Water Infrastructure Funding in the American Recovery and Reinvestment Act of 2009

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Summary

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009 (P.L. 111-5, the ARRA, or Recovery Act). Among the purposes identified in the legislation are preservation and creation of jobs and promotion of U.S. economic recovery, and investment in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits. This report identifies funding for water infrastructure programs and projects contained in the legislation.

The legislation directs additional appropriations to a number of existing federal programs that either directly invest in water infrastructure projects or provide assistance to states and localities for such activities. Water infrastructure funding in the bill, available for obligation through September 30, 2010, is provided to five federal agencies and one commission. This funding totals $13.5 billion.

The bill provides funding for locally built wastewater and drinking water treatment projects through assistance programs administered by the Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA). For the EPA wastewater program, the enacted bill provides $4.0 billion. For the EPA drinking water program, P.L. 111-5 provides $2.0 billion in additional funds. These funds were allocated to states according to established formulas, and states will award actual assistance to projects and communities. For the USDA programs that benefit rural communities, the Recovery Act provides $1.38 billion in grants and loans; USDA state offices are making individual project decisions. Additional funding in the bill for these programs is three to four times more than the level of recent appropriations.

The enacted legislation provides funding for water resources development and management projects administered by four agencies. It provides $4.6 billion for the U.S. Army Corps of Engineers (Corps) and $1.0 billion for the Bureau of Reclamation (Reclamation). The legislation also provides $340 million for USDA's Natural Resources Conservation Service (NRCS) agricultural watershed program, and $220 million for the Department of State's International Boundary and Water Commission (IBWC) for levee and dam upgrades. Congress directed that the funds be used consistent with the eligibility and prioritization constraints and direction provided in P.L. 111-5 and the accompanying conference report, H.Rept. 111-16, but discretion regarding which specific water resource projects received funds was largely left up to the these federal agencies.

Even after enactment, implementation of the additional water infrastructure funding in the ARRA is raising a number of issues, including how general restrictions in the legislation, such as "Buy American" requirements, will affect timely spending of ARRA funds. Another issue concerns matching fund requirements. Unless project assistance is provided entirely as grants, communities and project sponsors will need to come up with matching funds, which could be very challenging in the current fiscal environment. Congressional committees have held several hearings on use of ARRA water infrastructure funds, and additional oversight is likely during the remainder of the 111th Congress.

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Introduction

In response to a deteriorating national economy and recession, in February 2009 the Congress passed and President Obama signed into law the American Recovery and Reinvestment Act (P.L. 111-5). Among the purposes identified in the legislation are preservation and creation of jobs and promotion of U.S. economic recovery, and investment in transportation, environmental, and other infrastructure that will provide long-term economic benefits. This report identifies funding for water infrastructure programs and projects included in the bill. The legislation directs additional appropriations to a number of existing federal programs that either directly invest in water infrastructure projects or provide assistance to states and localities for such activities. Water infrastructure funding, available for obligation through September 30, 2010, is summarized in **Table 1**.

Table 1. Water Infrastructure Funding in the American Recovery and Reinvestment Act of 2009 (P.L. 111-5)

Agency	Program	P.L. 111-5
EPA	Clean Water State Revolving Fund capitalization grants	$4.0 billion
EPA	Drinking Water State Revolving Fund capitalization grants	$2.0 billion
RUS/USDA	Rural water and waste disposal grants and loans	$1.38 billion
Reclamation/DOI	Water and Related Resources	$1.0 billion
Corps/DOD[a]	Army Corps of Engineers Civil Works Program	$4.6 billion
NRCS/USDA	Agricultural Watershed Programs	$340 million
IBWC/State Dept.	International Boundary and Water Commission	$220 million
	Total	**$13.5 billion**

Source: Compiled by CRS.

Note: Table does not include funds for the Economic Development Administration's Public Works and Economic Development program or the Department of Housing and Urban Development's Community Development Block Grant program, both of which could be used for water infrastructure and other projects, See discussion on page 5.

a. Amounts include the $25 million for the Corps regulatory program and $100 million for the Formerly Utilized Sites Remedial Action Program (FUSRAP).

The infrastructure activities discussed here comprise one of many broad categories of infrastructure that received additional funding under the legislation, for construction, repair, and modernization of a range of infrastructure categories both traditional (e.g., highways, airports, passenger rail, and schools) and less traditional (e.g., broadband and the electric power transmission grid). These provisions of the legislation reflect a concept that has drawn much attention by policymakers as one option for addressing the nation's faltering economic conditions: the concept of countering the effect of the current recession with increased government spending

on public works in order to create jobs while also promoting long-term economic growth.[1] Proponents argued that states and localities had hundreds of infrastructure projects that were "ready to go" to construction in 90 or 120 days, except for funding, and thus could contribute quickly to job creation and economic stimulus,[2] especially in the construction sector that has been particularly hard hit by the recession.

During House and Senate debate on the legislation, both supporters and critics favored more infrastructure spending, with some critics urging changes to increase short-term, stimulative provisions of the bill, including more targeted infrastructure spending, and less spending on activities with less certain quick stimulative effect. Nevertheless, in the floor debates concerning the overall size and composition of the legislation, only one specific proposal to increase infrastructure funds in the bill was adopted.[3] The enacted legislation includes some additional funds for high-speed rail projects that were not included in the House or Senate versions.[4]

General Provisions Applicable to ARRA Water Infrastructure Funding

As enacted, the legislation contains several general provisions that apply to all water infrastructure projects and programs funded by the legislation. Two of these general provisions reflect policies to deliver the federal funds quickly, in order to create jobs. First, under section 1602, preference was to be given to activities that could start and finish quickly, with a goal that at least 50% of the funds go to activities that could be initiated within 120 days of enactment. Second, section 603 requires that all funds be obligated by September 30, 2010 (specific deadline provisions applicable to EPA funds are discussed below).

Two additional general provisions concern certain other restrictions on using federal funds. First, section 1605 requires that local entities that receive ARRA financial assistance use American-made iron, steel, and manufactured goods in the construction of their projects. Section 1605(b) allows federal agencies, with limited exceptions and applied consistently with U.S. international obligations, to waive this "Buy American" procurement requirement if doing so is in the public interest because there are insufficient American supplies, or if the use of American supplies will increase the cost of the project by more than 25%.

Finally, section 1606 directs that all projects funded directly by, or assisted in whole or in part by, ARRA shall comply with prevailing wage requirements of the Davis-Bacon Act. This act requires, among other things, that not less than the locally prevailing wage be paid to workers

[1] For background, see CRS Report R40107, *The Role of Public Works Infrastructure in Economic Stimulus*, coordinated by Claudia Copeland.

[2] In late 2008, state and local water agencies reportedly identified from $9 to $20 billion in wastewater treatment projects and $10 billion in drinking water projects that are "ready to go." Inside EPA, "States Seek over $9 Billion for Clean Water Projects in Stimulus Bill," September 12, 2008; "AWWA members Asked to Contact Congress on Drinking Water Infrastructure and Stimulus Bill," http://www.awwa.org/Government/Content.cfm?ItemNumber=3821&navItemNumber=1618.

[3] While the House adopted an amendment to increase transit capital grant funding by $3 billion, the Senate rejected an amendment offered by Senators Murray and Feinstein that would have provided $25 billion more for highway, transit, and drinking water and wastewater projects.

[4] For information, see CRS Report R40214, *Transportation and Transportation Security Related Provisions of House and Senate Stimulus Legislation (H.R. 1)*, by John W. Fischer et al.

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 (with respect to small and minority-owned businesses). Supporters say that the law helps stabilize the local construction industry by preventing competition from firms that could undercut local wages, and perhaps working conditions, and thus compete unfairly with local contractors.

Wastewater and Drinking Water

EPA State Revolving Fund (SRF) Programs

The federal Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) impose regulatory requirements regarding wastewater treatment and drinking water quality in the United States. For wastewater treatment, the CWA prescribes performance levels to be attained by municipal sewage treatment plants in order to prevent the discharge of harmful wastes into the Nation's lakes, rivers, and other surface waters. For drinking water quality, public water systems are subject to federal regulations under the SDWA which limit levels of contaminants in treated water and require, for example, system monitoring, treatment to remove certain contaminants, and reporting. Both of these laws authorize financial assistance so that communities can construct treatment facilities in compliance with these requirements.[5] Under both laws, Congress appropriates federal capitalization grants as seed money to support State Revolving Funds (SRFs), and states provide matching funds equal to 20% of the federal capitalization grant. States, in turn, provide loans from the SRFs to communities for water infrastructure projects. Over the long term, the loan programs are intended to be sustained through repayment of loans to states, thus creating a continuing source of state assistance for other communities.

The SRF capitalization grants are appropriated through the Environmental Protection Agency's (EPA's) State and Tribal Assistance Grants account (in the Interior and Environment Appropriations bill) and are allocated among the states according to formulas. Historically, the federal government has had a large financial role in assisting communities to meet their wastewater funding needs (having appropriated more than $75 billion since 1973) and also more recently in meeting drinking water treatment needs (more than $10 billion since 1997). However, estimates of funding needs remain very high ($203 billion for wastewater and $277 billion for drinking water), while appropriations for EPA assistance have declined in recent years. The economic recovery legislation provides additional FY2009 funding for the two SRF capitalization grant programs.

The Recovery Act provides an additional $4.0 billion for clean water SRFs and $2.0 billion for drinking water SRFs. Total stimulus funding for the two SRF programs is four times larger than the funding levels for these programs in regular FY2009 appropriations. As requested by many states, the legislation waives the current law requirement that states must provide a 20% match to the federal capitalization grant.

[5] For additional information, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, coordinated by Claudia Copeland.

The CWA and SDWA allow states to make low-interest or no-interest loans from the SRF. The Recovery Act allows states to also provide additional subsidization in the form of negative interest loans, principal forgiveness, grants, or a combination, but the legislation sets no project-specific limits on such assistance.[6] States are to use 50% of the capitalization grant to provide additional subsidization. In addition, states are to use not less than 20% of capitalization grants to support green infrastructure, water efficiency, or other environmentally innovative projects (unless there are insufficient applications for such projects).[7]

Under the Recovery Act, funds appropriated to states were allocated according to existing formulas, or methods of apportionment. Under current law, clean water SRF capitalization grant allocation is governed by a formulation in the CWA,[8] while drinking water SRF capitalization grants are allocated according to a formula developed by EPA that reflects the proportional share of each state's funding needs.[9] Based on those formulas, **Table A-1** in the Appendix to this report shows amounts that states were eligible to receive under the funding levels in the bill. The table reflects that, before funds were distributed to states, 1.5% was reserved for EPA to provide assistance to Indian Tribes and, under the drinking water SRF, to Alaska Native Village water systems, consistent with current law. Also, the table reflects that an additional 1.0% of the funds was reserved for program oversight by EPA and remains available for the agency's use through September 30, 2011. States award SRF assistance to projects on their Intended Use Plans, lists that states develop to identify which projects in which communities will receive funding.

EPA was directed to submit a report to the House and Senate Appropriations Committees within 30 days of enactment containing a general plan for expenditure of funds provided by the legislation, another report within 90 days providing detailed project level information associated with the general plan, and bi-annual reports on implementation, but there are no deadlines for actually awarding the funds in the bill. However, these reports to Congress would not identify wastewater and drinking water projects that would be funded, because states would be making those decisions, not EPA.

As described above, the legislation generally requires that ARRA funds be obligated by September 30, 2010. However, it also includes special deadline provisions that apply to the EPA SRF monies. The legislation directed that states are to give priority to wastewater and drinking water projects that could proceed to construction within 12 months of enactment (i.e., by February 17, 2010) and required that all SRF funds must be under contract or construction within that time. Further, the funds were provided as "use it or lose it," because EPA was directed to redistribute any SRF capitalization grant funds that were not under contract or construction by February 17.

[6] The SDWA already allows principal forgiveness for assistance provided to economically disadvantaged communities.

[7] ARRA omits provisions from the House-passed bill that would have required that 80% of capitalization grant funds go to municipalities that meet state affordability criteria. Under the existing SDWA SRF program, states use affordability criteria to determine whether a community is economically disadvantaged.

[8] For information, see CRS Report RL31073, *Allocation of Wastewater Treatment Assistance: Formula and Other Changes*, by Claudia Copeland.

[9] See http://www.epa.gov/safewater/dwsrf/allotments/funding_dwsrf_allotments_2008.html.

Other Federal Programs

Under the EPA SRF programs, rural and non-rural communities compete for funding; rural areas and other small communities have no special priority. For rural areas, the U.S. Department of Agriculture (USDA) administers grant and loan programs for water and wastewater projects, with eligibility limited to communities of 10,000 or less. These programs are administered at the national level by the Rural Utilities Service (RUS) at USDA.[10] Funding needs in rural areas are high (at least $50 billion, according to EPA surveys), and there is heavy demand for funds. At the end of FY2007, USDA reported a $2.4 billion backlog of requests for 928 water and wastewater projects. The Recovery Act also provides additional appropriations for these programs totaling $1.38 billion ($968 million in grants and $412 million in direct loans). Funding under the enacted bill is more than 2.5 times larger than the funding level in FY2009. The general provisions of P.L. 111-5 concerning preference for projects that can start quickly, obligation deadlines, and Buy American and prevailing wage requirements, described above, also apply to these USDA funds.

ARRA also includes funding for other federal programs that are not targeted to water infrastructure (or even to infrastructure exclusively), but could potentially be used for such purposes. One is the Public Works and Economic Development program of the Economic Development Administration (EDA, Department of Commerce). EDA is authorized to provide economic development grants to areas experiencing substantial economic distress in order to directly encourage business expansion, diversify local economies, and general or retain long-term jobs in the private sector. Economic development grants may be used for a wide range of purposes. ARRA provides $150 million for EDA grants. Regular FY2009 funding, enacted in March after ARRA, was $133 million, and FY2010 funding is $158 million.

ARRA also includes $1.0 billion for the Community Development Block Grant (CDBG) program administered by the Department of Housing and Urban Development (HUD). CDBG funds are used by about 1,200 state and local governments for a broad range of activities to invest in their own economic development priorities that are intended to result in decent housing in a suitable living environment. Program policy requires that at least 70% of funds must benefit low- and moderate-income persons. Regular FY2009 funding for the CDBG was $3.6 billion, and FY2010 funding is $3.99 billion.

Implementation and Oversight

Recovery Act funds for wastewater and drinking water projects were disbursed by the federal government to states and localities where the actual project decisions were made and spending will occur. EPA moved quickly after enactment of the legislation to issue guidance to states on how the agency would award and administer grants to wastewater and drinking water state revolving funds.[11] The guidance addressed a number of issues unique to the ARRA SRF funds, such as how states are to meet the law's requirement that at least 20% of the funds be used for green infrastructure projects, additional reporting requirements for accountability and transparency, and details that states must provide on their plans for using the federal funds,

[10] For information, see CRS Report 98-64, *Rural Water Supply and Sewer Systems: Background Information*, by Claudia Copeland.

[11] James A. Hanlon and Cynthia O. Dougherty, "Award of Capitalization Grants with Funds Appropriated by P.L. 111-5, the 'American Recovery and Reinvestment Act of 2009,'" memorandum, March 2, 2009. http://www.epa.gov/water/eparecovery/docs/604bARRA_guidance_memo_FINAL.pdf

including principal forgiveness. Most states reportedly decided to fund projects from existing priority lists (in order to meet the law's requirements to select projects that can proceed quickly to construction), while some developed supplemental project priority lists (especially where projects to meet the law's green project reserve had not previously been identified).

EPA had awarded nearly all of the $6.0 billion in clean water and drinking water SRF capitalization grants to states, the District of Columbia, Puerto Rico, and one Territory by December 2009. States, in turn, began to award funds to specific projects, and local governments to enter into contracts. But actual commitment of funds was slow: as of November, about 30% of clean water SRF and 17% of drinking water SRF funds were reported to be under contract. Consequently, for some time federal officials and some Members of Congress were concerned about the ability of states to have all funds under contract or construction by February 17, 2010, as required by ARRA, or EPA would be required to reallocate remaining funds. However, when February 17 arrived, EPA reported that all states made the one-year deadline, and no funds were reallocated.

As discussed above, the EPA SRF provisions of the legislation allow states to provide subsidization in the form of principal forgiveness, negative interest loans, grants, or a combination, and, in fact, states are required to use at least 50% of ARRA funds as subsidization. Traditionally, SRF assistance to communities is provided as loans that eventually are repaid to states. The concept of allowing principal forgiveness or negative interest loans means that communities will have less of a repayment burden. There is, however, a tension in how states will use this authority. As much as state budgets are under pressure from the current recession, so, too, are cities' budgets, and recipients of SRF assistance would rather receive a grant or partial grant than a loan that must be fully repaid. If states are generous in the amounts of subsidization that they provide (for example, requiring only small amounts of assistance or even none to be repaid), a few communities will benefit greatly. But if states are more restrictive (for example, providing only a small amount of additional subsidization), it may be possible to assist more communities in the state, yet those communities will have a larger repayment responsibility. Further, many states are concerned that providing financial assistance to communities with subsidies means that eventual repayments to the SRF will be less than 100%, thus diminishing the corpus of the SRF and impairing its long-term ability to serve as a source of additional future investment and assistance.

Both OMB and EPA issued guidance on implementing the law's Buy American provision (see page 2), which is another new consideration in using the ARRA funds. EPA's guidance details how an SRF assistance recipient (i.e., local government) may apply for a waiver from the Buy American requirement and how the agency will evaluate such requests.[12] EPA has issued four nationwide "Buy American" waivers based on the ARRA's public interest provision, as well as nearly four dozen project-specific waivers because U.S.-made products meeting specifications justified by local conditions and requirements were not available. EPA issued a nationwide waiver to allow some already-funded SRF projects to refinance loans to access the more attractive financing options that the Recovery Act provides, but this waiver only applies to eligible projects for which debt was incurred on or after October 1, 2008, and before February 17, 2009. A second waiver applies to projects that solicited bids on or after October 1, 2008, and before February 17,

[12] James A. Hanlon and Cynthia O. Dougherty, "Implementation of the Buy American provisions of P.L. 111-5, the 'American Recovery and Reinvestment Act of 2009,'" memorandum, April 28, 2009. http://www.epa.gov/water/eparecovery/docs/04-29-2009_BA_waiver_process_final.pdf

2009, and a third applies to "de minimis" use of non-domestic iron, steel, and manufactured goods in a project where such components comprise in total no more than 5% of materials in the project. A fourth nationwide waiver clarifies the previous "de minimis" waiver.

The Buy American requirement has become among the most contentious provisions of the ARRA for water infrastructure projects. Some state and local officials criticized the relatively high threshold in the law for waiving the provision based on increased costs (25%). Further, the provision has prompted special concern in the water infrastructure sector because only a limited amount of equipment and materials is manufactured in the United States, according to reports. Some critics say this could result in monopolies for certain companies and could increase the cost of ARRA projects because domestic content may be more expensive than foreign-supplied materials. A Canadian trade official characterized the provision as discriminatory and as a threat to traditional trading openness between the two countries.[13] But many policymakers support the general Buy American provision in the law, saying that it will help create domestic jobs.

Also of interest has been states' and localities' ability to identify the law's mandate that at least 20% of SRF monies be used for so-called "green" projects, since it was a new requirement and was complicated by the law's one-year deadline for having projects under contract. As part of its initial guidance on implementing ARRA, EPA identified examples of many types of projects that would be eligible for the law's Green Project Reserve (GPR).[14] In March 2010, EPA reported that all states met the 20% requirement and that, overall, states are investing 28% of ARRA funds on the four types of "green" projects identified in the legislation.

- 43% of GPR funds are being spent on energy efficiency projects, such as installing solar panels or wind turbines or more efficient pumps and motors at treatment plants, which tend to be more capital-intensive than other project types.
- 31% of GPR funds are being spent on water efficiency projects, such as installation of water meters or rehabilitation of collection sewer systems.
- Environmentally innovative projects, such as projects to achieve pollution prevention with reduced costs or to adapt treatment plants to impacts of climate change, account for 11% of GPR funds.
- Green infrastructure projects, such as green roofs and green practices to manage stormwater with wetlands and other natural systems, account for 15% of GPR funds.

Congress extended the 20% GPR requirement to FY2010 appropriations for the clean water and drinking water SRF programs.

Other federal agencies that received ARRA funds for wastewater and drinking water projects also are proceeding with implementation. For example, as of May 2010, USDA has obligated about 80% of the $1.38 billion in grant and loan funds that it received for rural water and waste disposal projects in more than 600 communities. USDA expects to award assistance to about 200 more communities by the September 30 deadline. The Economic Development Administration's six regional offices were responsible for selecting and administering the $150 million in ARRA funds

[13] Guy Saint-Jacques, Deputy Head of Mission, Embassy of Canada to the United States, Address to the 2009 National Clean Water Policy Forum, May 4, 2009.

[14] See http://www.epa.gov/water/eparecovery/docs/STIMULUS_Guidance_Green_Reserve.pdf.

that EDA received (which is the normal process for that agency), and as of September 30, 2009, EDA had awarded all of these funds to 68 grants in 37 states. The EDA total includes $27 million in grants to promote "green" jobs. As of January, EDA reported that it had broken ground on 20 projects, totaling $45 million, or 31% of the ARRA funds. Finally, HUD, which received $1.0 billion in ARRA CDBG funds, announced allocation of the funds in March 2009 to approximately 1,200 state and local governments; as of December 2009, grantees had spent less than 8% of the total.

Congressional committees have held several hearings on implementation of the Recovery Act. At the time of the legislation's enactment, the chairman of the House Transportation and Infrastructure Committee sent letters to governors requesting that they provide specific certifications and accountability information regarding ARRA-funded projects. Since April 2009, the committee has held four hearings on implementation of the water infrastructure funding provisions, receiving testimony from EPA, EDA, the Army Corps of Engineers and others within that committee's jurisdiction on steps to disburse funds to states and award assistance to specific projects. Other committees that have begun oversight activities include the House Natural Resources Committee (see discussion below), House and Senate Appropriations Committees, and the House Science and Technology Committee, which, among other topics, has investigated how government agencies are ensuring transparency and accountability for Recovery Act spending.

At the April 2009 hearing of the Transportation and Infrastructure Committee, the EPA Inspector General (IG) testified that EPA and its grantees would likely be challenged to spend the Recovery Act funding in a timely manner, as required by the legislation. The IG also observed that, because Recovery Act-funded grants do not require a match by the recipient and the law includes provisions for loan forgiveness, there is risk of fraud, waste, and abuse that EPA will need to monitor closely.[15] At a November hearing, Members expressed concern about the ability of some states to meet the February 17, 2010, statutory deadline to have ARRA-funded wastewater and drinking water projects under contract. EPA officials acknowledged the concern, but said then that the agency was working to help states, so as to avoid having to reallocate funds: as previously described, all states made the deadline, and no funds were reallocated. Many states have been challenged by the Buy American and "green infrastructure" requirements of the law, according to EPA.

Water Resources

The federal government has a long history of involvement in water resource development projects, such as dams, levees, coastal protection, and navigation works, to facilitate navigation, expand irrigated agriculture, and reduce flood losses. More recently, Congress has authorized and funded federal projects and programs to restore aquatic ecosystems, develop water recycling projects, and construct western rural water supply projects.

At the federal level, these activities are principally the responsibility of two agencies. Under its civil works program, the U.S. Army Corps of Engineers (Corps, Department of Defense) constructs and operates primarily navigation, flood, coastal protection, and aquatic restoration

[15] U.S. Environmental Protection Agency, Office of Inspector General, *EPA Action Needed to Ensure Drinking Water State Revolving Fund Projects Meet the American Recovery and Reinvestment Act Deadline of February 17, 2010,* Audit Briefing Report No. 10-R-0049, December 17, 2009.

throughout the country. The Bureau of Reclamation (Reclamation, Department of the Interior) is authorized to construct and manage multi-purpose projects serving irrigation, municipal and industrial water supply, flood control, power production, and recreation purposes in the 17 western states.[16] Congress provides appropriations to support these activities through annual Energy and Water Development appropriations bills.

The economic recovery legislation provides supplemental funding above regular appropriations for the Corps, Reclamation, and other water resources activities at the Department of Agriculture's Natural Resources Conservation Service (NRCS) and the Department of State's International Boundary and Water Commission (IBWC). The general provisions of P.L. 111-5 concerning preference for projects that can start quickly, obligation deadlines, and Buy American and prevailing wage requirements, described above, also apply to all of these water resources projects and activities.

Corps of Engineers Projects

P.L. 111-5 provides a total of $4.6 billion for the Corps. All of the funds go toward Corps civil works activities, however, some of the funds are directed toward activities other than federal water resources projects—$25 million for the Corps regulatory program and $25 million for the Formerly Utilized Sites Remedial Action Program (FUSRAP), a program to investigate and clean up or control sites that were part of the early atomic energy and weapons program. The legislation also reserves $200 million for water-related environmental infrastructure projects, which are projects more similar to the municipal water and wastewater systems previously discussed, than the Corps' primary flood, navigation, and aquatic restoration missions.[17]

P.L. 111-5 directs that the ARRA funds be used for either entire projects, programs, or activities, or elements of those. It states that funds are directed to activities that can be completed with the stimulus funds, and that do not create future budgetary obligations. It also states that funds shall only be used for programs, projects, or activities that "heretofore or hereafter" receive funds provided in Energy and Water Development appropriations acts.[18] P.L. 111-5 authorizes unlimited reprogramming authority for Corps funds provided under the legislation. It requires quarterly reports to the House and Senate Appropriations Committees on the allocation, obligation, and expenditure of the funds.

Bureau of Reclamation Projects and Programs

ARRA provides a total of $1.0 billion for Reclamation projects and programs. The law directs that the funds be used for projects, programs, or activities that can be completed with these funding amounts, and that do not create future budgetary obligations. It also authorizes unlimited reprogramming authority for Reclamation funds provided under the legislation.

[16] For more information, see CRS Report R40180, *Water Resources Issues in the 111th Congress*, coordinated by Betsy A. Cody.

[17] For information on Corps environmental infrastructure projects, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, coordinated by Claudia Copeland.

[18] This statutory language may indicate that not only may projects previously funded be eligible for stimulus funds, but also activities funded in subsequent legislation, such as regular FY2009 appropriations legislation, which Congress enacted in March 2009 (P.L. 111-8), after enactment of the ARRA.

Of the total ARRA funds for Reclamation, P.L. 111-5 provides $126 million for water reclamation and reuse projects (Title XVI projects, which typically treat municipal wastewater for reuse rather than discharge or desalinate brackish groundwater or seawater). The law also provides $50 million for projects under the Central Utah Project Completion Act, $50 million for California Bay-Delta projects, $60 million for rural water projects, and $10 million for inspection of canals in urbanized areas, amounts that were proposed by the Senate.

The Recovery Act also authorizes Reclamation to extend up to 50 years, with interest, the timeframe for water supply customers to repay the U.S. government for extraordinary maintenance and replacement of facilities. Short repayment times for major maintenance and rehabilitation projects have been of great concern to Reclamation water users in recent years, and are a growing concern as existing infrastructure ages. In the earlier House and Senate versions of the bill, Reclamation would have been authorized to extend repayment up to 25 years without interest.

Agricultural Watershed Programs

Under several small watershed programs, NRCS provides technical advisory services and financial assistance (partial grants) to state and local organizations to plan and install measures to prevent erosion, sedimentation, and flood damage to conserve, develop, and utilize land and water resources. The programs fund land treatment, and nonstructural and structural facilities for flood prevention, erosion reduction, agricultural water management, public recreation development, fish and wildlife habitat development, and municipal or industrial water supplies. Structural measures can include dams, levees, canals, pumping plants, and other facilities.[19] Agricultural watershed programs have existing formulas for allocating program funding. Factors considered include risk to life, flood damage reduction, water conservation, water quality, and erosion control, to name a few.[20]

P.L. 111-5 provides ARRA funding for three agricultural watershed programs. One is Watershed and Flood Prevention Operations, used to design and build flood prevention, water quality improvement, and similar projects. The enacted legislation provides $290 million divided in half, with $145 million for Watershed and Flood Prevention Operations and $145 million to purchase and restore floodplain easements though the Emergency Watershed Protection program. Under a floodplain easement, a landowner voluntarily offers to sell NRCS a permanent conservation easement that provides NRCS with full authority to restore and enhance the floodplain's functions and values. The third program is Watershed Rehabilitation, which rehabilitates dam projects previously constructed with NRCS assistance that have reached the end of their engineering design life. P.L. 111-5 provides $50 million for these activities. This amount is equal to 4.5 times the appropriations for these NRCS activities in FY2009 (which were enacted in March 2009). ARRA requires that spending be used to fully fund projects that can be completed and allocated to projects that can be commenced promptly. The conference report, H.Rept. 111-16, provides further direction to USDA on prioritization of the funds.

[19] For information, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, coordinated by Claudia Copeland.

[20] These formulas are established by NRCS and are made publicly available through its website. For the NRCS FY2009 fund allocation formulas and methodologies, see http://www.nrcs.usda.gov/programs/pdf_files/2009_Allocation_Formulas.pdf.

International Boundary and Water Commission Projects

The Recovery Act includes $220 million for the International Boundary and Water Commission for its water quantity program. The bill directs that IBWC use the funds for immediate repair and rehabilitation requirements. The four projects specified to receive the funds (Rio Grande Flood Control System, Safety of Dams, Colorado Boundary; and Capacity Preservation) are for flood damage reduction infrastructure upgrades (i.e., levee improvements and dam safety measures).

Implementation and Oversight

Unlike some of the other water infrastructure activities funded in the legislation (including the EPA wastewater and drinking water programs discussed previously), little was publicly known about how most of the water resources funds would be distributed when P.L. 111-5 was enacted. Generally, formulas are not used to distribute funds to the Bureau of Reclamation and Corps of Engineers. Instead, Congress typically, in either the text or report language of appropriations bills, distributes most of the appropriated funds across individual Corps and Bureau projects or programs, or the distribution is delegated to the agency. In contrast, P.L. 111-5 and the conference report (H.Rept. 111-16) list broad prioritization criteria and identified several broad categories in which it expects the agencies to allocate funds. Until the Administration notified Congress on how it chose to distribute the funds (discussed below), it was largely unknown which projects would be funded and how much assistance each state would receive.

When ARRA was enacted, questions were raised whether federal water resources agencies and contracting officers would be able to put the funds to use within the deadlines established in the bill; these questions arose in part because of the complexity of the projects' planning and construction processes and the contracting officer's existing workloads and processes. The amounts in P.L. 111-5 represent roughly 80% of the typical annual Corps appropriations, 80% of the typical Reclamation appropriations, and 4.5 times NRCS's current annual agricultural watershed funding.

Army Corps of Engineers

In P.L. 111-5, Congress appropriated $4.6 billion in funding among six Corps accounts, including approximately $2 billion for activities funded in the Operation and Maintenance account; $2 billion for projects in the Construction account; $375 million in the Mississippi River and Tributaries account; $25 million in the Investigations account; $25 million in the Regulatory account; and $100 million under the FUSRAP account. The Corps released its list of projects to receive ARRA funds on April 28, 2009, and subsequently made multiple updates to the list.[21] Of the total funding directed to the Corps, the Administration budgeted $4.4 billion across 1,182 water projects in 49 states and nine FUSRAP sites; it also reserved $200 million in order to cover cost contingencies for these projects.

[21] For a list of how the ARRA funds are distributed across the projects, see http://www.usace.army.mil/recovery/Pages/Projects.aspx. For a map of where the ARRA projects are located, see http://www.usace.army.mil/recovery/Pages/ProjectLocations.aspx. Corps projects receiving ARRA funds are located in 49 states and Puerto Rico; according to the Corps, Wyoming had no eligible projects.

According to the Corps, the Administration arrived at its ARRA project list using the criteria in P.L. 111-5, its conference report, long-standing executive branch policy, and policy established for distributing ARRA funds. As a result, only those projects that had been reviewed by the Assistant Secretary of the Army (Civil Works) and approved by the Office of Management and Budget were eligible. For example, the Corps is authorized to conduct beach nourishment projects, which place sand on beaches to reduce property damage from coastal storms.[22] However, Administration policy has been to not fund these projects in recent budget requests, therefore they were not included in the ARRA project list. There has been criticism by some Members of Congress and other stakeholders regarding the exclusion of beach nourishment projects from the ARRA list and also regarding the project list's exclusion of all "new starts."

In 2009, the House Transportation and Infrastructure Committee held oversight hearings that included testimony on Corps ARRA implementation on April 29, July 31, and November 4. Most recently, the committee held a hearing on Corps ARRA oversight on February 23, 2010. Concerns had previously been raised about Corps projects not moving as quickly as hoped. As of May 7, 2010, the Corps had obligated $3.54 billion (77% of its ARRA funds) and outlaid $1.32 billion (29%).[23] At an earlier hearing, the Corps indicated in testimony that bids for some ARRA contracts were lower than anticipated; consequently, some ARRA funds may be available for additional projects.[24] In February, the Corps estimated that ARRA funds had helped create or maintain 5,800 jobs, and that 74% of contract actions have been awarded to small businesses.[25]

Bureau of Reclamation

Reclamation announced its first outline of projects to be funded under ARRA on April 15, 2009.[26] The agency announced that a total of $945 million in funding was to be awarded to projects in six program areas—meeting future water supply needs ($450.9 million); infrastructure reliability and safety ($164.6 million); environmental/ecosystem restoration ($236.3 million); green buildings ($13.5 million); water conservation challenge grants ($40.0 million); and emergency drought relief $40.0 million. An additional $50 million was to be transferred to the Department of the Interior's Central Utah Project Completion Act effort, and $5 million was to be set aside for management and oversight.

The House Natural Resources Water and Power Subcommittee held an oversight hearing on Reclamation ARRA funding on April 28, 2009. Several Members of Congress and witnesses questioned why there was not more emergency drought funding, while others questioned a

[22] In Section 2018 of the Water Resources Development Act of 2007 (P.L. 110-114), Congress stated that it is the policy of the United States to promote beach nourishment.

[23] See Reporting data for week of May 7, 2010 at http://www.recovery.gov/Transparency/agency/reporting/agency_reporting2.aspx?agency_code=96&dt=05/07/2010.

[24] Oral testimony, Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Words), before the House Transportation and Infrastructure Subcommittee on Water Resources and Environment, at the Hearing on Recovery Act: Progress Report on Water Resource Infrastructure Investment, on November 4, 2009, available at http://transportation.house.gov/hearings/hearingDetail.aspx?NewsID=1037.

[25] Complete Statement of Terence C. Salt, Principal Deputy Assistant Secretary of the Army (Civil Works) before the U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Water Resources and Environment, *Recovery Act: Progress Report on Water Infrastructure Investment*, 111th Cong., 2nd sess., February 23, 2010, available at http://transportation.house.gov/Media/file/Full%20Committee/20100223/Darcy%20Salt.pdf.

[26] See http://recovery.doi.gov/press/bureaus/bureau-of-reclamation/summary-of-projects/#meeting. Reclamation's evaluation and selection criteria for developing the list is at http://recovery.doi.gov/docs/bor/project_criteria.pdf.

perceived high level of spending on environmental and ecosystem restoration projects. In response, the Reclamation witness noted that much of the environmental/ecosystem spending could be directly or indirectly tied to water supply reliability and that drought projects had not been fully identified.[27] At a House Appropriations Energy and Water Development Subcommittee hearing on the FY2011 budget on April 14, 2010, several Members voiced concerns related to ARRA funding. Issues raised included concerns related to the potential inclusion of new construction starts and unauthorized funding included in ARRA project lists, as well as potential reallocations for projects coming in under budgeted levels and the schedule for remaining project obligations. Additionally, legislation has been introduced that would provide Reclamation with the authority to redirect ARRA funding toward the non-federal cost share for projects that reduce the impacts of severe drought in certain areas of California and other western states. Reclamation raised concerns with these provisions at a House Natural Resources Water and Power Subcommittee hearing on February 4, 2010.[28] To date, no further action has occurred.

Of the $451 million for water supply needs, the Department of the Interior estimates that $135 million will go toward 27 projects authorized under Reclamation's water reuse authority, commonly known as the Title XVI program. Twenty-six of those projects are in California; the one New Mexico project identified in the July 1 list received $2.5 million in ARRA funds. Another $200 million will be used for authorized rural water supply projects.[29]

Since the announcement of initial project allocations in July 2009, Reclamation has funded numerous projects. According to Reclamation, regional funding ranges from $28.3 million for the Upper Colorado Region to $260 million for the Mid-Pacific Region (California and Klamath River Basin).[30] Overall, as of May 7, 2010, Reclamation had obligated $641 million (or 68% or of its ARRA funds) and outlaid $147 million (16%). Reclamation has previously responded to concerns about its rate of obligations by stating that it has a plan in place to ensure all obligations are made by the end of the fiscal year.

Agricultural Watershed Programs

As of May 10, 2010, NRCS has obligated over $196 million, or 57%, of the $340 million available through ARRA.[31] The agency expects the obligation rate to increase as summer construction season commences, thereby obligating all ARRA funds by September 30, 2010. Congressional updates are provided through written testimony at the House Transportation and Infrastructure Committee's periodic ARRA progress hearings.

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[27] Of particular note among the environmental projects was $109 million for a Red Bluff (CA) fish passage facility within Reclamation's Central Valley Project, which received widespread and bipartisan support. The project represents nearly one-third of the environmental and ecosystem ARRA funding outlined by Reclamation; according to Reclamation, the project will help facilitate the delivery of water supplies elsewhere in the CVP service area.

[28] U.S. Congress, House Committee on Natural Resources, Subcommittee on Water and Power, Hearing on H.R. 4225, 111th Cong., 2nd sess., February 4, 2010. Testimony available at http://www.usbr.gov/newsroom/testimony/detail.cfm?RecordID=1561.

[29] For information on these projects, see http://recovery.doi.gov/press/bureaus/bureau-of-reclamation/title-xvi-projects/.

[30] For a breakdown of project funding by region, see http://recovery.doi.gov/press/bureaus/bureau-of-reclamation/#releases.

[31] U.S. Congress, House Committee on Transportation and Infrastructure, *Statement of Dave White, Chief of NRCS USDA*, hearing on the Recovery Act: Progress Report for Infrastructure Investments, 111th Cong., 2nd sess., May 25, 2010.

For Watershed Rehabilitation, 26 aging flood control structures in 11 states were originally selected on April 6, 2009. As of May 10, 2010, NRCS has obligated just over $21 million (42% of the original $50 million) for these projects and construction has begun on four of these dams. Five projects have withdrawn due to engineering challenges, land rights issues, and sponsor cost-share requirements. NRCS announced the allocation of $84.8 million on April 16, 2009, and $42.3 million on June 2, 2009, of the original $145 million for selected projects within the Watershed and Flood Prevention program. As of May 10, 2010, NRCS has obligated $75.2 million (or 52%) and signed 284 contracts for 83 of the 87 planned projects. Of these projects, contracts have been awarded and construction has begun on 53 projects totaling $61.7 million.[32]

NRCS reports obligating over $100 million (69% of the original $145 million) for the purchase of floodplain easements under the Emergency Watershed Program (EWP).[33] Overall EWP floodplain enrollment continues to change due to withdrawals and additions. The application period closed in April 2009, and offers to purchase easements were sent to landowners in July 2009. Since then, 107 transactions were withdrawn, and an additional 74 replacement projects were added. NRCS has closed on 138 easements and made over $46 million in payments. Following the closing of more easements, NRCS anticipates an increase in restoration work to occur over the next 12 months increasing expenditures by $19 million. NRCS initially allocated funds for 289 easement acquisitions covering over 35,000 acres nationwide. Due to the recent changes, the agency now expects to enroll over 38,000 acres on 256 easement acquisitions through ARRA funding.

International Boundary and Water Commission Projects

On March 9, 2009, the Department of State released a list of IBWC levee projects (without funding levels for each project) to receive the ARRA funds.[34] By November, IBWC had awarded contracts or begun construction on a number of projects identified on the list, especially for rehabilitation of portions of the Lower Rio Grande Flood Control Project in Texas.[35] With ARRA and other prior year appropriations, construction for the highest priority IBWC levees is anticipated to be completed by September 2011.

Concluding Thoughts

The infrastructure funding provisions of the Recovery Act raise some general issues. Funding infrastructure is a long-term investment, not quick-fix spending, that should lead to something durable, useful, and financially productive. Water infrastructure projects often involve complicated planning and construction efforts that span multiple years. The long-term nature of such investments can be at odds with the stimulus goal of quickly injecting money into the economy. Thus, one question in debating infrastructure spending as part of economic recovery is, what is truly stimulative? Critics have contended that the haste to fund "ready to go" projects would likely to result in spending on many projects with marginal value, such as projects with

[32] For exact agricultural watershed project locations, see http://www.usda.gov/recovery/map/.

[33] U.S. Congress, House Committee on Transportation and Infrastructure, *Statement of Dave White, Chief of NRCS USDA*, hearing on the Recovery Act: Progress Report for Infrastructure Investments, 111th Cong., 2nd sess., May 25, 2010.

[34] For the project list, see http://www.state.gov/recovery/communications/120222.htm.

[35] For weekly Department of State reports on ARRA financial activity, see http://www.state.gov/recovery/.

plans that have been backlogged for some time because they lack sufficient merit, but were provided opportunity for funding when ARRA was enacted. Assessing the economic and environmental benefits of ARRA projects will take place for some time in the future, particularly because capital projects typically are multi-year investments.

ARRA includes a number of oversight measures.[36] However, these appear to be focused on the important issues of identifying waste, fraud, and abuse, and ensuring compliance with applicable standards and competition requirements in contracts and grants, but not necessarily on evaluating or ensuring the quality of funded projects. That responsibility resides with officials at all levels of government, including those who are making project funding decisions, and those charged with providing oversight and monitoring of grants and contracts. Federal agencies are likely to face challenges in managing recipients' activities in order to achieve ARRA's goals and requirements, while ensuring that expenditures begin quickly.

ARRA provided emergency supplemental appropriations for FY2009 and FY2010 for a number of existing federal programs.[37] The law was unusual in many respects, including the fact that the FY2009 supplemental funds in the legislation were enacted before resolution of the regular FY2009 appropriations for most agencies, which were contained in a full-year omnibus appropriations bill that the President signed on March 11, 2009 (P.L. 111-8). The regular FY2009 appropriations for water infrastructure programs provided in that legislation were about the same as in FY2008.

As described in this report, some of the water infrastructure funds included in the Recovery Act represented a significant increase above recent program funding levels—for some, from three to four times higher than the FY2009 amount. Many infrastructure stakeholder groups then urged Congress to sustain similar high levels in regular appropriations in FY2010 and beyond, because infrastructure projects typically involve outlays over multiple years. They argued that individual project planning and implementation would be disrupted if federal assistance is uneven or unpredictable, very large one year and much lower the next year. But because the infrastructure funds in P.L. 111-5 are to be available for obligation through FY2010 and will be spent out over several years,[38] some policymakers argued that it would not be necessary to appropriate increased levels for these programs in FY2010.

Still, with Administration support in the FY2010 budget request, regular FY2010 appropriations for the water infrastructure programs discussed in this report, which were enacted later in 2009, were for the most part slightly higher than regular FY2009 appropriations, but generally not as large as the substantial supplemental amounts that agencies received under ARRA. Whether it will be possible to sustain high spending levels for these programs in future years, beyond the

[36] The legislation provides oversight funds for federal agency Inspectors General and for the Government Accountability Office. It also establishes a Recovery Accountability and Transparency Board to coordinate and conduct oversight and to report quarterly to the President and Congress.

[37] By designating the appropriations as emergency spending, the discretionary spending in the bill was not subject to the constraints of the congressional budget resolution (S.Con.Res. 21, 110th Congress) under provisions of the Congressional Budget Act of 1974. For information, see CRS Report RL34711, *Consolidated Appropriations Act for FY2009 (P.L. 110-329): An Overview*, by Robert Keith.

[38] For example, the Congressional Budget Office estimated that 55% of the EPA SRF capitalization grant funds in the legislation will be spent in Fiscal Years 2010 and 2011. Only 3% will be spent in FY2009. A total of 79% will be spent between FY2009 and FY2012. Letter from Douglas W. Elmendorf, Director, Congressional Budget Office, to Honorable Nancy Pelosi, Speaker, U.S. House of Representatives, February 13, 2009, http://www.cbo.gov/ftpdocs/99xx/doc9989/hr1conference.pdf.

period covered by P.L. 111-5, is uncertain because of the significant fiscal challenges that policymakers face, but it is likely that there will continue to be calls for Congress to do that very thing.

Appendix. State Allocation of EPA Wastewater and Drinking Water Funds in ARRA

Table A-1. State Allocation of EPA Wastewater and Drinking Water Funds in the American Recovery and Reinvestment Act of 2009 (P.L. 111-5)

(Millions of Dollars)

STATES	CLEAN WATER SRF FUNDS ($4 BILLION)	DRINKING WATER SRF FUNDS ($2 BILLION)
Alabama	$44.3	$19.5
Alaska	$23.7	$19.5
Arizona	$26.7	$55.3
Arkansas	$25.9	$24.5
California	$283.1	$159.0
Colorado	$31.7	$34.4
Connecticut	$48.5	$19.5
Delaware	$19.4	$19.5
District of Columbia	$19.4	$19.5
Florida	$133.6	$88.1
Georgia	$66.9	$54.8
Hawaii	$30.7	$19.5
Idaho	$19.4	$19.5
Illinois	$179.0	$79.5
Indiana	95.4	$27.2
Iowa	$53.6	$24.3
Kansas	$35.7	$19.5
Kentucky	$50.4	$20.5
Louisiana	$43.5	$27.6
Maine	$30.6	$19.5
Maryland	$95.7	$26.8
Massachusetts	$134.4	$52.2
Michigan	$170.2	$67.5
Minnesota	$72.8	$35.1
Mississippi	$35/7	$19.5
Missouri	$109.7	$37.9
Montana	$19.4	$19.5
Nebraska	$20.2	$19.5
Nevada	$19.4	$19.5

STATES	CLEAN WATER SRF FUNDS ($4 BILLION)	DRINKING WATER SRF FUNDS ($2 BILLION)
New Hampshire	$39.6	$39.5
New Jersey	$161.8	$43.2
New Mexico	$19.4	$19.5
New York	$436.9	$86.8
North Carolina	$71.4	$65.6
North Dakota	$19.4	$19.5
Ohio	$222.9	$58.5
Oklahoma	$32.0	$31.5
Oregon	$44.7	$28.5
Pennsylvania	$156.8	$65.7
Rhode Island	$26.6	$19.5
South Carolina	$40.6	$19.5
South Dakota	$19.4	$19.5
Tennessee	$57.5	$20.2
Texas	$180.9	$160.7
Utah	$20.9	$19.5
Vermont	$19.4	$19.5
Virginia	$81.0	$20.8
Washington	$68.8	$41.8
West Virginia	$61.7	$19.5
Wisconsin	$107.0	$37.8
Wyoming	$19.4	$19.5
American Samoa	$3.6	$0.5
Guam	$2.6	$2.1
Northern Mariana Islands	$1.7	$1.8
Puerto Rico	$51.6	$19.5
Virgin Islands	$2.1	$2.0
TOTAL	$3,909.0	$1,950.0

Source: EPA (http://www.epa.gov/recovery/docs/Final_SRF_eco_recovery_allotments.pdf)

Note: Individual state allocations and totals reflect the fact that under the legislation, before funds are allocated to states, 1.5% was reserved for EPA to provide assistance to Indian Tribes, consistent with current law. Also, an additional 1.0% was reserved from the combined funds for program oversight by EPA, for a total of 2.5% in reserved funds.

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