

# CRS Issue Brief for Congress

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## **Clean Water Act Issues in the 108<sup>th</sup> Congress**

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## Clean Water Act Issues in the 108<sup>th</sup> Congress

### SUMMARY

Prospects for legislative initiatives to comprehensively amend the Clean Water Act (CWA) have stalled for some time over whether and exactly how to change the law, and Congress has recently focused legislative attention on narrow bills to extend or modify selected CWA programs, rather than taking up comprehensive proposals. The 107<sup>th</sup> Congress enacted a bill authorizing funding to clean up contaminated sediments in the Great Lakes (P.L. 107-303).

For several years, the most prominent water quality issue has concerned financial assistance for municipal wastewater treatment projects. In 2002, House and Senate committees approved bills to reauthorize the Act's wastewater infrastructure funding program, but no further action occurred. This issue has again received attention in the 108<sup>th</sup> Congress. At issue is how the federal government will assist states and cities in meeting needs to rebuild, repair, and upgrade wastewater treatment plants, especially in light of capital costs which are projected to be as much as \$390 billion over the next two decades. In July 2003, a House Transportation and Infrastructure subcommittee approved legislation to authorize \$20 billion in funding for clean water infrastructure (H.R. 1560), and in June 2004, the Senate Environment and Public Works Committee also approved a water infrastructure financing bill (S. 2550). Still, prospects for further action during the 108<sup>th</sup> Congress are uncertain.

Several other Clean Water Act issues could receive congressional attention, through

oversight hearings and possibly in legislative proposals. Among the topics of interest is whether and how the Administration will revise the current program for restoration of pollution-impaired waters (the Total Maximum Daily Load, or TMDL program), in view of controversy over regulatory changes made during the Clinton Administration and continuing disagreement among states, cities, industry, and environmental advocates about program effectiveness and efficiency.

Programs that regulate activities in wetlands, especially CWA Section 404, have been criticized by landowners for intruding on private land-use decisions and imposing excessive economic burdens. Environmentalists view these programs as essential for maintaining the health of wetland ecosystems. These groups are concerned about a 2001 Supreme Court decision that narrowed regulatory protection of wetlands, as well as recent administrative actions which they believe will likewise diminish protection.

Also of interest are water pollution problems due to waste discharges from large animal feeding operations, termed Confined Animal Feeding Operations (CAFOs). The 108<sup>th</sup> Congress may examine details of revised clean water rules for management of CAFO waste issued by EPA in December 2002 and overall efforts to address animal waste management problems.

## **MOST RECENT DEVELOPMENTS**

Water infrastructure funding legislation is receiving congressional attention in the 108<sup>th</sup> Congress because of recent estimates by the Environmental Protection Agency that as much as \$390 billion will be needed over the next two decades to rebuild, repair, and upgrade the nation's wastewater treatment plants. On June 23, the Senate Environment and Public Works Committee approved a bill (S. 2550) to provide \$41.25 billion over five years for wastewater and drinking water infrastructure programs. On July 17, 2003, a House Transportation and Infrastructure Committee subcommittee approved a bill to authorize \$20 billion over five years for the Clean Water Act's program that assists municipal wastewater treatment projects (H.R. 1560), but no further action on the legislation has occurred.

Omnibus energy legislation (H.R. 6) includes a provision that would give the oil and gas industry a permanent exemption from Clean Water Act stormwater runoff rules. The conference report passed the House on November 18. The Senate failed to invoke cloture on H.R. 6 on November 21, but a revised version (S. 2095), introduced on February 12, could receive further attention. The modified bill, which retains the oil and gas exemption provision, is a scaled-down energy policy bill, intended in part to reduce the overall cost of the legislation's revenue and incentive provisions.

Since the September 11, 2001 terrorist attacks in the United States, congressional attention has focused on security, preparedness, and emergency response issues, including at the nation's water infrastructure facilities (both wastewater and drinking water). In the 108<sup>th</sup> Congress, the House has passed a bill authorizing grants to enhance security of wastewater treatment works (H.R. 866), and a Senate committee has approved similar legislation (S. 1039).

## **BACKGROUND AND ANALYSIS**

### **Introduction**

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 (amended by P.L. 95-217 in 1977, P.L. 97-117 in 1981, and P.L. 100-4 in 1987). It consists of two major parts: regulatory provisions that impose progressively more stringent requirements on industries and cities to abate pollution and meet the statutory goal of zero discharge of pollutants; and provisions that authorize federal financial assistance for municipal wastewater treatment plant construction. Both parts are supported by research activities, plus permit and enforcement provisions. Programs at the federal level are administered by the Environmental Protection Agency (EPA); state and local governments have major responsibilities to implement CWA programs through standard-setting, permitting, and enforcement.

The objective declared in the 1972 Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. That objective 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. While 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 municipal 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 minute 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, following the traditional focus on point source pollution (discharges from industrial and municipal wastewater treatment plants). Overall, data reported by EPA and states indicate that 39% of river and stream miles assessed by states and 45% of assessed lake acres do not meet applicable water quality standards and are impaired for one or more desired uses. 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. For mercury — a contaminant of growing concern — as of 2002, 45 states had issued partial or statewide consumption advisories.

The most recent major amendments were enacted in 1987 (P.L. 100-4); this was the first comprehensive revision to the law in a decade. Authorizations for a number of programs such as general grant assistance to states, research, and general EPA support authorized in that law expired in FY1990 and FY1991. Authorizations for wastewater treatment funding expired in FY1994. None of these programs has lapsed, however, as Congress has continued to appropriate funds to implement the Act. (For further information, see CRS Issue Brief IB89102, *Water Quality: Implementing the Clean Water Act*.)

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

## **Legislative Activity Since P.L. 100-4**

Following enactment of amendments in 1987, no major CWA legislative activity occurred until the 104<sup>th</sup> Congress (1995). The House approved a comprehensive reauthorization bill, H.R. 961, that was opposed by environmentalists and the Clinton Administration which they said would undermine the existing framework for protecting U.S. waters. The Senate did not take up H.R. 961 or other CWA legislation.

In the 105<sup>th</sup> and 106<sup>th</sup> Congresses, no comprehensive reauthorization legislation was introduced, but action was taken in the 106<sup>th</sup> Congress on bills dealing with specific water quality issues. Congress passed a bill to strengthen protection of coastal recreation waters through upgraded water quality standards and coastal waters monitoring programs (P.L. 106-284). Congress also passed a bill (P.L. 106-457) which reauthorized several existing CWA programs (i.e., Chesapeake Bay cleanup, clean lakes, and the National Estuary Program) and a bill to authorize CWA grant funding for wet weather sewerage projects (included as a provision of the FY2001 Consolidated Appropriations bill, P.L. 106-554). (For additional information on congressional activity, see CRS Report RL30908, *Clean Water Act: Issues and Legislation in the 106<sup>th</sup> Congress.*)

During its tenure, the Clinton Administration did not offer legislation to reauthorize the CWA, but rather initiated a number of agency-wide and program-specific reforms focusing on flexibility and “common sense” approaches to regulation, many of which affected implementation of water quality programs. One initiative was a 1998 multi-agency Clean Water Action Plan intended to build on the environmental successes of the Act and address many of the nation’s remaining water quality challenges. Besides EPA, other involved agencies were the Departments of Agriculture, Commerce, Interior, and the U.S. Army Corps of Engineers. (For information, see CRS Report 98-150, *The Clean Water Action Plan: Background and Early Implementation.*) The Bush Administration has not undertaken actions specific to the Clean Water Action Plan. Many of the Plan’s activities continue, but without the focus given during the Clinton Administration.

**107<sup>th</sup> Congress.** The 107<sup>th</sup> Congress focused legislative attention on one of the key programs of the Act, provisions concerning financial assistance for municipal wastewater treatment projects. House and Senate committees approved bills to extend the Act’s State Revolving Fund (SRF) program through FY2007 (H.R. 3930, S. 1961), but this legislation did not reach the floor in either chamber. Neither bill received further action, in large part due to controversies over application of prevailing wage requirements of the Davis-Bacon Act and over the formula for allocating SRF grants among the states.

The single water quality measure enacted by the 107<sup>th</sup> Congress was the Great Lakes Legacy Act (P.L. 107-303). It amended existing Great Lakes provisions of the CWA (Section 118) to authorize \$50 million annually for FY2004-FY2008 for EPA to carry out projects to remediate sediment contamination in the Great Lakes. The bill also reauthorized CWA provisions concerning the Lake Champlain Basin Program. Miscellaneous provisions revived a number of CWA reports to Congress that had been sunset under a previously-passed law (P.L. 104-66) and allowed states to use CWA Section 319 grant funds for stormwater management projects in FY2003. (For additional information, see CRS Report RL31683, *Clean Water Act: A Review of Issues and Legislation in the 107<sup>th</sup> Congress.*)

**Wastewater Security.** More generally, following the September 11, 2001 terrorist attacks in the United States, congressional attention has focused on security, preparedness, and emergency response issues. Among the topics of interest are protection of the nation’s water infrastructure facilities (both drinking water and wastewater) from possible physical damage, biological/chemical attacks, and cyber disruption. (For information, see CRS Report RL32189, *Terrorism and Security Issues Facing the Water Infrastructure Sector.*) Policymakers examined a number of legislative options in this area, including enhanced physical security, communication and coordination, and research. In October 2002, the

House passed legislation to authorize \$200 million in grants for security activities at wastewater treatment plants (H.R. 5169). It also authorized \$15 million in technical assistance for small treatment plant facilities and \$5 million to EPA for improved vulnerability assessment tools. Similar legislation was introduced in the Senate (S. 3037), but no further action occurred. Congress did enact legislation authorizing \$160 million in grants for drinking water utilities to conduct vulnerability assessments (P.L. 107-188). In the 108<sup>th</sup> Congress, legislation similar to H.R. 5169 was approved by the House Transportation and Infrastructure Committee in February 2003 (H.R. 866, H.Rept. 108-33) and was passed by the House on May 7, 2003. It authorizes \$200 million in grants to wastewater utilities to conduct vulnerability assessments and an additional \$20 million for technical assistance and improved assessment tools. The Senate Environment and Public Works Committee approved a similar bill (S. 1039, S.Rept. 108-149) on May 15, 2003. No further action has occurred, due in part to concerns expressed by some that the legislation does not mandate vulnerability assessments and require that they be submitted to EPA, as is the case with drinking water assessments required by P.L. 107-188.

## Issues in the 108<sup>th</sup> Congress

The year 2002 marked the 30<sup>th</sup> anniversary of passage of the Clean Water Act and 15 years since the last major amendments to the law. While there has been measurable clean water progress as a result of the Act, observers and analysts agree that significant water pollution problems remain. However, there is less agreement about what solutions are needed and whether new legislation is required. Several key water quality issues exist: evaluating actions to implement existing provisions of the law, assessing whether additional steps are necessary to achieve overall goals of the Act which have not yet been attained, and defining the appropriate federal role in guiding and paying for clean water infrastructure and other activities. Legislative prospects for comprehensively amending the Act have for some time stalled over whether and exactly how to change the law. Many issues that might be addressed involve making difficult tradeoffs between impacts on different sectors of the economy, taking action when there is technical or scientific uncertainty, and allocating governmental responsibilities for implementing the law.

These issues 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 are at work. These include a general reluctance by most Members of Congress to address controversial environmental issues in view of the slim majorities held by political parties in the House and the Senate; lack of presidential initiatives on clean water issues (neither the Clinton nor the Bush Administration has proposed CWA legislation); and since the terrorist attacks of September 11, 2001, a more prominent congressional focus on security and terrorism issues than on most other topics, including environmental protection.

Indications from congressional leaders are that if it gives attention to the CWA, the 108<sup>th</sup> Congress, like the 107<sup>th</sup> Congress, will focus on water infrastructure funding legislation. A Senate committee has approved S. 2550, and a House subcommittee has approved H.R. 1560, bills to reauthorize the Act's water infrastructure funding program, but prospects for further action are uncertain (see below).

## Water Infrastructure Funding

The Act's program of financial aid for municipal wastewater treatment plant construction is a central feature of the law. At issue today is how the federal government will assist states and cities, especially in view of the high projected funding needs that exist. Since 1972, Congress has provided \$75 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. The CWA does not authorize funds for operation or maintenance of completed projects. State and local governments have spent more than \$25 billion of their own funds for construction, as well. In addition to CWA programs, other sources of federal funding are administered by the U.S. Department of Agriculture and Department of Housing and Urban Development (for information, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*).

Nevertheless, funding needs remain very high: an additional \$181 billion nationwide for all types of projects eligible for funding under the Act, according to the most recent Needs Survey estimate by EPA and the states, completed in August 2003. In September 2002, EPA released a study, called the Gap Analysis, which assesses the difference between current spending for wastewater infrastructure and total funding needs (both capital and operation and maintenance). EPA estimates 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 (including for some projects not currently eligible for CWA funds, such as system replacement, which are not reflected in the EPA-state Needs Survey). Funding needs for operation and maintenance, which are not currently eligible for federal aid, are an additional \$148 billion, the Agency estimates. 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. The study also estimates that, if wastewater spending increases by 3% annually, the gap would shrink by nearly 90% (to about \$1 billion annually). Outside groups, including a coalition called the Water Infrastructure Network, have offered proposals which have attracted some congressional interest for a multi-billion dollar investment program in wastewater and drinking water infrastructure. (For additional information, see CRS Report RL31116, *Water Infrastructure Funding: Review and Analysis of Current Issues*.)

The 1987 amendments initiated a program of grants to capitalize State Water Pollution Control Revolving Funds (SRFs), or loan programs. This program in Title VI of the Act replaced the previous categorical grants program, under which the federal share was 55% of project costs and localities were not obligated to repay federal funds that they received. Under the revolving fund concept, monies used for construction will be repaid by borrowing communities to the states, to be recycled for future construction in other communities, thus providing an ongoing source of financing. States must provide a 20% match of the federal amount. The intent of the 1987 amendments was that federal contributions to SRFs would assist in making a transition to full state and local financing by FY1995. The essential tradeoff was that states would have greater flexibility to set priorities and administer funding in exchange for ending federal aid after FY1994. (For additional information, see CRS Report 98-323, *Wastewater Treatment: Overview and Background*.)



All states have established the mechanisms to administer the new loan programs and have been receiving SRF capitalization funds under Title VI for several years. Many have complained that the SRF program is unduly complicated by federal rules, even though Congress had intended that states were to have greater flexibility. Congressional oversight has examined the progress towards 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.

Small communities and states with large rural populations have experienced the largest share of problems with the SRF program. Many small towns did not participate in the previous construction grants program and consequently are likely to require major projects to achieve compliance with the law. Yet these communities often lack an industrial tax base and thus face the prospect of very high per capita user fees, if their citizens are required to repay the full capital cost of sewage treatment projects.

While 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. The SRF provisions have been less controversial than others in the Act, such as wetlands reform, because of apparent general agreement on the need to extend funding assistance (as reflected in continued appropriations). The CWA's SRF provisions also were a model for similar provisions added to the Safe Drinking Water Act (SDWA) in 1996 (P.L. 104-182). However, because remaining clean water funding needs are still so large, 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. Bush Administration officials have said that infrastructure funding needs go beyond what the federal government can do on its own. Of particular concern is assisting small and economically disadvantaged communities that have had the most difficulty in adjusting from the Act's previous categorical grants program to SRF loans. Additionally, there is interest in adequacy of SRF or other funding specifically for projects dealing with problems of overflows from municipal combined and separate sewers which can release partially or untreated wastewaters that harm public health and the environment. 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 water infrastructure systems.

As described above, committees in the 107<sup>th</sup> Congress considered but did not pass legislation to address infrastructure funding issues. (For information on these bills, see CRS Report RL31344, *Water Infrastructure Financing Legislation: Comparison of S. 1961 and H.R. 3930*.) In the 108<sup>th</sup> Congress, four bills to reauthorize the Clean Water Act SRF program have been introduced so far (S. 170, S. 2550, H.R. 20, H.R. 1560). In addition, separate bills to reauthorize funding for sewer overflow grants (CWA Section 221) have been introduced (H.R. 784, S. 567).

On June 23, the Senate Environment and Public Works Committee approved legislation (S. 2550) authorizing \$41.25 billion over five years for wastewater and drinking water infrastructure programs, including \$20 billion for the clean water SRF program. The bill includes a new formula for state-by-state allocation of clean water SRF grants, renewal of the Clean Water Act's sewer overflow grant program, and provisions such as extended loan repayments and subsidies for disadvantaged communities.

On July 17, 2003, the House Transportation and Infrastructure Subcommittee on Water Resources and Environment approved H.R. 1560, legislation similar to H.R. 3930, the bill approved by that Committee in 2002. H.R. 1560 would authorize \$20 billion for the clean water SRF program for fiscal years 2004-2008. It includes several provisions intended to benefit economically disadvantaged and small communities, such as allowing extended loan repayments (30 years) and additional subsidies, including principal forgiveness and negative interest loans, for communities that meet a state's affordability criteria. It includes provisions to require communities to plan for capital replacement needs and to develop and implement an asset management plan for the repair and maintenance of infrastructure that is being financed.

The issue of the applicability of the prevailing wage requirements of the Davis-Bacon Act to SRF-funded projects is affecting consideration of water infrastructure legislation, because that act has both strong supporters and critics in Congress. The bill approved by the House subcommittee in July 2003 does not include language specifying that the Davis-Bacon Act shall apply to SRF-funded projects, while the bill approved by the Senate Environment and Public Works Committee does include such a requirement. Consideration of water infrastructure legislation in the 107<sup>th</sup> Congress was blocked in part because committee bills did include a Davis-Bacon provision, and controversies about the general issue of the law's applicability to water infrastructure legislation make prospects for further action during the 108<sup>th</sup> Congress uncertain.

## **Stormwater Rules for the Oil and Gas Industry**

Clean Water Act issues are addressed in one provision of the omnibus energy legislation being considered by the 108th Congress. Section 328 of the conference report on H.R. 6 (H.Rept. 108-375) would give a permanent exemption from CWA stormwater runoff rules for the construction of exploration and production facilities by oil and gas companies or the roads that service those sites. Currently under the Act, the operation of facilities involved in oil and gas exploration, production, processing, transmission, or treatment generally is exempt from compliance with stormwater runoff regulations, but the construction of associated facilities is not. The amendment would modify the CWA to specifically include construction activities in the types of oil and gas facilities that are covered by the law's statutory exemption from stormwater rules.

The issue arises from stormwater permitting rules for small construction sites and municipal separate storm sewer systems that were issued by EPA in 1999 which became effective March 10, 2003. Those rules, known as Phase II of the CWA stormwater program, require most small construction sites disturbing one to five acres and municipal separate storm sewer systems serving populations of up to 100,000 people to have a CWA discharge permit. The permits require pollution-prevention plans describing practices for curbing sediment and other pollutants from being washed by stormwater runoff into local water bodies. Phase I of the stormwater program required construction sites larger than five acres (including oil and gas facilities) and larger municipal separate storm sewer systems to obtain discharge permits beginning in 1991. (For background, see CRS Report 97-290, Stormwater Permits: Status of EPA's Regulatory Program.)

As the March 2003 compliance deadline approached, EPA proposed a two-year extension of the Phase II rules for small oil and gas construction sites to allow the agency to

assess the economic impact of the rule on that industry. EPA said that the delay was needed to comply with President Bush's Executive Order 13211, which directed agencies to consider the effects of their actions on energy-related production activities. EPA had initially assumed that most oil and gas facilities would be smaller than one acre in size and thus excluded from the Phase II rules, but recent Department of Energy data indicate that several thousand new sites per year would be subject to the rule. The postponement did not affect other industries or small cities covered by the 1999 rule.

The provision in the final bill is similar to one in House-passed H.R. 6: it makes EPA's two-year delay permanent and makes it applicable to construction activities at all oil and gas development and production sites, regardless of size, including those covered by Phase I of the stormwater program. Oil and gas officials say that the EPA stormwater rule creates costly permitting requirements, even though the short construction period for drilling sites carries little potential for stormwater runoff pollution. Supporters said the amendment was intended to clarify existing CWA language. Opponents argued that the provision did not belong in the energy legislation and that there was no evidence that construction at oil and gas sites causes less pollution than other construction activities. However, they were unsuccessful in efforts to remove the provision during House consideration of H.R. 6 in April 2003 and also during conference deliberations. On November 7, by a 188-210 vote, the House defeated a motion offered by Representative Filner that would have instructed conferees to strike the oil and gas exemption provision from the bill. The House passed the conference report on November 18 (246-180). On November 21, the Senate failed to invoke cloture on the bill (57-40). However, a revised version (S. 2095), introduced on February 12, could receive further attention. The modified energy policy bill, which retains the oil and gas exemption provision, contains new tax and revenue provisions intended to reduce the overall cost of the legislation.

## Other Clean Water Act Issues

Several other CWA issues could receive congressional attention, through oversight hearings and possibly in legislative proposals.

**TMDLs and State Water Quality Standards.** The CWA requires states to identify pollution-impaired water segments and develop "total maximum daily loads" (TMDLs) that set the maximum amount of pollution that a water body can receive without violating water quality standards. A TMDL is essentially a budget to allocate responsibility for implementing pollution control measures within an area or watershed in order to remedy water quality impairments. Until recently, there had been little implementation of the TMDL provision (Section 303(d)), which Congress enacted in 1972. Since the early 1990s, environmental groups have filed lawsuits in 40 states to pressure EPA and states to meet the law's requirements. Of the suits tried or settled to date, 20 have resulted in court orders requiring expeditious development of TMDLs, thus driving the program that had previously received little attention. At issue today are controversies over implementation of the existing TMDL program and regulatory revisions that EPA issued in July 2000 partly in response to the lawsuits to strengthen the program. That rule has been highly controversial because of issues such as potential burdens on states, industries, cities and others to implement a revised TMDL program and potential impacts on some agriculture and forestry sources, which are not now directly subject to CWA regulations. The controversies also drew congressional attention, and 13 congressional hearings were held by the House and Senate committees

during the 106<sup>th</sup> Congress. Committees and many Members expressed concern about details of the TMDL requirements and deadlines and adequacy of resources for states to develop TMDLs and related assessments. Because of those controversies, the Clinton Administration delayed the effective date of the 2000 rule until October 2001. In the FY2001 appropriations act providing funds for EPA, P.L. 106-377, Congress requested a study by the National Academy of Sciences (NAS) on the scientific basis of the TMDL program.

The NAS report, examining the role of science in the TMDL program, was issued June 15, 2001 (National Research Council, NAS, *Assessing the TMDL Approach to Water Quality Management*). It did not specifically analyze the July 2000 revised regulations. The NAS panel concluded that scientific knowledge exists to move forward with the TMDL program and recommended that EPA and states use adaptive implementation for TMDL development. In many cases, the report said, water quality problems and solutions are obvious and should proceed without complex analysis. In other cases, solutions are more complex and require a different level of understanding and something like phased implementation. In addition, the General Accounting Office issued a report which concluded that inconsistent monitoring, data collection, and listing procedures used by states to identify impaired waters have hindered efforts to develop effective TMDL programs (*Water Quality: Inconsistent State Approaches Complicate Nation's Efforts to Identify Its Most Polluted Waters*, GAO-02-186).

In October 2001, the Bush Administration announced that it would delay the rule for 18 months (until May 2003) to allow EPA officials time to review the rule and the NAS report. This action came after a federal court approved the Administration's request for a similar suspension of litigation which is challenging the regulation (nearly a dozen interest groups have sued EPA over various parts of the TMDL rule). In the interim, existing rules and requirements and court-sanctioned TMDL schedules (affecting approximately 22 states) remain in place. (For additional information, see CRS Report 97-831, *Clean Water Act and Total Maximum Daily Loads (TMDLs) of Pollutants*.)

On March 19, 2003, EPA withdrew the July 2000 TMDL rule. EPA officials said that implementation of the existing TMDL program will continue in the meantime, but that additional time beyond May 2003 is needed to decide whether and how to revise the current program. EPA is considering initiating an entirely new rule or other options, but no further timeframe or proposal has been announced. Congressional attention to these issues in the 107<sup>th</sup> Congress was limited to oversight hearings held by the House Transportation and Infrastructure Subcommittee on Water Resources in June and November 2001. The 108<sup>th</sup> Congress may examine implementation of existing TMDL requirements and possible regulatory changes, in view of continuing disagreement among states, cities, industry, and environmental advocates about program effectiveness and efficiency.

**Regulatory Protection of Wetlands.** How best to protect the nation's remaining wetlands and regulate activities taking place in wetlands has become one of the most contentious environmental policy issues, especially in the context of the CWA, which contains a key wetlands regulatory tool, the permit program in Section 404. It requires landowners or developers to obtain permits for disposal of dredged or fill material that is generated by construction or similar activity into navigable waters of the United States, including wetlands. Section 404 has evolved through judicial interpretation and regulatory change to become one of the principal federal tools used to protect wetlands, although that term appears only once in Section 404 itself and is not defined there. At the same time, its

implementation has come to be seen as intrusive and burdensome to those whose activities it regulates. At issue today is how to address criticism of the Section 404 regulatory program while achieving desired goals of wetlands protection. (For additional information, see CRS Issue Brief IB97014, *Wetlands Issues*.)

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

Legislative proposals to modify Section 404 have presented a number of issues, including whether all wetlands should be treated the same, or whether some could be accorded less stringent regulatory protection; whether activities or areas covered by federal regulation should be modified; and whether federal and state roles in implementing Section 404 should be revised. Views on these issues vary. Many wetland protection advocates contend that statutory changes that have been proposed would weaken current protection efforts and that more modest administrative reforms would effectively improve the current program. Many landowners say that changes are needed to lessen burdens of the regulatory program. Some also argue that the CWA should compensate landowners whose property is adversely affected by regulatory "takings" when application of Section 404 limits desired property use, since an estimated 74% of all remaining wetlands are on private lands.

***The Supreme Court's SWANCC Decision.*** One issue involving long-standing controversy and litigation is whether isolated waters are properly within the jurisdiction of Section 404. Isolated waters that are wetlands which are not physically adjacent to navigable surface waters often appear to provide only some of the values for which wetlands are protected, such as flood control or water purification, even if they meet the technical definition of a wetland. On January 9, 2001, the Supreme Court ruled on the question of whether the CWA provides the Corps and EPA with authority over isolated waters. The Court's 5-4 ruling in *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* (531 U.S. 159 (2001)) held that the Corps' denial of a 404 permit for a disposal site on isolated wetlands solely on the basis that migratory birds use the site exceeds the authority provided in the Act.

The full extent of retraction of the regulatory program resulting from this decision remains unclear for now. Environmentalists believe that the Court misinterpreted congressional intent on the matter, while industry and landowner groups welcomed the ruling. Policy implications of how much the decision restricts federal regulation depend on how broadly or narrowly the opinion is applied. Some federal courts have interpreted *SWANCC* narrowly, thus limiting its effect on current permit rules, while a few read the decision more broadly. The government's current view on this key question came in EPA-

Corps guidance issued on January 15, 2003. It provides a legal interpretation essentially based on a narrow reading of the Court's decision, thus allowing federal regulation of some isolated waters to continue, but it calls for more Headquarters review in disputed cases. Administration press releases say that the guidance demonstrates the government's commitment to "no-net-loss" wetlands policy. However, it is apparent that the issues remain under discussion, because at the same time, the Administration issued an advance notice of proposed rulemaking (ANPRM) seeking comment on how to define waters that are under jurisdiction of the regulatory program. The ANPRM did not actually propose rule changes, but it indicated possible ways that Clean Water Act rules might be modified to further limit federal jurisdiction, building on *SWANCC* and some subsequent legal decisions. The government received more than 133,000 comments on the ANPRM, most of them negative, according to EPA and the Corps. Environmentalists and many states opposed changing any rules, saying that the law and previous court rulings call for the broadest possible interpretation of the Clean Water Act (and narrow interpretation of *SWANCC*), but developers sought changes to clarify interpretation of the *SWANCC* ruling.

On December 16, EPA and the Corps announced that the Administration will not pursue development of rule changes concerning federal regulatory jurisdiction over isolated wetlands. The EPA Administrator said that the Administration wanted to avoid a contentious and lengthy rulemaking debate over the issue. Environmentalists and state representatives expressed relief at the announcement. Interest groups on all sides have been critical of confusion in implementing the 2003 guidance, which constitutes the main tool for interpreting the reach of the *SWANCC* decision. Environmentalists remain concerned about diminished protection resulting from the guidance, while developers said that without new regulations, confusing and contradictory interpretations of wetland rules will continue.

While it likely will take some time to 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. Whether states will act to fill in the gap left by removal of some federal jurisdiction is unclear, but a few states (Wisconsin and Ohio, for example) have passed new laws or adopted regulations to do so. (For additional information, see CRS Report RL30849, *The Supreme Court Addresses Corps of Engineers Jurisdiction Over 'Isolated Waters': The SWANCC Decision*.) Legislation to overturn the *SWANCC* decision by providing a broad definition of "waters of the United States" was introduced in the 107<sup>th</sup> Congress, but no further action occurred. Similar legislation has been introduced in the 108<sup>th</sup> Congress (H.R. 962, S. 473).

In September 2002, the House Government Reform Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs held a hearing on the government's response to the *SWANCC* decision and to press the government to clarify its interpretation of the Court case. Committee Members and public witnesses indicated that a lack of guidance has led to inconsistent regulatory decisions by Corps officials in individual regions of the country, and subsequent judicial decisions by other federal and state court have been mixed. At the hearing, Corps and EPA officials testified on their efforts to develop guidance, which subsequently was released in January 2003. Concern about lingering confusion over the *SWANCC* decision and its implementation by the Corps was the topic of an oversight hearing by the Senate Environment and Public Works Committee in June 2003. At the hearing, developers and other members of the regulated community criticized the Corps and EPA, saying that the January 2003 guidance document had not clarified the reach of federal

jurisdiction. A House Transportation and Infrastructure subcommittee also held a hearing on post-SWANCC issues on March 30, 2004.

**Animal Waste Management: Regulating CAFOs.** Public and policy attention has been increasing on steps to minimize public health and environmental impacts of runoff from animal feeding operations (AFOs). AFOs are agricultural facilities that confine livestock feeding activities, thus concentrating animal populations and waste. Animal waste is frequently applied to land for disposal and to utilize the nutrient value of manure to benefit crops. If not managed properly, however, it can pose risks to water quality and public health, contributing pollutants such as nutrients, sediment, pathogens, and ammonia to the environment. EPA rules require large AFOs, termed Confined Animal Feeding Operations (CAFOs), to have CWA discharge permits, but EPA acknowledges that compliance with rules issued in the 1970s was limited. In 1999, EPA and the U.S. Department of Agriculture initiated a national strategy to improve compliance and strengthen existing regulations that are intended to control adverse environmental impacts of AFOs. As part of that strategy (and to comply with a settlement agreement to update a number of industry clean water standards), in December 2000, EPA proposed rules to increase the number of CAFOs required to obtain CWA wastewater discharge permits and to restrict land application of animal wastes, in order to prevent runoff into nearby rivers and streams.

EPA issued final revised CAFO rules on December 16, 2002. The final rules, which were published in the Federal Register became effective April 14, 2003, are generally regarded as less stringent than the 2000 proposal. The most significant new provision will require CAFOs to develop nutrient management plans that are intended to keep livestock waste from entering nearby waters. Farmers are pleased that the rule scales back some of the proposal, which would, for example, have required co-permitting of corporate owners of livestock as well as of farmers who actually raise the animals. Environmentalists, however, contend the rule relies too heavily on voluntary measures to control runoff, instead of mandating strict compliance with water quality standards. A 2003 General Accounting Office report found that neither EPA nor states are equipped to implement the program, having not made provisions for additional staffing to process permits, conduct required inspections, and take enforcement actions (*Livestock Agriculture: Increased EPA Oversight Will Improve Environmental Program for Concentrated Animal Feeding Operations*, GAO-03-285). Several lawsuits challenging the final rules have been filed by industry groups and environmentalists. The 108<sup>th</sup> Congress may examine details of the final rules and overall efforts to address animal waste management problems. Legislation to strengthen regulation of CAFOs, beyond existing regulations, has been introduced (S. 1407). (For additional information, see CRS Report RL31851, *Animal Waste and the Environment: EPA Regulation of Concentrated Animal Feeding Operations (CAFOs)*.)

## **LEGISLATION**

### **H.R. 20 (Kelly)**

Clean Water Infrastructure Financing Act of 2003. Authorizes appropriations for CWA state water pollution control revolving funds. Introduced January 7, 2003; referred to Committee on Transportation and Infrastructure.

**H.R. 738 (Pallone)**

Clean Water Protection Act. Adds a definition of “fill material” to the CWA to clarify that fill material cannot be comprised of waste. Introduced February 12, 2003; referred to Committee on Transportation and Infrastructure.

**H.R. 784 (Camp)**

Water Quality Investment Act of 2003. Authorizes appropriations for grants to remediate sewer overflows (CWA Section 221). Introduced February 13, 2003; referred to Committee on Transportation and Infrastructure. (See S. 567.)

**H.R. 866 (Young)**

Wastewater Treatment Works Security Act of 2003. Enhances the security of wastewater treatment works by authorizing \$200 million in 75% grants to wastewater utilities for conducting vulnerability assessments. Also authorizes technical assistance to small wastewater utilities and grants to improve assessment methodologies and tools. Introduced February 13, 2003; referred to Committee on Transportation and Infrastructure. Approved by committee February 16 (H.Rept. 108-33). Passed House May 7, 2003, 413-2. (See S. 1039.)

**H.R. 962 (Oberstar)**

Clean Water Authority Restoration Act. Clarifies the CWA jurisdiction over “waters of the United States” by removing the definition of “navigable waters” subject to that regulatory jurisdiction, including under the Section 404 program; applies to all “waters of the U.S. broadly defined.” Introduced February 27, 2003; referred to Committee on Transportation and Infrastructure. (See S. 473.)

**H.R. 1560 (Duncan)**

Water Quality Financing Act of 2003. Authorizes appropriations for CWA state water pollution control revolving funds. Introduced April 2, 2003; referred to Committee on Transportation and Infrastructure. Approved by Water Resources and Environment Subcommittee, with amendment, July 17, 2003. (Similar to H.R. 3930 in 107<sup>th</sup> Congress)

**H.R. 2668 (C. Miller)**

Great Lakes Controlled Data Collection and Monitoring Act. A bill to amend the Federal Water Pollution Control Act to direct the Great Lakes National Program Office of the EPA to develop, implement, monitor, and report on a series of indicators of water quality and related environmental factors in the Great Lakes. Introduced July 8, 2003; referred to Committee on Transportation and Infrastructure. (See S. 1116)

**H.R. 2720 (Emanuel)**

Great Lakes Restoration Financing Act of 2003. Authorizes appropriations for state programs and activities for restoration of the Great Lakes. Introduced July 14, 2003; referred to Committee on Transportation and Infrastructure, Committee on Resources.

**H.R. 4416 (Ehlers)**

Great Lakes Protection and Restoration Committee Act. Establishes a committee to conduct a study of funding needs and expected accomplishments of programs to achieve Great Lakes restoration goals identified by Great Lakes governors. Introduced May 20, 2004; referred to Committee on Resources, Committee on Transportation and Infrastructure.



**S. 170 (Voinovich)**

Clean Water Infrastructure Financing Act of 2003. Authorizes appropriations for CWA state water pollution control revolving funds. Introduced January 15, 2003; referred to Committee on Environment and Public Works.

**S. 473 (Feingold)**

Clean Water Authority Restoration Act. Clarifies the CWA jurisdiction over “waters of the United States” by removing the definition of “navigable waters” subject to that regulatory jurisdiction, including under the Section 404 program; applies to all “waters of the U.S. broadly defined.” Introduced February 27, 2003; referred to Committee on Environment and Public Works. (See H.R. 962.)

**S. 567 (Snowe)**

Water Quality Investment Act of 2003. Authorizes appropriations for grants to remediate sewer overflows (CWA Section 221). Introduced March 6, 2003; referred to Committee on Environment and Public Works. (See H.R. 784.)

**S. 779 (Jeffords)**

Wastewater Treatment Works Security and Safety Act. Improves protection of wastewater treatment works from terrorist and other harmful intentional acts. Introduced April 3, 2003; referred to Committee on Environment and Public Works.

**S. 1039 (Inhofe)**

Wastewater Treatment Works Security Act of 2003. Enhances the security of wastewater treatment works by authorizing \$200 million in 75% grants to wastewater utilities for conducting vulnerability assessments. Also authorizes technical assistance to small wastewater utilities, grants to improve assessment methodologies and tools, and EPA research on technologies for wastewater utility security. Introduced May 12, 2003; referred to Committee on Environment and Public Works. Approved by committee May 15, S.Rept. 108-149. (See H.R. 866.)

**S. 1116 (Levin)**

Great Lakes Water Quality Indicators and Monitoring Act. Directs EPA’s Great Lakes National Program Office to develop, implement, monitor, and report on a series of indicators of water quality and related environmental factors in the Great Lakes. Introduced May 22, 2003; referred to Committee on Environment and Public Works. (See H.R. 2668.)

**S. 1398 (DeWine)**

Great Lakes Environmental Restoration Act. Provides for environmental restoration of the Great Lakes. Introduced July 14, 2003; referred to Committee on Environment and Public Works. Hearing held by Governmental Affairs Subcommittee on Oversight of Government Management, the Federal Workforce and the District of Columbia July 16. (See H.R. 2720.)

**S. 2550 (Crapo)**

Water Infrastructure Financing Act, to improve water and wastewater infrastructure in the United States, provides \$20 billion over five years for the clean water SRF and \$15 billion over five years for the drinking water SRF program. Introduced June 21, 2004;

referred to Committee on Environment and Public Works. Approved with amendments by full committee June 23.

## **CONGRESSIONAL HEARINGS, REPORTS, AND DOCUMENTS**

U.S. Congress. House. Committee on Transportation and Infrastructure. Subcommittee on Water Resources and Environment. *Improving Water Quality: States' Perspectives on the Federal Water Pollution Control Act*. Hearing, Feb. 28, 2001. 107<sup>th</sup> Congress, 1<sup>st</sup> session, 53 p. (107-3)

—*Water Infrastructure Needs*. Hearing, Mar. 28, 2001. 107<sup>th</sup> Congress, 1<sup>st</sup> session, 296 p. (107-8)

—*Confined Animal Feeding Operations*. Hearing, May 16, 2001. 107<sup>th</sup> Congress, 1<sup>st</sup> session, 126 p. (107-21)

—*The Wetlands Permitting Process: Is It Working Fairly?* Hearing, Oct. 3, 2001. 107<sup>th</sup> Congress, 1<sup>st</sup> session, 99 p. (107-50)

U.S. Congress. Senate. Committee on Environment and Public Works. *Water Investment Act of 2002*. Report to accompany S. 1961, together with minority views. 107<sup>th</sup> Congress, 2d session. Report 107-228. 116 p.

—Subcommittee on Fisheries, Wildlife, and Water. *Water and Wastewater Infrastructure Needs*. Hearing, Mar. 21, 2001. 107<sup>th</sup> Congress, 1<sup>st</sup> session, 141 p. (S.Hrg. 107-316)

—*Water Infrastructure Needs in Ohio*. Field hearing, April 30, 2001. 107<sup>th</sup> Congress, 1st session, 104 p. (S.Hrg. 107-320)

—*Water Investment Act and Other Water Infrastructure Bills*. Hearings, Feb. 26, 28, 2002. 107<sup>th</sup> Congress, 2d session, 283 p. (S.Hrg. 107-954)

## **FOR ADDITIONAL READING**

Houck, Oliver A. “TMDLs: The Resurrection of Water Quality Standards-Based Regulation Under the Clean Water Act.” *Environmental Law Reporter News & Analysis*, v. 27, no. 7, July 1997: 10329-10344.

Loeb, Penny. “Very Troubled Waters.” *U.S. News & World Report*, v. 125, no. 12, September 28, 1998: 39, 41-42.

National Research Council, National Academy of Sciences. *ASSESSING THE TMDL APPROACH TO WATER QUALITY MANAGEMENT*. National Academy Press, Washington, D.C. June 2001. 82 p.

U.S. Congressional Budget Office. *Future Investment in Drinking Water and Wastewater Infrastructure*. Washington, November 2002. 58 p.

U.S. Environmental Protection Agency. *The National Water Quality Inventory: 2000 Report*. Washington, September 2002. "EPA-841-R-2-001."

U.S. General Accounting Office. *Key EPA and State Decisions Limited by Inconsistent and Incomplete Data*. (GAO/RCED-00-54) March 2000. 73 p.

———*Water Infrastructure: Information on Financing, Capital Planning, and Privatization*. (GAO-02-764) August 2002. 79 p.

## **CRS Issue Briefs**

CRS Issue Brief IB89102, *Water Quality: Implementing the Clean Water Act*, by Claudia Copeland.

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

## **CRS Reports**

CRS Report RL31683, *Clean Water Act: A Review of Issues and Legislation in the 107<sup>th</sup> Congress*, by Claudia Copeland.

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

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

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

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

CRS Report RL31116, *Water Infrastructure Funding: Review and Analysis of Current Issues*, by Claudia Copeland and Mary Tiemann.

CRS Report RL30437, *Water Quality Initiatives and Agriculture*, by Claudia Copeland.