



Water Quality Issues in the 111th Congress: Oversight and Implementation

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Summary

Although much progress has been made in achieving the ambitious goals that Congress established more than 35 years ago in the Clean Water Act (CWA) to restore and maintain the chemical, physical, and biological integrity of the nation's waters, long-standing problems persist, and new problems have emerged. Water quality problems are diverse, ranging from pollution runoff from farms and ranches, city streets, and other diffuse or "nonpoint" sources, to toxic substances discharged from factories and sewage treatment plants.

There is little agreement among stakeholders about what solutions are needed and whether new legislation is required to address the nation's remaining water pollution problems. For some time, efforts to comprehensively amend the CWA have stalled as interests have debated whether and exactly how to change the law. Congress has instead focused legislative attention on enacting narrow bills to extend or modify selected CWA programs, but not any comprehensive proposals.

For several years, the most prominent legislative water quality issue has concerned financial assistance for municipal wastewater treatment projects. House and Senate committees have approved bills on several occasions, but, for various reasons, no legislation has been enacted. At issue is how the federal government will assist states and cities in meeting needs to rebuild, repair, and upgrade wastewater treatment plants, especially in light of capital costs that are projected to be as much as \$390 billion. In the 111th Congress, interest in increased investment in public works infrastructure—including wastewater—in order to stimulate the faltering U.S. economy has brought greater attention to water infrastructure issues. Acting quickly, in early February, Congress passed and the President signed the American Recovery and Reinvestment Act (P.L. 111-5). Among its provisions, the legislation appropriates \$4.0 billion in additional CWA assistance for wastewater projects. In addition, on March 12, the House passed legislation to reauthorize the CWA's State Revolving Fund (SRF) program to finance wastewater infrastructure and several related provisions of the act (H.R. 1262).

Also likely to be of interest are programs that regulate activities in wetlands, especially CWA Section 404, which has been criticized by landowners for intruding on private land-use decisions and imposing excessive economic burdens. Environmentalists view this regulatory program as essential for maintaining the health of wetland ecosystems, and they are concerned about court rulings that narrowed regulatory protection of wetlands and about related administrative actions. Many stakeholders desire clarification of the act's regulatory jurisdiction, but they differ on what solutions are appropriate. In the 110th Congress, committees held hearings on legislation intended to provide that clarification, but no further legislative action occurred.

Other issues discussed in this report that also could be of interest in the 111th Congress include implementation of current programs to manage nonpoint sources of pollution, as these are major contributors to water quality impairments across the country; and implementation of EPA rules governing discharges of wastes from large animal feeding operations.

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Introduction

Although much progress has been made in achieving the ambitious goals that Congress established more than 35 years ago to restore and maintain the chemical, physical, and biological integrity of the nation's waters, long-standing problems persist, and new problems have emerged. Water quality problems are diverse, ranging from pollution runoff from farms and ranches, city streets, and other diffuse or "nonpoint" sources, to "point" source discharges of metals and organic and inorganic toxic substances from factories and sewage treatment plants.

The principal law that deals with polluting activity in the nation's streams, lakes, estuaries, and coastal waters is the Federal Water Pollution Control Act (P.L. 92-500, enacted in 1972), commonly known as the Clean Water Act, or CWA. It consists of two major parts: regulatory provisions that impose progressively more stringent requirements on industries and cities to abate pollution and meet the statutory goal of zero discharge of pollutants; and provisions that authorize federal financial assistance for municipal wastewater treatment plant construction. Both parts are supported by research activities, plus permit and enforcement provisions. Programs at the federal level are administered by the Environmental Protection Agency (EPA); state and local governments have major responsibilities to implement CWA programs through standard-setting, permitting, and enforcement.¹

The water quality restoration objective declared in the 1972 act was accompanied by statutory goals to eliminate the discharge of pollutants into navigable waters by 1985 and to attain, wherever possible, waters deemed "fishable and swimmable" by 1983. Although those goals have not been fully achieved, considerable progress has been made, especially in controlling conventional pollutants (suspended solids, bacteria, and oxygen-consuming materials) discharged by industries and sewage treatment plants.

Progress has been mixed in controlling discharges of toxic pollutants (heavy metals, inorganic and organic chemicals), which are more numerous and can harm human health and the environment even when present in very small amounts—at the parts-per-billion level. Moreover, efforts to control pollution from diffuse sources, termed nonpoint source pollution (rainfall runoff from urban, suburban, and agricultural areas, for example), are more recent, given the earlier emphasis on "point source" pollution (discharges from industrial and municipal wastewater treatment plants). Overall, data reported by EPA and states indicate that 45% of river and stream miles assessed by states and 47% of assessed lake acres do not meet applicable water quality standards and are impaired for one or more desired uses.² In 2006 EPA issued an assessment of streams and small rivers and reported that 67% of U.S. stream miles are in poor or fair condition and that nutrients and streambed sediments have the largest adverse impact on the biological condition of these waters.³ Approximately 95,000 lakes and 544,000 river miles in the United States are under fish-consumption advisories (including 100% of the Great Lakes and their connecting waters), due to chemical contaminants in lakes, rivers, and coastal waters, and one-

¹ For further information, see CRS Report RL30030, *Clean Water Act: A Summary of the Law*, by Claudia Copeland.

² U.S. Environmental Protection Agency, *National Water Quality Inventory: Report to Congress, 2002 Reporting Cycle*, EPA 841-R-07-001, October 2007, <http://www.epa.gov/305b/2002report/>.

³ U.S. Environmental Protection Agency, *Wadeable Streams Assessment: A Collaborative Survey of the Nation's Streams*, EPA 841-B-06-002, December 2006, <http://www.epa.gov/owow/streamsurvey/>.

third of shellfishing beds are closed or restricted, due to toxic pollutant contamination. Mercury is a contaminant of growing concern—as of 2003, 45 states had issued partial or statewide fish or shellfish consumption advisories because of elevated mercury levels.

The last major amendments to the law were the Water Quality Act of 1987 (P.L. 100-4). These amendments culminated six years of congressional efforts to extend and revise the act and were the most comprehensive amendments since 1972. Authorizations of appropriations for some programs provided in P.L. 100-4, such as general grant assistance to states, research, and general EPA support authorized in that law, expired in FY1990 and FY1991. Authorizations for wastewater treatment funding expired in FY1994. None of these programs has lapsed, however, as Congress has continued to appropriate funds to implement them. EPA, states, industry, and other citizens continue to implement the 1987 legislation, including meeting the numerous requirements and deadlines in it.

The Clean Water Act has been viewed as one of the most successful environmental laws in terms of achieving its statutory goals, which have been widely supported by the public, but lately some have questioned whether additional actions to achieve further benefits are worth the costs. Criticism has come from industry, which has been the long-standing focus of the act's regulatory programs and often opposes imposition of new stringent and costly requirements. Criticism also has come from developers and property rights groups who contend that federal regulations (particularly the act's wetlands permit program) are a costly intrusion on private land-use decisions. States and cities have traditionally supported water quality programs and federal funding to assist them in carrying out the law, but many have opposed CWA measures that they fear might impose new unfunded mandates. Many environmental groups believe that further fine-tuning is needed to maintain progress achieved to date and to address remaining water quality problems.

Initially following enactment of amendments in 1987, no major CWA legislative activity occurred. A comprehensive reauthorization bill opposed by the Clinton Administration and environmental groups passed the House in the 104th Congress (1995), but was not enacted. Since then, no comprehensive reauthorization legislation has been introduced, but beginning in the 106th Congress, a number of bills dealing with specific water quality issues and programs in the law have been enacted—especially, legislation to reauthorize several existing CWA programs.⁴ Since the 107th Congress, the dominant CWA issue has been water infrastructure financing—i.e., extension and modification of provisions of the act authorizing financial assistance for municipal wastewater treatment projects. House and Senate committees have approved bills and the House passed a bill in the 110th Congress, but none has been enacted.

The remainder of this report discusses CWA issues likely to be of interest in the 111th Congress, beginning with discussion of two issues that are likely to be most prominent—water infrastructure funding, and regulatory protection of wetlands. It then briefly describes several other issues that could receive attention, either through oversight or legislation, including management of sewer overflows, implementation of the CWA's nonpoint source pollution management program, and regulation of waste discharges from animal feeding operations. It concludes with a brief discussion of water quality appropriations and water infrastructure as part of economic stimulus legislation.

⁴ For additional information on legislative activity since P.L. 100-4, see CRS Report RL33800, *Water Quality Issues in the 110th Congress: Oversight and Implementation*, by Claudia Copeland.

Legislative Issues in the 111th Congress

The year 2007 marked the 35th anniversary of passage of the Clean Water Act and 20 years since the last major amendments to the law. While, as noted, there has been measurable clean water progress as a result of the act, observers and analysts agree that significant water pollution problems remain. However, there is less agreement about what solutions are needed and whether new legislation is required. Several key water quality issues exist: evaluating actions to implement existing provisions of the law, assessing whether additional steps are necessary to achieve overall goals of the act that have not yet been attained, ensuring that progress made to date is not lost through diminished attention to water quality needs, and defining the appropriate federal role in guiding and paying for clean water infrastructure and other activities. For some time, efforts to comprehensively amend the act have stalled as interests have debated whether and exactly how to change the law. Many issues that might be addressed involve making difficult tradeoffs between impacts on different sectors of the economy, taking action when there is technical or scientific uncertainty, and allocating governmental responsibilities for implementing the law.

These factors partly explain why Congress has recently favored focusing legislative attention on narrow bills to extend or modify selected CWA programs, rather than taking up comprehensive proposals. Other factors also have been at work. These include a general reluctance by most Members of Congress to address controversial environmental issues in view of the slim majorities held by political parties in the House and the Senate; and a lack of presidential initiatives on clean water issues (neither the Clinton nor the Bush Administration proposed CWA legislation). In addition, for some time after the terrorist attacks of September 11, 2001, Congress was more focused on security, terrorism, and Iraq war issues than on many other topics, including environmental protection.

As a result of the 2006 mid-term elections and changed congressional leadership beginning in 2007, many observers expected that the 110th Congress would pursue oversight of clean water and other environmental programs. Greater interest in environmental issues was apparent, but no comprehensive legislation was enacted. A particular legislative focus was water infrastructure financing legislation, specifically reauthorization of the act's financial aid program (discussed next in this report). Also on the congressional agenda was consideration of the geographic reach of the Clean Water Act over the nation's waters and wetlands, in light of court rulings—including two Supreme Court decisions—that have narrowed the law's regulatory jurisdiction, but in ways that are somewhat unclear.

The 2008 general and congressional elections have encouraged many policymakers and stakeholders to anticipate much greater attention to many environmental issues, including clean water, by the 111th Congress and the Obama Administration. The new Administration's priorities in this area are not yet fully known, although during the 2008 presidential campaign, candidate Obama supported several issues, including preservation of wetlands, Great Lakes restoration legislation, water conservation, regulation of large animal feeding operations, and full funding of clean water infrastructure assistance programs. Funding for water infrastructure projects, discussed next in this report, has received early attention in the 111th Congress in light of interest in utilizing increased investment in public works projects—including wastewater—in order to stimulate the faltering U.S. economy.

Authorization of Water Infrastructure Funding

Meeting the nation's needs to build, upgrade, rebuild, and repair wastewater infrastructure is a significant element in achieving the Clean Water Act's water quality objectives. The act's program of financial aid for municipal wastewater treatment plant construction is a key contributor to that effort. Since 1972 Congress has provided more than \$78 billion to assist cities in constructing projects to achieve the act's requirements for secondary treatment of municipal sewage (equivalent to 85% reduction of wastes), or more stringent treatment where required by local water quality conditions. State and local governments have spent more than \$25 billion of their own funds for construction, as well.

Still, funding needs remain very high: an additional \$202.5 billion nationwide for all types of projects eligible for funding under the act, according to the most recent Needs Survey estimate by EPA and the states, released in January 2008, an 8.6% increase above the estimate reported four years earlier.⁵ EPA reported several reasons for increased needs: problems due to aging infrastructure, treatment plant improvements needed to meet more protective water quality standards, and additional capacity required to handle wet weather flows. This current estimate includes \$134.4 billion for wastewater treatment and collection systems (\$10.5 billion more than the previous report), \$54.8 billion for combined sewer overflow corrections (\$1.5 billion less than the previous estimate), \$9 billion for stormwater management (\$2.8 billion more than the previous estimate), and \$4.3 billion to build systems to distribute recycled water (a new category in this report). The estimate does not explicitly include funding needed to address security issues, needs related to growth and expansion in regions that are experiencing population growth, or funding possibly needed for treatment works to adapt to climate change impacts.

In September 2002, EPA released a study called the Gap Analysis that assesses the difference between current spending for wastewater infrastructure and total funding needs (both capital and operation and maintenance).⁶ In that report, EPA estimated that, over the next two decades, the United States needs to spend nearly \$390 billion to replace existing wastewater infrastructure systems and to build new ones. Funding needs for operation and maintenance (not eligible for Clean Water Act funding) are an additional \$148 billion over the next two decades, the agency estimated. According to the Gap Analysis, if there is no increase in investment, there will be about a \$6 billion gap between current annual capital expenditures for wastewater treatment (\$13 billion annually) and projected spending needs of approximately \$19 billion. The study also estimated that, if wastewater spending were to increase by 3% annually (essentially meaning a doubling of rates paid by ratepayers), the gap would shrink by nearly 90% (to about \$1 billion annually). At issue has been what the federal role should be in assisting states and cities, especially in view of such high projected funding needs.

In the 111th Congress, recognition of significant remaining funding needs for water infrastructure has merged with consideration of legislation that would use federal government spending to stimulate recovery of the U.S. economy (see discussion of "Economic Stimulus" below, page 19)

⁵ U.S. Environmental Protection Agency, *Clean Watersheds Needs Survey 2004, Report to Congress*, Washington, January 2008, <http://www.epa.gov/owm/mtb/cwms/2004rtc/toc.htm>.

⁶ U.S. Environmental Protection Agency, *The Clean Water and Drinking Water Infrastructure Gap Analysis*, EPA 816-R-02-020, September 2002.

Debate over the nature of the nation's efforts regarding wastewater infrastructure was a central and controversial part of the 1987 amendments to the act. The 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), which are 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. Although most states believe that the SRF is working well, early funding and administrative problems and continuing large funding needs have delayed the anticipated shift to full state responsibility. Thus, SRF issues have been prominent on the Clean Water Act reauthorization agenda in recent Congresses.⁷

SRF monies may be used for specified activities, including making 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. Since the SRF program began, states have used \$2.6 billion to assist more than 8,650 nonpoint management projects; none has gone to estuary management activities.

All states have established the mechanisms to administer the new loan programs and have been receiving SRF capitalization funds under Title VI. Many have complained that the SRF program is unduly complicated by federal rules, even though Congress had intended that states were to have greater flexibility. Congressional oversight has examined the progress toward reducing the backlog of wastewater treatment facilities needed to achieve the act's water quality objectives, while newer estimates of future funding needs have drawn increased attention to the role of the SRF program in meeting such needs. Although there has been some criticism of the SRF program, and debate continues over specific concerns, the basic approach is well supported. Congress used the clean water SRF as the model when it established a drinking water SRF in 1996 (P.L. 104-182).⁸

Although the initial intent was to phase out federal support for this program, Congress has continued to appropriate SRF capitalization grants to the states, providing an average of \$1.35 billion annually in recent years, but that amount has been declining since FY2005. **Table 1** summarizes wastewater treatment funding under Title II (traditional grants program) and Title VI (capitalization grants for revolving loan programs) since the 1987 amendments. This table does

⁷ For further information on the clean water SRF program, see CRS Report 98-323, *Wastewater Treatment: Overview and Background*, by Claudia Copeland.

⁸ For additional information, see CRS Report RS22037, *Drinking Water State Revolving Fund (DWSRF): Program Overview and Issues*, by Mary Tiemann.

not include appropriations for congressionally earmarked special project grants in individual cities, which in recent years have represented about 15% of water infrastructure funds.⁹

Table I. CWA Wastewater Treatment Funding
(billions of dollars)

Fiscal Year	Authorizations		Appropriations	
	Title II	Title VI	Title II	Title VI
1986	2.400	—	1.800	—
1987	2.400	—	2.360	—
1988	2.400	—	2.300	—
1989	1.200	1.200	0.941	0.941
1990	1.200	1.200	0.967	0.967
1991	—	2.400	—	2.100
1992	—	1.800	—	1.950
1993	—	1.200	—	1.930
1994	—	0.600	—	1.220
1995	—	—	—	1.240
1996	—	—	—	2.070
1997	—	—	—	0.625
1998	—	—	—	1.350
1999	—	—	—	1.350
2000	—	—	—	1.345
2001	—	—	—	1.350
2002	—	—	—	1.350
2003	—	—	—	1.341
2004	—	—	—	1.342
2005	—	—	—	1.091
2006	—	—	—	0.887
2007	—	—	—	1.084
2008	—	—	—	0.689
2009	—	—	—	0.689
2009 ARRA ^a	—	—	—	4.000
TOTAL	7.200	8.400	6.568	30.911

Source: Compiled by CRS.

- a. The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) provides \$4.0 billion in supplemental FY2009 appropriations. See discussion of Economic Stimulus, page 19.

⁹ Issues associated with special project grants are discussed in CRS Report RL32201, *Water Infrastructure Projects Designated in EPA Appropriations: Trends and Policy Implications*, by Claudia Copeland.

One issue of continuing 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.

Because remaining clean water funding needs are still so large nationally, an issue is whether and how to extend SRF assistance to address those needs, how to allocate SRF funds among the states, and how to prioritize projects and funding. Additionally, there is concern about the adequacy of SRF or other funding specifically for high-cost projects dealing with problems of overflows from municipal combined and separate sewers which can release partially treated or untreated wastewaters that harm public health and the environment. EPA estimates that the cost of projects to control sewer overflows, from combined and separate sanitary sewer systems, and manage stormwater runoff, is nearly \$64 billion nationwide. And more recently, wastewater utilities have sought assistance to assess operational vulnerabilities and upgrade physical protection of their facilities against possible terrorist attacks that could threaten the water infrastructure system.¹⁰

During the Bush Administration, EPA officials took the position that infrastructure funding needs go beyond what the federal government can do on its own, and the President's budget for several years advanced the concept that federal funding would cease after 2011 and that state and local self-financing would occur thereafter. Although saying that federal and state funding can help water utilities meet future needs, EPA's principal water infrastructure initiative was to support other types of responses to help ensure that investment needs are met in an efficient, timely, and equitable manner. In particular, EPA promoted strategies that it terms the Four Pillars of Sustainable Infrastructure, based on concepts of better management, full-cost pricing, efficient water use, and watershed approaches to protection. EPA pursued a Sustainable Infrastructure Leadership Initiative in partnership with water utilities to promote the Four Pillars. The purpose of the initiative was to identify new and better ways of doing business in the water and wastewater industries and promote them widely, and thus ensure sustainability of water systems. For example, EPA worked to encourage rate structures that lead to full cost pricing and will support water metering and other conservation measures. EPA also has encouraged consumers to use water-efficient products (e.g., residential bathroom products), with the intent of reducing national water and wastewater infrastructure needs by reducing projected water demand and wastewater flow, thus allowing deferral or downsizing of capital projects.

Legislative Responses

Congress has considered water infrastructure funding issues several times since the 107th Congress. In that Congress, House and Senate committees approved bills to extend the act's SRF program and increase federal assistance (H.R. 3930; S. 1961). The Senate bill was reported, but a report on H.R. 3930 was not filed; neither bill received further action.

¹⁰ For additional information on many of these topics, see CRS Report RL31116, *Water Infrastructure Needs and Investment: Review and Analysis of Key Issues*, by Claudia Copeland and Mary Tiemann.

In the 108th Congress, bills to reauthorize the Clean Water Act SRF program were introduced, as were separate bills to reauthorize funding for sewer overflow grants (CWA Section 221). The Senate Environment and Public Works Committee reported legislation authorizing \$41.25 billion over five years for wastewater and drinking water infrastructure programs, including \$20 billion for the clean water SRF program (S. 2550). In addition, the House Transportation and Infrastructure Subcommittee on Water Resources and Environment approved H.R. 1560 (legislation similar to H.R. 3930, the bill approved by that committee in the 107th Congress), but no further action occurred.

In the 109th Congress, the Senate Environment and Public Works Committee approved S. 1400, the Water Infrastructure Financing Act, in July 2005. The bill was similar to S. 2550 in the 108th Congress. No further action occurred on this bill, and there was no legislative activity in the House on similar legislation during the 109th Congress.

Throughout this period, several factors have contributed to problems in moving any of these bills further in the legislative process, including Administration opposition to authorization levels, disputes over the formula for allocating clean water SRF grants among the states, and controversies over application of prevailing wage requirements of the Davis-Bacon Act.

The issue of the applicability of the Davis-Bacon Act to SRF-funded projects has been especially controversial, because that act has both strong supporters and critics in Congress and elsewhere. Critics of Davis-Bacon say that it unnecessarily increases public construction costs and hampers competition, while supporters say that it helps stabilize the local construction industry by preventing competition that would undercut local wages and working conditions. Under the original SRF program authorization enacted in 1987, the Davis-Bacon Act applied to so-called “first use” monies provided by a state from its SRF (that is, loans made from initial federal capitalization grants, but not to subsequent monies provided from repayments to the SRF). When that authorization expired at the end of FY1994, Davis-Bacon requirements also expired. Thus, the recent issue has been whether to restore the applicability of those requirements.¹¹

For some time, interest has been growing in identifying and developing new mechanisms to help localities pay for water infrastructure projects, beyond federal grants or SRFs, which appear insufficient to fully meet funding needs. In June 2005, the House Transportation and Infrastructure Subcommittee on Water Resources and Environment held hearings on alternative means to fund water infrastructure projects in the future. At the first hearing, witnesses focused on one way to increase funding for water infrastructure that has recently been advocated by some groups, creating a national clean water trust fund that would conceptually be similar to trust funds that exist for highway and aviation projects. Witnesses and subcommittee members discussed difficulties in identifying potential revenue sources that would be deemed fair and equitable. The second hearing addressed other financing options, such as expanded use of tax-exempt private activity bonds, and more efficient management techniques, such as asset management programs and sustainable infrastructure initiatives. In the 109th Congress, legislation was introduced to establish a \$7.5 billion federal trust fund for wastewater infrastructure improvements. This bill, H.R. 4560, proposed to use a concept for funding such projects that has been promoted by wastewater treatment industry officials, other stakeholders, and some environmentalists, who argue it could provide a new source of money for necessary system upgrades amid dwindling

¹¹ For additional information, see CRS Report RL31491, *Davis-Bacon Act Coverage and the State Revolving Fund Program Under the Clean Water Act*, by William G. Whittaker.

federal funds. The bill contemplated a system of user fees to create the fund, but the source of revenue was not specified in the bill. Congress did not act on this proposal, and no similar legislation has been introduced subsequently.

110th Congress

Wastewater infrastructure financing again received attention in the 110th Congress. In March 2007 the House approved three bills; however, the Senate did not act on any of them. H.R. 720, the Water Quality Financing Act of 2007, was substantially similar to legislation that the House Transportation and Infrastructure Committee's Water Resources and Environment Subcommittee approved in the 108th Congress (H.R. 1560). It would have authorized \$14 billion for the clean water SRF program for FY2008-FY2011. It included several provisions intended to benefit economically disadvantaged and small communities, such as allowing extended loan repayments (30 years, rather than 20) and additional subsidies (e.g., principal forgiveness and negative interest loans) for communities that meet a state's affordability criteria. One key difference between this bill and the earlier legislation was the specification in H.R. 720 that the Davis-Bacon Act prevailing wage requirement shall apply to all projects financed in whole or in part through an SRF.

The House also passed H.R. 569, a bill to reauthorize CWA Section 221 and to provide funding for projects to correct municipal sewer overflows (see discussion of this issue on page 15); and H.R. 700, a bill to reauthorize CWA Section 220 and to extend a pilot program to develop alternative water source projects (i.e., projects to meet critical water supply needs).

The Senate Environment and Public Works Committee held an oversight hearing on wastewater infrastructure needs in September 2007 and later took up a specific legislative proposal dealing with financing issues. In September 2008, the committee approved the Water Infrastructure Financing Act (S. 3617), a bill that was similar to a measure that the committee approved in the 109th Congress (S. 1400). S. 3617 would have authorized \$19.6 billion for grants to capitalize the Clean Water Act SRF program and \$14.7 billion for Safe Drinking Water Act SRF capitalization grants through FY2012. The bill would have expanded eligibility for clean water SRF assistance including, for example, projects that implement stormwater management, water conservation or efficiency projects, and water and wastewater reuse and recycling projects; and it included a number of provisions to make the clean water and drinking water SRF programs more parallel, such as allowing SRF assistance to be used by private as well as public wastewater treatment systems. The committee approved an amendment adding Davis-Bacon Act language similar to that in House-passed H.R. 720, specifying that prevailing wage requirements shall apply to all projects financed in whole or in part through an SRF.

111th Congress

On March 12, the House approved legislation (by a 317-101 vote) to reauthorize the SRF program and several related programs in the CWA (H.R. 1262). The bill includes provisions of five bills that passed the House during the 110th Congress but were not enacted.

Title I of H.R. 1262 authorizes \$13.8 billion in SRF capitalization grants over five years, FY2010-2014, and is essentially the same text as H.R. 720 as passed by the House in March 2007. It includes several provisions intended to benefit economically disadvantaged and small communities, such as allowing extended loan repayments (30 years, rather than 20) and

additional subsidies (e.g., principal forgiveness and negative interest loans) for communities that meet a state's affordability criteria. The bill includes several provisions intended to encourage and make SRF-eligible projects involving green infrastructure,¹² water reuse and conservation, and energy-efficient technologies. It includes provisions to require communities to plan for capital replacement needs and to develop and implement an asset management plan for the repair and maintenance of infrastructure that is being financed. It also includes specification that the Davis-Bacon Act prevailing wage requirement shall apply to all projects financed in whole or in part through an SRF. During debate on the bill, the House defeated an amendment that would have deleted the prevailing wage provision from the bill.

Title II incorporates the text of H.R. 700. It would reauthorize CWA Section 220 to extend a pilot program to develop alternative water source projects at \$50 million per year through FY2014. The House passed a similar bill (also H.R. 700) in March 2007.

Title III incorporates the text of H.R. 895. It would reauthorize CWA Section 221 to authorize a total of \$2.5 billion through FY2014 for projects to correct municipal sewer overflows. Twenty percent of these monies are to be used for green infrastructure projects. The House passed a similar bill (H.R. 569) in March 2007.

Title IV incorporates the text of H.R. 753. It is intended to ensure that sewage treatment plants monitor for and report discharges of raw sewage from combined or separate sewers. The bill would require EPA to issue criteria to guide plant operators in assessing whether a sewer overflow has the potential to affect human health or imminently and substantially endanger human health. The House passed a similar bill (H.R. 2452 in June 2008).

Title V reauthorizes the CWA's program for cleanup of contaminated sediments in the Great Lakes with \$150 million per year in funding through FY2014. In the 110th Congress, the House passed H.R. 6460, providing this level of funding and making certain programmatic changes, but as enacted (P.L. 110-365), the bill retained the existing funding level of \$50 million per year. Title V would increase authorized funding to the level supported by the House in the 110th Congress.

During consideration of H.R. 1262, the House adopted several amendments, including: (1) a requirement that states use at least 15% of SRF capitalization grants to assist small communities; (2) establishment of a federal task force on proper disposal of unused pharmaceuticals (based on H.R. 276); (3) a requirement that the Office of Management and Budget establish a crosscut budget for Chesapeake Bay (based on H.R. 1053); and (4) requirements for studies of infrastructure along the Rio Grande River and along the U.S.-Mexico border, wastewater infrastructure in the United States and Canada that discharge into the Great Lakes, and the presence of pharmaceuticals and personal care products (PPPs) in U.S. waters.

Regulatory Protection of Wetlands

How best to protect the nation's remaining wetlands and regulate activities taking place in wetlands has become one of the most contentious environmental policy issues, especially in the

¹² Green infrastructure, broadly defined, is an approach to water management that reduces stormwater runoff, sewer overflows, and flooding by protecting, restoring, or mimicking the natural hydrology of an area. It is often accomplished through the use of plants and soils or engineered solutions that recreate natural processes, such as planting trees and restoring wetlands.

context of the CWA, which contains a key wetlands regulatory tool, the permit program in Section 404. It requires landowners or developers to obtain permits for disposal of dredged or fill material that is generated by construction or similar activity into navigable waters of the United States, including wetlands. Section 404 has evolved through judicial interpretation and regulatory change to become one of the principal federal tools used to protect wetlands, although that term appears only once in Section 404 itself and is not defined there. At the same time, its implementation has come to be seen as intrusive and burdensome to those whose activities it regulates. At issue today is how to address criticism of the Section 404 regulatory program while achieving desired goals of wetlands protection.¹³

Unlike the rest of the act, the permit aspects of Section 404 are administered by the U.S. Army Corps of Engineers, rather than EPA, although the Corps uses EPA environmental guidance. Other federal agencies including the U.S. Fish and Wildlife Service (FWS) and Natural Resource Conservation Service (NRCS) have more limited roles in the Corps' permitting decisions. Tension has existed for many years between the regulation of activities in wetlands under Section 404 and related laws, on the one hand, and the desire of landowners to develop property that may include wetlands, on the other hand. The conflicts over wetlands regulation have for the most part occurred in administrative proceedings, as Congress has not amended Section 404 since 1977, when it provided exemptions for categories of routine activities, such as normal farming and forestry. Controversy has grown over the extent of federal jurisdiction and impacts on private property, burdens and delay of permit procedures, and roles of federal agencies and states in issuing permits.

Judicial Proceedings Involving Section 404

One issue involving long-standing controversy and litigation is whether isolated waters are properly within the jurisdiction of Section 404. Isolated waters—wetlands which are not physically adjacent to navigable surface waters—often appear to provide only some of the values for which wetlands are protected, such as flood control or water purification, even if they meet the technical definition of a wetland.

SWANCC

On January 9, 2001, the Supreme Court ruled on the question of whether the CWA provides the Corps and EPA with authority over isolated waters. The Court's 5-4 ruling in *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* (531 U.S. 159 (2001)) held that the Corps' denial of a 404 permit for a disposal site on isolated wetlands solely on the basis that migratory birds use the site exceeds the authority provided in the act.

The full extent of impacts on the regulatory program resulting from this decision remains unclear, even eight years after the ruling, in part because of different interpretations of *SWANCC* reflected in subsequent federal court cases. While it continues to be difficult to fully assess how regulatory protection of wetlands will be affected as a result of the *SWANCC* decision and other possible changes, the remaining responsibility to protect affected wetlands falls on states and localities.¹⁴

¹³ For additional information, see CRS Report RL33483, *Wetlands: An Overview of Issues*, by Claudia Copeland.

¹⁴ For additional information, see CRS Report RL30849, *The Supreme Court Addresses Corps of Engineers Jurisdiction Over "Isolated Waters": The SWANCC Decision*, by Robert Meltz.

Environmentalists believe that the Court misinterpreted congressional intent on the matter, while industry and landowner groups welcomed the ruling. Policy implications of how much the decision restricts federal regulation depend on how broadly or narrowly the opinion is applied. Some federal courts have interpreted *SWANCC* narrowly, thus limiting its effect on current permit rules, while a few read the decision more broadly.

The government's view on this key question was expressed in EPA-Corps guidance issued in January 2003. It provides a legal interpretation essentially based on a narrow reading of the Court's decision, thus allowing federal regulation of some isolated waters to continue, but it calls for more headquarters review in disputed cases. Administration press releases said that the guidance demonstrates the government's commitment to "no-net-loss" wetlands policy. However, it is apparent that the issues remained under review, because at the same time, the Administration issued an advance notice of proposed rulemaking (ANPRM) seeking comment on how to define waters that are under jurisdiction of the regulatory program.¹⁵ The ANPRM did not actually propose rule changes, but it indicated possible ways that Clean Water Act rules might be modified to further limit federal jurisdiction, building on *SWANCC* and some subsequent legal decisions.

The government received more than 133,000 comments on the ANPRM, most of them negative, according to EPA and the Corps. Environmentalists and many states opposed changing any rules, saying that the law and previous court rulings call for the broadest possible interpretation of the Clean Water Act (and thus a narrow interpretation of *SWANCC*), but developers sought changes to clarify interpretation of *SWANCC*. In December 2003, EPA and the Corps announced that the Administration would not pursue rule changes on federal regulatory jurisdiction over isolated wetlands. The EPA Administrator said that the Administration wanted to avoid a contentious and lengthy rulemaking debate over the issue. Environmentalists and state representatives expressed relief at the announcement. Interest groups on all sides have been critical of confusion in implementing the 2003 guidance, which constitutes the main tool for interpreting the reach of the *SWANCC* decision. Environmentalists remain concerned about diminished protection resulting from the guidance, while developers said that without new regulations, confusing and contradictory interpretations of wetland rules will continue.

Rapanos v. United States

Federal courts continue to have a key role in interpreting and clarifying the *SWANCC* decision. On February 21, 2006, the Supreme Court heard arguments in two cases brought by landowners (*Rapanos v. United States*; *Carabell v. U.S. Army Corps of Engineers*) seeking to narrow the scope of the CWA permit program as it applies to development of wetlands. The issue in both cases had to do with the reach of the CWA to cover "waters" that were not navigable waters, in the traditional sense, but were connected somehow to navigable waters or "adjacent" to those waters. (The act requires a federal permit to discharge dredged or fill materials into "navigable waters.") Many legal and other observers hoped that the Court's ruling in these cases would bring greater clarity about the scope of federal jurisdiction.

The Court's ruling was issued on June 19, 2006 (*Rapanos, v. United States*, 547 U.S. 715 (2006)). In a 5-4 decision, a plurality of the Court, led by Justice Scalia, held that the lower court had

¹⁵ U.S. Department of Defense, Department of the Army, Corps of Engineers and U.S. Environmental Protection Agency, "Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of 'Waters of the United States' and Joint Memorandum," 63 *Federal Register* 1991-1998, January 15, 2003.

applied an incorrect standard to determine whether the wetlands at issue are covered by the CWA. Justice Kennedy joined this plurality to vacate the lower court decisions and remand the cases for further consideration, but he took different positions on most of the substantive issues raised by the cases, as did four other dissenting justices.¹⁶ Legal observers suggest that the implications of the ruling (both short-term and long-term) are far from clear. Because the several opinions written by the justices did not draw a clear line regarding which wetlands and other waters are subject to federal jurisdiction, one likely result has been more case-by-case determinations and continuing litigation. There also has been renewed pressure on the Corps and EPA to clarify the issues through an administrative rulemaking.

On June 5, 2007—nearly one year after the *Rapanos* ruling—EPA and the Corps issued guidance to enable their field staffs to make CWA jurisdictional determinations in light of the decision. According to the guidance, the agencies will assert regulatory jurisdiction over certain waters, such as traditional navigable waters and adjacent wetlands. Jurisdiction over others, such as non-navigable tributaries that do not typically flow year-round and wetlands adjacent to such tributaries, will be determined on a case-by-case basis, to determine if the waters in question have a significant nexus with a traditional navigable water. The guidance details how the agencies should evaluate whether there is a significant nexus. The guidance is not intended to increase or decrease CWA jurisdiction, and it does not supersede or nullify the 2003 guidance, discussed above, which addressed jurisdiction over isolated wetlands in light of *SWANCC*.

In accompanying documents, EPA and the Corps said that the Administration was considering a rulemaking in response to the *Rapanos* decision, but they noted that developing new rules to interpret the decision would take more time than issuing the guidance. They also noted that, despite issuance of the guidance documents, legal challenges to the scope of CWA jurisdiction are likely to continue. The guidance took effect immediately, but the agencies also solicited public comments, and left open the possibility of further changes in the future.

Based on more than 66,000 public comments received and 18 months of implementation of the 2007 guidance, EPA and the Corps issued revised guidance December 2, 2008.¹⁷ The revisions made few changes to the earlier document, but did add clarification of some key terms that are important to determining CWA jurisdiction, such as the meaning of the regulatory term “adjacent wetlands.” The agencies continue to take the position that, based on additional experience, they could provide supplementary guidance or initiate rulemaking. Some environmental groups criticized the revised guidance, saying that it continues to substantially limit the scope of waters that are protected by the CWA. Industry analysts said that the few changes in the guidance could make it simpler for regulators to make jurisdictional determinations.

Congressional Responses

In September 2002, a House Government Reform subcommittee held a hearing on the government’s response to the *SWANCC* decision. Committee Members and public witnesses indicated that a lack of guidance from the government clarifying its interpretation of the case had led to inconsistent regulatory decisions by Corps officials in individual regions of the country, and

¹⁶ For additional information, see CRS Report RL33263, *The Wetlands Coverage of the Clean Water Act Is Revisited by the Supreme Court: Rapanos v. United States*, by Robert Meltz and Claudia Copeland.

¹⁷ The 2008 revised guidance and related documents, including the 2007 guidance that it supersedes, are available at <http://www.epa.gov/owow/wetlands/guidance/CWAwaters.html>.

subsequent judicial decisions by other federal and state courts have been mixed. At the hearing, Corps and EPA officials testified on their efforts to develop guidance, which subsequently was released in January 2003. Concern about lingering confusion over the *SWANCC* decision and Corps implementation was the topic of an oversight hearing by the Senate Environment and Public Works Committee in June 2003. Developers and others in the regulated community criticized the Corps and EPA, saying that the January 2003 guidance document had not clarified the reach of federal jurisdiction. A House Transportation and Infrastructure subcommittee also held a hearing on post-*SWANCC* issues in March 2004.

Legislation to overturn the *SWANCC* and *Rapanos* decisions by providing a broad definition of “waters of the United States” was introduced in the 110th Congress (H.R. 2421 and S. 1870, the Clean Water Authority Restoration Act of 2007). Similar legislation was introduced in the 107th, 108th, and 109th Congresses. Other legislation to narrow the definition of “waters of the United States” also was introduced in the 109th Congress (H.R. 2658). On August 1, 2006, a Senate Environment and Public Works subcommittee held a hearing on the Court’s *Rapanos* decision. For now, it is unclear whether the decision in the *Rapanos* case will accelerate congressional action on legislative proposals to address uncertainties about federal jurisdiction over wetlands and other waters, but both the *SWANCC* and *Rapanos* rulings remain highly controversial.

The House Transportation and Infrastructure Committee held hearings on H.R. 2421 and related jurisdictional issues on July 17 and July 19, 2007. Another hearing was held April 16, 2008. The Senate Environment and Public Works Committee held a hearing on issues related to the *Rapanos* ruling on December 13, 2007, and held a legislative hearing on S. 1870 on April 9, 2008. Proponents contend that Congress must clarify the important issues left unsettled by the Supreme Court’s 2001 and 2006 rulings and by the 2007 Corps/EPA guidance. Bill sponsors argue that the legislation would “reaffirm” what Congress intended when the CWA was enacted in 1972 and what EPA and the Corps have subsequently been practicing until recently, in terms of CWA jurisdiction. But critics question the constitutionality of the legislation and assert that it would expand federal authority, thus likely increasing confusion, rather than settling it. Prospects for the legislation are uncertain, given the divided views on how it might be interpreted by federal agencies and the courts.

Other Clean Water Act Issues

Several other issues affecting efforts to achieve the goals and objectives of the Clean Water Act also could be of interest during the 111th Congress through oversight and legislation.

Implementation of the BEACH Act

In 2000 Congress enacted the Beaches Environmental Assessment and Coastal Health Act (the BEACH Act) in order to augment federal and state efforts to prevent human exposure to polluted coastal recreation waters, including the Great Lakes. This act directed coastal states to adopt updated water quality standards and EPA to develop new protective criteria and standards. It also authorized grants to coastal states to support monitoring and notification programs. In May 2007 the GAO issued a report on federal and state implementation, finding that EPA has implemented

most provisions of the act, but has not yet published new or revised water quality criteria, which the law required by 2005.¹⁸

In the 110th Congress, Senate and House committees held hearings on the status of implementation of the BEACH Act, and bills to extend authorization for appropriations for the act's grants were introduced. The House approved one such bill (H.R. 2537). It would have allowed states to use BEACH Act funds to track sources of pollution and would require states to use rapid testing methods of beach water, in order to improve public notification. It proposed to increase grant funds to the states from \$30 million annually to \$40 million. It also would have directed EPA to publish revised water quality criteria for pathogens, a key pollutant of concern at beaches, as well as a list of all pathogens and pathogen indicators it has studied and observed in the course of developing those criteria. The Senate Environment and Public Works Committee approved companion legislation (S. 2844), but no further action occurred.

Combined and Separate Sewer Overflows

About 750 U.S. communities have combined sewers where domestic sanitary sewage, industrial wastes, infiltration from groundwater, and stormwater runoff are collected. These systems serve approximately 40 million persons, mainly in older urban and coastal cities. Normally (under dry-weather conditions), the combined wastes are conveyed to a municipal sewage treatment plant.

Properly designed, sized, and maintained combined sewers can be an acceptable part of a city's water pollution control infrastructure. However, combined sewer overflow (CSO) occurs when the capacity of the collection and treatment system is exceeded due to high volumes of rainwater or snowmelt, and the excess volume is diverted and discharged directly into receiving waters, bypassing the sewage treatment plants. Often the excess flow that contains raw sewage, industrial wastes, and stormwater is discharged untreated. Many combined sewer systems are found in coastal areas where recreational areas, fish habitat and shellfish beds may be contaminated by the discharges. To manage CSOs, cities are subject to a policy issued by EPA in 1994 that requires implementation of nine minimum controls that generally are based on combinations of management techniques (such as temporary retention of excess flow during storm events) and structural measures (such as construction of separate storm sewer systems).

One issue concerning some cities is the problem of overflows from municipal separate sanitary sewers (SSOs) that are not CSOs because they transport only sanitary wastes. Discharges of untreated sewage from these sewers can occur from manholes, broken pipes and deteriorated infrastructure, and undersized pipes, and can occur in wet or dry weather. EPA estimates that there are about 18,000 municipalities with separate sanitary sewers, all of which can, under certain circumstances, experience overflows. No explicit EPA or statutory control policy for addressing SSOs currently exists.

Funding for CSO and SSO projects is a major concern of states and cities. The most recent clean water needs survey found that the largest needs category, totaling \$55 billion and representing 27% of total water infrastructure needs, is to address CSOs. In 2000, Congress passed legislation, the Wet Weather Water Quality Act, authorizing a two-year \$1.5 billion grants program to reduce wet weather flows from municipal sewer systems, both CSOs and SSOs (Section 112 of Division

¹⁸ U.S. Government Accountability Office, *EPA and States Have Made Progress in Implementing the BEACH Act, but Additional Actions Could Improve Public Health Protection*, GAO-07-591, May 2007.

B, P.L. 106-154). However, Congress provided no appropriations for these wet weather grants during the two years of authorization (FY2002-FY2003). As described above, in March 2007, the House passed legislation to reauthorize this grant program (H.R. 569), and similar language is included in Title III of H.R. 1262, passed by the House on March 12, 2009. Title IV of H.R. 1262 also includes the text of H.R. 753 in the 111th Congress (identical to House-passed H.R. 2452 from the 110th Congress), which would require EPA to issue criteria to guide wastewater treatment plant operators in assessing whether a sewer overflow has the potential to affect human health or imminently and substantially endanger human health.¹⁹

Nonpoint Pollution Management

Prior to the 1987 CWA amendments, the act's requirements focused primarily on controlling pollution from "point" sources, that is, discharges from wastewater treatment plants and industrial facilities. 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. Nonpoint pollution is rainfall or snowmelt runoff from farm and urban areas, as well as construction, forestry, and mining sites. In 1987 Congress added a new Section 319 to the act to strengthen the law regarding this major contributor to water pollution by requiring states to develop and implement programs to control nonpoint sources of 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 totaling \$400 million were authorized over four years to cover as much as 60% of the costs of implementing a state's management plan. (In recent years, actual appropriations for Section 319 grants have averaged about \$205 million annually.)

At issue today is what progress is being made to manage nonpoint source pollution and what additional efforts may be needed involving Section 319 or other public and private activities. Several concerns have been raised about the program, such as whether state plans have comprehensively addressed their nonpoint pollution problems. Some observers are critical of the largely voluntary nature of the Section 319 program, consisting of "all carrot but no stick," while others argue that the types of individual land management decisions that are needed to address nonpoint source pollution cannot be regulated in the same ways that industrial sources are controlled (i.e., through nationally applicable discharge limitations and permits).

Funding has become an important issue as states 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. Precise estimates of management costs are not available, because so much depends on the site-specific nature of problems and solutions. Without adequate funding to implement state management plans, it is doubtful that much will be achieved under Section 319 to control nonpoint source pollution.

Because agricultural activities are known to be a significant source of nonpoint pollution nationwide, the adequacy of efforts to address these sources has received much attention. Questions have been raised about the 319 grant program's efficacy and overlap with farm bill conservation funding.²⁰ In particular, the White House Office of Management and Budget (OMB)

¹⁹ In the 110th Congress, The Senate Environment and Public Works Committee approved S. 2080 with an amendment providing the text of House-passed S. 2452, but no further action occurred.

²⁰ For information, see CRS Report RL34557, *Conservation Provisions of the 2008 Farm Bill*, by Tadlock Cowan, (continued...)

found that EPA had not demonstrated results under the program and has urged the agency to shift its focus away from implementing projects in agricultural areas, regardless of water quality status, and toward implementing projects specifically in waters that have been identified as impaired (are failing to meet established water quality standards). State officials have been concerned that OMB is not fully aware of the extent to which Section 319 funds address a range of nonpoint pollution control needs beyond the agricultural sector.

Strategy Concerning Animal Feeding Operations

As noted above, EPA's water quality reports identify agricultural activities as the leading contributor to water quality impairments nationwide. Animal feeding operations (AFOs) are only a subset of the agriculture category, but because more than one-half of the states specifically identify AFOs as contributing to impairments, public and policy attention has increased on how to minimize public health and environmental impacts of runoff from them. AFOs are agricultural facilities that confine livestock and their feeding activities, thus concentrating animal populations and waste. Animal waste is frequently applied to land for disposal and to use the nutrient value of manure to benefit crops. If not managed properly, however, it can pose risks to water quality and public health, contributing pollutants such as nutrients, sediment, pathogens, and ammonia to the environment.

Clean water regulations issued in the 1970s required discharge permits for the largest AFOs, termed confined animal feeding operations (CAFOs). However, EPA acknowledged that compliance and enforcement of these permit rules was poor (less than one-third of covered facilities actually have permits) and that the regulations themselves were outdated. In 2003, EPA issued a revised rule to regulate waste discharges from CAFOs. Among the key elements, the rules include requirements for development of nutrient management plans to better manage land application of manure. Farm groups generally supported the regulation as being consistent with environmental initiatives in the 2002 farm bill (P.L. 107-171), but environmental groups criticized the rule for inadequately addressing animal waste runoff problems.²¹ A January 2003 GAO report concluded that the rules will be ineffective unless EPA increases its oversight of state regulatory programs, which have primary responsibility for ensuring compliance by feedlot operators.²²

In February 2005, a federal court issued a ruling in a set of challenges to the CAFO rule (*Waterkeeper Alliance, American Farm Bureau, et al. v. EPA*, 399 F.3d 486 (2d Cir. 2005)). The litigation involved challenges to the permitting scheme of the rule, the type of discharges subject to regulation, and the effluent limitations established in the rules. The court upheld major parts of the EPA rule, held in favor of some of industry's challenges, held in favor of several of environmentalists' challenges, and in some cases directed EPA to explain more fully why it did or did not do certain things with regard to specific provisions of the rule. In October 2008, EPA issued final revisions to the 2003 CAFO rule in response to the court's decision.²³ Challenges to

(...continued)

Renée Johnson, and Megan Stubbs.

²¹ For additional information, see CRS Report RL31851, *Animal Waste and Water Quality: EPA Regulation of Concentrated Animal Feeding Operations (CAFOs)*, by Claudia Copeland.

²² U.S. General Accounting Office, *Increased EPA Oversight Will Improve Environmental Programs for Concentrated Animal Feeding Operations*, GAO-03-285, January 2003.

²³ For additional information, see CRS Report RL33656, *Animal Waste and Water Quality: EPA's Response to the Waterkeeper Alliance Court Decision on Regulation of CAFOs*, by Claudia Copeland.

the revised rule were brought by several industry groups and environmental groups in six federal courts. The cases have been consolidated in the Fifth Circuit Court of Appeals (*National Pork Producers Council v. EPA*, CA5, No. 08-61093).

The Relationship between CWA and FIFRA

Also of legislative interest are the impacts of court rulings in several cases concerning implementation of existing provisions of the law and involving questions of whether certain activities require a Clean Water Act discharge permit. A fundamental element of the act is the requirement that the “discharge of a pollutant” from a point source shall be carried out pursuant to a permit authorized by the National Pollutant Discharge Elimination System (NPDES) program under Section 402 of the law.

In recent years, federal courts have held that aerial application of a pesticide over and into U.S. waters requires a CWA permit, even when the pesticide use meets other requirements of federal law, including the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These decisions drew the attention of many pesticide applicators, including public health entities such as mosquito control districts, concerned with how the rulings might affect their need to control pests associated with diseases such as the West Nile virus. In November 2006, EPA finalized a rule seeking to resolve the conflict over the regulatory scope of the CWA and FIFRA related to pesticide use, in light of the recent litigation, by promulgating clarifying circumstances under which a CWA permit is or is not required for activities carried out pursuant to FIFRA. But in January 2009, a federal court rejected EPA’s argument that residual and excess pesticides do not require an NPDES permit, and the court vacated the rule (*National Cotton Council of America v. U.S. Environmental Protection Agency*, 553 F.3d 927 (6th Cir. 2009)). In the 109th Congress, prior to issuance of the now-vacated rule, legislation intended to affirm that a CWA permit is not required for use of FIFRA-approved pesticides was introduced, but it was not enacted. Future steps, including EPA’s response to the court’s ruling, are unknown for now.²⁴

EPA’s Water Transfer Rule

Clean Water Act permitting issues also were raised in other litigation. In 2004, the Supreme Court held that the transfer of polluted water from one waterbody to another may require a permit, notwithstanding that no new pollutant is added in the process of transfer (*South Florida Water Management District v. Miccosukee Tribe of Indians*, 124 S. Ct. 1537 (2004)). The decision raised concerns in agricultural areas where such transfers often occur in supplying irrigation water, presently without a permit. Congress has not held oversight hearings on impacts of the Court’s decision, and legislation that might address the ruling has not been introduced. In response to the Court’s ruling, in June 2008, EPA promulgated a rule defining categories or types of water transfers that the agency believes do not require NPDES permits. The rule, which supports EPA’s long-standing legal interpretation of the CWA, is controversial and was quickly challenged in federal courts by the Miccosukee Indian Tribe of Florida and environmental advocates. A ruling in that litigation has not been issued.

²⁴ For additional information, see CRS Report RL32884, *Pesticide Use and Water Quality: Are the Laws Complementary or in Conflict?*, by Claudia Copeland.

Continuing Issue: Appropriations

Clean water issues also are addressed by Congress in the context of appropriations.²⁵

FY2009 Appropriations

President Bush's FY2009 budget was presented on February 5, 2008. Overall, the budget sought \$7.1 billion for EPA programs and activities, 5% less than Congress appropriated for FY2008. The request included a number of reductions for water quality programs. It sought \$555 million for the clean water SRF program (20% below the FY2008 level) and, as in previous budgets, requested no funding for congressionally earmarked water infrastructure grants. In addition, the budget asked for 8% less for nonpoint pollution management grants (\$184.5 million, compared with \$200.8 million in FY2008) and sought no funding for the targeted watershed grants program, a competitive grant program that provides funding for community-driven watershed restoration projects; it received \$10 million in FY2008 appropriations.

In June 2008, a House Appropriations subcommittee approved a bill with FY2009 funds for EPA. The bill included \$850 million for clean water SRF capitalization grants (\$295 million above the Administration's request and \$161 million above the FY2008 level) and \$180 million for congressionally earmarked water infrastructure grants.

No further action occurred before the start of the new fiscal year, on October 1. However, at the end of September Congress and the President agreed to legislation providing partial-year funding for EPA and most other agencies and departments. This bill, the Consolidated Security, Disaster Assistance, and Continuing Resolution Act, 2009 (P.L. 110-329), provided funding through March 6, 2009, at FY2008-enacted levels (i.e., \$689 million for clean water SRF grants), and a second short-term CR was enacted on March 6 (P.L. 111-6), while Congress was finishing consideration of a full-year omnibus FY2009 appropriations bill that the President signed on March 11 (P.L. 111-8). It provides \$689 million in regular appropriations for the full year, but Congress has also provided \$4.0 billion more in economic stimulus funds, which are discussed next. The omnibus appropriations act also includes \$183.5 million for earmarked water infrastructure grants.

Economic Stimulus

For a number of months, economic indicators have shown significant deterioration of the national economy, which has officially been declared in recession. Fiscal problems have affected all levels of government, and states and cities are increasingly looking to the federal government for assistance in addressing the nation's faltering economic conditions. As a result, interest in using federal government spending to stimulate U.S. economic recovery intensified, and President Obama urged Congress to enact a multi-billion dollar fiscal stimulus bill. Among the options that have been under discussion, many favor making accelerated investments in the nation's public infrastructure in order to create jobs while also meeting infrastructure needs. Legislative focus

²⁵ For additional information, see CRS Report 96-647, *Water Infrastructure Financing: History of EPA Appropriations*, by Claudia Copeland.

centered on providing supplemental appropriations for a wide range of government programs, including the clean water SRF program.

Because of the urgency of responding to the economic downturn, emphasis has been on providing funds for projects that could move to construction quickly, which are often referred to as “shovel ready” or “ready to go” projects. To support arguments for generous spending levels in a stimulus bill, interest groups have come forward with lists and estimates of “ready to go” projects. For example, state and local water agencies reportedly identified from \$9 to \$20 billion in wastewater treatment projects that are “ready to go.”²⁶ Legislators moved quickly on these issues, because President Obama urged passage of economic stimulus legislation by mid-February.

In response, on January 28, the House passed H.R. 1, the American Recovery and Reinvestment Act, providing supplemental appropriations for a number of existing federal infrastructure and other programs, including \$6 billion for clean water SRF capitalization grants. On February 10, the Senate passed an amended version of the legislation, providing \$4 billion for clean water SRF grants, and on February 13, the House and Senate agreed to a reconciled version of the legislation providing \$4 billion for clean water SRF grants that will be available through September 30, 2010. President Obama signed the bill into law on February 17 (P.L. 111-5).²⁷

Funds will be distributed to states according to the existing state-by-state formulation in the CWA that applies to regular SRF appropriations, but the bill waives the CWA requirement that states provide a 20% match to the federal capitalization grant. Also, the legislation allows states to provide assistance to communities in the form of negative interest loans, principal forgiveness, grants, or a combination. States are to give preference to activities that can start and finish quickly, with a goal that at least 50% of the funds go to activities that can be initiated within 120 days of enactment. Further, states are to give priority to wastewater projects that can proceed to construction within 12 months of enactment, and EPA is directed to redistribute any SRF capitalization grant funds that are not under contract or construction within that time. The legislation also directs states to use at least 20% of their capitalization grants to fund projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. EPA issued guidance on implementing these provisions on March 2.²⁸

The supplemental clean water SRF funds provided by P.L. 111-5 are nearly six times larger than FY2009 funds currently appropriated to states. Most state and local government officials welcome the help provided by the stimulus funds in addressing long-standing infrastructure needs, but they note that significant funding needs will remain even after the stimulus money has been spent.

²⁶ Inside EPA, “States Seek over \$9 Billion for Clean Water Projects in Stimulus Bill,” September 12, 2008.

²⁷ For additional information, see CRS Report R40216, *Water Infrastructure Funding in the American Recovery and Reinvestment Act of 2009*, by Claudia Copeland and Nicole T. Carter.

²⁸ See http://www.epa.gov/water/eparecovery/docs/2009-03-02_Final_ARRA_SRF_Guidance.pdf.

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