Water Quality Issues in the 112th Congress: Oversight and Implementation

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Summary

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. However, 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 has been the role of the federal government in assisting 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, the House passed H.R. 1262 to reauthorize the CWA's State Revolving Fund (SRF) program to finance wastewater infrastructure and several related provisions of the act. A companion bill, S. 1005, was approved by the Senate Environment and Public Works Committee. No legislation was enacted.

Programs that regulate activities in wetlands also have been of interest, 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 have 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 111th Congress, the Senate Environment and Public Works Committee approved a bill that sought to clarify but not expand the CWA's geographic scope (the Clean Water Restoration Act, S. 787). A companion bill was introduced in the House (H.R. 5088). Because some stakeholders believe that the bills would expand federal jurisdiction—not simply clarify it—the bills were controversial, and no legislation was enacted.

These issues are likely to be of interest in the 112th Congress, as well. In addition, a number of other CWA issues have drawn interest recently and been the subject of congressional oversight and legislation, with some legislators highly critical of recent regulatory initiatives and others more supportive of EPA's actions. Among the topics of interest are environmental and economic impacts of Chesapeake Bay restoration efforts, federal promulgation of water quality standards in Florida, regulation of surface coal mining activities in Appalachia, and other CWA regulatory actions. Congressional interest in several of these issues is reflected in policy provisions of H.R. 2584, providing FY2012 appropriations for EPA.

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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 primary day-to-day responsibilities to implement CWA programs through standard-setting, permitting, enforcement, and administering financial assistance programs.[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 facilities and municipal wastewater treatment plants). Overall, data reported by EPA and states indicate that 44% of river and stream miles assessed by states and 64% 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 aquatic species in 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-third of shellfishing beds are closed or restricted, due to toxic pollutant contamination.

[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, 2004 Reporting Cycle*, EPA 841-R-08-001, January 2009, http://water.epa.gov/lawsregs/guidance/cwa/305b/2004report_index.cfm.

[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/.

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 CWA were the Water Quality Act of 1987 (P.L. 100-4). That legislation 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, 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, especially in view of the continuing problems of the U.S. economy. 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.

Legislative and Oversight Issues in the 112th 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: what additional actions should be taken to implement existing provisions of the law, whether additional steps are necessary to achieve overall goals of the act that have not yet been attained, how to ensure that progress made to date is not lost through diminished attention to water quality needs, and what is 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 among federal, state, local, and tribal entities 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 relatively 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.

The 2008 election 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. During the 2008 presidential campaign, candidate Obama supported several water quality 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, received early attention in the 111th Congress in light of interest in using increased investment in public works projects—including wastewater—to stimulate the faltering U.S. economy, but the Obama Administration did not present other legislative proposals concerning water quality. Also on the congressional agenda was consideration of the geographic reach of the CWA 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 111th Congress enacted two bills that amend the CWA. One dealt with extending a moratorium for CWA permitting of certain vessels (P.L. 111-215), and the other dealt with ensuring that federal agencies and departments pay localities for reasonable costs associated with managing stormwater pollution from federal properties (P.L. 111-378).

The two CWA issues that have recently been the focus of much of legislators' may receive some attention again in the 112th Congress—water infrastructure financing, and regulatory protection of wetlands—but likely with different focus than in the recent past, as congressional leadership and priorities have shifted since the November 2010 election. A number of other water quality issues also are on Congress's agenda through oversight and legislation.

Authorization of Clean Water Infrastructure Funding

Meeting the nation's needs to build, upgrade, rebuild, and repair wastewater infrastructure is a significant element in achieving the CWA'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 $85 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. Federal funds can only be used for construction purposes (i.e., new plants or upgrades), but not for operation and maintenance of facilities.

Still, funding needs remain very high: an additional $298 billion, according to the most recent Needs Survey estimate by EPA and the states, released in June 2010, a 17% increase above the estimate reported four years earlier.[4] This current estimate includes $187.9 billion for wastewater treatment and collection systems ($26.7 billion more than the previous report), which represent more than 60% of all needs; $63.6 billion for combined sewer overflow corrections ($1.4 billion less than the previous estimate); $42.3 billion for stormwater management ($17 billion more than

[4] U.S. Environmental Protection Agency, *Clean Watersheds Needs Survey 2008, Report to Congress*, Washington, June 2010, http://water.epa.gov/scitech/datait/databases/cwns/upload/cwns2008rtc.pdf.

the previous estimate); and $4.4 billion to build systems to distribute recycled water ($700 million less than the previous estimate).

EPA reported several reasons for increased total needs for wastewater treatment, which were $23 billion higher than in the previous report: improvements needed to meet more protective water quality standards, rehabilitation of aging infrastructure, and expanding capacity to meet population growth. Needs for stormwater management increased by $17 billion and were mostly due to emerging needs to provide "green" infrastructure (e.g., use of wetland and other natural systems to capture stormwater) as a supplement to traditional stormwater treatment structures, according to EPA. The estimates do not explicitly include funding needed to address security issues, 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 assessed the difference between current spending for wastewater infrastructure and total funding needs (both capital and operation and maintenance).[5] 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.

Debate over 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 a state fund established pursuant to Title VI. Under the revolving fund concept, monies used for wastewater treatment construction are 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.[6]

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

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

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

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 that are intended in part to provide accountability for federal dollars, 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).[7]

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. **Table 1** summarizes wastewater treatment funding under Title II (the traditional grants program) and Title VI (capitalization grants for revolving loan programs) since the 1987 amendments. This table does not include appropriations for congressionally directed special project grants in individual cities, which in recent years have represented about 15% of water infrastructure funds.[8]

Table 1. CWA Wastewater Treatment Funding

(billions of dollars)

	Authorizations		Appropriations	
Fiscal Year	**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

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

[8] 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.

	Authorizations		Appropriations	
Fiscal Year	**Title II**	**Title VI**	**Title II**	**Title VI**
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
2010	—	—	—	2.100
2011	—	—	—	1.522[b]
TOTAL	7.200	8.400	6.568	34.533

Source: Compiled by CRS.

a. The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) provided $4.0 billion in supplemental FY2009 appropriations.

b. FY2011 amounts reflect 0.2% rescission (from $1.525 billion that was appropriated).

One issue of continuing interest is impacts on small communities, many of which have found it difficult to participate in the SRF loan program. This is due to a number of factors: many are characterized by narrow or weak tax bases, limited or no access to capital markets, lower relative household incomes, higher per capita needs, and limited ability to demonstrate economies of scale. 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, at 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 and manage stormwater runoff is nearly $64 billion nationwide—nearly twice the total of SRF capitalization grants appropriated since 1987. 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.[9]

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 during that time 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 worked with water utilities to promote strategies based on concepts of better management, full-cost pricing, efficient water use, and watershed approaches to protection. 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 through conservation measures by reducing projected water demand and wastewater flow, thus deferring or downsizing of capital projects.

The Obama Administration's EPA likewise supports sustainable practices to reduce the potential gap between funding needs and spending. Building on concepts similar to those supported by the Bush Administration and on a request in the President's FY2010 budget, in October 2010 EPA issued a "Clean Water and Drinking Water Infrastructure Sustainability Policy" addressing management and pricing of infrastructure funded through SRFs to encourage conservation and provide adequate long-term funding for future capital needs. EPA will work with water utilities to promote planning processes that reflect not only public health and water quality, but also conservation of natural resources and innovative treatment. Further, EPA will work with states to target SRF assistance to projects that focus on system upgrade and replacement in existing communities, reflect full life cycle costs of infrastructure assets, and conserve natural resources or use alternative approaches.

Legislative Responses

Congress has considered water infrastructure funding issues several times since the 107th Congress, but no legislation other than appropriations has been enacted. 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.

In the 108th Congress, bills to reauthorize the Clean Water Act SRF program were introduced, as were separate bills to reauthorize grant funding for projects to address municipal sewer overflows (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

[9] 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.

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 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.

In the 110th Congress, the House approved three wastewater infrastructure financing bills; however, the Senate did not act on any of them. The first, H.R. 720, was substantially similar to legislation that the House Water Resources and Environment Subcommittee approved in the 108th Congress (H.R. 1560). 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; 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 approved S. 3617, a bill that was similar to the committee's bill in the 109th Congress, but no further action occurred.

Water infrastructure legislation again received attention in the 111th Congress. The House passed a bill (H.R. 1262), and legislation was reported by a Senate committee (S. 1005). The House-passed bill would have reauthorized SRF capitalization grants for five years (through FY2014), and it also included provisions of five bills that passed the House during the 110th Congress but were not enacted dealing with issues such as authorizing grants for sewer overflow projects and authorizing alternative water supply demonstration projects. The Senate committee bill would have authorized $20 billion over five years for clean water SRF grants and $14.7 billion for drinking water SRF grants. It also would have added a $1.85 billion nationwide grant program for addressing combined sewer overflows (reauthorizing existing CWA Section 221) and a $50 million grant program for agriculture-related water quality issues.

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

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.[10]

[10] For information, see CRS Report R41469, *Davis-Bacon Prevailing Wages and State Revolving Loan Programs Under the Clean Water Act and the Safe Drinking Water Act*, by Gerald Mayer and Jon O. Shimabukuro.

A second issue that has complicated enactment of legislation is the method of allocating SRF capitalization grants among the states. CWA Section 205(c)(3) contains a table that identifies each state's percentage share of appropriated funds. Changing the formulation of how funds are distributed matters to every state, because inevitably it results in "winners" and "losers." But because the existing statutory allotment has not been revised since 1987, while needs have changed considerably, the issue is important to considering clean water infrastructure legislation.[11] House and Senate bills in the 111th Congress included revised allotment formulas based in part on newer estimates of states' funding needs.[12] The allocation formula was one of the factors that contributed to the fact that the Senate did not consider S. 1005. The formula proposed in the legislation was based on needs identified in the 2004 clean water needs survey. However, after the Senate committee reported the bill, EPA released the 2008 needs survey, leading some Members to favor developing a different formula based on the newer needs estimates. Ultimately, bill sponsors were unable to revise the allocation formula in the legislation to meet these concerns.

Despite these specific issues that have stalled legislation, the act's water infrastructure program is widely supported both inside and outside Congress, and renewed attention by the 112th Congress could occur. However, the 112th Congress has been focusing extensively on reducing federal spending, and it is unclear for now how water infrastructure investments will be viewed in the context of spending cuts and deficit reduction.

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. Much of the debate has focused on the CWA, which contains a key wetlands regulatory tool. The permit program in CWA Section 404 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 in the context of meeting the goals and objectives of the CWA.[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 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

[11] For additional information on the current statutory formula, see CRS Report RL31073, *Allocation of Wastewater Treatment Assistance: Formula and Other Changes*, by Claudia Copeland.

[12] See the discussion in CRS Report R40098, *Water Quality Issues in the 111th Congress: Oversight and Implementation*, for details.

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

occurred in administrative and judicial 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 and may be wet only for portions of the year—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

In 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 exceeded the authority provided in the act.

The full extent of impacts on the regulatory program resulting from this decision still remains unclear, even 10 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] 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 existing permit rules, while a few have read the decision more broadly, resulting in a more restrictive interpretation of regulatory jurisdiction.

The government's view on this key question came 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. 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.

[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.

Rapanos v. United States

Federal courts continue to have a key role in interpreting and clarifying the *SWANCC* decision. In February 2006, the Supreme Court heard arguments in two consolidated cases brought by landowners (*Rapanos v. United States*; and *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 on the two cases 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 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.[15] 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 result has been more case-by-case determinations and continuing litigation. There also has been pressure on the Corps and EPA to clarify the issues through an administrative rulemaking.

Corps/EPA Guidance

In June 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 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.[16] 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." Some environmental groups criticized the 2008 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, but overall, industry groups such as developers remain frustrated by what they see as inconsistencies and delays in obtaining needed permits.

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

[16] 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.

The Obama Administration entered this debate in April 2011, when EPA and the Corps proposed new guidance to replace the agencies' 2003 and 2008 guidance (these earlier guidance documents remain in effect until new guidance is finalized). The new guidance is intended to clarify regulatory jurisdiction over U.S. waters and wetlands, consistent with the Supreme Court decisions and agency regulations. The document states that "after careful review of these opinions, the agencies concluded that previous guidance did not make full use of the authority provided by the CWA to include waters within the scope of the Act, as interpreted by the Court." Based on current interpretations, the agencies expect that

> the extent of waters over which the agencies assert jurisdiction under the CWA will increase compared to the extent of waters over which jurisdiction has been asserted under existing guidance, though certainly not to the full extent that it was typically asserted prior to the Supreme Court decisions in *SWANCC* and *Rapanos*.[17]

The EPA/Corps proposed guidance quickly generated more controversy. Some critics argue that the guidance represents over-reaching by the agencies, beyond authority provided by Congress. Others fault the continued reliance on federal guidance, which is not binding and lacks the force of law, yet can have significant impact on regulated entities. The agencies accepted public comment on the revised guidance until July 31, 2011, and they also plan to propose revisions of existing regulations to further clarify which waters are subject to CWA jurisdiction, after the guidance is final.

Legislative Responses

Congressional committees have held a number of oversight hearings on both the *SWANCC* and *Rapanos* decisions, seeking clarification of interpretations and impacts of the rulings. But the uncertainties about federal jurisdiction over wetlands and other waters raised by the rulings remain highly controversial. In response, legislation to overturn the decisions by providing a broad definition of "waters of the United States" has been introduced regularly since the 107th Congress. Legislation that instead would have narrowed the definition of "waters of the United States" also was introduced on one occasion, in the 109th Congress.

Environmental advocates and others contend that Congress must clarify the important issues left unsettled by the Supreme Court's 2001 and 2006 rulings and by the Corps/EPA guidance. They also argue that legislation is needed to "reaffirm" what Congress intended when the CWA was enacted in 1972 and what EPA and the Corps have subsequently been practicing until the two Supreme Court rulings, in terms of CWA jurisdiction. But critics have questioned the constitutionality of legislation that has been proposed, and have asserted that it would expand federal authority, thus likely increasing confusion, rather than settling it.

Obama Administration officials have addressed concerns about the continuing uncertainties regarding the proper scope of CWA regulatory jurisdiction. In May 2009, the heads of EPA, the Corps, the Department of Agriculture, the Department of the Interior, and the Council on Environmental Quality jointly wrote to congressional leaders to support the need for legislative clarification of the issues—marking the first time that the Administration has done so—and to

[17] U.S. Environmental Protection Agency and Department of the Army, Corps of Engineers, "Draft Guidance on Identifying Waters Protected by the Clean Water Act," April 27, 2011, p. 3. The proposed revised guidance and related documents are available at http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm.

identify certain principles that might help guide legislative and other actions: Broadly protect the nation's waters; make the definition of covered waters predictable and manageable; promote consistency between CWA and agricultural wetlands programs; and recognize long-standing practices, such as exemptions now in effect only through regulations or guidance.[18]

In the 111th Congress, legislation similar to bills introduced previously was advanced by a Senate committee, but the bill was not considered by the full Senate. On June 18, 2009, the Environment and Public Works Committee approved, 12-7, an amended version of S. 787, the Clean Water Restoration Act. A committee report on S. 787 (S.Rept. 111-361) was filed more than 18 months later, days before the 111th Congress adjourned *sine die*. The bill would have amended the CWA to define "waters of the United States" to mean:

> all waters subject to the ebb and flow of the tide, the territorial seas, and all interstate and intrastate waters, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds, all tributaries of any of the above waters, and all impoundments of the foregoing.

The bill would have excluded prior converted cropland and certain waste treatment systems from the term "waters of the United States," and it would have protected, or saved, existing regulatory exclusions such as for dredge or fill discharges from normal farming activities. The bill also would have instructed that "waters of the United States" be construed consistently with (1) how EPA and the Corps interpreted and applied "waters of the United States" prior to January 9, 2001, the day before *SWANCC* was decided, and (2) Congress's constitutional authority. During markup, the committee rejected several amendments that would have struck some of the terms in the new definition (such as mudflats and prairie potholes), but it approved language stating that the CWA's jurisdiction shall be construed consistent with EPA and Corps interpretation prior to Jan. 9, 2001. However, critics asserted that that intent was what the Court found invalid in its rulings in the *SWANCC* and *Rapanos* cases.

Companion legislation was introduced in the House on April 23, 2010 (H.R. 5088, America's Commitment to Clean Water Act).[19] Like S. 787, the House bill was intended to clarify regulatory scope of the CWA and restore jurisdiction as it had been interpreted prior to the *SWANCC* and *Rapanos* rulings. Like the Senate committee bill, H.R. 5088 would have deleted the word "navigable" from the law and would have amended the CWA to define "waters of the United States," which would become the operational term for jurisdiction. Unlike the Senate committee bill described above, the new definition of that term was to be drawn from existing EPA-Corps regulatory definitions, with some modifications. The principal House sponsor, Representative Oberstar, stated at the time that the bill differed from prior proposals (such as H.R. 2421 in the 110th Congress), based on extensive public comments and suggestions. Despite changes from earlier versions, the bill was criticized based on concern that it would increase the scope of federal jurisdiction, not merely re-state what Congress enacted in 1972.

While interest in these issues remains high, future prospects for similar legislation are highly uncertain because of the widely differing views of proponents and opponents.

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[18] See http://epw.senate.gov/public/index.cfm?FuseAction=Majority.PressReleases&ContentRecord_id=64739ae3-802a-23ad-4c30-36fc58cc1014&Region_id=&Issue_id=.

[19] For information on the 111th Congress legislation, see CRS Report R41225, *Legislative Approaches to Defining "Waters of the United States,"* by Claudia Copeland.

Other Clean Water Act Issues

A number of other issues affecting efforts to achieve the goals and objectives of the CWA have drawn interest recently and been the subject of congressional oversight and legislation. Attention to similar issues is occurring in the 112th Congress, with some legislators highly critical of recent regulatory initiatives and others more supportive of EPA's implementation efforts.

Over the past two years, EPA has proposed and promulgated numerous regulations implementing the CWA and other pollution control statutes that it administers. Critics of the Administration, both within Congress and outside of it, have accused the agency of reaching beyond the authority given it by Congress and ignoring or underestimating the costs and economic impacts of these rules. Republican leaders in the House been conducting vigorous oversight of the agency in the 112th Congress. Bills seeking to overturn specific regulations or to limit the agency's authority also have been introduced, as have proposals to bar EPA funding for specific activities (see "Continuing Issue: Appropriations" below). Environmental groups disagree that the agency has overreached, and EPA itself maintains that its pace of regulation is actually slower than the pace during the first years of the Clinton and George W. Bush Administrations. Agency officials contend that critics' focus on the cost of controls obscures the benefits of new regulations, which, EPA estimates, far exceed the costs, while investing in pollution control is an important source of economic activity, exports, and American jobs. While particular attention is being paid to the Clean Air Act, a number of EPA's initiatives concerning the CWA also are receiving legislators' scrutiny.[20]

Chesapeake Bay Restoration

Despite several decades of activity by governments, the private sector, and the general public, efforts to improve and protect the Chesapeake Bay have been insufficient to meet restoration goals. Although some specific indicators of Bay health have improved slightly or remained steady (such as blue crabs and underwater bay grasses), others remain at low levels of improvement, especially water quality. Overall, the Bay and its tributaries remain in poor health, with polluted water, reduced populations of fish and shellfish, and degraded habitat and resources. The primary pollutants causing impairments are nutrients (nitrogen and phosphorus) and sediment discharged from multiple urban, suburban, and rural sources around the Bay.

In May 2009, President Obama issued an executive order that declared the Bay a "national treasure" and charged the federal government with assuming a strong leadership role in restoring the Bay.[21] The executive order established a Federal Leadership Committee for the Chesapeake Bay to develop and implement a new strategy for protecting and restoring the Chesapeake region. The resulting strategy, released in May 2010, launched major specific environmental initiatives to establish new clean water regulations on stormwater discharges and pollution discharges from animal feedlots in the Bay watershed, put new agricultural conservation practices on farms in the region, and restore land and water habitat.[22]

[20] For information, see CRS Report R41561, *EPA Regulations: Too Much, Too Little, or On Track?* by James E. McCarthy and Claudia Copeland.

[21] Executive Order 13508, "Chesapeake Bay Protection and Restoration," 74 *Federal Register* 23099-23104, May 15, 2009.

[22] For information, see http://www.chesapeakebay.net/news_federalstrategy.aspx?menuitem=51207.

A central feature of the overall strategy is EPA's establishment of a Total Maximum Daily Load (TMDL) for Chesapeake Bay. Section 303 of the CWA requires states to identify waters that are impaired by pollution, even after application of pollution controls. For those waters, states must establish a TMDL to ensure that water quality standards can be attained. A TMDL is essentially a pollution budget, a quantitative estimate of what it takes to achieve standards, setting the maximum amount of pollution that a waterbody can receive without violating standards. If a state fails to do this, EPA is required by the CWA to make its own TMDL determination for the state. Throughout the United States—including the Chesapeake Bay watershed—more than 20,000 waterways are known to be violating applicable water quality standards and to require a TMDL.[23] Lawsuits have been brought with the intention of pressuring EPA and states to develop TMDLs; under a consent decree in one such lawsuit, EPA was required to establish a Chesapeake Bay TMDL no later than May 1, 2011. EPA issued the TMDL on December 29, 2010. The Chesapeake Bay TMDL is the largest single TMDL developed to date. It addresses all segments of the Bay and its tidal tributaries that are impaired from discharges of nitrogen, phosphorus, and sediment, with a goal of having TMDL implementation measures in place by 2025. The TMDL allocates needed reductions of these pollutants to all jurisdictions in the 64,000 square mile watershed. Detailed plans identifying specific reductions are to be developed by the Bay states in Watershed Implementation Plans.[24]

As part of the TMDL development process, states are to prepare Watershed Implementation Plans (WIPs) identifying specific reductions and control measures to achieve needed pollutant reductions from point sources (i.e., industrial and municipal facilities and CAFOs) and nonpoint sources (i.e., farms and forests), as well as two-year milestones to implement the plans. The first phase of WIPs, providing a general outline of steps that states will take to implement the TMDL, were developed in December 2010, and states are now developing Phase II WIPs that will provide more localized identification of controls and best management practices needed to meet the goals of the TMDL.

EPA's TMDL plans and the overall federal Bay restoration strategy under the executive order are controversial with a number of groups that are concerned about the likely mandatory nature of many of EPA's and states' upcoming actions. Legal challenges to the TMDL were brought by agricultural and home builder groups, who argue that EPA has exceeded its CWA authority. On the other hand, environmental activists are pleased that the federal government is finally asserting a leadership role to restore the Bay and have supported legislation that would codify requirements for the Bay TMDL in the Clean Water Act, while authorizing grants and other assistance for implementing required measures. Companion bills to do so were introduced in the 111th Congress (S. 1816 and H.R. 3852), but no legislation was enacted. The House Agriculture Committee also approved separate legislation (H.R. 5509) that would have authorized an expanded role for the Department of Agriculture in Chesapeake Bay restoration. Similar bills have not been introduced in the 112th Congress, but Congress has shown interest in early implementation of the TMDL. Oversight hearings on the impact of the TMDL on agriculture have been held by the House Agriculture Subcommittee on Conservation, Energy, and Forestry (on March 16 and November 3).

[23] For background information, see CRS Report 97-831, *Clean Water Act and Total Maximum Daily Loads (TMDLs) of Pollutants*, by Claudia Copeland.

[24] For information on the TMDL, see http://www.epa.gov/chesapeakebaytmdl/.

Florida Nutrient Water Quality Standards

The CWA directs states to adopt water quality standards for their waters and authorizes EPA to promulgate new or revised standards if a state's actions fail to meet CWA requirements. Water quality standards consist of designated uses, criteria to protect the designated uses, and an antidegradation statement. They serve as the framework for pollution control measures specified by states for individual sources.

Florida waters are severely impaired by nutrients (nitrogen and phosphorus) from diverse sources including agriculture and livestock, municipal and industrial wastewater discharges, and urban stormwater runoff, EPA determined in 2009 that Florida's existing *narrative* water quality standards for nutrients must be revised in the form of *numeric* criteria that will enable Florida to better control nutrient pollution. In 2009 EPA entered into a consent decree with environmental litigants requiring the agency to promulgate numeric nutrient water quality standards for Florida. To meet the legal deadline, EPA issued the first phase of these standards on November 15, 2010, establishing standards for lakes and flowing waters in the state. The EPA rule does not establish any requirements directly applicable to regulated entities or other sources of nutrient pollution. Water quality standards do not have the force of law until the state translates them into permit limits or otherwise imposes pollution control requirements on dischargers in the state. In response to criticism of the standards, EPA delayed the effective date of the final rule for 15 months (to March 2012), to allow local governments, businesses, and the state of Florida time to review the standards and develop implementation strategies. Nevertheless, separate legal challenges to the rule have been filed in federal court by environmental advocates, several industry groups, the state, and groups representing local governments.

The second phase of standards is due to be proposed by March 15, 2012, and finalized by November 15, 2012. They will apply to estuarine, coastal waters, and Southern Florida inland flowing waters. While few dispute the need to reduce nutrients in Florida's waters, EPA's proposal has been controversial, involving disputes about the data underlying the proposal, potential costs of complying with numeric standards when they are incorporated into discharge permit limitations, and disputes over administrative flexibility. Further, some groups fear that EPA's actions in Florida will be a precedent for similar regulatory action elsewhere. For example, although EPA officials have said they have no specific plans to do so elsewhere, environmental advocacy groups have petitioned or filed lawsuits seeking to require EPA to establish numeric nutrient water quality standards in Kansas and for the Upper Mississippi River Basin (in July, EPA denied the petition seeking similar water quality standards for the Upper Mississippi River Basin).

EPA's long-standing position has been that it would withdraw the federal numeric nutrient criteria for any waters covered by approved state water quality standards. Thus, Florida environmental officials have continued to work on developing water quality criteria for nutrients that EPA could determine meet requirements of the CWA. In November 2011, the state Department of Environmental Protection proposed a rulemaking to establish numeric nutrient standards for the state's inland waters (those covered by EPA's 2010 rule), and EPA indicated in a letter in response that it likely would approve the state's draft rule.[25]

[25] The state's draft proposed rule, EPA's response, and other information are available at http://www.dep.state.fl.us/secretary/nns.htm.

Nonetheless, EPA's actions have drawn congressional attention. Legislation approved by the House on July 13 (H.R. 2018, the Clean Water Cooperative Federalism Act of 2011) in part addresses the issue of EPA's promulgation of water quality standards for Florida. Provisions in the bill would restrict EPA's oversight of state water quality standards by allowing the agency to promulgate a water quality standard for a state only if EPA has previously approved the state's standard and the state concurs that a new or revised standard is necessary. The bill is intended to be prospective; it would not apply to actions taken before enactment. Likewise, the House Appropriations Committee included a general provision in H.R. 2584 (Section 452 of the bill), providing FY2012 appropriations for EPA, that would bar EPA from spending funds to implement or enforce the standards that were issued in 2010.

Mountaintop Mining in Appalachia

Mountaintop removal coal mining involves removing the top of a mountain in order to recover the coal seams contained there. This practice occurs in six Appalachian states (Kentucky, West Virginia, Virginia, Tennessee, Pennsylvania, and Ohio). It creates an immense quantity of excess spoil, which is typically placed in nearby valleys, burying streams that flow through the valleys. Critics say that, as a result of valley fills, stream water quality and the aquatic and wildlife habitat that streams support are destroyed. The mining industry argues that mountaintop mining is essential to conducting surface coal mining in the Appalachian region and that surface coal mining would not be economically feasible there if producers were restricted from using valleys for the disposal of mining overburden.[26]

Mountaintop mining is regulated under several laws, including the CWA Section 404 permit program (discussed above) and the Surface Mining Control and Reclamation Act. In June 2009, officials of EPA, the Corps of Engineers, and the Department of the Interior's Office of Surface Mining and Reclamation (OSM) signed a Memorandum of Understanding outlining a series of administrative actions under these laws to reduce the harmful environmental impacts of mountaintop mining and surface coal mining in Appalachia. The plan includes a series of near-term and longer-term actions that emphasize specific steps, improved coordination, and greater transparency of decisions. The actions are being implemented through regulatory proposals, guidance documents, and review of pending applications for permits to authorize mountaintop mining-valley fill operations. In particular, EPA and the Corps are conducting detailed evaluations of 79 pending CWA permit applications for surface mining activities in Appalachia to limit environmental impacts. In July 2009, the Army Corps suspended the use of a particular CWA general permit for surface coal mining activities in Appalachia and proposed a rule to prohibit its use entirely; a finalized rule, expected in 2012, would apply more stringent CWA rules to these coal mining operations.

In April 2010 EPA issued interim guidance on review of CWA Section 402 and 404 permit requests for surface coal mining in Appalachia. The guidance tightened oversight of permit reviews in several ways, most notably by establishing two benchmarks for stream conductivity, a proxy for dissolved solids in stream waters that may contribute to toxicity. EPA said that the guidance is intended to clarify existing requirements under the law, based on best available science, but the guidance has generated criticism and litigation, due to concerns that the guidance is substantive—not simply interpretive—and has been issued without adequate public review and

[26] For additional information, see CRS Report RS21421, *Mountaintop Mining: Background on Current Controversies*, by Claudia Copeland.

due process. EPA is working on revised guidance that incorporates public comments and a review by the agency's Science Advisory Board. The House Transportation Subcommittee on Water Resources and Environment held hearings on these issues on May 5 and May 11, 2011. A hearing also was held by the House Government Reform and Oversight Committee on July 14.

In the 111th Congress (as in several prior Congresses), legislation intended to sharply restrict the practice of mountaintop mining was introduced (H.R. 1310, the Clean Water Protection Act, and a different measure, S. 696, the Appalachia Restoration Act). Both bills would have narrowed the CWA definition of "fill material," and thus narrowed the types of materials that can be discharged into U.S. waters under a Section 404 permit. The significance of both bills is that discharges of materials that are not eligible for a Section 404 permit are regulated under CWA Section 402. Because Section 402 discharge requirements are more restrictive than those for Section 404, some discharges that could be permitted under Section 404 cannot be authorized under Section 402. Supporters of the bills favored making it more difficult to use Section 404 to authorize activities that they consider to be environmentally harmful. On the other hand, critics said that, as a practical matter, economically important activities such as coal mining could not meet the more stringent limitations of a Section 402 permit and, thus, would be infeasible. In the 112th Congress, H.R. 1375 has been introduced; it is similar to H.R. 1310 in the 111th Congress.

Additionally, legislation intended to restrict the Administration's recent regulatory actions also was introduced in the 111th Congress (H.R. 6113 and S. 3933, the Electricity Reliability Protection Act of 2010). This bill would have prohibited EPA, the Corps, and OSM from administering or enforcing any policy or procedure that was announced in the June 2009 MOU or the April 2010 EPA permitting guidance unless they are contained in promulgated regulations. Critics of the Administration's actions have argued that the policies constitute rules, and thus should be subject to complete administrative requirements of rulemaking, including public notice and comment and subsequent judicial review. In the 112th Congress, similar legislation has not been introduced, but was included as an amendment to a House-passed bill providing FY2011 appropriations for EPA and other agencies (H.R. 1; see discussion of "FY2011 Appropriations," below), although that appropriations bill was not enacted. Similar language also was included in bills providing FY2012 appropriations for the Corps (Section 109 of H.R. 2354), approved by the House in July, and EPA (Section 433 of H.R. 2584), considered by the House in July.

Another aspect of this issue that has drawn congressional attention is EPA's January 2011 veto of a CWA section 404 permit for a surface coal mining operation in West Virginia, the Spruce No. 1 mine. In response, several bills have been introduced in the 112th Congress to limit or prohibit EPA's ability to exercise this veto authority.[27] One proposal (H.R. 2018) would bar EPA from vetoing a 404 permit without concurrence of the state in which the discharge would originate. This bill was passed by the House on July 13.

The Relationship Between CWA and FIFRA

In recent years, federal courts have held that aerial application of a pesticide over and into U.S. waters requires authorization under the CWA's National Pollutant Discharge Elimination System (NPDES) permit program, even when the pesticide use meets other requirements of federal law, including the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These decisions drew

[27] For background on the veto, see CRS Report RS21421, *Mountaintop Mining: Background on Current Controversies*, by Claudia Copeland.

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. However, in January 2009, a federal court rejected EPA's argument that residual and excess pesticides do not require a CWA permit because they are adequately regulated by FIFRA, and the court vacated the rule.[28] In June 2009, the federal court granted an EPA request for a delay in the effective date of the court's ruling, allowing time for EPA to develop general CWA permits for pesticide applications covered by the ruling.[29] General permits will minimize regulatory burdens on pesticide applicators and state permitting officials, but there has been significant concern about the impacts of EPA's actions.

EPA issued the pesticide general permit on October 31, 2011, as required by the court.[30] EPA estimates that the universe of affected activities that for the first time will be subject to CWA permits is approximately 5.6 million applications annually, which are performed by 365,000 applicators covering four use patterns: (1) mosquito and other flying insect pest control; (2) aquatic weed and algae control; (3) aquatic nuisance animal control; and (4) forest canopy pest control. Under the final permit, pesticide applicators will be automatically covered for discharges that occur before January 12, 2012, but will have to apply for coverage thereafter.

In spite of EPA's efforts to issue a general permit to respond to the 2009 court ruling, Congress has considered legislation to affirm that a CWA permit is not required for use of FIFRA-approved pesticides. In the 112th Congress, the House passed H.R. 872, a bill that would amend FIFRA and the CWA to provide that neither EPA nor a state may require a CWA permit for discharge of a pesticide whose use has been authorized pursuant to FIFRA. The Senate Agriculture Committee approved the bill without amendment in June. Further, the text of the legislation also was included in H.R. 2584, legislation providing FY2012 appropriations for EPA, which the House considered in July, but no final action has occurred. Although legislation was not enacted before EPA issued the final permit on October 31, some legislators reportedly have discussed compromise legislation that would provide for a temporary permit moratorium and an EPA study of impacts of pesticide discharges.

CWA Permits for Logging Road Discharges

A court ruling concerning pollutant discharges from certain logging roads is much like the judicial ruling concerning new requirements for CWA permits for the discharge of pesticides over and into U.S. waters (discussed above). In *Northwest Environmental Defense Center v. Brown* (No. 07-35266, 9th Cir., May 17, 2011), the Ninth Circuit held that stormwater runoff from certain logging roads that is collected by and discharged from a system of ditches, culverts, and channels is a point source for which a CWA NPDES permit is required. This ruling invalidated EPA's

[28] National Cotton Council of America v. U.S. Environmental Protection Agency, 553 F.3d 927 (6th Cir. 2009).

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

[30] U.S. Environmental Protection Agency, "Final National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit for Point Source Discharges From the Application of Pesticides; Notice of final permit," 76 *Federal Register* 68750-68756, November 7, 2011.

position in regulations since 1976, that stormwater runoff from logging roads is nonpoint source pollution that does not require such a permit, even if the runoff is channeled and discharged through a discrete conveyance. Environmental groups contend that timber hauling on logging roads is a major source of sediment (rocks, dirt, gravel) that flows into streams and harms aquatic life. Critics of the court's decision say that the existing process has worked well for 35 years, with states regulating runoff and EPA not requiring permits. In response to the ruling, legislation has been introduced that would amend the CWA to exempt any silviculture activity from requiring an NPDES permit under CWA Section 402 (H.R. 2541/S. 1369). Similar legislative language was included in H.R. 2584, legislation providing FY2012 appropriations for EPA, which the House considered prior to the August recess.

Continuing Issue: Appropriations

Clean water issues also have been addressed regularly by Congress in the context of annual appropriations acts. EPA's appropriations are included in the Interior, Environment, and Related Agencies appropriations acts.[31]

FY2011 Appropriations

President Obama presented his FY2011 budget request to Congress on February 1, 2010. Overall, the President's budget called for a freeze on non-security discretionary expenditures at EPA and other federal agencies. Consequently, the total request for EPA was $10.02 billion, compared with $10.3 billion enacted for FY2010.[32] The FY2011 request sought $2.0 billion for clean water SRF capitalization grants, which was $100 million less than the FY2010 enacted level, but still an increase above recent years' funding levels. As in the FY2010 regular appropriations, the President's budget requested that states use 20% of their capitalization grants for "green infrastructure" projects (such as water efficiency or energy efficiency) and also use 30% of SRF capitalization grants in excess of $1 billion in the form of additional subsidies (such as loan forgiveness or negative interest loans) to communities that face difficulties in paying for infrastructure projects.

One item that drew some congressional attention was the President's request for Great Lakes restoration. This funding would continue an initiative created in the FY2010 budget to target the most significant environmental problems of the Great Lakes ecosystem and to coordinate the work of multiple federal agencies in restoring the lakes. The budget requested $300 million for these activities in FY2011, because most of the $475 million appropriated in FY2010 was still uncommitted and unspent as of February 2010, when the FY2011 budget request was submitted. Only 8% of the 2010 funds had been obligated by that time, and some of that year's funds won't be spent until 2011, according to EPA.

Congress took only limited action on FY2011 funding for EPA before the start of the new fiscal year on October 1, 2010: a House Appropriations subcommittee approved a bill in July, but no

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

[32] For information, see CRS Report R41149, *Environmental Protection Agency (EPA): Appropriations for FY2011*, by Robert Esworthy et al.

further action followed. At the end of September 2010, the House and Senate passed a continuing resolution to extend FY2010 funding levels for EPA and other federal agencies and departments until December 3, 2010, because no FY2011 appropriations bills had been enacted by October 1. President Obama signed the continuing resolution (CR) on September 30 (P.L. 111-242). This bill was followed by six more short-term CRs before Congress came to final resolution of FY2011 spending on April 14, 2011, enacting a bill to provide funding for EPA and all other federal agencies and departments through September 30 (P.L. 112-10). The final bill reduces overall funding for EPA 15% below the FY2010 level and provides $1.522 billion for the clean water SRF program, 27.5% below the FY2010 enacted level and 2% less than the President's request for FY2012 (discussed below).[33] The legislation, as enacted, did not include a number of policy issue amendments included in an earlier House-passed CR that intended to prohibit funding for a number of EPA regulatory activities discussed previously in this report, including implementation of the Administration's regulatory initiatives on mountaintop mining in Appalachia; implementation of the Chesapeake Bay TMDL; and implementation or enforcement of the November 2010 Florida numeric nutrient water quality standards rule.[34]

FY2012 Appropriations

Consideration of the budget for FY2012 began even as funding for FY2011 was still not final. The President submitted the Administration's FY2012 budget request on February 14. It seeks $9 billion total for EPA, a decrease of $1.3 billion from the FY2010 enacted level. It requests $1.55 billion for clean water SRF capitalization grants (26% below FY2010), which EPA estimates will enable states and tribes to initiate approximately 600 clean water projects nationally. It also requests $350 million for the Great Lakes Initiative (also 26% below the FY2010 level).

For several days in July, the House debated H.R. 2584, providing FY2012 appropriations for EPA, but the House did not take final action on the bill before the August recess. As reported, the bill provides $7.3 billion for EPA, 17% less than FY2011 funds and 19% less than the President's FY2012 request. It reduces funds for the clean water SRF capitalization grants to $689 million (the same level provided in FY2008; see **Table 1**), while including no funds for congressionally designated special projects (i.e., earmarks). Other water quality-specific reductions in the bill include 14% less than FY2011 levels for the Section 319 grant program (for managing nonpoint source pollution) and the Section 106 grant program that assists state implementation of CWA programs. Further, the bill provides $250 million for the Great Lakes Initiative (16.5% below the FY2011 level and 29% below the FY2012 request).

In addition, H.R. 2584 as reported includes a number of general provisions to prohibit funding for certain EPA water quality rules, guidelines, and initiatives, including—

- the Administration's regulatory initiatives concerning mountaintop mining practices in Appalachia (discussed above);
- EPA's promulgation of nutrient water quality standards in Florida (discussed above);

[33] Congress appropriated $1.525 billion for the clean water SRF program, but also mandated a 0.2% across-the-board rescission, resulting in final appropriation of $1.522 billion.

[34] For information, see CRS Report R41698, *H.R. 1 Full-Year FY2011 Continuing Resolution: Overview of Environmental Protection Agency (EPA) Provisions*, by Robert Esworthy.

- EPA's intention to issue a CWA general permit for pesticide discharges affecting water (discussed above—the provision in the bill is identical to H.R. 872 as passed by the House and approved by the Senate Agriculture Committee);
- language to reverse the federal court ruling to require CWA permits for pollutant discharges from certain logging roads (discussed above);
- a rule proposed by EPA to regulate cooling water intake structures at power plants and manufacturing facilities (see CRS Report R41786, *Cooling Water Intake Structures: Summary of EPA's Proposed Rule*); and
- a rule under consideration but not yet proposed to expand the CWA's stormwater management program (see CRS Report 97-290, *Stormwater Permits: Status of EPA's Regulatory Program*); and several others.

Further action on H.R. 2584 is uncertain for now, as congressional leaders are working on strategies to enact FY2012 appropriations. Congress did pass a short-term CR that funds EPA and other agencies and departments through November 18, 2011 (P.L. 112-36).

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