

## WikiLeaks Document Release

http://wikileaks.org/wiki/CRS-RS22248 February 2, 2009

# Congressional Research Service Report RS22248

### Federal Disaster and Emergency Assistance for Water Infrastructure Facilities and Supplies

Claudia Copeland, Mary Tiemann, and Nicole T. Carter, Resources, Science, and Industry Division September 9, 2005

Abstract. Natural and other disasters, such as Hurricane Katrina, can impair, contaminate, or destroy public water systems, including treatment facilities and distribution systems. Costs of addressing such damage can be substantial, while the potential public health and safety consequences of lost or impaired water supplies necessitate rapid responses. Natural and other disasters also can have calamitous impacts on other water infrastructure facilities, such as wastewater treatment plants and flood control systems. To help address such emergencies, Congress has authorized programs over the years that can provide emergency assistance to repair and restore drinking water, wastewater, and related water infrastructure systems and facilities. This report offers information on federal programs that can provide emergency drinking water, wastewater, and related assistance. These include the Public Assistance grant program (Federal Emergency Management Agency), Emergency and Imminent Community Water Assistance Grant Program and Emergency Watershed Protection Program (U.S. Department of Agriculture), Drinking Water Emergency Assistance (Environmental Protection Agency), and flood control and coastal emergency response (Department of Defense, Army Corps of Engineers). (For a review of other federal water assistance programs, see CRS Report RL30478, Federally Supported Water Supply and Wastewater Treatment Programs.)



# **CRS** Report for Congress

Received through the CRS Web

# Federal Disaster and Emergency Assistance for Water Infrastructure Facilities and Supplies

Claudia Copeland and Mary Tiemann Specialists in Environmental Policy Resources, Science, and Industry Division

Nicole T. Carter
Analyst in Environmental Policy
Resources, Science, and Industry Division

#### **Summary**

Natural and other disasters, such as Hurricane Katrina, can impair, contaminate, or destroy public water systems, including treatment facilities and distribution systems. Costs of addressing such damage can be substantial, while the potential public health and safety consequences of lost or impaired water supplies necessitate rapid responses. Natural and other disasters also can have calamitous impacts on other water infrastructure facilities, such as wastewater treatment plants and flood control systems. To help address such emergencies, Congress has authorized programs over the years that can provide emergency assistance to repair and restore drinking water, wastewater, and related water infrastructure systems and facilities. This report offers information on federal programs that can provide emergency drinking water, wastewater, and related assistance. These include the Public Assistance grant program (Federal Emergency Management Agency), Emergency and Imminent Community Water Assistance Grant Program and Emergency Watershed Protection Program (U.S. Department of Agriculture), Drinking Water Emergency Assistance (Environmental Protection Agency), and flood control and coastal emergency response (Department of Defense, Army Corps of Engineers). This report will be updated to reflect developments. (For a review of other federal water assistance programs, see CRS Report RL30478, Federally Supported Water Supply and Wastewater Treatment Programs.)

Following natural disasters and other calamities, the immediate recovery tasks involve assistance for individual victims. In addition, communities also often face the necessity of repairing critical infrastructure systems that sustain essential services to the affected population. Among the most important of these are water infrastructure systems: drinking water treatment and distribution systems that provide safe and healthy potable water, as well as water supply needed for fire-fighting efforts; sewage collection and

treatment systems; and water and flood control works to drain flood waters and repair levees and floodwalls. This report describes several federal programs that can provide emergency assistance for needed activities so that communities are able to respond to disasters and restore drinking water, wastewater, and related facilities and services. The most important of these is the Public Assistance program administered by the Federal Emergency Management Agency (FEMA). Other programs of the U.S. Department of Agriculture, Environmental Protection Agency, and U.S. Army Corps of Engineers may also provide emergency assistance and are described below. (For information on Corps activities related to New Orleans levee and floodwall infrastructure, see CRS Report RS22238, *New Orleans Levees and Floodwalls: Hurricane Damage Protection*, by Nicole T. Carter.)

#### **Federal Emergency Management Agency**

Repair, Restoration, and Replacement of Damaged Facilities (Public Assistance Grant Program). The Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act) authorizes the primary disaster assistance program for state and local governments overwhelmed by catastrophes. Programs authorized by the Stafford Act are administered by FEMA. State and local governments and certain private nonprofit organizations¹ are eligible to receive Public Assistance program grants to repair, replace, or restore disaster-damaged, publicly owned facilities. A wide range of activities are eligible for funding under this program, including repair of water treatment and distribution systems, sewage collection and treatment facilities, power generation facilities and distribution lines, water control facilities (including drainage channels, pumping facilities, and emergency repair of levees²), roads and bridges, and removal of debris. To be eligible, the work must be required as the result of a disaster, be located within the designated disaster areas, and be the legal responsibility of an eligible applicant. The statute states that the federal share shall not be less than 75% of the eligible cost of repair, restoration, reconstruction, or replacement.

Work that is eligible for federal disaster grant assistance is classified as either emergency work or permanent work under FEMA regulations (44 C.F.R. 206.204). Emergency work involves work that must be done immediately to save lives and to protect property, public health and safety, or to avert or lessen the threat of a major disaster. Emergency work generally lasts no more than six months, and includes such activities as debris removal and demolition of unsafe structures. Permanent work is intended to restore a damaged facility to its pre-disaster design, and must be completed within 18 months after an emergency is declared. States may extend the deadlines for an additional six months for emergency work, and an additional 30 months for permanent work. Work can range from minor repairs to replacement. Categories of permanent work include utility distribution systems, such as water treatment and delivery systems, sewage collection and treatment facilities, and power generation facility and distribution lines.

<sup>&</sup>lt;sup>1</sup> Eligible private nonprofit organizations are those that provide critical services that are available to the general public. Critical services are defined to include power, water, sewer, wastewater treatment, communications, and emergency medical care (42 U.S.C. 5172(a)(3)(B)).

<sup>&</sup>lt;sup>2</sup> Permanent repair of flood control works is the responsibility of the U.S. Army Corps of Engineers and the Natural Resources Conservation Services, U.S. Department of Agriculture.

Congress appropriates funds annually to the Disaster Relief Fund for this program and for other categories of aid authorized under the Stafford Act (i.e., individual and household assistance, and state hazard mitigation assistance) to ensure that assistance is available when disasters occur. In most years, supplemental appropriations also have been made in response to specific natural disasters. For FY2004, Congress originally appropriated \$1.8 billion, and made supplemental appropriations of \$2.275 billion. For FY2005, original appropriations were \$2.042 billion, while supplemental appropriations reached \$8.5 billion. (For further information, see CRS Report RL33053, Federal Stafford Act Disaster Assistance: Presidential Declarations, Eligible Activities, and Funding, by Keith Bea, and CRS Report RL31734, Federal Disaster Recovery Programs: Brief Summaries, by Mary Jordan.)

**Statutory Authority.** The Public Assistance grant program is authorized under Section 406, Stafford Act, 42 U.S.C. 5172(a). For more information, see [http://www.fema.gov/rrr/pa/].<sup>3</sup>

#### U.S. Department of Agriculture

Emergency and Imminent Community Water Assistance Grants. The Rural Utilities Service (RUS), within the USDA, is authorized to help rural residents where a significant decline in quantity or quality of drinking water exists or is imminent and funds are needed to obtain adequate quantities of water that meet standards of the Safe Drinking Water Act or the Clean Water Act. Grants, ranging from \$10,000 to a maximum of \$500,000, are provided for projects to serve a rural area with a population of 10,000 or less that has a median household income not in excess of the statewide non-metropolitan median household income. Grants for repairs, partial replacement, or significant maintenance of an established system may be made for 100% of project cost, but cannot exceed \$150,000. Communities use the funds for new systems, waterline extensions, construction of water sources and treatment facilities, and repairs or renovation of existing systems. Grants are made for projects needed to meet health or sanitary standards, including Clean Water Act and Safe Drinking Water Act standards and requirements. Applicants compete on a national basis for available funding.

The 2002 farm bill (Farm Security and Rural Investment Act of 2002, P.L. 107-171) authorized \$35 million per year through FY2007 for this program and made funding for it mandatory through reservation of 3% to 5% of appropriated water and waste disposal grant funds. Amounts provided through this program have been quite variable over time. In FY2002, emergency grants totaling \$2.96 million were made by RUS to projects in six states; in FY2003, \$16.6 million was distributed for 63 projects in 24 states; and in FY2004, \$15.2 million was distributed for 64 projects in 21 states. For FY2005,

<sup>&</sup>lt;sup>3</sup> In the event of a major disaster, the Stafford Act also authorizes the President, acting through FEMA, to direct federal agencies (with or without reimbursement) to use their authorities and resources under federal law (including personnel, equipment, supplies, facilities, and technical services) in support of state and local assistance efforts (42 U.S.C. 5170). Under this authority, many agencies are providing a wide range of assistance to areas affected by Hurricane Katrina, including in the area of water supply. For example, the U.S. Navy and the Bureau of Reclamation, Department of the Interior, have sent to Mississippi water purification units that can provide up to 200,000 gallons of drinking water per day.

Congress appropriated \$22.9 million for emergency and imminent community water assistance grants.

**Statutory Authority.** Statutory authority for the emergency and imminent community water assistance program is the Consolidated Farm and Rural Development Act, as amended, Section 306A, 7 U.S.C. 1926a. For additional information on RUS water programs, see [http://www.usda.gov/rus/water/index.htm].

Emergency Watershed Protection and Restoration. The Natural Resources Conservation Service (NRCS) of the USDA administers several authorities for measures to prevent erosion and flood damages and to conserve, develop, and utilize land and water resources. One of these is the Emergency Watershed Protection (EWP) program, which is used to restore the natural functions of a watershed after a natural disaster has occurred. This program is designed to help people and conserve natural resources by relieving imminent hazards to life and property caused by floods, fires, windstorms, and other natural occurrences. It is an emergency recovery program.

EWP work is not limited to any one set of prescribed measures and can include removing debris from stream channels, road culverts, and bridges; reshaping and protecting eroded banks; correcting damaged drainage facilities; repairing levees and structures; and purchasing floodplain easements. All EWP work must reduce threats to life and property and must be economically, environmentally, and socially defensible and sound from a technical standpoint. NRCS makes case-by-case investigations of the completed work.

EWP funds have a number of significant restrictions. For example, EWP cannot solve problems that existed before the disaster or improve the level of protection above that which existed before a disaster. It cannot fund operation and maintenance work or repair private or public transportation facilities or utilities. The work cannot be used to install measures not essential to the reduction of hazards. In addition, funds cannot be used to perform work on structures installed by another federal agency.

Appropriations vary widely from year to year, and activity levels can vary widely from year to year and place to place. Spending is dependent upon supplemental congressional appropriations and is usually made available in emergency supplemental legislation. For example, in FY2005, Congress provided \$250 million in P.L. 108-324 (emergency supplemental appropriations for FY2005) to repair damages to waterways and watersheds resulting from natural disasters, with the largest amount (\$120 million) going to Florida to respond to damage caused there by hurricanes in 2004. In FY2004, Congress provided \$150 million for use in southern California for a wildfire and tree mortality emergency. According to USDA, over the past 10 years, an average of \$120 million per year has been appropriated for EWP work. Approximately two-thirds of the events that trigger EWP assistance are local in nature and not presidentially declared disasters.

**Statutory Authority.** The program is authorized by Section 216, P.L. 81-516, 33 U.S.C. 701b1, and Sections 403-405, P.L. 95-334, 16 U.S.C. 2203-2205. For additional information, see [http://www.nrcs.usda/programs/ewp/index.html].

#### **Environmental Protection Agency (EPA)**

**Drinking Water Emergency Assistance.** The Safe Drinking Water Act (SDWA) authorizes EPA to provide technical assistance and to make grants to states and public water systems to assist in responding to and alleviating emergency situations affecting public water systems (including sources of water for such systems) which the Administrator determines to present substantial danger to the public health.<sup>4</sup> Grants may be used to support those actions which (1) are necessary for preventing, limiting, or mitigating danger to the public health in such emergency situations, and (2) would not, in the judgement of the Administrator, be taken without such emergency assistance. The law specifies that the Administrator may carry out this program as part of, and in accordance with the terms and conditions of, any other program of assistance for environmental emergencies that EPA is authorized to carry out under any other provision of law.

In the Public Health Security and Bioterrorism Preparedness and Response Act (P.L. 107-188, Section 403), Congress amended SDWA Subsection 1442(d) to authorize appropriations for this emergency assistance of \$35 million for FY2002, and such sums as may be necessary for each fiscal year thereafter. Under this authority, for the past several fiscal years EPA has requested and received approximately \$5 million for grants to states to support homeland security coordination work involving EPA and drinking water utilities.

**Statutory Authority.** The statutory authority for this emergency drinking water assistance is the Safe Drinking Water Act, Section 1442(b), 42 U.S.C. 300j-1.

#### **Department of Defense, Army Corps of Engineers**

The U.S. Army Corps of Engineers (Corps), within the Department of Defense (DOD), has military and civilian responsibilities. Under its civil works program at the direction of Congress, the Corps plans, constructs, operates, and maintains a wide range of water resources facilities. The agency also has authorities for emergency assistance and has responsibilities under the National Response Plan.<sup>5</sup>

Flood Control and Coastal Emergencies. P.L. 84-99 (33 U.S.C. 701n) provides the Corps authority for emergency response and disaster assistance, including

<sup>&</sup>lt;sup>4</sup> In contrast, the Clean Water Act does not provide for emergency financial assistance for repairs to wastewater treatment and related water infrastructure facilities that may have been damaged by a natural disaster. It does authorize a financial assistance program to enable communities to construct or upgrade municipal sewage treatment plants to achieve prescribed performance levels (the clean water state revolving fund loan program). However, eligible activities under this program do not include response to emergency situations. (For information on this program, see discussion in CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs.*)

<sup>&</sup>lt;sup>5</sup> Section 502(6) of the Homeland Security Act of 2002 authorized the Secretary of Homeland Security to consolidate federal government emergency response plans into a single, coordinated National Response Plan (NRP). The text of the NRP is available at [http://www.dhs.gov/dhspublic/display?theme+14&content=4264], visited September 2, 2005.

provision of emergency water. It authorizes disaster preparedness, advance measures, emergency operations (disaster response and post-flood response), rehabilitation of flood control works threatened or destroyed by flood, protection or repair of federally authorized shore protection works threatened or destroyed by coastal storm, emergency dredging, and flood-related rescue operations. This authority was expanded by Section 917 of the Water Resources Development Act of 1986 (P.L. 99-662), which authorizes the Corps to provide emergency response assistance for up to 10 days following an emergency and before the presidential declaration of an emergency. Activities are limited to actions to save lives and protect improved property (public facilities/services and residential or commercial developments).

Appropriations for these activities often are included in the annual Energy and Water Development appropriations acts as part of the agency's civil works budget, and are sometimes included in emergency supplemental appropriations for emergency response activities. The levels of appropriations for work conducted under this authority have varied (e.g., \$60 million in FY2004, and \$15 million in FY2003).

The Stafford Act. The Stafford Act (42 U.S.C. 5170b) authorizes FEMA to direct DOD to use its resources to provide assistance in the event of a major disaster or emergency declaration by the President. Under the National Response Plan, which is administered by the Department of Homeland Security, the DOD is responsible for emergency support for public works and engineering. The Corps is the designated operating agent for DOD in executing these activities. Public works and engineering support include technical advice and evaluations, engineering services, construction management and inspection, emergency contracting, emergency power, emergency repair of wastewater and solid waste facilities, and real estate support. This includes restoring critical public services and facilities, including supply of adequate amounts of potable water, temporary restoration of water supply systems, and the provision of water for firefighting. The Corps funding for these activities is provided through mission assignments made by FEMA and paid for from the Disaster Relief Fund.

**Statutory Authority.** The Corps of Engineers emergency and disaster-related activities are authorized by P.L. 84-99, Section 216, 33 U.S.C. 701n.<sup>6</sup> For additional information, see [http://www.usace.army.mil/inet/functions/cw/cecwo/readness.htm].

<sup>&</sup>lt;sup>6</sup> In addition to the Corps' emergency authorities for water supply and infrastructure discussed herein, the Corps also has for its broader water resources missions other emergency authorities (e.g., an Emergency Streambank and Shoreline Erosion Protection program) and recovery-related authorities (e.g., a Snagging and Clearing for Flood Control program).