Order Code IB89102

CRS Issue Brief for Congress

Received through the CRS Web

Water Quality: Implementing the Clean Water Act

Updated January 11, 2000

Claudia Copeland
Resources, Science, and Industry Division

CONTENTS

SUMMARY

MOST RECENT DEVELOPMENTS

BACKGROUND AND ANALYSIS

The Act and Recent Amendments
- Legislative activity after P.L. 100-4

Toxic Pollutant Provisions
- EPA's approach
- TMDLs
- Industrial pretreatment

Nonpoint Pollution Management Provisions
- Adequacy of plans
- Quality of plans
- Funding
- Recent program changes

State Revolving Fund Provisions
- Small communities

Other Issues
- Stormwater discharges
- Impacts on small communities
- Wetlands

Reinventing Government at EPA
- Performance Partnership System between EPA and states
- Initiatives for industry
- Program-specific initiatives

The Administration's Clean Water Initiative
- Strategy concerning animal feeding operations

Continuing Issue: Appropriations and the Federal Budget
- FY2000
- FY1999

CONGRESSIONAL HEARINGS, REPORTS, AND DOCUMENTS

Water Quality: Implementing the Clean Water Act

SUMMARY

Congress enacted the most recent major amendments to the Clean Water Act in 1987 (P.L. 100-4). Since then, the Environmental Protection Agency (EPA), states, and others have been working to implement the many program changes and additions mandated in the law. At issue today, as it has been for some time, is what progress EPA and the states are making. In general, many states and environmental groups fault EPA for delays in issuing guidance and assistance needed to carry out the provisions of the law. EPA and others are critical of states, in turn, for not reaching beyond conventional knowledge and institutional approaches to address their water quality problems. Environmental groups have been criticized for insufficient recognition of EPA's and states' need for flexibility to implement the Act. Finally, Congress has been criticized for not providing adequate funding and resources to meet EPA and state needs.

Three issues have predominated recently in connection with implementation of the law. The first involves the toxic pollutant control provisions under the 1987 amendments, requiring states to develop programs to control residual toxic discharges that impair water quality. Industry and environmentalists have criticized EPA's approach, which has focused on toxics from industrial and municipal sources, largely to the exclusion of nonpoint contributions, such as silt and pesticide runoff from farms. The second issue involves the nonpoint pollution management provisions added in 1987. States are developing management programs describing methods that will be used to reduce nonpoint pollution, which may be responsible for as much as 50% of the nation's remaining water quality problems. Most observers agree that implementation of nonpoint source control measures is significantly hindered by lack of resources, including federal assistance. EPA has adopted program guidance intended to give states more implementation flexibility and to speed up progress in nonpoint source control.

The third issue is funding to construct municipal wastewater treatment plants under the State Revolving Fund provisions of the 1987 amendments. Budgetary constraints on federal aid for wastewater treatment are a continuing concern.

Since 1993, EPA has begun a number of agencywide and program-specific reforms focusing on flexibility and "common sense" approaches to regulation. Many of these will affect implementation of water quality programs. In February 1998, the Administration released a multi-agency Clean Water Action Plan intended to build on the environmental successes of the Act and address the nation's remaining water quality challenges. Funding for this Action Plan is a concern to many.

Reauthorization of the Act was on the agenda of the 104th Congress. The House passed H.R. 961 in May 1995, but no Clean Water Act amendments were enacted. (For further information, see CRS Issue Brief IB10001, *Clean Water Act Reauthorization .)* Reauthorization legislation was not introduced in the 105th Congress, and no major House or Senate committee activity occurred. Thus, the Act could present issues for the 106th Congress; whether and how it will be considered is unclear at this time, and no major activity occurred in the first session.

MOST RECENT DEVELOPMENTS

In October 1997, Vice President Gore directed federal agencies to develop a Clean Water Initiative to improve and strengthen the nation's water pollution control efforts. A multi-agency Action Plan was released in February 1998 and identifies more than 100 actions. Most are existing activities, now labeled as part of the Initiative. It did not include legislative proposals to reauthorize the Clean Water Act. A key part of the Plan, to minimize the public health and environmental impacts of runoff from animal feeding operations, was addressed by the release in March 1999 of a joint EPA-USDA strategy to achieve better control of animal wastes that cause impairment of rivers, lakes, and estuaries. Final appropriations for FY1999 to fund the Plan were $1.8 billion and provided less than 15% of the budgetary increases sought by the Administration. For FY2000, the Administration requested $2.3 billion to fund the Plan, including $458 million in increases above FY1999 levels. FY2000 appropriations bills enacted late in 1999 provide about $1.97 billion of the total requested. On May 13, 1999, the Senate Environment and Public Works Committee held the first congressional oversight hearing on the Plan.

On October 7, 1999, conferees approved legislation providing funding for EPA for FY2000 (H.R. 2684, H.Rept. 106-379). It includes $1.35 billion for clean water SRF grants plus $411 million more for earmarked and priority infrastructure project grants. President Clinton signed the bill October 20 (P.L. 106-74).

BACKGROUND AND ANALYSIS

The Act and Recent Amendments

The Federal Water Pollution Control Act, or Clean Water Act, is the principal law governing pollution in the nation's streams, lakes, and estuaries. Originally enacted in 1948, it was totally revised by amendments in 1972 (P.L. 92-500) that gave the Act its current form and spelled out ambitious programs for water quality improvements that are now being put in place by industries and cities. Congress made certain fine-tuning amendments in 1977 (P.L. 95-217) and 1981 (P.L. 97-117).

The Act consists of two major parts: regulatory provisions that impose progressively more stringent requirements on industries and cities in order to meet the statutory goal of zero discharge of pollutants, and provisions that authorize federal financial assistance for municipal wastewater treatment construction. Industries were to meet pollution control limits first by use of Best Practicable Technology and later by improved Best Available Technology. Cities were to achieve secondary treatment of municipal wastewater (roughly 85% removal of conventional wastes), or better if needed to meet water quality standards. Both major parts are supported by research activities authorized in the law, plus permit and penalty provisions for enforcement. These programs are administered by the Environmental Protection Agency (EPA), while state and local governments have the principal day-to-day responsibility for implementing the law. (Note: A summary of the Act with details and "hot links" to sections of the U.S. Code can be found in the online version of this issue brief, which is available on the CRS Home Page/Full Text of CRS Online Products.)

The most recent amendments, enacted in February 1987, are the Water Quality Act of 1987 (P.L. 100-4). These amendments culminated 6 years of congressional efforts to extend and revise the Act and are the most comprehensive amendments to it since 1972. They recognize that, despite much progress to date, significant water quality problems persist. Among its many provisions, the 1987 legislation:

- established a comprehensive program for controlling toxic pollutant discharges, beyond that already provided in the Act, to respond to so-called "toxic hot spots;"

- added a program requiring states to develop and implement programs to control nonpoint sources of pollution, or rainfall runoff from farm and urban areas, plus construction, forestry, and mining sites;

- authorized a total of $18 billion in aid for wastewater treatment assistance under a combination of the Act's traditional construction grants program through FY1990 and, as a transition to full state funding responsibility, a new program of grants to capitalize State Revolving Funds, from FY1989-1994;

- authorized or modified a number of programs to address water pollution problems in diverse geographic areas such as coastal estuaries, the Great Lakes, and the Chesapeake Bay; and

- revised many of the Act's regulatory, permit, and enforcement programs.

Legislative activity after P.L. 100-4. Congressional oversight of water quality issues was limited following enactment of P.L. 100-4. Congressional subcommittees held general oversight hearings, as well as several hearings on individual issues (wetlands protection, Chesapeake Bay programs, and toxics contamination of Great Lakes waters), but reserved extensive review and oversight until implementation had been underway for some time.

EPA, the states, industry, and other citizens continue to implement the 1987 legislation, including meeting the numerous requirements and deadlines in it. Three sets of issues have been the focus of attention regarding the pace and effectiveness of implementation: the toxic pollutant control provisions, nonpoint pollution management provisions, and the State Revolving Fund provisions to transfer wastewater treatment funding responsibility to the states after 1994. Attention has also focused on the cost-effectiveness of clean water requirements and flexibility of implementation.

Implementation issues discussed below were the basis for legislation to reauthorize the Clean Water Act during the 103rd Congress. House and Senate committees held hearings in 1993, and the Senate Environment and Public Works Committee reported a comprehensive reauthorization bill, S. 2093 (S.Rept. 103-257) in May 1994. Legislation also was introduced in the House (H.R. 3948), but no further action occurred because of controversies specific to the Act and the pending bills, as well as controversies over regulatory relief issues that became barriers to a number of bills in 1994.

In the 104th Congress, the House moved quickly on Clean Water Act legislation, approving a comprehensive reauthorization bill on May 16, 1995. H.R. 961 would have

amended many of the regulatory and standards provisions of the law, required EPA to use extensive new risk assessment and cost-benefit analysis procedures, and increased flexibility with regulatory relief from current clean water programs. However, the Senate did not take up the Clean Water Act during the 104th Congress; thus, no legislation was enacted.

1997 marked the 25-year anniversary of the 1972 Clean Water Act amendments, which established the goals, objectives, and structure that continue to guide the law today. In the 105th Congress, no major committee activity over the Act occurred either in the House or the Senate. Implementation issues that were the focus of attention in recent Congresses, along with concerns over flexibility and regulatory relief, are expected to predominate when Congress does take up reauthorization in the future. The Act could present issues for the 106th Congress; whether and how it will be considered is unclear at this time. (For additional information, see CRS Report 98-946, *Clean Water Act Issues in the 106th Congress*.) In February 1998, the Administration released a multi-agency Action Plan to implement a Clean Water Initiative intended to build on the environmental successes of the Act and address the nation's remaining water quality challenges (see discussion below, **The Administration's Clean Water Initiative**).

Toxic Pollutant Provisions

P.L. 100-4 established a new program intended to respond to so-called "toxic hot spots," areas of waterways where toxic pollutant discharges continue to contribute to water quality problems even after industries and cities install pollution controls previously required in the law. By February 1989, each state was required to submit for EPA approval a list of these "toxic hot spots" and a strategy to bring affected waters into compliance within 3 years after submission of the lists. The emphasis in the provisions is on point sources (i.e., industrial manufacturing facilities or sewage treatment plants) that are discharging toxic wastes, while recognizing that a combination of controls on point *and* nonpoint sources of pollution may be needed to achieve water quality standards. From the state submissions, EPA estimated that 10% of U.S. waters are impaired by a combination of toxic, conventional, and nonconventional wastes from point and/or nonpoint sources.

Initial state compliance with these provisions was good. EPA and states identified 879 point sources, including 240 sewage treatment plants and a dozen federal facilities, discharging toxic pollutants in amounts that are causing water quality impairment. These sources are located on about 600 water bodies in 45 states and territories. Individual control strategies (discharge permits with additional control requirements) are being developed for these industrial and municipal facilities.

However, only seven states had adopted specific water quality standards for priority toxic pollutants by February 1990, as required by the 1987 amendments. Consequently, in November 1992 EPA issued a final rule setting federal water quality standards for 14 states and territories that had not yet adopted their own criteria. The water quality criteria are recommended numeric limits at levels considered safe for specific contaminants in water. The rule, which established as few as one to as many as 98 toxic criteria, will be enforced through limits contained in discharge permits issued to individual industrial and municipal sources.

Several concerns have been raised about implementation of these provisions.

EPA's approach. Industry and environmentalists criticized EPA's approach to implementing this program, which has focused on toxics from industrial and municipal sources, largely to the exclusion of nonpoint contributions, such as pesticide runoff from farms. Industry's concern is that this focus will result in imposing more control requirements on major sources already being regulated, while overlooking other sources where previous controls have been ineffective or nonexistent. A concern of environmentalists is that EPA's limited approach misses congressional intent and provides states with no incentive to evaluate additional toxic pollution sources. EPA acknowledged these points, but said its approach was appropriate in view of deadlines in the Act, demands imposed on states (without additional resources), and existing information that the bulk of toxics are discharged from point sources, not intermittent nonpoint sources. However, a federal court ruled in 1990 that EPA's approach was too narrow and ordered the agency to revise the program. These EPA efforts, still underway, are a possible subject for congressional oversight.

TMDLs. The Act requires states to identify pollution-impaired water segments and develop "total maximum daily loads" (TMDLs) that set the maximum amount of pollution that a water body can receive without violating water quality standards. If a state fails to do so, EPA is required to develop a priority list for the state and make its own TMDL determination. Most states have lacked the resources to do TMDL analyses, which involve complex assessment of point and nonpoint sources and mathematical modeling, and EPA has both been reluctant to override states and has also lacked resources to do the analyses. Thus, there has been little implementation of the provision that Congress enacted in 1972. In recent months, national and local environmental groups have filed more than 20 lawsuits against EPA, claiming the agency has failed to fulfill its CWA requirements. Courts in Georgia and Idaho have ruled in favor of the environmental groups and have ordered EPA to develop TMDLs. EPA officials are concerned about diverting agency resources from other high-priority water quality activities in order to meet the courts' orders, especially if other lawsuits yield similar results. In October 1996, EPA created an advisory committee to solicit advice on the TMDL problem. Recommendations from the advisory committee, received in June 1998, formed the basis of TMDL program changes that EPA proposed in August 1999. The proposal sets forth criteria for states, territories and authorized Indian tribes to identify impaired waters and establish all TMDLs within 15 years. It would require more comprehensive assessments of waterways, detailed cleanup plans, and timetables for implementation. Final revised rules are expected later in 2000. (For additional information, see CRS Report 97-831 ENR, *Clean Water Act and Total Maximum Daily Loads (TMDLs) of Pollutants*.)

Industrial pretreatment. Industries that discharge wastes to city sewers, rather than treating those wastes on-site, are required to first pretreat or remove toxics that would interfere with operation of the city's wastewater treatment plant. Questions have been raised about the adequacy of the current pretreatment program, as it is being implemented by cities. A General Accounting Office report (Improved Monitoring and Enforcement Needed for Toxic Pollutants Entering Sewers, GAO/RCED-89-101), for example, stated that many cities fail to bring strong enforcement actions against industries that violate pretreatment requirements. Further, there is concern that a large number of industries discharging to city sewers are not subject to EPA's detailed regulations because they are not specified in the law and thus may not be adequately pretreating and controlling wastes. This concern is underscored by data reported to EPA through the Toxic Release Inventory (TRI), mandated by the 1986 Superfund amendments, which indicates that nearly 70% of the toxic chemicals

discharged by industry into the nation's waters annually are discharged indirectly, through sewer systems. Cities and regulated industries contend that it is overly complicated, and EPA is developing regulatory proposals to streamline the pretreatment program.

Nonpoint Pollution Management Provisions

The 1987 amendments added a new Section 319 to the Act, under which states were required to develop and implement programs to control nonpoint sources of pollution, or rainfall runoff from farm and urban areas, as well as construction, forestry, and mining sites. Previously, the Act had largely focused on controlling point sources, while helping states and localities to plan for management of diverse nonpoint sources. Yet, as industrial and municipal sources have abated pollution, uncontrolled nonpoint sources have become a relatively larger portion of remaining water quality problems — perhaps contributing as much as 50% of the nation's water pollution.

States were required to identify waters not expected to meet water quality standards — because of nonpoint source pollution and to implement plans for managing pollution from runoff. Federal grants were authorized to cover as much as 60% of the costs of implementing a state's management plan. A total of $400 million was authorized to be appropriated for these grants.

The funding issue has become more urgent as states have moved from assessment and plan development to management, since Congress intended that Section 319 funds be used primarily to implement nonpoint pollution controls on the ground. EPA has urged states to use a portion of monies that they receive under Section 106 of the Act, water quality program assistance grants, for nonpoint source activities. But, doing so utilizes money otherwise needed for core state efforts, such as permit issuance, monitoring, enforcement, etc.

Several concerns have been raised about the Section 319 program.

Adequacy of plans. Whether state plans have comprehensively addressed nonpoint pollution problems is a lingering question. Some environmental groups criticize EPA for providing inadequate guidance on methods, or management practices, to advance control of nonpoint sources beyond known problems and existing implementation steps, such as voluntary compliance and public education. Moreover, some believe that states should be required to repeat the nonpoint source assessments, which were one-time-only activities under the 1987 law, in order to reflect improvements in technical and scientific information.

Quality of plans. EPA officials acknowledge that the quality of assessment reports and management plans is quite variable and that many (including some that have been approved) have been disappointing. Several reasons are cited: staff limitations affecting states' and EPA regions' ability to prepare and oversee plans; lack of funding; limited federal clout, since the program is essentially voluntary; and variations in the way regions administered the program.

Funding. Precise estimates of the cost to manage nonpoint source pollution are not available, but in 1994 EPA estimated that current and planned spending by private sources, states, and cities under provisions of current law is between $750 million and $1.1 billion per year. Without adequate funding to implement state management plans, it is doubtful that

much will be achieved under Section 319 to control nonpoint source pollution. Lack of funding risks the possibility of Section 319 becoming the Section 208 of this decade: in the 1970s, states and regions used federal assistance to prepare areawide waste treatment management plans under Section 208 of this Act, intended to comprehensively cover point and nonpoint sources. No implementation monies were authorized, and few of the plans were realized, as a result.

A General Accounting Office report (*Greater EPA Leadership Needed to Reduce Nonpoint Source Pollution*, GAO/RCED-91-10) noted a number of barriers impeding state and local efforts to control nonpoint source pollution. Among these is the lack of monitoring data concerning both the scope and impacts of the nonpoint problem, which makes it difficult for public officials to convince landowners and others of the need for action. GAO also criticized EPA for continuing to focus the bulk of its own resources on point source control activities rather than nonpoint source. According to GAO, "the major underlying barrier inhibiting EPA's nonpoint source control efforts is the low level of funding afforded nonpoint source pollution control." Thus GAO recommended that EPA seek and Congress should consider allocating greater water quality funding to nonpoint source pollution control in view of its importance to cleaning up impaired and polluted waterways.

Recent program changes. EPA and states negotiated changes intended to give the 319 program a new framework by giving states more flexibility. As a result, in May 1996, EPA issued revised guidance concerning state management of nonpoint source programs that is intended to recognize that federal and state processes need to be streamlined to increase program effectiveness and to speed progress towards solving nonpoint pollution problems. The revised guidance outlines nine key elements to be reflected in state programs (e.g., strong partnerships with stakeholders, explicit short and long term goals for protecting surface and ground waters). States that meet the nine criteria can be designated as leadership states, making them eligible for incentives such as multi-year grants, reduced amount and frequency of reporting, and self-assessment by states themselves. These incentives contrast with the previous program approach, in which states competed for grants and those which did not meet particular requirements received less grant money. The flexibility in this program area is a key example of EPA's recent efforts to adopt regulatory reform throughout its activities (see discussion below, **Reinventing Government at EPA**).

State Revolving Fund Provisions

The Act's program of financial aid for municipal wastewater treatment plant construction was a central and controversial aspect of debate on the 1987 amendments. Since 1972 Congress has provided $69 billion to assist wastewater treatment construction, but funding needs remain very high: an additional $139.5 billion nationwide over the next 20 years for all types of projects eligible for funding under the Act, according to the most recent estimate by EPA and the states completed in 1996 (the report is available from EPA via [http://www.epa.gov/owm/toc.htm]). At issue has been how to assist states and cities, yet respond to concerns over the impact of grant-in-aid programs on federal spending and the deficit.

The 1987 amendments extended through FY1990 the traditional Title II program of grants for sewage treatment project construction, under which the federal share was 55% of

project costs. The 1987 law initiated a program of grants to capitalize State Water Pollution Control Revolving Funds (SRFs), or loan programs, in a new Title VI. States are required to deposit an amount equal to at least 20% of the federal capitalization grant in the Fund established under Title VI. Under the revolving fund concept, monies used for wastewater treatment construction would be repaid by loan recipients to the states (repayment was not required for grants under the Title II program), to be recycled for future construction in other communities, thus providing an ongoing source of financing. The expectation in 1987 was that the federal contributions to SRFs would assist in making a transition to full state and local financing by FY1995. While most states believe that the SRF is working well, early funding and administrative problems led many to believe that the anticipated shift to full state responsibility will be delayed. Thus, SRF issues were prominent on the Clean Water Act reauthorization agenda in the 103rd and 104th Congresses. (For further information, see CRS Report 98-323, ENR, *Wastewater Treatment: Overview and Background*.)

SRF monies may be used for certain types of financial activity, including loans for as much as 100% of project costs (at or below market interest rates, including interest-free loans), to buy or refinance cities' debt obligation, or as a source of revenue or security for payment of principal and interest on a state-issued bond. SRF monies also may be used to provide loan guarantees or credit enhancement for localities.

Loans made by a state from its SRF are to be used first to assure progress towards the goals of the Act and, in particular, on projects to meet the standards and enforceable requirements of the Act. After states achieve those requirements of the Act, SRF monies also may be used to implement nonpoint pollution management and national estuary programs.

Table 1 summarizes wastewater treatment funding under Title II (traditional grants program) and Title VI (capitalization grants for revolving loan programs). (**Note**: **Table 1** does **not** include grant appropriations for special projects in individual cities.)

Table 1. Wastewater Treatment Funding
(billions of dollars)

	Authorizations		Appropriations	
Fiscal Year	**Title II**	**Title VI**	**Title II**	**Title VI**
1986	$2.4	—	$1.8	—
1987	2.4	—	2.36	—
1988	2.4	—	2.3	—
1989	1.2	1.2	0.941	0.941
1990	1.2	1.2	0.967	0.967
1991	—	2.4	—	2.1
1992	—	1.8	—	1.95
1993	—	1.2	—	1.93
1994	—	0.6	—	1.22

	Authorizations		Appropriations	
Fiscal Year	**Title II**	**Title VI**	**Title II**	**Title VI**
1995	—	—	—	1.24
1996	—	—	—	2.07
1997	—	—	—	0.625
1998	—	—	—	1.35
1999	—	—	—	1.35
2000	---	---	---	1.35

Small communities. One SRF issue of considerable interest is impacts on small communities. These entities in particular have found it difficult to participate in the SRF loan program, since many are characterized by narrow or weak tax bases, limited or no access to capital markets, lower relative household incomes, and higher per capita needs. They often find it harder to borrow to meet their capital needs and pay relatively high premiums to do so. Meeting the special needs of small towns, through a reestablished grant program, other funding source, or loan program with special rules, has been an issue of interest to Congress.

Witnesses at congressional hearings have focused extensively on wastewater funding/SRF issues. Particular problems were highlighted, including: small communities that may find it difficult to participate in the SRF loan program, and the lack of funds for categories of projects such as correcting combined sewer overflows. The General Accounting Office has stated that two SRF funding issues predominate. First is the gap between funding levels authorized in the Act and state needs. Second is the small community problem. Over the next 10 years, according to GAO, SRFs will only meet about one-third of the states' funding needs and will generally not meet the needs of poor communities.

While there has been some criticism of the SRF program, and debate continues over specific concerns (such as small community impacts), the basic approach is well supported in Congress and elsewhere. Congress used the clean water SRF as the model when it established a drinking water SRF in legislation that reauthorized the Safe Drinking Water Act in 1996 (P.L. 104-182). (For further information, see CRS Report 97-677, *Safe Drinking Water Act: State Revolving Fund Program*.)

Other Issues

A number of other Clean Water Act issues continue to receive attention, as well. Like those discussed previously, many of these topics have recently been part of Congress' agenda in connection with reauthorization (see CRS Issue Brief IB10001).

Stormwater discharges. EPA has struggled since the 1970s to regulate industrial and municipal stormwater discharges in a workable yet comprehensive manner. In P.L. 100-4 Congress established firm deadlines and priorities for EPA to require permits for these

discharges of stormwater that is not mixed or contaminated with household or industrial waste. EPA issued rules in November 1990 (21 months after the statutory deadline) that addressed the process of applying for stormwater permits. The burden of complying with the rules continues to be an issue with many affected industries and municipalities, especially small cities. Since 1994, EPA has been working with an advisory committee of stakeholders to develop rules for regulating smaller stormwater dischargers, which were not covered by EPA's 1990 rules. Proposed rules for smaller dischargers (unregulated industries and small cities) were released in December 1997, and final rules were issued in October 1999. (For further information, see CRS Report 97-290 ENR, *Stormwater Permits: Status of EPA's Regulatory Program*.)

Impacts on small communities. The costs of achieving clean water and other environmental programs are believed to fall the heaviest on small towns, especially those with fewer than 2,500 persons. While levels of federal assistance remain stable or decline, these cities can be expected to experience the largest average increases in total user charges and fees, in order to comply with environmental requirements. Small towns that lack the tax base to finance wastewater projects in many cases have delayed making needed investments. Consequently, 80% of those that missed the Act's July 1988 deadline for secondary treatment of sewage were small cities, defined by EPA as those with fewer than 10,000 persons. Moreover, small communities often exhibit higher rates of noncompliance with regulatory requirements compared with larger urban areas. The impacts of regulatory programs, including capital needed to comply with environmental mandates for clean water, drinking water, and other programs, have been a particular focus in recent debate over problems of unfunded federal mandates.

Wetlands. Public debate over the nation's wetlands has come to focus on questions of the effectiveness and costs of wetland resource protection efforts, rather than on whether such resources should be preserved. The permit program authorized by Section 404 of the Clean Water Act is one of the major federal programs that protects wetlands. However, environmentalists and others are increasingly critical of Section 404 as being inadequate to prevent the continuing loss of wetlands, due to statutory exemption of certain types of actions on farmlands and weak enforcement. Those wishing to develop wetlands maintain that existing laws are already an intrusion on private land-use decisions and that further federal involvement is unwarranted. How best to protect remaining wetlands and regulate activities taking place in wetlands has become one of the most contentious environmental policy issues facing Congress and was a prominent element of clean water debate during the 103rd and 104th Congresses. (See CRS Issue Brief IB97014, *Wetland Issues*.)

Reinventing Government at EPA

EPA has been at the center of many of the Clinton Administration's efforts to reinvent government. Some of EPA's projects are intended to fix problem areas in the implementation of current law; others are intended to set future directions. The initiatives are, in part, a response to budgetary pressures and the need to be more efficient. The agency also is responding to pressures from the Congress to reform the way it does business and the realization that Congress may change the agency, if it fails to change itself. (For further information, see CRS Report 96-283, *Reinventing the Environmental Protection Agency and EPA's Water Programs*.) Broadly, the reinvention activities at EPA fit in three categories.

Performance Partnership System between EPA and states. In May 1995 EPA and states entered into a formal agreement intended to fundamentally redesign and improve the federal-state partnership on environmental protection. States will be allowed more authority to set priorities and tailor implementation, while EPA agrees to allow states greater flexibility and reduce oversight of states that demonstrate exceptional performance. (For further information, see CRS Report 97-689 ENR, *Environmental Policy: Issues in Federal-State Relations*.) One element of the partnership program is a more flexible approach to funding, through block grants to be called Performance Partnership Grants, in lieu of traditional categorical grants for air, water, hazardous waste, etc. Consolidated grants are intended to reduce administrative burdens and improve environmental performance by allowing states to target funds to meet their specific needs. Congress endorsed the consolidated grants approach in EPA's FY1996 funding bill, P.L. 104-134, and has supported it in subsequent appropriations bills, as well.

Initiatives for industry. The second category is a series of new regulatory partnerships between EPA and industry intended to apply more common sense and economical approaches to environmental regulation. These initiatives are equivalent to the federal-state performance partnerships. The centerpiece of these activities is EPA's Common Sense Initiative (CSI), through which six industry sectors have been identified and corresponding task groups established to debate and restructure environmental requirements based on industry sectors, rather than pollutant by pollutant or media by media. Other industry activities include Project XL, which will give selected entities the opportunity to demonstrate innovations to meet environmental goals outside the current regulatory framework; a Common Sense Compliance Program of incentives for small businesses; and a reexamination of all of the agency's permitting programs to adopt performance-based improvements.

Program-specific initiatives. Third is activities in individual program areas, including water quality, that involve regulatory reform initiatives in specific terms and reflect a devolution to states (transfer of powers and authorities from the federal government). In the water quality program, many of the initiatives start from a watershed approach to problem-solving. This approach recognizes that remaining water quality problems require attention to diffuse (nonpoint) as well as discrete (point source) pollution sources managed on the basis of geographic areas defined by natural or hydrologic features, instead of political boundaries. Further, the watershed approach is more community-based than top-down in emphasis and is intended to be a process that involves key government, citizen, and other user groups as full partners in developing solutions. EPA is using the broad approach to address specific water pollution issues, especially wet weather pollution problems (nonpoint sources, stormwater, and sewer system overflows).

Some observers say that the types of changes occurring at EPA through these initiatives are logical next steps in the evolution of environmental programs. Others say that what is occurring is a sea change in policy without clear prospects that environmental benefits will result. In addition, some are concerned that the many activities have insufficient focus or priority. The significance of many of the activities is difficult to assess in these early stages. Most participants are enthusiastic about the changes in process affecting the EPA-state and EPA-industry relationships. Still, there are concerns about how some of the broad initiatives will be implemented and about if, in EPA's enthusiasm for state flexibility and reduced federal oversight, support for core elements of environmental protection programs will be diminished.

The Administration's Clean Water Initiative

In October 1997, on the 25th anniversary of the CWA, Vice President Al Gore announced an initiative intended to build on the environmental successes of the Act and to address the nation's remaining water quality challenges, especially nonpoint source pollution. The Vice President directed EPA and USDA to coordinate the work of other federal agencies to develop an action plan to improve and strengthen water pollution control efforts. The purpose of the plan is to coordinate federal efforts to achieve three goals: enhanced protection from public health threats posed by water pollution, more effective control of polluted runoff, and promotion of water quality protection on a watershed basis. Other departments to be involved in the Initiative include USDA, the Departments of Interior and Commerce, and the U.S. Army Corps of Engineers.

President Clinton and Vice President Gore released the action plan on February 19, 1998. Components of the plan, nearly 100 actions, consist mainly of existing programs, including some planned regulatory actions that agencies have had underway, now to be enhanced with increased funding or accelerated with performance-specific deadlines. (The text is available at [http://www.epa.gov/cleanwater/].) The individual elements of the plan are built on 4 concepts: utilizing collaborative watershed-based partnerships to clean up impaired waters; maintaining strong federal and state standards; calling on federal natural resource and conservation agencies to assist in restoring and protecting watersheds; and ensuring that citizens and officials have improved information for decisionmaking.

Complementing the plan, the President's FY1999 budget identified the Clean Water Initiative as a high-priority for environmental programs in the budget. It requested a total of $2.2 billion, a $568 million, or 35%, increase over 1998, to fund activities in 5 departments and agencies, plus interagency funds. Almost one-half of the total increases, $265 million, was designated as assistance to states and localities or to individual landowners (farmers).

The action plan was not accompanied by proposals or legislation to reauthorize the CWA. In Congress, it was considered primarily through the appropriations process, rather than authorizing committee activity. FY1999 funding to support the plan was contained in several separate appropriations bills, including the Omnibus Consolidated and Supplemental Appropriations Act (P.L. 105-277) passed just before the 105th Congress adjourned. In those bills, congressional support for the action plan was quite mixed. Appropriators funded few budgetary elements of the Action Plan, citing reasons such as difficulty in supporting new initiatives, on top of existing priorities. Overall, the bills provided $1.8 billion, or less than 15% of the increased funds requested by the Administration. While EPA received close to full funding for the requested action plan activities contained in its budget ($121 million), other agencies and departments received no or only small increases to support the plan.

EPA and USDA officials say that the action plan will be implemented, even though FY1999 funds are less than requested. Implementation will occur, they say, because they believe that its many actions are the only way to achieve the Clean Water Act's water quality goals. In the President's FY2000 budget request, the Administration sought $458 million ($2.3 billion total) for Clean Water Action Plan activities. Funding for the plan in FY2000, is about $1.975 billion–$258 million more than in FY1999, but $300 million less than was requested.

(For additional information, see CRS Report 98-150, *Clean Water Action Plan: Background and Early Implementation*, and CRS Report 98-745, *Clean Water Action Plan: Budgetary Initiatives*.)

On May 13, 1999, the Senate Environment and Public Works Committee held the first congressional oversight hearing on the Plan outside the appropriations process. The Committee heard from federal and state government representatives, as well as members of the public. Agency witnesses addressed how the Plan is involving the public, states and localities, and federal agencies in intergovernmental partnerships. Other witnesses and some Committee members questioned the degree to which the Plan actually reflects state, local, public and congressional input and whether federal agencies have the legal authority to be taking some of the contemplated actions. Questions also were raised about the scientific basis of the Plan, because of inadequate national water quality data. Testimony from hearing is available at [http://www.senate.gov/~epw/stm1_106.htm#5-13-99].

Strategy concerning animal feeding operations. A key element of the Clean Water Initiative, minimizing public health and environmental impacts of runoff from animal feeding operations (AFOs) into rivers, lakes, and estuaries, was addressed by a national strategy issued jointly by EPA and USDA on March 9, 1999. Animal feeding operations are agricultural facilities that confine feeding activities, thus concentrating animal populations and manure. Animal waste, if not managed properly, can run off farms and pollute nearby water bodies. Agricultural runoff has been linked to dangerous toxic microorganisms such as *Pfiesteria piscicida*, which is widely believed to be responsible for major fish kills and disease events in several mid-Atlantic states. (For additional information, see CRS Report 97-1047, *Pfiesteria and Related Harmful Blooms: Natural Resources and Human Health Concerns*.)

Existing EPA regulations, issued in the 1970s, require CWA discharge permits for the largest AFOs (about 6,600 out of 450,000 total facilities nationwide). However, EPA acknowledges that compliance and enforcement of these permit rules is poor (less than one-third of covered facilities actually have permits) and that the regulations themselves are outdated. For example, they do not reflect changed waste management practices or address the need for management plans dealing with land application of manure. The national strategy contains a number of short-term and long-term steps to improve compliance and strengthen existing regulations, obtain better information through data collection and research on water quality impairments due to AFOs, and together with other federal agencies and states, coordinate activities related to AFOs. The strategy consists of multiple elements and is based on a national performance expectation that all AFO owners and operators — regardless of the size of their operations — will develop and implement site-specific Comprehensive Nutrient Management Plans (CNMPs) by 2009. With the exception of large AFO operations that already are subject to CWA requirements (about 5% of total AFOs nationwide), the agencies expect that the vast majority of CNMPs will be developed and implemented voluntarily. In general terms, a CNMP will identify actions or priorities to meet clearly identified nutrient management goals at an agricultural operation and typically will address manure handling and storage, land application of manure, land management, and recordkeeping. EPA will work with states on a 2-phase approach for permitting animal feedlot operations: requiring coverage of large-scale operations by permits by 2005; and revising existing regulations, by 2002. Issues that Congress may address include impacts and costs imposed on the agricultural sector and how the proposed combination of regulatory and incentive-based measures will achieve control of agricultural runoff that adversely affects

water quality. (For additional information, see CRS Report 98-451, *Animal Waste Management and the Environment: Background for Current Issues*.) In legislation providing FY2000 funding for EPA (P.L. 106-74), Congress directed EPA in conjunction with USDA to submit a report to Congress by May 15, 2001, providing a cost and capability assessment of the AFO strategy.

Continuing Issue: Appropriations and the Federal Budget

While the 1987 amendments dealt with financial aid questions in terms of Clean Water Act authorizations, funding questions have continued to arise and be addressed in the context of appropriations. (For additional information, see CRS Report 96-647 ENR, *Water Infrastructure Financing: History of EPA Appropriations*.)

FY2000. President Clinton's FY2000 budget request seeks approximately level spending for general water quality activities next year, compared with FY1999 enacted levels. However, the budget proposed significant reductions for clean water infrastructure spending. It sought $800 million for clean water SRF grants (compared with $1.35 billion for FY1999) and requested two-thirds less for grants for special projects. Despite the proposed reduction in SRF grants, which was criticized by Members of Congress and interest group representatives, EPA budget documents said there will be limited impact on states and that the request will still allow EPA to meet its long-term capitalization goal of providing an average amount of $2.0 billion in annual financial assistance to states.

On October 7, Congress approved legislation providing EPA's funding for FY2000 (H.R. 2684, H. Rept. 106-379). It provides $1.35 billion for clean water SRF grants (thus rejecting the Administration's request to reduce federal funding for the SRF program), $80 million for U.S.-Mexico Border and Alaska rural and Native Village projects, and $332 million for 141 other special needs water and wastewater grants. The Administration objected to the large number of earmarked project grants in the bill, but the President signed the bill into law on October 20 (P.L. 106-74).

FY1999. The President FY1999 budget requested slightly less for water quality programs than Congress provided in FY1998 appropriations. The budget requested $1.1 billion for clean water SRF grants ($275 million less than appropriated in FY1998) and $178 million for special projects (versus $393 million in FY1998).

The budget also sought $145 million increased funding for EPA to implement the Clean Water Initiative, consisting of $95 million more for grants to states to manage nonpoint source pollution (a 95% increase for CWA Section 319 grants); $20 million more for grants for state administration of water quality programs (a 20% increase for Section 106 grants); and $30 million for various water quality activities, including EPA development of water quality criteria for nutrients and updated regulations for animal feeding operations, other grants for watershed restoration and wetlands protection, and EPA actions to reduce the need for fish advisories.

In October 1998, Congress passed legislation providing FY1999 funding for EPA (P.L. 105-276). Overall, the bill provides $7.6 billion for FY1999, about $200 million below the President's request. For clean water programs, the bill includes $1.35 billion for clean water SRF grants, $382 million for special project grants, and $121 million in increased funding for

the Clean Water Initiative. It also included $880 million for consolidated state environmental management grants, of which $349 million is intended for state water quality grants.

CONGRESSIONAL HEARINGS, REPORTS, AND DOCUMENTS

(Note: Congress has held more than 75 hearings on Clean Water Act and water quality issues since enactment of P.L. 100-4. Those highlighted below are a partial list of published hearings.)

U.S. Congress. House. Committee on Transportation and Infrastructure. *Meeting Clean Water and Drinking Water Infrastructure Needs*. Hearing, 105th Congress, 1st session, April 23, 1997. Washington, U.S. Govt. Print., Off., 437 p. (105-18)

—— *Recent Regulatory and Judicial Developments on Wetlands*. Hearing, April 29, 1997. 105th Congress, 1st session. Washington, U.S. Govt. Print. Off., 461 p. (105-36)

—— Subcommittee on Water Resources and Environment. *Governors' Perspectives on the Clean Water Act*. Hearing, Feb. 13, 1999. 106th Congress, 1st session. Washington, U.S. Govt. Print. Off., 56 p. (106-12)

U.S. Congress. Senate. Committee on Environment and Public Works. Subcommittee on Clean Air, Wetlands, Private Property, and Nuclear Safety. *Wetlands: Review of Regulatory Changes*. Hearing, June 26, 1997. 105th Congress, 1st session. Washington, U.S. Govt. Print. Off., 230 p. (S.Hrg. 105-328)

FOR ADDITIONAL READING

Goplerud, C. Peter. "Water Pollution Law: Milestones from the Past and Anticipation of the Future." *Natural Resources & Environment.* v. 10, no. 2, Fall 1995. pp. 7-12.

Knopman, Debra S. and Richard A. Smith. "20 Years of the Clean Water Act, Has U.S. Water Quality Improved?" *Environment.* v. 31, no. 1, January/February 1993. pp. 16-20, 34-41.

U.S. Environmental Protection Agency. *National Water Quality Inventory: 1996 Report to Congress.* Washington, 1998. "EPA841-R-97-008" 521 p.

—— *1996 Clean Water Needs Survey Report to Congress*. Washington, 1997. 1 vol.

CRS Reports and Issue Briefs

CRS Report 98-451. *Animal Waste Management and the Environment: Background for Current Issues*, by Claudia Copeland and Jeffrey Zinn.

CRS Report RL30030. *Clean Water Act: A Summary of the Law*, by Claudia Copeland.

CRS Report 97-831. *Clean Water Act and Total Maximum Daily Loads (TMDLs) of Pollutants*, by Claudia Copeland.

CRS Issue Brief IB10001. *Clean Water Act Reauthorization*, by Claudia Copeland.

CRS Report 98-946. *Clean Water Act Reauthorization Issues in the 106th Congress*, by Claudia Copeland.

CRS Report 97-488. *Clean Water Act Section 401: Background and Issues*, by Claudia Copeland.

CRS Report 98-150. *Clean Water Action Plan: Background and Early Implementation*, by Claudia Copeland.

CRS Report 98-745. *Clean Water Action Plan: Budgetary Initiatives*, by Claudia Copeland.

CRS Report 96-442. *Great Lakes Water Quality Issues*, by Claudia Copeland.

CRS Report 96-283. *Reinventing the Environmental Protection Agency and EPA's Water Programs*, by Claudia Copeland.

CRS Report 98-323. *Wastewater Treatment: Overview and Background*, by Claudia Copeland.

CRS Report 96-647. *Water Infrastructure Financing: History of EPA Appropriations*, by Claudia Copeland.

CRS Issue Brief IB97014. *Wetland Issues*, by Jeffrey Zinn and Claudia Copeland.