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Water Resource Issues in the 109th Congress

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Summary

Growing population, recurrent drought, and changing public interests have increased pressure on existing water supplies, resulting in water use conflicts throughout the country. These conflicts are particularly evident in the West, where population is expected to increase by 30% in the next 20-25 years and where urban needs often compete with agricultural needs, as well as with increased demand for water for recreation, scenic enjoyment, and to meet endangered species needs. The 109th Congress is considering numerous supply and technology oriented water resource bills, including appropriations for the Bureau of Reclamation and U.S. Army Corps of Engineers for FY2006 and FY2007, a Water Resources Development Act (WRDA), and various agency policy and program changes — e.g. operation of federal projects along the Missouri, Upper Mississippi, Rio Grande, and Colorado Rivers, and oversight of ecosystem restoration for the California Bay-Delta (CALFED) and the Florida Everglades. Also at issue are the broader questions of the future role of traditional water resource agencies in an era of changing public demands, declining budgets, and integrated environmental resource management, and the potential need or desire for a National Water Commission or periodic assessments of the Nation's water resources. This product will be updated semi-annually.

Introduction

Water supply and water resource management issues are becoming increasingly important as pressure on existing supplies continues to grow. Increasing population and recurrent drought in many areas, combined with increasing demand for water for recreation, scenic value, and to meet fish and wildlife needs, have resulted in conflicts throughout the country, especially in the arid West. Major water resource development projects (large dams and diversions) traditionally met much of the consumptive demand for water for the largest single use, irrigated agriculture; however, the financial and

environmental costs have limited such projects for more than two decades.[1] Additionally, water resource development projects for consumptive uses, power generation, and flood control have been criticized for degrading recreational opportunities, scenic values, and fish and wildlife habitat. Consequently, considerable public pressure has been focused on getting water resources agencies to alter project operations or to otherwise mitigate environmental impacts. Because many of the Nation's environmental laws were enacted after major water resource development, water resource agencies such as the U.S. Army Corps of Engineers (Corps) and the Bureau of Reclamation (Bureau) often find their project operations in conflict with one or more laws — particularly with the federal Endangered Species Act (ESA) and Clean Water Act (CWA), and similar state and local laws and regulations.

In the West, naturally scarce water supplies and increasing urban populations[2] 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. Water marketing and water trading are becoming increasingly accepted, but some federal and state laws limit this option. Some critics have called for more efficient use of agricultural water and even transfer of water from agricultural to urban uses. Yet, agricultural users argue that stable supplies of low-cost water contribute to producing the nation's food supply, and therefore provide widespread benefits. Further, discussion of water allocation is complicated by the labyrinth of water rights, long-term water contracts, and decades of incremental state and federal law on water use and development. Nonetheless, municipal water demands will likely play a major role in future allocation or re-allocation decisions. For example, conflicts such as the current debate over transferring Colorado River water from the agriculture-based Imperial Irrigation District in southern California to the city of San Diego may become more common.

Nationwide, threatened and endangered species and general concern over the health of the nation's rivers and riparian areas have driven 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).[3] Yet, the demand for traditional or new

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[1] Municipal supplies of water have traditionally been developed locally or regionally, without federal assistance. Although some municipalities are supplied water from federal facilities, for decades (especially since the 1970s), the bulk of water-related federal assistance has been channeled to municipalities through the states for wastewater and drinking water treatment, not for development of water supplies. For more information on federal water projects and programs, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs.*

[2] 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.

[3] For more information on federal involvement in Everglades restoration, see CRS Report RS20702, *South Florida Ecosystem Restoration and the Comprehensive Everglades Restoration Plan*. 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*
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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 109th 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 FY2006 appropriations for the Bureau and the Corps. Specific issues that are being or are likely to be discussed in the 109th Congress 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 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,[4] 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,

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Institutional and Water Use Issues.

[4] Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

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.[5] Bureau-related water project and management issues that are likely to be considered during the 109th 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.

(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 109th Congress.*)

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, Everglades processes) 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 109th Congress.

Corps of Engineers. Congress regularly authorizes and reviews water resources programs and projects of the Corps in a Water Resources Development Act (WRDA) and/or the annual Energy and Water Development Appropriations acts. Consideration of WRDA, which typically has been biennial, has continued in 2005; the last WRDA was

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[5] 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).

enacted in 2000. WRDA bills were introduced in 2002, 2003, and 2004, but were not enacted. Passage of these bills reportedly was complicated by debates on authorization of controversial projects and policies, and whether to change the way the Corps plans for and evaluates projects. Whether any agreement on changes to Corps' planning and evaluation procedures will be made by the 109th Congress may depend in part on the Administration's water policy and spending priorities and whether the recommendations of outside entities, such as the National Academy of Sciences, serve to promote legislative consensus or compromise. Consideration of a WRDA in the first session of the 109th Congress so far has included debates in committee on changes to state and local roles in projects, potential changes in Corps policies and practices, and authorization of high profile projects, such as coastal Louisiana restoration, lock expansion and ecosystem restoration for the Upper Mississippi River-Illinois Waterway, Everglades-related projects, and other issues related to Corps permitting and regulatory practices. Pressure to authorize new projects and to increase funding or modify existing projects is often intense and may result in a final 2005 WRDA bill, depending on how outstanding issues are addressed or resolved. For more information on current WRDA issues, see CRS Issue Brief IB10133, *Water Resources Development Act (WRDA) and Other Army Corps of Engineers Legislation*, coordinated by Nicole T. Carter.

The ramifications of a shift to performance-based budgeting for the Corps — stemming from the Administration's FY2005 budget request — has raised concern within the Congress. The 108th Congress specifically expressed concern about how the shift contributed to the Administration reducing support for operation and maintenance of some waterways and a policy of not funding sand renourishment of beach protection projects after initial sand nourishment. The 109th Congress continues to address these issues, as well as security of Corps facilities, implementation of Florida Everglades ecosystem restoration, and general financial management. Regarding the latter issue, the use of multi-year construction contracts and reprogramming across contracts have been of particular interest and concern in the 109th Congress. For more information on current Corps issues, see CRS Issue Brief IB10120, *Army Corps of Engineers Civil Works Program: Issues for Congress*, by Nicole T. Carter and Pervaze A. Sheikh.

Corps river and reservoir management, in particular, are receiving congressional and public scrutiny. Rivers provide not only water supply for agriculture and municipalities, navigation, and flood protection, but also recreational opportunities and natural habitat. 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. The 109th Congress may choose to become involved in management through oversight, legislative direction, authorizing legislation, or appropriations.