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Water Quality Issues in the 113th Congress: An Overview

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Summary

Much progress has been made in achieving the ambitious goals that Congress established 40 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 aid for municipal wastewater treatment projects. House and Senate committees have approved bills to reauthorize CWA assistance on several occasions since the 107th Congress, but, for various reasons, no legislation other than appropriations 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 nearly $300 billion over the next 20 years. Congress agreed to legislation that creates a pilot program to provide federal loans for wastewater infrastructure (H.R. 3080/P.L. 113-121). The same legislation also revises certain of the water infrastructure provisions of the CWA.

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. On March 25, 2014, the Environmental Protection Agency (EPA) and the Army Corps of Engineers proposed a rule intended to clarify jurisdictional issues, but interpretive questions about the proposal remain controversial inside and outside of Congress. The agencies expect to issue a final rule by April 2015.

A number of other CWA issues have 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. Some issues have drawn policy makers' attention following court rulings that addressed and in several cases expanded the regulatory scope of water quality protection efforts under the law. Among the topics of interest have been 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 has been reflected in specific legislative proposals and debate over policy provisions of legislation to provide appropriations for EPA. In the 113th Congress, Members from both parties raised questions about the cost-effectiveness of some of EPA's actions and/or whether the agency has exceeded its authority.

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Introduction

Much progress has been made in achieving the ambitious goals that Congress established 40 years ago 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 "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 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. 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.

[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/.

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. Lately, however, 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 and strengthening of the law is needed to maintain progress achieved to date and to address remaining water quality problems.

Legislative and Oversight Issues

October 2012 marked the 40th anniversary of passage of the Clean Water Act and 25 years since the last major amendments to the law were enacted. 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 focused 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 some 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; a lack of legislative initiatives by the Administration on clean water issues (neither the Clinton nor the Bush Administration proposed CWA legislation, nor has the Obama Administration); and the high economic cost of addressing water infrastructure issues.

Two CWA issues that have been the focus of much of legislators' interest in recent Congresses received some attention again in the 112th Congress—water infrastructure financing, and

regulatory protection of wetlands—but with different focus than in the recent past. After the 2010 election, congressional leadership and priorities shifted—particularly in the House, which used both oversight and legislation to focus criticism on EPA regulatory activities. The 112th Congress enacted two bills that amend the CWA. One extended the moratorium for CWA permitting of certain vessels for an additional year, until December 18, 2014 (P.L. 112-213), and the other extends authorization of funds for the Lake Pontchartrain Basin program in Section 121 of the act through FY2017 (P.L. 112-237). With the 113th Congress divided like the 112th into a Republican-controlled House and a Democratic-controlled Senate, and President Obama having been re-elected, consideration of environmental issues generally, including water quality, reflected those of the previous two years. In addition to enacting appropriations bills (see "Continuing Issue: Appropriations"), the 113th Congress enacted several bills with CWA provisions.

- Provisions of water resource legislation creating a pilot program for water infrastructure financing, plus some amendments to CWA Title VI (see "WIFIA Pilot Program and SRF Amendments in P.L. 113-121");
- As part of the 2014 farm bill, legislation exempting silviculture activity from requiring a CWA permit (see "CWA Permits for Logging Road Discharges");
- Legislation providing an additional three-year moratorium for CWA permitting of certain vessels (see CRS Report R42142, *EPA's Vessel General Permits: Background and Issues*); and
- A bill eliminating a number of statutorily required reports to Congress, including one CWA report (P.L. 113-188).

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 nearly $90 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, which are funded from local sources.

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 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

[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.

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.

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, 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.[5]

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 national estuary programs and nonpoint pollution management. Since the SRF program began, states have used $4.0 billion to assist more than 14,500 nonpoint management projects.

All states have established the mechanisms to administer the new loan programs and have been receiving SRF capitalization funds under Title VI. 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).[6]

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)

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

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

since the 1987 amendments. This table does not include appropriations for congressionally directed special project grants in individual cities (that is, congressional earmarks), which for several years represented about 15% of water infrastructure funds.[7]

Table 1. CWA Water Infrastructure 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	0.960	0.967
1991	—	2.400	—	2.048
1992	—	1.800	—	1.950
1993	—	1.200	—	1.928
1994	—	0.600	—	1.218
1995	—	—	—	1.235
1996	—	—	—	2.074
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
2012	—	—	—	1.466

[7] 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. Since FY2011, Congress has placed a moratorium on earmarks, but the practice could resume in the future.

	Authorizations		Appropriations	
Fiscal Year	**Title II**	**Title VI**	**Title II**	**Title VI**
2013	—	—	—	1.376[b]
2014	—	—	—	1.449
2015	—	—	—	1.449
TOTAL	7.2	8.4	8.4	39.2

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. FY2013 appropriations reflect post-sequester/post-rescission amount.

One issue of continuing interest is impacts of paying for water infrastructure projects 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.[8]

In 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 is working 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 is working 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. Throughout this period, several factors have contributed to difficulties in moving bills through the legislative process.

[8] 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.

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. It requires, among other things, that not less than the locally prevailing wage be paid to workers employed, under contract, on federal construction work "to which the United States or the District of Columbia is a party." 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.[9]

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.[10]

Despite these specific issues that have stalled legislation, the act's water infrastructure program is widely supported both inside and outside Congress. However, because the House and Senate have focused extensively on reducing federal spending and deficit reduction recently, proposals concerning new or expanded federal spending for water infrastructure investments have not advanced. In the 113th Congress, reauthorization legislation was introduced in the House (H.R. 1877).

WIFIA Pilot Program and SRF Amendments in P.L. 113-121

Most policy makers acknowledge that communities face formidable challenges in providing and paying for adequate and reliable water infrastructure services for their citizens, and Congress is considering ways to help meet those challenges. Several policy options have been discussed, including some that exist and are well established—such as the SRF program—while some are newer—such as creating a national infrastructure bank. Some are intended to provide long-term revenue to support infrastructure financing programs, and some are intended to encourage private participation in providing wastewater services. At this point, there is no consensus favoring a preferred policy, and many advocate a combination of options to expand the financing "toolbox."

One particular option that has been debated is a "Water Infrastructure Finance and Innovation Act," or WIFIA, program, and legislation to create a WIFIA pilot program has been enacted (H.R. 3080/P.L. 113-121) in the 113th Congress. The legislation, the Water Resources Reform and Development Act (WRRDA) Title V, Subtitle C, authorizes a five-year WIFIA pilot program.

[9] 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.

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

Under the bill, EPA is authorized to provide credit assistance (secured loans or loan guarantees) for drinking water and wastewater projects, and the U.S. Army Corps of Engineers is authorized to provide similar assistance for water resource projects, such as flood control or hurricane and storm damage reduction. Proponents argue that WIFIA offers a number of financing advantages, such as providing credit assistance at low U.S. Treasury rates to projects that otherwise have difficulty obtaining financing, thus lowering the cost of capital to borrowers. Projects must be $20 million or larger in costs to be eligible, except that projects in rural areas (population 25,000 or less) must have eligible projects costs of $5 million or more.[11]

Since passage of the legislation, EPA has held a series of meetings around the country to discuss implementation of the new program, as the agency seeks stakeholder views on issues such as how to define eligible projects, develop a project ranking system and evaluation criteria, and determine credit worthiness. However, the program will not proceed until Congress provides appropriations for it. In the FY2015 omnibus appropriations act, enacted in December 2014 (H.R. 83/P.L. 113-235), Congress provided EPA with $2.2 million for hiring and staffing to implement the new program, but it did not appropriate funds to actually finance projects.

In addition to the WIFIA provisions, P.L. 113-121 includes a number of provisions amending the water infrastructure provisions of the CWA, especially the Title VI SRF program. Some of the provisions in P.L. 113-121 were included in other legislation (H.R. 1877) and proposals in recent Congresses that have not advanced (such as extending SRF loan repayment from 20 to 30 years, including land acquisition in the definition of "treatment works" in order to be eligible for SRF assistance, and explicitly allowing SRF monies to be used for security projects). Several of them have been included in recent appropriations bills and are now codified in the CWA (such as expanding the list of SRF-eligible projects to include energy- and water-efficiency and others, increasing SRF assistance to Indian Tribes, and imposing "Buy American" requirements on SRF assistance, which was included in EPA's FY2014 appropriations, P.L. 113-76). The CWA provisions included in P.L. 113-121 are the first amendments to Title VI since 1987. However, the amendments do not address other long-standing Title VI issues: authorization of appropriations for capitalization grants (i.e., the amendments do not reauthorize clean water SRF grants), state-by-state allocation of capitalization grants (i.e., the allocation formula that has been in effect since 1987), and applicability of prevailing wage requirements under the Davis-Bacon Act (locally prevailing wages are to be paid to workers on projects that receive SRF assistance).[12]

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

[11] For additional information, see CRS Report R43315, *Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act (WIFIA) Program*, by Claudia Copeland.

[12] For additional information, see CRS Report R43298, *Water Resources Reform and Development Act of 2014: Comparison of Select Provisions*, by Nicole T. Carter et al.

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 environmental guidance jointly developed with EPA to evaluate permit applications. 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 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 *and* Rapanos

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.

In 2006, the Supreme Court revisited issues related to the extent of CWA jurisdiction 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 404 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.[14] Because the several

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

[14] For additional information, see CRS Report RL33263, *The Wetlands Coverage of the Clean Water Act (CWA): Rapanos and Beyond*, by Robert Meltz and Claudia Copeland.

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.

The full extent of impacts on the regulatory program resulting from these decisions still remains unclear, in part because of different interpretations of both rulings 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 decisions and other possible changes, the remaining responsibility to protect affected wetlands falls on states and localities. Environmentalists believe that the Court has misinterpreted congressional intent on the matter, while industry and landowner groups welcomed the rulings. Policy implications of how much the decisions restrict federal regulation depend on how broadly or narrowly the opinions are applied. Some federal courts have interpreted *SWANCC* and *Rapanos* narrowly, thus limiting effects on existing permit rules, while a few have read the decisions more broadly, resulting in a more restrictive interpretation of regulatory jurisdiction.

Corps/EPA Guidance

Following both the *SWANCC* and *Rapanos* rulings, EPA and the Corps issued guidance documents in 2003 and 2008 to enable their field staffs to make CWA jurisdictional determinations in light of the decisions. Environmental groups criticized the guidance, saying that the agencies are substantially limiting the scope of waters that are protected by the CWA. Industry groups such as developers remain frustrated by what they see as inconsistencies and delays in obtaining needed permits.

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 documents remain in effect until new guidance is finalized). The new guidance was intended to clarify regulatory jurisdiction over U.S. waters and wetlands, consistent with the Supreme Court decisions and agency regulations. Like previous guidance documents, the Obama draft examined current regulatory definitions of waters that are subject to CWA jurisdiction, such as interstate waters, and tributaries (at 33 C.F.R. §328.3 and 40 C.F.R. §230.3) in light of the Supreme Court's rulings to determine which waters are clearly subject to the CWA, which waters are not, and which waters require a case-specific analysis in order to determine jurisdiction. The document stated 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 expected 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*.[15]

This conclusion was based on the agencies' view that the draft guidance would clarify jurisdiction over some waters that previously were uncertain. EPA and the Corps believed that the resulting expanded jurisdiction would not be great, in terms of acreage or stream miles.

[15] 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, on file with author, available to congressional clients upon request.

The guidance proposed by EPA and the Corps quickly generated more controversy. Some critics argued that the guidance represented over-reaching by the agencies, beyond authority provided by Congress. Others faulted the continued reliance on federal guidance, which is not binding and lacks the force of law, yet can have significant impact on regulated entities.

Proposed Rule to Define "Waters of the United States"

For various reasons, the 2011 draft guidance was not finalized, and in September 2013, EPA and the Corps announced that the document had been withdrawn from interagency review and also announced that revised regulations to define "waters of the United States" were being developed. On March 25, 2014, the agencies released a proposed rule.[16] The agencies accepted public comment on the proposal until November 14, 2014.[17]

According to the agencies, the proposed rule would revise the existing administrative definition of "waters of the United States" consistent with legal rulings and science concerning the interconnectedness of tributaries, wetlands, and other waters and effects of these connections on the chemical, physical, and biological integrity of downstream waters. It is particularly focused on clarifying the regulatory status of waters located in isolated places in a landscape, the types of waters with ambiguous jurisdictional status following the Supreme Court's 2001 ruling in *SWANCC*, and small streams, rivers that flow for part of the year, and nearby wetlands, the types of waters affected by the Court's 2006 ruling in *Rapanos*.

The proposed rule would not modify some categories of waters that currently are jurisdictional by rule (traditional navigable waters, interstate waters and wetlands, the territorial seas, and impoundments). But, proposed changes would increase the asserted scope of CWA jurisdiction, in part as a result of expressly declaring some types of waters categorically jurisdictional (such as all waters adjacent to a jurisdictional water), and also by application of new definitions, which give larger regulatory context to some types of waters, such as tributaries. The proposal also would identify waters that are categorically not jurisdictional, such as ditches in uplands that have less than perennial flow. EPA and the Corps believe that the proposed rule will provide greater clarity and certainty to the regulated community regarding waters that are and are not jurisdictional under the CWA, but some waters will continue to require case-specific evaluation to determine if there is a "significant nexus" to a jurisdictional water.

The agencies believe that the proposal does not exceed the CWA's coverage or protect new types of waters that have not been protected historically. While it would enlarge jurisdiction beyond that under the existing (2008) EPA-Corps guidance, they believe that it would not enlarge jurisdiction beyond what is consistent with the Supreme Court's narrow reading of jurisdiction under *SWANCC* and *Rapanos*. Others disagree: agriculture and other stakeholder groups assert that the agencies are proposing to expand the jurisdiction of the CWA beyond what the law and the courts allow.

Also in September 2013, EPA released a draft report that reviews and synthesizes the peer-reviewed scientific literature on the connectivity or isolation of streams and wetlands relative to large water bodies such as rivers, lakes, estuaries, and oceans.[18] The purpose of the review, which

[16] For more information on the proposal, see CRS Report R43455, *EPA and the Army Corps' Proposed Rule to Define "Waters of the United States"*, by Claudia Copeland.

[17] Department of Defense, Department of the Army, Corps of Engineers, and Environmental Protection Agency, "Definition of 'Waters of the United States' Under the Clean Water Act, Proposed Rule," 79 *Federal Register* 22188-22274, April 21, 2014.

[18] U.S. Environmental Protection Agency, Office of Research and Development, Connectivity of Streams and Wetlands

summarizes more than 1,000 published and peer-reviewed scientific reports, is to summarize current understanding about these connections, the factors that influence them, and mechanisms by which connected waters affect the function or condition of downstream waters. EPA and the Corps used the draft report during development of the proposed rule.

EPA asked its Science Advisory Board (SAB) to review the draft report and to comment on whether its conclusions and findings are supported by the available science. The draft report is not intended as a policy document—it does not reference either the Scalia plurality or Kennedy tests in *Rapanos*, nor does it address legal standards for CWA jurisdiction. Nevertheless, EPA and the Corps say that the proposed rule takes into consideration the latest peer-reviewed science reflected in the draft science report. The EPA connectivity report, when finalized, will provide a scientific basis needed to clarify CWA jurisdiction, but the rule will not be finalized until the SAB's review and a final science report are complete, according to the agency.[19] Some stakeholders have expressed concern that the scientific study could allow the agencies to assert jurisdiction in a blanket fashion over ephemeral and intermittent streams, rather than subjecting them to case-by-case determination of a "significant nexus" to downstream navigable waters. An ad hoc panel of the SAB completed its review in August. The panel found that the draft connectivity study accurately established linkages between streams, wetlands, and downstream waters, and it concluded that the study would be useful to policy makers if it provides some estimate about the relative certainty of linkages between waters and wetlands in uplands and downstream navigable waters.[20]

Legislative Responses

Congressional committees have held 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, and such a bill was reported by a Senate committee in the 111th Congress (for information, see CRS Report RL33263, *The Wetlands Coverage of the Clean Water Act (CWA): Rapanos and Beyond*). Legislation that instead would narrow the definition of "waters of the United States" also has been introduced, as described below.

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.

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to Downstream Waters: A Review and Synthesis of the Scientific Evidence, External Review Draft, EPA/600/R-11-098B, September 2013, http://yosemite.epa.gov/sab/sabproduct.nsf/0/7724357376745F48852579E60043E88C/$File/WOUS_ERD2_Sep2013.pdf.

[19] See U.S. Environmental Protection Agency, "Clean Water Act Definition of 'Waters of the United States,'" http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm.

[20] See http://yosemite.epa.gov/sab/sabproduct.nsf/WebBOARD/10BDF631A1B3730B85257D4F006B9B2B/$File/SAB+ROE+draft+report-9-10-2014.pdf.

Obama Administration officials have addressed concerns about the continuing uncertainties regarding the proper scope of CWA regulatory jurisdiction. In 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.[21] However, the Administration did not develop or support particular legislation.

While interest in these issues has remained high, future prospects for legislation are highly uncertain because of the widely differing views of proponents and opponents. EPA's and the Corps' efforts to develop revised *Rapanos* guidance and revised regulations have been controversial and have received congressional attention. Legislative provisions to prohibit the agencies from funding activities related to the guidance and the proposed "waters" rule also were included in several appropriations bills since the 112th and 113th Congresses. One such provision was enacted as part of the Consolidated and Further Continuing Appropriations Act, 2015 (H.R. 83/P.L. 113-235), enacted in December 2014. It includes a provision requiring EPA and the Corps to withdraw an interpretive rule related to the proposed "waters" rule that addresses permit exemptions for agricultural activities, which created controversy and confusion. The appropriations act did not include any policy provisions on the proposed "waters" rule.

Interest in legislation concerning the guidance continued with bills in the 113th Congress, such as S. 1006 and H.R. 1829, to prevent the agencies from finalizing the 2011 draft guidance, which has now been withdrawn, and S. 2496, which would have barred EPA or the Corps from finalizing the 2014 proposed "waters of the United States" rule; and S. 890/H.R. 3377, which would have amended the CWA with a narrow definition of waters that are subject to the act's jurisdiction. In September, the House passed H.R. 5078, which would have prevented the agencies from finalizing the proposed "waters" rule and required withdrawal of the related interpretive rule on agricultural exemptions.

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. Some legislators have been highly critical of recent regulatory initiatives, while others have been more supportive of EPA's implementation efforts.

Since 2009, 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 conducted vigorous oversight of the agency in the 112th Congress. Bills seeking to overturn specific regulations or to limit the agency's authority also were introduced, along with proposals to bar EPA funding for specific activities. Environmental groups disagree that the agency has overreached, and EPA itself contends 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

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

EPA's initiatives concerning the CWA also have received legislators' scrutiny.[22] Similar scrutiny of EPA's activities continued in the 113th Congress.

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.[23] 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.[24]

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.[25] 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, which the agency did 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 six states located in the Chesapeake Bay watershed in Watershed Implementation Plans (WIPs).[26]

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

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

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

[25] For background information, see CRS Report R42752, *Clean Water Act and Pollutant Total Maximum Daily Loads (TMDLs)*, by Claudia Copeland.

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

As part of the TMDL development process, Chesapeake Bay jurisdictions are to prepare WIPs identifying specific control measures to achieve needed pollutant reductions from point sources (i.e., industrial and municipal facilities) 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. States now have developed Phase II WIPs to 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. In September 2013, a federal court upheld the TMDL, in a lawsuit that had challenged EPA's authority to set pollution limits in the multistate plan. That ruling has been appealed. On the other hand, environmental activists in particular are pleased that the federal government is now asserting a leadership role to restore the Bay and have supported legislation that would codify requirements for the Bay TMDL in the CWA, while authorizing grants and other assistance for implementing required measures.

The 112th Congress expressed interest in early implementation of the Chesapeake Bay TMDL, with particular focus on impacts of the plan on agricultural sources in the Bay watershed. A House Agriculture subcommittee held oversight hearings in 2011. In addition, legislation was introduced (H.R. 4153) that would give states, not EPA, authority to set nutrient and sediment limits for the Bay and would increase USDA's role in Bay restoration.

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.

The rule did not yet go into effect, as EPA delayed the effective date to prepare for implementation and state efforts to develop a rule that EPA could approve. In response to criticism of the proposed standards, EPA delayed the effective date of the 2010 rule to allow local governments, businesses, and the state of Florida time to review the standards and develop implementation strategies. While few dispute the need to reduce nutrients in Florida's waters, EPA's actions have 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.

EPA said all along that it prefers that Florida implement its own numeric nutrient water quality criteria, and in June 2012 the state submitted revised standards with numeric nutrient criteria. In response, EPA indicated to the state that the agency likely would approve the standards, at which time the agency would initiate administrative action to repeal the 2010 federal rule. Consequently, EPA delayed the effective date of the 2010 rule several times to allow the state to complete its process and to avoid confusion that could occur if federal criteria became effective while state criteria are being reviewed.

At the same time, separate legal challenges to the 2010 rule were filed in federal court by environmental advocates, several industry groups, and Florida's agriculture commissioner. In February 2012, a federal court ruling largely upheld EPA's authority and methodology in setting numeric criteria for nutrient pollution in Florida waters, but it remanded a portion of the rule concerning numeric criteria for streams, saying they were arbitrary and capricious.

Further, EPA's deadline for issuing the second phase of standards, for estuaries, coastal waters, and flowing waters in the South Florida Region, also was extended several times to allow the state to develop its own standards.

In March 2013, EPA and the state reached agreement on steps to put the state in charge of determining numeric limits on nutrient pollution in Florida waterways. Groundwork for the agreement was laid in November 2012 when EPA approved the state's June 2012 submission for lakes, rivers, streams, and some estuaries. Under the March agreement, Florida pledged to move forward with rulemaking and legislation to complete the job of setting numeric nutrient criteria for Florida waterways. The proposed state legislation would require completion of nutrient criteria rulemaking for remaining coastal and estuarine waters by December 1, 2014, and establishment of interim nutrient standards until then. In response to the state's actions, EPA approved the state's implementation plan for controlling nutrient pollution in Florida waters and petitioned the federal court in Florida to allow it to approve the state's water quality standards, although they lack numeric criteria for all waters. In January 2014, the court agreed to amend the 2009 consent decree in light of the adoption of new nutrient criteria, thus lifting the requirement for EPA to issue numeric nutrient standards under the second phase of rulemaking, and in September, EPA finalized a rule withdrawing the overlapping federally promulgated water quality standards to allow Florida to implement its standards to address nutrient pollution.[27]

Industry groups endorsed the agreement and the court's modification of the consent decree. However, it was criticized by environmental advocacy groups, who said that the plan lacks many elements that EPA previously said were essential and fails to cover large portions of the state's waters by, for example, exempting tidal waters, marine lakes, and flowing waters in the southern portion of the state, unless they are being used for "frequent recreation." Environmental groups' legal challenge to the plan was rejected by the court's January 2014 ruling, but the groups have appealed the ruling.

Some industry groups fear that EPA's actions in Florida—even if now resolved—will be a precedent for similar regulatory action elsewhere. For example, although EPA officials have said they have no specific plans to do so, environmental advocacy groups have filed petitions and lawsuits seeking to require EPA to establish numeric nutrient water quality standards in Kansas and for the Upper Mississippi River Basin (in July 2012, EPA denied the petition seeking similar

[27] For additional information, see http://www.epa.gov/lawsregs/rulesregs/florida_index.cfm.

federal water quality standards for the Upper Mississippi River Basin). EPA is defending its decision to not develop a similar cleanup plan for the Upper Mississippi River Basin in court.

Nonetheless, EPA's actions have drawn congressional attention. A bill in the 113th Congress (H.R. 1948) would have restricted 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. Similar legislation passed the House in the 112th Congress. Even with EPA's approval of Florida's rules, controversies persist, and attention to these issues continued in the 113th Congress.

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.[28]

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 July 2009, the Army Corps suspended the use of a particular CWA general permit (nationwide permit 21) for surface coal mining activities in Appalachia and in February 2012, it finalized rules to apply more stringent use of CWA general permits by these coal mining operations.[29]

Also in 2009 EPA and the Corps began conducting detailed evaluations of 79 pending CWA permit applications for surface mining activities in order to limit environmental impacts of the proposed activities under a process called Enhanced Coordination Procedures (ECP). Coal industry groups and coal state officials contended that the ECP process resulted in costly delay in issuance of permits. They challenged the process in federal court, and in October 2011, the court struck down the ECP as an unlawful transfer of legal authority from the Corps to EPA.[30] The agencies are continuing to review permit applications for surface coal mining projects in Appalachia under existing rules, but not the vacated ECP.

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

[29] For information, see CRS Report 97-223, *The Army Corps of Engineers' Nationwide Permits Program: Issues and Regulatory Developments*, by Claudia Copeland.

[30] At the time of the court's ruling, 8 of the 79 projects under ECP review had received permits; 50 permit applications had been withdrawn by the applicants; 3 project reviews were underway or nearly complete; and 18 reviews had not yet begun.

In July 2011 EPA issued 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, which is a measure of the level of salinity in water and is a proxy for dissolved solids in stream waters associated with mining activity that may contribute to toxicity. The guidance has been very controversial with industry. The House Transportation Subcommittee on Water Resources and Environment held hearings on these issues in May 2011. A hearing also was held by the House Government Reform and Oversight Committee in July 2011. In July 2012, the same federal court that struck down the ECP also invalidated the 2011 guidance document intended to help assess a mine's water quality impacts, ruling that EPA had overstepped its statutory authority. The government appealed both of these rulings, which were overturned by a federal appeals court in July 2014.[31]

In the 113th Congress (as in several prior Congresses), legislation intended to sharply restrict the practice of mountaintop mining was introduced (H.R. 1837, the Clean Water Protection Act). It would have narrowed the CWA definition of "fill material," and thus narrow the types of materials that can be discharged into U.S. waters under a Section 404 permit. The significance of the bill 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 favored making it more difficult to use Section 404 to authorize activities that they consider to be environmentally harmful. On the other hand, critics of the legislation say 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. Another 113th Congress bill, H.R. 526, would have placed a moratorium on permitting for mountain removal coal mining until certain health studies are conducted.[32]

Another aspect of the mountaintop mining issue that has drawn congressional attention is EPA's 2011 veto of a CWA Section 404 permit for a surface coal mining operation in West Virginia, the Spruce No. 1 mine. EPA's action has been controversial, particularly because the veto occurred after the permit had been issued by the Army Corps. EPA's veto of the permit was challenged, and in March 2012, a federal district court overturned the veto, ruling that EPA had exceeded its statutory authority in the Spruce No. 1 action. However, in April 2013, a federal appeals court reversed the lower court's decision and upheld EPA's authority to retroactively veto permits.[33] The appeals court ruling was applauded by environmental groups and criticized by the mining industry. In response, bills were introduced to limit or prohibit EPA's ability to exercise this veto authority. Several proposals in the 113th Congress (H.R. 524/S. 830 and H.R. 1829/S. 861) would have barred EPA from vetoing a 404 permit retroactively. Another bill, S. 2156, would have prohibited retroactive vetoes and also restricted prospective vetoes in advance of a 404 permit application being submitted.

Congressional interest in the government's multiple actions on mountaintop mining—which some critics consider part of a "War on Coal"—continued in 2014.

[31] National Mining Association v. McCarthy, D.C. Cir., No. 12-5310, July 11, 2014.

[32] For additional information, see CRS Report RL31411, *Controversies over Redefining "Fill Material" Under the Clean Water Act*, by Claudia Copeland.

[33] Mingo Logan Coal Company v. U.S. Environmental Protection Agency, 714 F.3d 608 (DC Cir. 2013); *cert. denied*, 134 S. Ct. 1540 (2014). For background on the veto, see CRS Report RS21421, *Mountaintop Mining: Background on Current Controversies*, by Claudia Copeland.

The Relationship between the 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 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 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 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.[34] In response, EPA developed a general CWA permit for pesticide applications covered by the ruling.[35] General permits are intended to minimize regulatory burdens on pesticide applicators and state permitting officials, but there still has been significant concern about impacts of EPA's actions.

EPA issued the pesticide general permit on October 31, 2011, as required by the court.[36] EPA estimated that the universe of affected activities 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. EPA and states are now implementing the permit requirements.[37]

In spite of EPA's efforts to issue a general permit to respond to the 2009 court ruling, legislation to affirm that a CWA permit is not required for use of FIFRA-approved pesticides has received bi-partisan support. In the 113th Congress, the House passed legislation that would have amended 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 (H.R. 935). Language identical to this bill was included in 2013 farm bill legislation approved by the House in July 2013 (H.R. 2642; the provision was not included in the farm bill that Congress approved in February 2014, P.L. 113-79). Other legislation was introduced, as well (S. 175 and S. 802).

CWA Permits for Logging Road Discharges

Another federal court ruling concerning the extent of CWA permit requirements has drawn public and congressional attention. In *Northwest Environmental Defense Center v. Brown*,[38] 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 position in regulations since 1976, that

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

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

[36] 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.

[37] The EPA pesticide general permit applies in six states where EPA is the permitting authority (Alaska, Idaho, Massachusetts, New Hampshire, New Mexico, and Oklahoma), the District of Columbia, most U.S. territories, and on Indian Tribal lands. Elsewhere, states have developed permits comparable to the federal permit.

[38] 640 F.3d 1063 (9th Cir. 2011).

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 2012, the Supreme Court granted a petition by timber industry groups and others, including a number of states, to review the logging roads ruling. The U.S. solicitor general asked the Court to let the appeals court ruling stand and to not accept the petition for certiorari, because EPA stated that it would issue a rule to nullify the ruling and specify that logging roads do not need discharge permits for stormwater runoff. EPA moved quickly on the rule, which the EPA Administrator signed on November 30, 2012, three days before the Supreme Court heard arguments in the case.[39]

In March 2013, the Court issued its decision in the case, upholding EPA's interpretation of its original stormwater rule as not requiring CWA permits for channeled stormwater runoff from logging roads.[40] In a 7-1 ruling, the Court reversed and remanded the 2011 ruling by the Ninth Circuit. Justice Antonin Scalia dissented in part, saying he would have affirmed the appeals court decision because EPA had failed to follow its own regulations. The Court's ruling did not specifically address EPA's November 2012 rule.

In response to the Ninth Circuit ruling and uncertainty about permit requirements, legislation was introduced in the 113th Congress to amend the CWA to exempt any silviculture activity from requiring an NPDES permit under CWA Section 402 (H.R. 2026/S. 971). A provision similar to this legislation was included in H.R. 2642, the farm bill that Congress approved in February 2014 (P.L. 113-79). The final bill states that no NPDES permit shall be required for a discharge of runoff from specified silviculture activities (such as nursery operations, thinning, prescribed burning, or pest and fire control) that are conducted in accordance with standard industry practice. It also states that discharges from silvicultural activities are not exempted from permitting requirements under CWA Section 404 (the act's dredge and fill permit program), existing permitting requirements under Section 402, or from any other federal law.

Continuing Issue: Appropriations

Clean water policy and program 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.[41]

FY2014 Appropriations

The Administration presented the FY2014 budget request in April 2013. It sought $8.15 billion overall for EPA, including $1.095 billion for clean water SRF capitalization grants (25% less than

[39] U.S. Environmental Protection Agency, "Revisions to Stormwater Regulations To Clarify That an NPDES Permit Is Not Required for Stormwater Discharges From Logging Roads," 77 *Federal Register* 72970-72975, December 7, 2012. For additional information, see CRS Report R42587, *Whether Logging Road Runoff Requires a Clean Water Act Permit: Decker v. Northwest Environmental Defense Center*, by Robert Meltz and Claudia Copeland.

[40] Decker v. Northwest Environmental Defense Center, 133 S. Ct. 1326 (2013).

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

the FY2013 enacted level), $165 million for Section 319 grants, $259 million for Section 106 grants, and $300 million for the Great Lakes Restoration Initiative.

In mid-2013, the House Appropriations Subcommittee on Interior, Environment, and Related Agencies drafted a bill (unnumbered) that would reduce overall funding for EPA by 34% from the FY2013 enacted level, including an 83% reduction for clean water SRF capitalization grants (the bill would provide $250 million). According to subcommittee documents, the reduction is appropriate because, despite recent federal support, little progress has been made to reduce the known water infrastructure gap.[42] The draft bill would provide $60 million for the Great Lakes Restoration Initiative. The full committee did not complete markup of this bill.

The Senate Appropriations Subcommittee on Interior, Environment, and Related Agencies drafted an alternative bill that would maintain funding for the clean water SRF program at $1.45 billion and would provide small funding increases for several EPA programs above FY2013 enacted levels, including the Great Lakes Restoration Initiative ($300 million).[43] There was no further action on this bill.

Congress did not reach final agreement on FY2014 appropriations before the start of the fiscal year on October 1, but did agree to a short-term continuing appropriations measure (P.L. 113-46), which provided funding through January 15, 2014. Final action on appropriations for EPA and all other federal agencies and departments occurred as part of the Consolidated Appropriations Act, 2014 (H.R. 3547, P.L. 113-76), signed by the President on January 17. This bill provides $1.45 billion for clean water SRF capitalization grants (5% more than FY2013 funds and 32% higher than the President's FY2014 budget request) and $300 million for the Great Lakes Restoration Initiative. For water quality grants provided to states, the bill includes $159.3 million for Section 319 nonpoint pollution management ($3.4 million more than in 2013), $230.8 million for Section 106 state management ($3.8 million more than in 2013), and $9.5 million for beaches grants ($200,000 more than in 2013; the Administration had requested zero funding for this grant program).

FY2015 Appropriations

The Administration's FY2015 budget was presented on March 4, 2014. It sought $7.89 billion overall for EPA (3.6% below the FY2014 enacted level), including $1.018 billion for clean water SRF capitalization grants, $15 million for Alaska Native Village and U.S.-Mexico Border projects, and $1.13 billion for state categorical grants. The total amount requested for clean water SRF capitalization grants was 26% below the FY2014 enacted level. Among the state categorical grants, the budget sought 8% more for clean water pollution control grants (CWA Section 106) and 3.6% more for nonpoint pollution management grants (CWA Section 319). As in FY2014, the budget sought no funds for the beaches grant program. The request also included $275 million for the Great Lakes Restoration Initiative ($25 million less than in FY2014) and a total of $119 million for other geographic programs, such as Chesapeake Bay (3% more than these programs received in FY2014).

Congress did not enact FY2015 appropriations before the start of the fiscal year on October 1, but it did enact a short-term continuing resolution to provide funding at FY2014 levels through December 11, 2014 (H.J.Res. 124/P.L. 113-164). Before taking that action, the appropriations

[42] See http://appropriations.house.gov/uploadedfiles/hrpt-113-hr-fy2014-interior.pdf, p. 62.

[43] See http://www.appropriations.senate.gov/news.cfm?method=news.view&id=b3e22f9d-a060-45eb-90ef-1225244125a7.

committees took some action on bills to provide EPA appropriations. In July 2014, the House Appropriations Committee reported H.R. 5171, and in August, a Senate Appropriations subcommittee released a chairman's mark providing recommendations for the FY2015 Interior and Environment Appropriations Act.[44]

Final appropriations were included in the Consolidated and Further Continuing Appropriations Act, 2015 (H.R. 83/P.L. 113-235), enacted in December 2014. The bill includes FY2015 funds for most EPA water programs at the same level as enacted for FY2014: e.g., $1.45 billion for clean water SRF capitalization grants and $300 million for the Great Lakes Restoration Initiative. The bill also provides $159 million for nonpoint pollution management grants (CWA Section 319), $231 million for state water quality management grants (CWA Section 106), and $73 million for the Chesapeake Bay program ($3 million more than FY2014). Generally, these funding levels are higher than were included in the President's FY2015 budget request. The final bill also included $9.5 million for the beaches grant program, although the Administration had requested no funding for it.

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[44] See http://www.appropriations.senate.gov/news/fy15-interior-subcommittee-bill-draft-report.