

# CRS Report for Congress

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## Water Resource Issues in the 109<sup>th</sup> Congress

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### Summary

Budgetary constraints, conflicting policy objectives, adverse environmental impacts and a demand for local control, all contribute to controversies and trade-offs surrounding water resources development and management. Hurricane Katrina brought to the forefront long-simmering policy disputes involving local control, federal financing, environmental and social tradeoffs, and multi-level accountability and responsibility for water infrastructure projects, such as levees. Construction, improvement, and management of other federal water resource projects (e.g., locks, dams, and diversion facilities) face similar challenges.

The 109<sup>th</sup> Congress faces numerous questions as it considers water resource development, technology, and water supply bills, in the second session. Do projects that meet local needs also contribute to national economic development (an evaluation criterion for federal participation), or are the benefits concentrated locally or regionally? What environmental and social impacts (and benefits) result, and what trade-offs are appropriate? Once projects are constructed, who controls them and who pays for maintenance and operation? Do project operations conflict with environmental requirements? How can project impacts be mitigated while minimizing costs to project users? These questions and others are likely to arise as Congress debates appropriations for the Bureau of Reclamation and U.S. Army Corps of Engineers for FY2007, contents of a 2006 Water Resources Development Act (WRDA), and agency policy and program changes (e.g. rural water supply, operation of federal projects along the Colorado River, and oversight of California Bay-Delta (CALFED) and Everglades restoration programs). Oversight issues related to Hurricane Katrina and the federal role in hurricane and flood protection, and levee construction and management, also will be on-going during the second session. This report will be updated semi-annually.

## Introduction

Federal water resource construction waned during the last decades of the 20<sup>th</sup> Century in response to fiscal constraints, interest in more local control of water and land resources, and requirements to assess environmental impacts of federal actions and to protect fish and wildlife. This marked the end of expansionist federal policies of the early 20<sup>th</sup> Century that had led to widespread federal investment in dams, navigation locks, irrigation diversions, and levees and basin-wide planning and development efforts. The 2005 hurricane season has brought national attention and interest to long-simmering water policy disputes, such as the trade-offs in national and local benefits, costs, and risks of the current division of responsibilities between local, state, and federal entities.

The 109<sup>th</sup> Congress is faced with deciding whether to change existing policy that defines the federal role in the planning, construction, maintenance, inspection and financing of water resources projects and whether to alter federal investment in water resources research and data collection. Congress makes these decisions within the context of multiple and often conflicting objectives, competing legal decisions, and entrenched institutional mechanisms (e.g., century old water rights, contractual obligations, etc.). Although most water resource legislation typically addresses site-specific needs, certain themes and issues appear in many local and regional water resources conflicts. For example, demand for new project services (e.g., improved navigation, new water supply, improved or new flood control facilities), protection of threatened and endangered species, and water quality concerns are common to many conflicts; however, most legislation on these issues deals with specific sites, such as the Upper Mississippi, Florida Everglades, and the Sacramento and San Joaquin Rivers Delta and its confluence with San Francisco Bay (CALFED).

## Background

The 109<sup>th</sup> Congress in its second session is likely to consider site-specific legislation for coastal Louisiana, Upper Mississippi River-Illinois Waterway System, the Great Lakes, and possibly the Lower Colorado River basin. However, the more typical site-specific legislation, yet on a smaller scale, are the hundreds of individual water resources projects authorized through Water Resources Development Acts and stand alone bills addressing new water supply technologies and augmentation of existing water supplies, rural water supply development, and Indian water rights settlements. On-going oversight of existing laws and projects (e.g. Central Valley Project Improvement Act, flood protection in New Orleans and Sacramento) and project operations is also expected, especially where court decisions, agency actions, or other circumstances, such as drought, may affect project operations (e.g., Colorado, Columbia, Klamath, Missouri, Rio Grande, and San Joaquin rivers). Latent legislative topics that the 109<sup>th</sup> Congress may chose to address in the second session include proposals for national water supply and drought assessments, national water policy coordination and planning, and for financing instruments to address water infrastructure needs such as rehabilitating aging navigation and flood control works and assisting local water entities to comply with federal regulations.

In the West, naturally scarce water supplies and increasing urban populations<sup>1</sup> have spawned new debates over water allocation — particularly over water for threatened or endangered species — and have increased federal-state tensions, since the federal government has generally deferred to state primacy in intrastate water allocation. Western water legislation during the second session of the 109<sup>th</sup> Congress is likely to center on project management and oversight, rural water supply legislation, and the Bureau of Reclamation's Title 16 water reclamation and recycling program. Nationally, congressional attention during the second session of the 109<sup>th</sup> Congress is likely to focus on the federal role in levee construction, maintenance, and evaluation. Hurricane Katrina oversight issues such as how to better coordinate federal activities and how to respond or rebuild in the wake of catastrophic damages will be of particular focus, as will the examination of other areas of the country that may also be vulnerable. Also of concern nationwide is the status of threatened and endangered species and the health of the nation's rivers and riparian areas. Federal obligations to protect threatened and endangered species and other environmental quality requirements have resulted in increased attention to river and watershed restoration efforts. The federal government is involved in several restoration initiatives ranging from the Florida Everglades to the San Francisco Bay-San Joaquin/Sacramento Rivers Delta (Bay-Delta).<sup>2</sup>

At the same time, the demand for traditional or new water supply projects, navigational improvements, flood control projects, and beach and shoreline protection efforts continues. In fact, both the Everglades and Bay-Delta restoration efforts include significant water supply components. Controversy over how much water should be divided among recovering threatened and endangered species, protecting water quality, and supplying farms, cities, and other uses has been on-going. Further, widespread drought throughout different parts of the country over the past several years has spurred new requests for support for developing and ensuring dwindling water supplies, and new security threats to water infrastructure have placed added pressures on budgetary resources. The 109<sup>th</sup> Congress has pending several national water policy proposals ranging from new water study commissions and assessments, and rural water supply initiatives, to global sanitation and drinking water aid.

These issues will continue to be debated during consideration of individual project authorizations, as well as during debate on water resource development legislation and on FY2007 appropriations for the Bureau and the Corps. Specific issues that are being or are likely to be discussed during the second session are treated below. Other general issues that may arise include federal reserved water rights in relation to federal lands, transfer of water across federal lands and through federal facilities, Indian water rights settlements, licensing of non-federal hydro power facilities (i.e., private dams regulated

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<sup>1</sup> The population in the West is projected to increase by 30% in the next 20-25 years. Western Water Policy Review Advisory Commission, *Water in the West: Challenge for the Next Century* (Denver, CO: June, 1998), p. xiii.

<sup>2</sup> For more information on federal involvement in Everglades restoration, see CRS Report RS20702, *South Florida Ecosystem Restoration and the Comprehensive Everglades Restoration Plan*, by Pervaze A. Sheikh and Nicole T. Carter. For information on Bay-Delta issues, see CRS Issue Brief IB10019, *Western Water Resource Issues*; and CRS Report RL31975, *CALFED Bay-Delta Program: Overview of Institutional and Water Use Issues*, both by Pervaze A. Sheikh and Betsy A. Cody.

by the Federal Energy Regulatory Commission (FERC)), and whether to establish a national water commission to address federal water policy and coordination.

## Water Resource Projects

Most of the large dams and water diversion structures in the United States were built by, or with the assistance of, the Bureau or the Corps. Traditionally, Bureau projects were designed principally to provide reliable supplies of water for irrigation and some municipal and industrial uses; Corps projects were designed principally for flood control, navigation, and power generation. The Bureau currently manages hundreds of storage reservoirs and diversion dams in 17 western states,<sup>3</sup> providing water to approximately 9 million acres of farmland and 31 million people. The Corps' operations are much more widespread and diverse, and include several thousand flood control and navigation projects throughout the country, including 25,000 miles of waterways (with 238 navigation locks), 926 harbors, and 383 dam and reservoir projects (with 75 hydroelectric plants).

**Bureau of Reclamation.** Since the early 1900s, the Bureau has constructed and operated large, multi-purpose water projects; water supplies from these projects have been primarily for irrigation. Construction authorizations slowed during the 1970s and 1980s due to several factors. In 1987, the Bureau announced a new mission: environmentally sensitive water resources management. In the following decade, increased population, prolonged drought, fiscal constraints, and increased water demands for fish and wildlife, recreation, and scenic enjoyment resulted in increased pressure to alter operation of many Bureau projects. Such changes have been controversial, however, as water rights, contractual obligations, and the potential economic effects of altering project operations complicate any change in water allocation or project operations.

In contrast to the Corps, there is no tradition of a regularly scheduled authorization vehicle for Bureau projects. Instead, Bureau projects are generally considered individually.<sup>4</sup> Bureau-related water project and management issues that are likely to be considered during the 109<sup>th</sup> Congress include:

- oversight of project operations and environmental requirements (e.g., ESA and CWA);
- oversight of the Central Valley [California] Project Improvement Act;
- oversight of, and appropriations for, CALFED (Bay-Delta restoration);
- consideration of a West-wide rural water supply program;
- examination of the Bureau's Title 16 (recycling and reuse) program;
- authorization of individual water recycling and desalination projects; and
- response to drought conditions.

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<sup>3</sup> Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

<sup>4</sup> However, Congress occasionally passes omnibus bills addressing key Bureau policy changes, as well as new or revised project and program authorizations, the latest being the Reclamation Projects Authorization and Adjustment Act of 1992 (P.L. 102-575).

(For information on these, and other active legislative proposals affecting the Bureau of Reclamation, see CRS Issue Brief IB10019, *Western Water Resource Issues in the 109<sup>th</sup> Congress*, by Betsy A. Cody and Pervaze A. Sheikhi.)

A broader issue that often receives attention from Congress is oversight of the Bureau's mission and its future role in western water supply and water resource management generally. As public demands and concerns have changed, so has legislation affecting the Bureau. Further, many in Congress have questioned the Bureau's shift in focus from a water resources development agency to a water resource management agency. Some have also questioned the increasing number of proposals to fund new rural water supply projects with high federal cost-share ratios and grants for reclaiming and reusing water. Critical questions Congress may address include What should be the future federal role in water resources development and management? Should (or to what extent should) the federal government develop or augment new supply systems designed primarily to serve communities/municipalities, or is this a local/regional responsibility? Who should pay, and how much? Should the Bureau be involved in environmental mitigation or is this best handled through new institutional arrangements (e.g., CALFED) or other existing agencies (e.g., Fish and Wildlife Service and/or the Environmental Protection Agency)? Should existing projects be revamped or "re-operated" to accommodate changing demands, and, if so, do new policies and institutions (state-federal roles) need to be addressed, and again, who should pay? Relatedly, the issue of whether there should be a National Water Commission or periodic water resource assessments is also receiving attention in the 109<sup>th</sup> Congress.

**Corps of Engineers.** Congress authorizes Corps water resources activities and makes changes to the agency's policies generally in a Water Resources Development Act (WRDA), and at times in the annual Energy and Water Development Appropriations acts. Contents of a WRDA are cumulative and new acts do not supercede or replace previous acts. Consideration of two WRDA bills introduced in 2005 continues in 2006. Previous WRDAs follow a loosely biennial schedule; however, the last WRDA was enacted in 2000. WRDA bills were introduced in 2002, 2003, 2004, and 2005, but were not enacted; their enactment was complicated by debates on whether to authorize controversial projects, and whether to change the way the Corps plans and evaluates projects.

Consideration of the WRDA bills in the first session of the 109th Congress included debates in committee on changes to state and local roles in projects, potential changes in Corps policies and practices (such as changes to Corps permitting and regulatory practices), and authorization of high profile projects. Prior to Hurricane Katrina, the project authorizations receiving the most attention were coastal Louisiana wetlands restoration, lock expansion and ecosystem restoration for the Upper Mississippi River-Illinois Waterway, and Everglades-related projects. The 2005 hurricane season added other possible authorizations to the mix, including authorizations for near-term and long-term hurricane protection measures for Louisiana and other Gulf Coast states and flood control activities in other areas of the nation vulnerable to flooding. Hurricane Katrina's impact on WRDA passage is uncertain; the disaster increased interest in flood control and Louisiana projects in the bill, while also increasing interest in streamlining federal spending which has some observers concerned about authorizing more Corps projects. Pressure to authorize projects, especially projects related to areas affected during the 2005 hurricane season, and to increase funding or modify existing projects may result in outstanding issues being addressed or resolved, leading to enactment of WRDA by the

109<sup>th</sup> Congress. For more information on current WRDA issues, see CRS Issue Brief IB10133, *Water Resources Development Act (WRDA): Army Corps of Engineers Authorization Issues in the 109<sup>th</sup> Congress*, coordinated by Nicole T. Carter.

Corps flood control and hurricane protection projects, in particular, are receiving congressional and public scrutiny following the 2005 hurricane season and Hurricane Katrina's impact on New Orleans in particular. This scrutiny is added to the attention already on the Corps' river and reservoir management; in many cases, Corps facilities and their operation are central to debates over multi-purpose river management. For example, water resources management by the Corps, particularly on the Mississippi, Missouri, Columbia and Snake Rivers, remains controversial and is frequently challenged in the courts. During the second session of the 109<sup>th</sup> Congress, the Corps' projects and role in emergency response are expected to remain the subject of congressional oversight, legislative direction, authorizing legislation, and appropriations.

The 109<sup>th</sup> Congress continues to address issues related to the Administration's adoption of a performance-based-budgeting approach for the agency, as well as safety and security of Corps facilities, implementation of Florida Everglades ecosystem restoration, and general financial management. In Energy and Water Development FY2006 appropriations reports, Congress expressed dissatisfaction with the Corps' financial management, particularly the reprogramming of funds across projects and the use of multiyear continuing contracts for projects. For more information on Corps appropriations topics, see CRS Report RL32852, *Energy and Water Development: FY2006 Appropriations*, by Carl Behrens.