not *require* the states to implement nonpoint source pollution plans.²⁵ Instead, it only obligates them to make public disclosures about water pollution problems and estimates of potential solutions.²⁶ As an initial matter, this requirement extends to so-called assessment reports, which, *inter alia*, requires states to “identif[y] those navigable waters within the [s]tate which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards.”²⁷

If states fail to submit these reports, the statute shifts the responsibility to EPA to prepare and present a report to Congress, or provide assistance to a local public organization experienced with water pollution control to do the same.²⁸

However, if states fail to submit a management program detailing their intended solutions to the problems identified in the assessment report,²⁹ or if EPA refuses to ap-

prove the management reports submitted by the state, the stick is more circumspect. Under the terms of the CWA, the federal agency cannot impose a management program upon a state.³⁰

There are, however, no scofflaws in the nonpoint source pollution regime—even though the law could have been ignored, as it makes no provision for enforcement. In practice, states have participated in the program, that is, submitted assessment reports, management plans, and annual reports on the progress of their implementation.

Their participation has come because of the semi-alluring carrot provided by Congress. States that implement nonpoint source pollution programs and that can show that the BMPs they have chosen are effective in meeting their annual milestones can receive money disbursed from EPA.³¹

They cannot get vast quantities of money; the §319 program is budgeted at \$209 million for fiscal year (FY) 2005.³² But the money offered is more than a pittance, particularly when compared with prior limited funding for addressing nonpoint source pollution.

From 1987 to 1989, only \$3.8 million was appropriated for nonpoint source pollution control.³³ Between 1990 and 1993, funding never exceeded \$50 million per year.³⁴ Currently, §319 funding is the largest EPA water quality program implemented through state management grants.³⁵

from . . . nonpoint source[s] . . . taking into account the impact of the practice on ground water quality. . . .

(B) An identification of programs (including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects) to achieve implementation of the [BMPs]

(C) A schedule containing annual milestones [and providing] for utilization of the [BMPs] at the earliest practicable date.

20. 33 U.S.C. §1329(a)(1)(C).

21. *Id.*

22. *Id.* §1329(m)(1).

23. *Id.* §1329(h).

24. See Zaring, *supra* note 19, at 10132 (noting that §208 was “toothless” and §319 suffered from “not enough carrot, not enough stick”).

25. The courts have recognized this limitation. See, e.g., *American Wildlands v. Browner*, 260 F.3d 1192, 1198, 31 ELR 20860 (10th Cir. 2001) (“nothing in the CWA demands that a state adopt a regulatory system for nonpoint sources”).

26. 33 U.S.C. §1329(b)(2).

27. *Id.* §1329(a)(1).

28. See *id.* §1329(d)(3), (e). Governmental entities are supposed to play this role. “Public organizations” are supposed to have “expertise in, and authority to, control water pollution resulting from nonpoint source.” *Id.* §1329(e).

29. Specifically, §1329(b)(2) of the CWA provides that each state must provide a report that includes:

(A) An identification of the [BMPs] and measures which will be undertaken to reduce pollutant loadings resulting

30. For an examination of the “sticks” and “carrots,” see Robert D. Fentress, *Nonpoint Source Pollution, Groundwater, and the 1987 Water Quality Act: Section 208 Revisited?*, 19 ENVTL. L. 807, 825-27 (1989). To be sure, EPA’s approval is not likely to be challenged, given the very strict requirements for reversing an agency’s discretionary decisions on matters of expertise.

31. 33 U.S.C. §1329(h); for conditions on renewal of grants, see subsections 8-9. Opponents have criticized the controls of §319 as being ineffective, citing EPA’s own findings that many waterways continue to be polluted primarily from nonpoint sources. See Eric Tobin, *Pronsolino v. Nastri: Are TMDLs for Nonpoint Sources the Key to Controlling the “Unregulated” Half of Water Pollution?*, 33 ENVTL. L. 807, 809 (2003); see also U.S. EPA, *2000 National Water Quality Inventory* ch. 2, at 14, at <http://www.epa.gov/305b/2000report/chp2.pdf>. Despite the lack of proverbial sticks to force compliance, many states have taken the initiative to utilize the funding provided by this section to reduce nonpoint source pollution in their navigable waters as well as their groundwater (which is not covered by the primary provisions of §319).

32. National Association of Conservation Districts, *Funding Issues—Water Quality*, at <http://www.nacdnet.org/govtaff/issuepapers/va-hud.htm> (last visited July 29, 2004).

33. See *Hearings Before the House Water Resources and Env’t Subcomm.*, 1995 WL 76952 (Feb. 24, 1995) (testimony of John J. Vroom, President, American Crop Protective Association).

34. See *id.*

35. U.S. EPA, *National Oceanic and Atmospheric Administration (NOAA) Appropriations*, at <http://www.nacdnet.org/govtaff/issuepapers/va-hud.htm> (see figure). That figure, however, reflects a \$30 million decrease in funding from FY 2004. Compared to a total water quality funding decrease of \$23 million, it appears that §319 has suffered a significant and targeted funding drop in the past year. See U.S. EPA, *2005 Budget in Brief 2-1*, at <http://www.epa.gov/ocfo/budget/2005/2005bib.pdf>. When measured against the total EPA budget for water quality management, the §319 program accounts for only

It is, to be sure, not full funding. Generally, EPA only matches state expenditures on §319 programs; the Agency's contribution may be as large as 60% of the program's cost, with the state funding the rest.³⁶

It is through control of this funding that EPA has done most of its regulatory work in establishing a federal nonpoint source pollution policy. In 1996, it outlined nine key elements for nonpoint source pollution management plans,³⁷ and instructed states to amend their programs to incorporate the elements. States that successfully did so, provided they also had "a proven track record of effective implementation" could be "afforded substantially reduced oversight and maximum flexibility to implement their state programs and to achieve water quality objectives," in addition to more funding.³⁸

In 2003, EPA announced a general revision of its funding guidelines.³⁹ These guidelines retained the nine key elements of the 1996 program, but went into more detail on particular programs for which grants might be awarded, as well as detail about other sources of funding that might be used to partner with §319-funded programs.⁴⁰

7%. *Id.* Given that the water quality budget represents only 37.9% of EPA's total budget, the spending on §319 grants, while notable, is not particularly great when compared to nonpermissive regulatory programs.

36. U.S. EPA, *Applying for and Administering CWA §319 Grants: A Guide for State Nonpoint Source Agencies* 9, at http://www.epa.gov/owow/nonpoint_source/319/319stateguide-revised.pdf (also note helpful chart on mechanics of §319 grants, *id.* at 6).

37. The nine principles are broad ones. In theory, every management plan should have:

1. Explicit short- and long-term goals, objectives[,] and strategies to protect surface and ground water.

2. Strong working partnerships and collaboration with appropriate [s]tate, interstate, [t]ribal, regional, and local entities (including conservation districts), private sector groups, citizens groups, and [f]ederal agencies.

3. A balanced approach that emphasizes both [state-wide] nonpoint source programs and on the ground management of individual watersheds where waters are impaired or threatened.

4. The [s]tate program (a) abates known water quality impairments resulting from nonpoint source pollution and (b) prevents significant threats to water quality from present and future activities.

5. An identification of waters and watersheds impaired or threatened by nonpoint source pollution and a process to progressively address these waters.

6. The [s]tate reviews, upgrades[,] and implements all program components required by §319 of the CWA, and establishes flexible, targeted, iterative approaches to achieve and maintain beneficial uses of water as expeditiously as practicable.

7. An identification of [f]ederal lands and objectives which are not managed consistently with [s]tate program objectives.

8. Efficient and effective management and implementation of the [s]tate's nonpoint source program, including necessary financial management.

9. A feedback loop whereby the [s]tate reviews, evaluates, and revises its nonpoint source assessment and its management program at least every five years.

U.S. EPA, NONPOINT SOURCE PROGRAM AND GRANTS GUIDANCE FOR FISCAL YEAR 1997 AND FUTURE YEARS (1996), available at <http://www.epa.gov/OWOW/NPS/npsguid1.html#II>.

38. See <http://www.epa.gov/owow/nps/Section319III/intro.htm>.

39. EPA refers to the revisions as "guidelines for [s]tates' implementation of nonpoint source management programs under [§]319 of the [CWA] and for the award of [§]319 grants to [s]tates to implement those programs." 68 Fed. Reg. at 60653.

40. See *id.*

In addition, EPA split the way it would disburse the funding into two roughly equivalent piles: base funding and incremental funding. While base funding may be spent by the states on a variety of projects related to nonpoint source pollution reduction, incremental funding is targeted at projects aimed at "those watersheds identified as not meeting clean water and other natural resource goals."⁴¹

II. The Regime in Action

In light of the nature of the carrot and the stick, what do nonpoint source pollution best practices look like? If the statutory direction of Congress created a scheme that turned on disclosure and supervision through funding, the actual best practices devised by EPA and the states are a study in coordination.

EPA does not promulgate BMPs but identifies, in an unassuming way, practices that it likes, and serves as a clearinghouse for the exchange of information by states on practices that they like.

This leads, to be sure, to a fine-grained and theoretically disaggregated system, including very, very specific directions to very particular groups of farmers.

But if we look at the practice of the states, we can see certain themes across jurisdictions. It might, in fact, be fair to characterize the number of technical best practices that many, if not most, states recognize and urge their farmers and others to adopt to be from a limited set of options.

Nor are common technical approaches the only best practices themes. Another important sort of best practice urged by EPA is a bureaucratic one: the Agency urges state officials to partner with state and other federal bureaucracies to fund management programs and devise effective pollution control schemes.

In this section of the Article, I survey the guidance on best practices that EPA provides, discuss some of the common approaches to agricultural runoff adopted by many states, and identify the sort of bureaucratic networking urged by EPA as its own, distinct form of best practice.

A. Technical BMPs

Specific BMPs for riparian fencing of cattle herds, for example, or the creation of containment pools, are not generally devised by EPA and urged upon states and farmers. Instead, these practices are formulated by states implementing plans, as well as by experts interested in the issue and grant recipients.⁴²

Nor does EPA publish a list of qualifying best practices, although it does provide resources that point states to sources for finding BMPs developed by other groups.⁴³ In-

41. Guidance from Robert H. Wayland III, Director, Office of Wetlands, Oceans, and Watersheds, to U.S. EPA Regional Water Division Directors, State and Interstate Water Quality Program Directors, and Section 319-Eligible Tribal Water Quality Program Directors, *Funding the Development and Implementation of Watershed Restoration Action Strategies Under Section 319 of the Clean Water Act* (Dec. 4, 1998), at <http://www.epa.gov/owow/nps/fy19992.html>.

42. EPA issues disclaimers throughout its nonpoint source guidance which, for example, "does not impose legally binding requirements on EPA, states, territories, authorized tribes, or the public," 1-2, at <http://www.epa.gov/owow/nps/agmm/chap1.pdf>.

43. EPA makes materials available for states on its website which is available on the Internet at http://www.epa.gov/owow/nonpoint_source/agriculture. It contains links to groups that create BMPs for

stead, the Agency collects information from successful projects and consolidates this information in a database of §319 success stories, listing the projects by state.⁴⁴

In addition to requiring that all state management plans adhere to its nine key principles, EPA collects and publicizes success stories of pollution control. EPA has also developed guidelines to administer the implementation of nonpoint source management programs,⁴⁵ and has monitored the effectiveness and success of these programs.⁴⁶ In addition, EPA has created a “list of agriculture documents—most notably BMP manuals—that the Nonpoint Source Control Branch at EPA headquarters has found to be especially well done.”⁴⁷

The result is a relatively consistent set of BMPs adopted across the states. For example, almost all §319 programs are directed in part at reducing sedimentation caused by agricultural runoff. Twenty-one states, particularly those with large livestock industries, commonly employ grazing management systems for cattle to reduce pollution from manure and erosion that results from overgrazing. Some grazing BMPs include riparian fencing, water lines for the cattle, and rotating grazing patterns.⁴⁸ Iowa dealt with erosion and agricultural runoff into a fishing stream by enlisting farmers and other landholders in a land improvement scheme. The state

created 379,305 feet of terraces, 96 grade-stabilization structures, 60 water and sediment control basins, 2 agricultural waste structures, nutrient and pesticide management plans on 6,723 acres, and timber stand improvement plans on 705 acres in the creek watershed.⁴⁹

States have also reduced sedimentation in drainage systems by constructing wetlands. These wetlands are installed throughout the drainage area, diverting and collecting some of the pollutants that pass through.⁵⁰

To address the problem of erosion along stream banks, 21 states have employed stream bank reforestation projects as a means of reducing downstream sedimentation. Another set of 21 states have urged farmers to adopt certain practices, particularly tillage reduction, in reducing pollution from agricultural runoff.⁵¹

How have states identified and developed these BMP initiatives? In addition to drawing upon the information provided by EPA, states develop their best practices internally, drawing upon the expertise of various state departments and consultation with private individuals.⁵² They have also adopted the BMPs of other states, as collected and promulgated by EPA.

And finally, EPA has worked with clients or contractors to develop best practices. For example, EPA has a recommended practices manual available for the maintenance and service of unpaved roads prepared by a local watershed management authority.⁵³

agricultural nonpoint source pollution. In addition, EPA has sought “to provide technical assistance to state program managers and others on the best available, economically achievable means of reducing nonpoint source pollution of surface and ground water from agriculture.” 65 Fed. Reg. 61325, 61325 (Oct. 17, 2000). The Agency’s guidance “provides background information about agricultural nonpoint source pollution, where it comes from and how it enters the [n]ation’s waters, discusses the broad concepts of assessing and addressing water quality problems on a watershed level, and presents up-to-date technical information about how to reduce agricultural nonpoint source pollution.” *Id.*

44. See, e.g., U.S. EPA, SECTION 319 SUCCESS STORIES, VOL. III (2002), available at http://www.epa.gov/owow/nonpoint_source/Section319III/.

45. “These guidelines apply to grants appropriated by Congress in [FY] 2004 and in subsequent years. The guidelines continue EPA’s policy of focusing a significant portion of [§]319 funds (\$100 million annually) to address watersheds where nonpoint source pollution has resulted in impairment of water quality. The remaining funds [slightly more than \$200 million] are to be used by states to assist in their implementation of their broad array of programs and authorities to address all of the water quality threats and impairments caused by nonpoint source pollution.” 68 Fed. Reg. at 60653. See also 60 Fed. Reg. 53875, 53875 (Oct. 18, 1995) (discussing NPDES BMP guidance document to guidance manual for developing BMP).

46. Section 319 Nonpoint Source National Monitoring Program Successes and Recommendations—November 2000, at <http://www5.bae.ncsu.edu/programs/extension/wqg/section319/page1.htm>. However, most of the recommendations produced by the monitoring program concerned coordination between states and private parties and accuracy of data collection, emphasizing the importance of clearly defining roles and responsibilities of the agencies involved to ensure coordination as well as collecting accurate data so that even an unsuccessful program can teach valuable lessons. *Id.* at 9-10. See <http://www5.bae.ncsu.edu/programs/extension/wqg/section319/page9.htm>.

47. See <http://www.epa.gov/owow/nps/agriculture.html>.

48. These practices were used in Arizona, Iowa, Kentucky, Michigan, Mississippi, Missouri, Montana, New Mexico, North Dakota, Ohio, Oregon, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming. SUCCESS STORIES, VOL. III, *supra* note 44 (with a page for each state’s program); see also New Mexico’s program, which is listed in U.S. EPA, SECTION 319 SUCCESS STORIES, VOL. II (2001), available at <http://www.epa.gov/owow/NPS/Section319II/>, for New Mexico alone it is <http://www.epa.gov/owow/nps/Section319II/NM.htm>.

49. Section 319 Nonpoint Source National Monitoring Program, *supra* note 46, at 17 (<http://www5.bae.ncsu.edu/programs/extension/wqg/section319/page17.htm>).

50. Colorado, Idaho, Indiana, Nevada, New Hampshire, New Jersey, North Carolina, Oklahoma, South Carolina, and Tennessee; the District of Columbia, Georgia, Illinois, Indiana, Kansas, Montana, and Virginia. SUCCESS STORIES, VOL. III, *supra* note 44. For Maryland and Massachusetts, see <http://www.epa.gov/owow/nps/Section319II/MD.html>; <http://www.epa.gov/owow/nps/Section319II/MA.html>.

51. The following states use stream bank erosion reduction practices as part of §319 management programs: Alaska, Colorado, District of Columbia, Georgia, Idaho, Illinois, Indiana, Minnesota, Montana, Nebraska, Nevada, New Jersey, North Carolina, North Dakota, Oregon, Pennsylvania, South Carolina, Tennessee, Utah, and Vermont, <http://www.epa.gov/owow/nps/Section319III/>, as does Florida, see <http://www.epa.gov/owow/NPS/Section319II/FL.html>. States also sometimes urge particular farming practices on farmers, such as tillage reduction, improved irrigation, and field grade management practices. The states using these practices in their §319 programs are: Alabama, California, Connecticut, Illinois, Indiana, Louisiana, Maine, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Washington, and Wisconsin, see <http://www.epa.gov/owow/nps/Section319III/>. See also Larry C. Frarey, *Toward the Development of Performance Criteria Beyond Best Management Practices*, 48 OKLA. L. REV. 353, 356 (1995) (surveying the BMPs adopted by Florida for the Lake Okechobee watershed).

52. See Northern Virginia, *BMP Handbook*, at <http://www.novaregina.org/pdf/NVBMP-Handbook.pdf>, primarily concerning urban stormwater runoff nonpoint source pollution. The handbook states the assumptions that lead to the best practices methodology, but is designed to stimulate private submission of BMP solutions.

53. CHOCTAWHATCHEE, PEA, AND YELLOW RIVERS WATERSHED MANAGEMENT AUTHORITY, RECOMMENDED PRACTICES MANUAL AVAILABLE FOR THE MAINTENANCE AND SERVICE OF UNPAVED ROADS (2000), available at http://www.epa.gov/owow/nps/unpaved_roads/titlecontentsintro.pdf. It warns that “[i]his manual does not constitute a standard, specification, or regulation bound on any professional group or political entity, but is intended only as a guide.” See *id.*

B. Bureaucratic BMPs

A second element of this best practices scheme is a bureaucratic one. It is concerned with mobilizing state government officials, experts, interested parties, and other federal bureaucrats, and encouraging participation in the pollution control process. A “network” is a popular term used by EPA for this horizontally aligned system of enforcement.⁵⁴

EPA commends states that have “strengthened and increased their partnerships, nurtured a vast network of community-based action on a watershed basis and, in many cases, developed stronger financial bases and legal support for their upgraded programs” in order to implement their management programs.⁵⁵

Elsewhere, I have suggested that, in cases where central authority is circumscribed, rules are often created by “horizontal collaboration through networks of officials and private parties that exist alongside the more vertical, hierarchical structures into which they are more formally fitted.”⁵⁶

The nonpoint source pollution regime is an example of this sort of collaboration. Without rulemaking authority, EPA has attempted to meet its congressionally mandated goal of reducing nonpoint source pollution⁵⁷ by leveraging its guidance and funding authority with, for example, that of the USDA.⁵⁸ Indeed, EPA has said: “USDA’s primary conservation funding programs . . . are particularly well-designed to support the implementation of . . . agricultural [BMPs].”⁵⁹

EPA’s enthusiasm is rooted in the fact that the USDA’s farm subsidy bill includes substantial environmental funding, and that the USDA has indicated that “[r]eductions of nonpoint source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds” would be a national priority.⁶⁰

Because funding for voluntary conservation measures by farmers will soon dwarf that authorized under §319 by a factor of five, USDA assistance in controlling nonpoint source pollution is particularly important.⁶¹ Accordingly, much of

the interaction between state officials and farmers in devising ways to reduce nonpoint source pollution may occur through agricultural rather than environmental bureaucrats, such as conservation officers employed by state agricultural departments rather than water quality officials employed by their environmental services outfits.⁶²

EPA has also networked with state officials to develop its approach to nonpoint source pollution. Indeed, the nine key principles approach to funding §319 plans were developed after joint discussions with the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA).⁶³ After EPA issued its funding guidance, the ASIWPCA explicitly endorsed it,⁶⁴ and since then has characterized its work on nonpoint sources as the State/USEPA Nonpoint Source Partnership.⁶⁵

III. Hard Rules in a Soft System

Finally, EPA has taken some tentative steps toward linking its soft administrative program concerning nonpoint source pollution with its harder program, which limits the number of pollutants that may be released into waters already designated as impaired under the CWA. In this way, EPA has paired the advice and funding incentives contained within the best practices model with a stricter statutory scheme.

This scheme, which measures total maximum daily loads (TMDLs), is based on §303(d) of the CWA. That section requires states to identify waters that cannot meet water quality standards through point source pollution controls and set TMDLs for those waters.⁶⁶

For a discussion, see <http://www.epa.gov/owow/nps/agmm/chap1.pdf>, at 1-7 to 1-8.

62. Accordingly, EPA has recommended:

States should strive to work with the agricultural community to accomplish win-win situations whereby Farm Bill funds are actively used to support the implementation of watershed-based plans developed under [§]319. Where this approach is successful, [§]319 funds could be focused (in addition to monitoring, planning, and providing coordination support for projects) on the implementation of agricultural BMPs that are not eligible for Farm Bill funding, e.g., BMPs that are not in the Natural Resources Conservation Service’s Field Office Technical Guide of conservation standards; implementation of agricultural projects in concert with other agencies and groups to help solve watershed problems.

68 Fed. Reg. at 60658.

63. 65 Fed. Reg. 70899, 70899 (Nov. 28, 2000) (“The Nonpoint Source Program and Grants Guidance for Fiscal Years 1997 and Future Years (May 1996) is a product of joint discussions in 1995 and 1996, with representatives of U.S. EPA Headquarters, Regions and the States, under the auspices of the Association of State and Interstate Water Pollution Control Administrators.”); <http://www.epa.gov/owow/nps/Section319III/intro.htm>.

64. See <http://www.epa.gov/owow/nps/Section319III/intro.htm>.

65. As ASIWPCA says about collection of documents on the State/USEPA Nonpoint Source Partnership: “The documents below summarize the activities underway in a [s]tate and U.S. EPA work group to strengthen [nonpoint source] programs. They relate to watershed implementation, addressing urban and rural pollution, grants management, capacity building, information transfer and outreach and reporting results achieved.” Available on the Internet at <http://www.asiwPCA.org/programs/nps.htm>. See also http://www.epa.gov/owow/nps/2002_work_group_priorities.doc.

66. See 33 U.S.C. §1313(c); see also 40 C.F.R. §130.7(b). See also *Pronsolino v. Nastro*, 291 F.3d 1123, 32 ELR 20689 (9th Cir. 2002) (requiring waters failing to meet water quality standards due to

54. Network governance is particularly popular in describing international regulation, as it, like the nonpoint source pollution regime, does not feature a strong central authority with the power to force compliance with rules. See, e.g., ANNE-MARIE SLAUGHTER, *A NEW WORLD ORDER* (2004); Anne-Marie Slaughter, *A Typology of Transjudicial Communications*, 29 U. RICH. L. REV. 99 (1994); Kal Raustiala, *The Architecture of International Cooperation: Transgovernmental Networks and the Future of International Law*, 43 VA. J. INT’L L. 1 (2002).

55. 68 Fed. Reg. at 60654.

56. David Zaring, *National Rulemaking Through Trial Courts: The Big Case and Institutional Reform*, 51 UCLA L. REV. 1015, 1029 (2004).

57. See 33 U.S.C. §1251(a)(7).

58. The Agency has said that it “wishes to particularly emphasize the significant benefits of working closely with the [USDA] to achieve our common goals of improving restoration and protection of water quality.” 68 Fed. Reg. at 60657.

59. *Id.* at 60658.

60. 7 C.F.R. §1466.4. The USDA’s Environmental Quality Incentives Program, through which much of the nonpoint pollution control resources are attached, can be found on the Internet at <http://www.usda.gov/farmbill>; <http://www.nrcs.usda.gov/programs/farmbill/> 2002; and http://www.usda.gov/farmbill/conservation_fb.html.

61. See <http://www.epa.gov/owow/nps/agmm/chap1.pdf>, at 1-7 (increases are authorized from \$200 million to \$1.1 billion between 2002 and 2007). The Farm Bill’s conservation reserve program is designed to deal with farm erosion, another source of runoff pollution.

In setting TMDLs, the states must identify the point source and nonpoint source pollutants coming into the system and identify the maximum loads that the waterway can take in and still meet water quality standards.⁶⁷ Thus, “[p]oint sources themselves also provide a built-in incentive for controlling [nonpoint] sources if the TMDL program remains viable.”⁶⁸

The §303(d) regime, while focusing on the big problems for states, leaves them with absolute discretion as to how to solve those problems.⁶⁹ As with §319 and BMPs, EPA cannot force states to take action to ensure compliance in nonpoint source pollutant levels.⁷⁰

However, unlike §319, citizen groups have forced EPA to set TMDLs when states have failed to do so through lawsuits.⁷¹ EPA has accordingly advised states to incorporate TMDLs in their assessment reports and management programs under §319.⁷² In fact, up to 20% of the BMPs funds from EPA can be used to develop a program and set TMDLs. In recent years, EPA has encouraged states to use those funds in order to set TMDLs.⁷³ Moreover, EPA’s most recent funding guidance reserves \$100 million of the total amount of §319 funding for so-called incremental uses that, as I noted earlier, are targeted at alleviating water quality in impaired watersheds, ordinarily through §303(d).

EPA’s interpretation of §303(d), that it requires the identification of nonpoint source polluted waters by the states and allows for EPA to set TMDLs for waters in noncomplying states, was upheld as a reasonable interpretation of the stat-

ute.⁷⁴ However, other decisions have been careful to limit EPA’s authority to identification and have left the achievement of those standards solely with the states.⁷⁵

IV. Conclusion

Commentators often decry the CWA’s nonpoint provisions as an example of regulatory failure.⁷⁶ I have certainly turned a skeptical eye to Congress’ efforts in the past.⁷⁷ But I think the criticism can obscure the fact that there is a federal approach to nonpoint source pollution, and it is a surprisingly comprehensive one.

The modest goals of this Article are to show how this scheme works—through disclosure required, and money provided, by Congress, and then through coordination and fiscal supervision via EPA with, perhaps unsurprisingly, some halting efforts to tie these softer mechanisms of oversight to harder rules that also form a part of the federal clean water regime.

It is likely to remain the regime for some time to come. Congress may never permit EPA to promulgate hard nonpoint source pollution rules, either for political reasons,⁷⁸ or because of increasing levels of skepticism about the ability of large complicated rulemakings to achieve difficult goals—such as ensuring fishable and swimmable waters.⁷⁹

This is, of course, part of a larger trend in administration. Where command-and-control rulemaking has proven to be difficult, or disfavored, federal agencies have turned to other ways to implement their programs. They have, for example, sought consensus for new rules through negotiated regulation.⁸⁰ They have tried to implement programs through contract and privatization, rather than through an expansion of bureaucratic capabilities.⁸¹ And, perhaps most interestingly, they have turned to best practices like those offered in the case of agricultural nonpoint source pollution.

It is worth noting that best practices have long roots both within and outside the law. In many ways, they are reminis-

nonpoint source pollution to be designated as impaired and subject to TMDLs); for a discussion, see Gaba, *supra* note 1, at n.45.

67. Tobin, *supra* note 31, at 813.

68. Flatt, *supra* note 1, at 605.

69. In fact, an EPA revision of the water quality standards/TMDL program in 2000 that incorporated new requirements for consideration of nonpoint sources and imposed new requirements on states to adopt some form of “implementation plan” to achieve controls on nonpoint sources. 65 Fed. Reg. at 43586. Congress, in the Military Construction Appropriations Act, Pub. L. No. 106-246, 114 Stat. 511 (2000), prohibited EPA from using funds to enact this requirement. EPA subsequently withdrew the regulation. See 68 Fed. Reg. 13608, 13,608 (Mar. 19, 2003) (withdrawing the rule). For a discussion, see Gaba, *supra* note 1.

70. See Flatt, *supra* note 1, at 598 (“Here, the federal role is essentially one of advice and encouragement.”); Dianne K. Conway, *TMDL Litigation: So Now What?*, 17 VA. ENVTL. L.J. 83, 114 (1997); see also Tobin, *supra* note 31, at 838.

71. *Id.* at 94-97. In *Pronolino v. Marcus*, 291 F.3d 1123 (9th Cir. 2002), *aff’g*, 91 F. Supp. 2d 1337, 30 ELR 20460 (N.D. Cal. 2000), the court upheld EPA’s right under §303(d) of the CWA to designate a TMDL for the Garcia River in California. California’s failure to do so prompted citizen suits against EPA demanding that a TMDL be set for the river. Tobin, *supra* note 31, at 809. When EPA responded by setting a TMDL, invoking its right to set one in accordance with §303, timber interests whose nonpoint source pollution would have to be regulated in order to meet the TMDL requirements sued EPA and based its challenge on *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 14 ELR 20507 (1984). Tobin, *supra* note 31, at 809; *Sierra Club v. Meiburg*, 296 F.3d 1021, 1026, 32 ELR 20776 (11th Cir. 2002) (another consent decree lawsuit).

72. Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories in FY 2002 and Subsequent Years, 66 Fed. Reg. 47653-701 (Introduction) (Sept. 13, 2001); “In addition, since 1998, EPA has spent more than \$11 million to support development of technical guidance for developing TMDLs and identifying the most appropriate and efficient best management practices for nonpoint sources.” 68 Fed. Reg. at 13609-10.

73. See *id.* at 47653; see also 68 Fed. Reg. at 60653-702, §III.B. (“In FY 2001, EPA recognized the need to increasingly focus [§]319 grant

dollars on implementing nonpoint source TMDLs or the nonpoint source components of mixed-source TMDLs.”).

74. *Id.* at 823-24.

75. *Id.* at 838 (“The [U.S. Court of Appeals for the] Eleventh Circuit refused to find that, under current regulations, a TMDL includes an implementation plan, leaving implementation of TMDLs wholly to Georgia’s discretion, for good or ill.”).

76. See *supra* notes 24, 30 and accompanying text. J.B. Ruhl has posited that “farms are virtually unregulated by the expansive body of environmental law that has developed in the United States in the past 30 years.” J.B. Ruhl, *The Environmental Law of Farms: 30 Years of Making a Mole Hill Out of a Mountain*, 31 ELR 10203, 10203 (Feb. 2001).

77. See Zaring, *supra* note 19 and accompanying text.

78. See *id.*

79. As Dick Stewart has put it: “Today we face an acute problem of growing regulatory fatigue. . . . It generally takes a very long time to formulate and adopt new regulations and a long time to implement them.” Richard B. Stewart, *Administrative Law in the Twenty-First Century*, 78 N.Y.U. L. REV. 437, 446 (2003); see also DAVID OSBORNE & TED GAEBLER, *REINVENTING GOVERNMENT: HOW THE ENTREPRENEURIAL SPIRIT IS TRANSFORMING THE PUBLIC SECTOR* 11-12 (1992) (“Our thesis is simple: The kind of governments that developed during the industrial era, with their sluggish, centralized bureaucracies, their preoccupation with rules and regulations, and their hierarchical chains of command, no longer work very well.”).

80. See Jody Freeman, *Collaborative Governance in the Administrative State*, 45 UCLA L. REV. 1 (1997).

cent of, although more multifarious than, such classics of optional legal standardization such as model codes and restatements.⁸² But they are not, at least originally, creatures of law. The concept was popularized in the private sector; private companies and industries share best practices (they use the term), standardize around them, and use them to track the progress of their competitors.⁸³

Of course, best practices—the term is two words long and, accordingly, supports a number of different definitions—can mean different things in different issue areas. For example, I consider best practices as a method of legal administration: horizontal, jargon-like, but emblematic of a new method of regulation that relies less on constraint, and more on coordination and social co-optation. Additionally, best practices are not just an increasingly prevalent tech-

nique of administration, but also a model or a metaphor for a new type of organization of regulation—an organization that occurs without much centralized direction, but rather through shared learning.

Leading by example rather than by rule is, in fact, an increasingly pervasive form of administration, a new solution to an old problem of administrative law, and one that extends across the federal bureaucracy.⁸⁴ EPA's agricultural nonpoint source pollution regime is one well-established example of this new form of administration. It is certainly possible to say that this surprisingly standardized, but complex and nonmandatory approach to nonpoint source pollution is a flawed one. But it would be inaccurate to say it does not exist.⁸⁵

81. See Jody Freeman, *Extending Public Law Norms Through Privatization*, 116 HARV. L. REV. 1285 (2003).

82. And, of course, state regulators increasingly gather at national conventions to discuss means of harmonizing their own approaches to state regulatory problems; they frequently exchange views on best practices. The National Association of Insurance Commissioners (NAIC) is a principle example (the federal government does not regulate insurance). The NAIC has been in existence since 1971.

83. "Free trade, especially among neighboring nations with high volumes of transactions, presupposes a high degree of commercial law uniformity and a standardization of business practice; as the volume of regional trade increases, so does the need for uniformity and standardization." Boris Kozolchyk, *Highways and Byways of NAFTA*

Commercial Law: The Challenge to Develop a "Best Practice" in North American Trade, 4 U.S.-MEX. L.J. 1, 1 (1996).

84. And, indeed, internationally as well. For examples of this sort of informal cooperation in the financial regulation sector, see David Zaring, *International Law by Other Means: The Twilight Existence of International Financial Regulatory Organizations*, 33 TEX. INT'L L.J. 281 (1998).

85. As commentators like Ruhl have occasionally done (he has claimed that there is a "vast anti-law of farms and the environment" leaving "farms largely unburdened by environmental law"). Ruhl, *supra* note 76, at 10204. Ruhl, of course, means not to deny the existence of the nonpoint source regime, but to characterize it as ineffective (he argues that "[t]here is simply no rational relationship between the magnitude of the environmental harms farms cause and the response of environmental law")—which is, of course, a worthy matter for de-