Order Code IB10019

CRS Issue Brief for Congress
Received through the CRS Web

Western Water Resource Issues

Updated September 12, 2003

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SUMMARY

For more than a century, the federal government has constructed water resource projects for a variety of purposes, including flood control, navigation, power generation, and irrigation. While most municipal and industrial water supplies have been built by non-federal entities, most of the large, federal water supply projects in the West, including Hoover and Grand Coulee dams, were constructed by the Bureau of Reclamation (Department of the Interior) to provide water for irrigation.

Growing populations and changing values have increased demands on water supplies and river systems, resulting in water use and management conflicts throughout the country, particularly in the West, where the population is expected to increase 30% in the next 20-25 years. In many western states, agricultural needs are often in direct conflict with urban needs, as well as with water demand for threatened and endangered species, recreation, and scenic enjoyment.

Debate over western water resources revolves around the issue of how best to plan for and manage the use of this renewable, yet sometimes scarce and increasingly sought after, resource. Some observers advocate enhancing water supplies, for example, by building new storage or diversion projects, expanding old ones, or funding water reclamation and reuse facilities. Others emphasize the need to manage existing supplies more efficiently — through conservation, revision of policies that encourage inefficient use of water, and establishment of market mechanisms to allocate water.

The 107th Congress considered a number of bills on western water issues, including several title transfer and wastewater reclamation and reuse bills. One of the most legislatively active areas involved attempted reauthorization of CALFED — a joint federal and state program to restore fish and wildlife habitat and address California water supply/quality issues. Another hotly debated issue involved management of the Klamath River Project (OR and CA) and impacts on farmers, fish, and other interests in the Klamath River Basin.

The 108th Congress is considering a number of the same issues; however, new developments involving California's allocation of Colorado River water will likely spur additional oversight of related issues, such as progress in restoring the Salton Sea. Action is also expected on CALFED. The federal portion of the CALFED program has not been authorized since FY2000 and thus federal participation has been limited. Several other oversight issues may be addressed, including oversight of, or changes to, the Central Valley Project Improvement Act, management of the Columbia, Snake, Klamath, and Colorado River Systems, implementation of other legislation such as the Dakota Water Resources Act, and more broadly, federal water policy and coordination. The 108th Congress is also likely to consider one or more Indian water rights settlement bills; however, these bills will not be tracked in this issue brief.

MOST RECENT DEVELOPMENTS

On September 10, 2003 the House Resources Water and Power Subcommittee held hearings on four water reclamation and re-use bills: H.R. 142, H.R. 1156, H.R. 2960, and H.R. 2991. On July 24, 2003, the subcommittee held hearings on two CALFED bills (H.R. 2828 and H.R. 2641). The California CALFED Program is a federal and state effort to coordinate water management and restoration activities at the confluence of the Sacramento and San Joaquin Rivers and San Francisco Bay (Bay-Delta) in California. Federal funding for the CALFED Program expired at the end of FY2000, although some activities supporting the program have been funded. On July 23, Chairman Ken Calvert of the House Resources Water and Power Subcommittee introduced H.R. 2828 to authorize certain CALFED activities. Senators Dianne Feinstein and Barbara Boxer introduced a CALFED authorization bill, S. 1097, on May 21, and on June 26, Congressman George Miller introduced H.R. 2641. While the bills are similar in many respects, they differ in several ways, including how they relate to the current 30-year plan for the CALFED program as outlined in a Record of Decision in 2000, and how certain projects would be authorized.

During CALFED oversight hearings held by House Resources in June, the issue of Colorado River water supplies was also raised. On July 2, 2003, the Bureau of Reclamation issued its Part 417 Review, which approved 91% (2,824,100 acre-feet) of the Colorado River water ordered for use in 2003 by the largest agricultural user of Colorado River water, the Imperial Irrigation District (IID). IID challenged the Part 417 Review determination. A re-evaluation was done after the challenge and approximately 92% was approved (2,835,500 acre-feet). The Review relates to an ongoing struggle among four southern California water users to agree to a settlement that would quantify how much Colorado River water each entity gets under a body of law known as the "Law of the River." A tentative agreement to transfer water from farmers in the Imperial Valley to municipal water districts in San Diego was scrubbed on December 31, 2002, when the deadline passed for several water agency boards to approve an agreement on how California's portion of Colorado River water will be apportioned. The Secretary of the Interior subsequently halted deliveries of surplus water to California and reallocated water supplies among certain California water and irrigation districts. The Secretary's decision to reallocate water supplies within California was challenged by IID and eventually stayed pending a review of water needs for 2003. Although the four agencies reportedly reached a new deal (or agreement) in early September, a final agreement is still pending. On September 12, a package of 3 state bills incorporating portions of the agreement was passed by both the State of California House and Senate and awaits the signature of the Governor. Some issues, including the on-going lawsuit between IID and the Department of the Interior, remain unresolved.

On May 2, the Secretary of the Interior announced its "Water 2025" proposal, which calls for "concentrating existing federal financial and technical resources in key western watersheds and in critical research and development...," including desalination and conservation technologies. The proposal keys off of an effort first announced in the President's budget request for the Bureau of Reclamation. The FY2004 request includes $11 million for a new Western Water Initiative to "help develop solutions to the increasing demands for limited water resources."

BACKGROUND AND ANALYSIS

For more than a century, the federal government has been involved in developing water projects for a variety of purposes, including flood control, navigation, power generation, and irrigation. Most major water projects, such as large dams and diversions, were constructed by either the Bureau of Reclamation (Bureau), in the Department of the Interior, or the U.S. Army Corps of Engineers (Corps), in the Department of Defense. Traditionally, the Corps has built and maintained projects designed primarily for flood control, navigation, and power generation, whereas Bureau projects were designed primarily to facilitate settlement of the West by storing and providing reliable supplies of water for irrigation and "reclamation" of arid lands. While both agencies supply water for some municipal and industrial uses, they do so largely as a secondary responsibility in connection with larger multipurpose projects. Most of the nation's public municipal water systems have been built by local communities under prevailing state water laws.

Today, the Bureau operates nearly 350 storage reservoirs and approximately 250 diversion dams — including some of the largest dams in the world, such as Hoover Dam on the Colorado River and Grand Coulee Dam on the Columbia River. In total, the Bureau's projects provide water to approximately 9 million acres of farmland and nearly 31 million people in 17 western states. The Bureau also operates 58 power plants. Because of the strategic importance of the Bureau's largest facilities, the Bureau has heightened security at all key facilities to protect projects in the wake of the terrorist attacks on New York and the Pentagon on September 11, 2001.

Most Bureau water supply projects were built under authority granted to the Secretary of the Interior in the Reclamation Act of 1902, or through individual project authorizations. The original intent of the Reclamation Act was to encourage families to settle and farm lands in the arid and semi-arid West, where precipitation is typically 30% to 50% of what it is in the East. Construction of reclamation projects expanded greatly during the 1930s and 1940s, and continued rapidly until the late 1960s and early 1970s. By the late 1960s, a combination of changing national priorities and local needs, increasing construction costs, and the development of most prime locations for water works contributed to a decline in new construction of major water works nationwide. Water supply for traditional off-stream uses — including municipal, industrial, and agricultural uses — was increasingly in direct competition with a growing interest in allocating water to maintain or enhance in-stream uses, such as recreation, scenic enjoyment, and fisheries and wildlife habitat.

During the 1970s, construction of new projects slowed to a handful of major works, culminating in the completion of the Tellico dam project in Tennessee and the Tennessee Tombigbee waterway through Alabama and Mississippi. These projects pitted conservation and environmental groups, as well as some fiscal conservatives, against the traditional water resources development community. New on the scene was the National Environmental Policy Act of 1970 (NEPA), which for the first time required an assessment of the environmental effects of federal projects, and provided for more public scrutiny of such projects. In 1978, President Carter announced that future federal water policy would focus on improving water resources management, constructing only projects that were economically viable, cooperating with state and local entities, and sustaining environmental quality. The Reagan Administration continued to oppose large projects, contending they

were fiscally unsound. New construction of federally financed water projects virtually stopped until Congress passed the Water Resources Development Act (WRDA) of 1986, which addressed Corps projects and policies. Federal water research and planning activities were also reduced during the early years of the Reagan Administration, which felt that states should have a greater role in carrying out such activities. Consistent with this outlook, President Reagan abolished the Water Resources Council, an umbrella agency established in 1968 to coordinate federal water policy and to assess the status of the nation's water resource and development needs.

Congress subsequently scaled back several remaining authorized projects, changed repayment and cost-share structures, and passed laws that altered project operations and water delivery programs. For example, in 1982 Congress passed the Reclamation Reform Act, which altered the Bureau's water pricing policies for some users. The Act revised acreage limitation requirements and charges for water received to irrigate leased lands. Congress soon increased local entities' share in construction costs for Corps water resource projects with passage of the 1986 WRDA.

Over the last decade, both the Corps and the Bureau have undertaken projects or programs aimed at mitigating or preventing environmental degradation due in part to the construction and operation of large water projects. The agencies have pursued these actions through administrative efforts and congressional mandates, as well as in response to court actions. Currently, the federal government is involved in several restoration initiatives, including the Florida Everglades, the California Bay-Delta, and the Columbia and Snake River basins in the Pacific Northwest. These initiatives have been quite controversial. Each involves many stakeholders at the local and regional level (water users, landowners, farmers, commercial and sports fishermen, urban water suppliers and users, navigational interests, hydropower customers and providers, recreationists, and environmentalists) and has been years in the making. At the same time, demand for traditional or new water resource projects continues — particularly for ways to augment local water supplies, maintain or improve navigation, and control or prevent floods and shoreline erosion. In addition, demand continues from some sectors for new or previously authorized large water supply projects (e.g., Auburn and Temperance Flats dams, and Sites Reservoir in California).

Legislative and Oversight Issues

The 108th Congress is considering several water resource issues in legislation ranging from transferring title of federal facilities to local project users, to individual project authorizations and agency policy changes (e.g., reoperation of water project facilities in the Central Valley of California and in the Colorado and Columbia River Basins). Oversight of ongoing agency activities, such as water management in the Klamath River Basin, Salton Sea restoration, allocation of Colorado River water supplies (particularly within California), and authorization of a program to carry out activities affecting the delta confluence of the San Joaquin and Sacramento Rivers at the San Francisco Bay (Bay-Delta, or CALFED) are also being discussed. The broader topic of whether to review federal water activities or establish a national water policy commission may also be addressed. Funding and policy direction through the annual Energy and Water appropriations bill also influences the construction and operation of projects. (See CRS Report RL31807, *Appropriations for FY2004: Energy and*

Water Development.) In particular, appropriations language concerning funding (or lack thereof) for the CALFED program has been the subject of much debate.

Security of Reclamation Facilities

Security remains heightened at Bureau facilities in the wake of terrorist attacks in New York and Washington D.C. on September 11, 2001. The Bureau initially closed visitor facilities and cancelled tours at all facilities. While most visitor facilities have reopened, facilities may close or reopen depending on security alert levels and site-specific concerns at any time. For example, the Bureau heightened security at many facilities during recent code orange alerts and is expected to do so in the future. Further, in February, the Bureau closed the road over Folsom Dam (CA), largely because of security concerns. Legislation to authorize the Bureau to build a new bridge near the dam has been introduced (H.R. 901). The Administration opposes the legislation largely on the grounds of its cost — $66 million (roughly 8% of the Bureau's annual budget). The bill was marked up and ordered reported from the House Resources Committee on June 11, 2003; the bill was reported July 14 (H.Rept. 108-202).

Because Bureau facilities were not directly affected by September 11 events, it did not receive funding in the first two releases of emergency supplemental appropriations following the attack. However, the agency received $30.3 million for security at Bureau facilities as part of the third cluster of emergency supplemental funding included in Division B, Chapter 5, of the FY2002 Defense Appropriations bill (H.R. 3338, P.L. 107-117). The Bureau received $28.4 million for site security for FY2003 in its annual appropriation (Water and Related Resources Account), and an additional $25 million in supplemental appropriations for FY2003. The Administration has requested $28.6 million for Bureau site security for FY2004.

Klamath River Basin

Nearly two years ago, controversy erupted when the Bureau announced it would not release water from Upper Klamath Lake during the 2001 growing season to approximately 200,000 acres of farm and pasture lands within the roughly 235,000-acre Klamath project service area. The announcement was made in order to make water available for several fish species under protection of the federal Endangered Species Act (ESA). The Klamath Project area straddles the Oregon/California border and has been the site of increasingly complex water management issues involving several tribes, fishermen, farmers, environmentalists, and recreationists. Specifically at issue is how to operate the Bureau's project facilities to meet irrigation water contract obligations without adversely affecting federally listed fish and wildlife species.

The Bureau issued a 10-year operations plan in February 2002 and a "biological assessment" (a process necessary under the Endangered Species Act (ESA)) for operation of its Klamath Project in Oregon and California. However, subsequent biological opinions on the Bureau's 10-year operations plan found that the plan would likely jeopardize the continued existence of two federally listed suckers and coho salmon, as well as result in the adverse modification of proposed critical habitat. Although the biological opinions issued on May 31, 2002, by the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (now called NOAA Fisheries) both included "reasonable and prudent

alternatives," the Bureau formally rejected both Final Biological Opinions and opted to operate under a one-year plan that it asserts complies with the opinions. While met with enthusiasm from area farmers, the Bureau's decision was met with much criticism and concern from environmentalists, fishermen, tribes, and others. On April 10, 2003, the Bureau issued its Klamath Project 2003 operations plan and noted that planning for multi-year operations of the project is ongoing. The ESA agencies (FWS and NOAA Fisheries) have not issued a biological opinion on the one-year operations plan and instead are working within the biological opinions released in May 2002.

Legislation during the 107th Congress centered on providing funding for conservation and other activities in the Klamath basin. For example, the 2002 farm bill included $50 million in mandatory spending for water conservation activities in the Klamath Basin (P.L. 107-171; Title II, subtitle D, §2301 ("§1240I")). The bill also authorizes study of options for improving fish passage at Chiloquin Dam, including dam removal. On October 24, 2002, Congressman Thompson introduced H.R. 5698, a bill that would provide conservation and habitat restoration programs in the Klamath River basin and emergency disaster assistance to fishermen, Indian tribes, small businesses, and others that were economically affected by the Klamath River basin fish kill of 2002.[1] A new Thompson bill (H.R. 1760) was introduced in the 108th Congress on April 10, 2003.

Debate over different aspects of water allocation within the Klamath River Basin is likely to continue. For example, Section 137 of the House-passed FY2004 Interior and Related Appropriations bill (H.R. 2691) would prohibit federal funding of the Klamath Fishery Management Council. An amendment that would have limited crops grown on the Klamath project was defeated during floor debate. Both provisions have sparked considerable controversy among interested parties. Additionally, oversight is expected pending a final report from the National Academy of Sciences' National Research Council (NRC). The NRC had released an interim report evaluating the 2001 federal biological opinions on endangered and threatened fishes in the Klamath River Basin, the latter of which led to the Bureau's decision to not deliver water to a majority of farms in the Klamath Project. In this report, the NRC concluded there was neither sound scientific basis for maintaining Upper Klamath Lake levels and increased river flows as recommended in those biological opinions, nor sufficient basis for supporting the contrary assertions included in the Bureau's 2001 biological assessment. The Bureau maintains that its current operating plan is consistent with the NRC findings; others contend that its actions will, and have, harmed fish. (For more information, see CRS Report RL31098 and CRS Issue Brief IB10072.)

Title Transfer

Congress more and more is considering legislation that would transfer the ownership (title) of individual Bureau of Reclamation water supply projects to current water users. These "title transfer" bills vary depending on the circumstances of each project; however, some general issues apply. Transfer issues range from questions regarding a project's worth

[1] The salmon fish kill occurred in September when the fish were returning to spawn in the Klamath River. It is unclear as to why the fish died, although some scientists believe that low river flows and high water temperature may have stressed the salmon and made them susceptible to higher incidence of disease.

and valuation to legal and policy questions regarding the transfer's affect on other area water users, fish and wildlife, future project operations, and future management of lands associated with the project. So far, five title transfer bills have been introduced in the 108th Congress: S. 520 and H.R. 1106 dealing with transfer of title for the Freemont-Madison project; S. 900 and H.R. 2257, dealing with transfer of the Lower Yellowstone Project; and , and H.R. 1648, dealing with portions of the Cachuma project. Other more limited title transfer bills have been introduced as well.

The Clinton Administration first actively negotiated title transfer on a voluntary basis with interested water/irrigation districts beginning in 1995 when it announced a policy "framework" to establish a process for negotiating title transfers. While some districts pursued the Administration's framework process, others sought direct legislative authority for transfers. In general, Congress must authorize transfer of title to reclamation facilities (32 Stat. 389; 43 U.S.C. 498), regardless of the process used to get to a transfer agreement.

A central issue with title transfer legislation is whether the transfers should be mandated or simply authorized. Some argue that the transfers are "minor land transactions" and advocate that Congress direct they take place within a certain time period. Others strongly disagree. Debate mostly centers on the role the National Environmental Policy Act (NEPA) would and should play prior to a project's transfer. Environmentalists generally fear that a directed transfer with or without specific NEPA language would effectively allow the Bureau and project transfer proponents to avoid assessing and/or mitigating environmental effects of the proposed transfers. Conversely, project proponents have pursued directed transfers to avoid what they view are unnecessary delays and to ensure the transfers take place. For example, some title transfer legislation directs the transfer to occur "in accordance with all applicable law," while other legislation directs the transfer take place pursuant to an agreement already negotiated with project water users. Two laws recently enacted (P.L. 106-220 and P.L. 106-221) authorize the transfers, whereas others (P.L. 106-249, P.L. 106-377, and P.L. 106-512) direct the transfer.

Other discussions center on the role the Endangered Species Act (ESA) might play on project operations after the transfer. One of the main concerns for environmentalists appears to be that once the project is out of federal ownership there will no longer be a legal obligation for the district to consult with other federal entities on the impact of project operations on threatened or endangered species, as is now required of the Bureau under Section 7 of the ESA. Additionally, environmentalists and others fear that once out of federal hands there will be little if any public scrutiny of project operations. Conversely, project proponents are likely to favor private operations.

Controversies regarding the application of NEPA and ESA to project title transfers, as well as the question of whether to direct or authorize the transfers, are likely to remain at issue. Other issues involve concerns about the overall costs of the transfers, who should pay for costs associated with the transfer, effects on third parties, liability, the valuation of project facilities and lands (and treatment of mineral or other receipts), and financial compensation for the projects. Related to many of the issues outlined above is the question of how these projects might be operated in the future. Although the House Resources Committee has noted that it contemplates that facilities would be maintained and managed without significant changes, and in some cases bill language states that the projects shall be managed for the purposes for which the project was authorized, transfer bills approved by the

committees have been silent on enforcement issues and in describing what might occur if the new owners change operations (other than they must comply with all applicable laws at that time). Little has been said, for example, about what might occur if new project owners decided to partition project lands for new homes and convert irrigation water to domestic use.

Project Construction

California Bay-Delta/CALFED. The authorization of an annual appropriation of $143 million for implementing portions of an ecosystem protection plan and long-term restoration projects for the San Francisco Bay/San Joaquin and Sacramento Rivers Delta (Bay-Delta, also known as the CALFED program) expired September 30, 2000. The initial authorization for CALFED funding (P.L. 104-208, Division E) came on the heels of a 1994 agreement among state and federal agencies, urban, agricultural, and environmental interests to protect the Bay-Delta while satisfying key needs of various involved interests. The process was initiated to address critical water quality, water supply, and fish and wildlife habitat issues in the 738,000 acre Bay-Delta estuary and has grown into a comprehensive effort to address long-term water supply/quality issues for most of the state.

Appropriators have been reluctant to fund the program absent an explicit authorization from the authorizing committees. No funds were included for the CALFED program in the Energy and Water Development Appropriations bill for FY2002; however, appropriators included $30 million for activities that support the CALFED goals. The money was included in funding for the Central Valley Project in the Bureau of Reclamation's Water and Related Resources Account and provided funds to investigate building the Sites Reservoir and raising Shasta Dam. For FY2004, the Administration has requested $15 million for "activities for which authority is in place." The House and Senate Committee on Appropriations, however, recommended no funding for CALFED since it has no authority to receive funding. For more information on funding investigations and other appropriations issues, see CRS Report RL31308, *Appropriations for FY2004: Energy and Water Development*; and CRS Report RL31975, *CALFED Bay-Delta Program: Overview of Institutional and Water Use Issues*, by Pervaze A. Sheikh and Betsy A. Cody.

Given increasing pressure on California to live within its entitlement of 4.4 million acre feet of Colorado River water (see "Salton Sea" and "Colorado River Water and California's 4.4 Plan," below), as well as pressure on federal and state agencies to meet environmental and contractual legal demands in operating water delivery facilities, the 108th Congress is again considering comprehensive legislation authorizing the CALFED program. For example, on May 21, Senators Feinstein and Boxer introduced S. 1097, a bill to authorize federal funding for the CALFED program using the August 2000 ROD as a framework for implementation. On June 26, Congressman George Miller introduced another CALFED bill, H.R. 2641. The Miller bill is largely based on S. 1097; however, it differs in several key respects, including pumping capacities at Delta pumping plants, refuge water supplies, beneficiary pay language, and limitations on water storage and groundwater facilities pending state adoption of a groundwater management plan. Meanwhile, the House Resources Committee held a series of CALFED oversight hearings, including one in May on cross-cut budget issues and three field hearings in California, two to discuss the CALFED Program and water needs in the Central Valley of California and a third to discuss water shortage problems in southern California. On July 23, Chairman Calvert, of the House Resources Water and Power Subcommittee, introduced another CALFED related bill (H.R. 2828). Title

II of H.R. 2828 is similar to H.R. 2641 and S. 1097 in some respects, but differs in how closely the bill tracks the ROD and how certain projects are authorized. The Subcommittee held hearings on both H.R. 2828 and H.R. 2641 on July 24, 2003.

Rural Water Supply Projects. Beginning with authorization of the WEB Rural Water Supply Act in 1980 (P.L. 96-355), Congress has authorized the Bureau to fund the construction of several "rural water supply" projects and oversee construction of another, with funding coming from the Department of Agriculture. These projects have individual authorizations, but all are generally aimed at providing water for municipal and industrial (M&I) uses in rural areas — a departure from the historical mission of providing water for irrigation, with M&I use as an incidental project purpose.

These projects have been somewhat controversial, largely due to the relatively large share of federal construction costs proposed. Typically, the Bureau requires that people benefitting from a reclamation project repay 100% of the construction costs (plus interest) attributed to M&I project purposes. For example, if a project's purpose is 50% irrigation, 30% flood control and 20% M&I, M&I water users would pay (reimburse the federal government) for 100% of their 20% of construction costs of the project, plus interest (the federal cost share would be 0% of the 20% cost allocated to M&I purposes). In contrast, the federal cost share (non-reimbursable component) for the Bureau's "rural water supply" projects typically ranges from 75% to 85%. Some have raised concerns that these projects have the potential to overwhelm the Bureau's budget. For example, the federal contribution to the Lewis and Clark project is estimated at $214 million. For perspective, the Bureau's budget ranges in the neighborhood of approximately $800 million (net current authority) annually. Prior to the recent authorizations, the Bureau had approximately 60 authorized projects in various stages of construction with projected construction costs for completion of $4.9 billion. Outstanding construction authorizations now total approximately $7 billion (excluding "deferred" projects such as Auburn Dam).

Some also fear that these projects are outside the realm of those historically constructed by the Bureau and believe they would be better handled via other existing federal water quality or water supply programs, such as the USDA's Rural Utility Service or the EPA's state revolving loan fund. However, as designed, the projects do not fit EPA or USDA criteria, and thus project proponents have looked to the Bureau for funding. An additional concern with the Lewis and Clark legislation was that it would authorize projects outside of the Bureau of Reclamation's historic service area (outside the 17 western states). (For information on other federal water supply programs, see CRS Report RL30478.) For FY2004, the Bureau requested a total of $43.5 million for three rural water supply projects.

On May 20, Senator Bingaman introduced S. 1085 to assist states and local communities in evaluating and developing rural and small community water supply systems (generally serving no more than 40,000 people) and for other purposes. Meanwhile, the Bureau of Reclamation is preparing a proposal to coordinate and revamp its rural water supply activities. The proposal was precipitated by a 2002 Office of Management and Budget review of the Bureau's rural water supply projects and actions.

Title 16 Projects. Title 16 of P.L. 102-575 directs the Secretary of the Interior to develop a program to "investigate and identify" opportunities to reclaim and reuse wastewater and naturally impaired ground and surface water. The original Act authorized

construction of five reclamation wastewater projects and six wastewater and groundwater recycling/reclamation studies. The Act was amended in 1996 (P.L. 104-206) to authorize another 18 construction projects and an additional study, and again in 1998 (P.L. 105-321) and 2000 (P.L. 106-554, Division B, Section 106) to authorize two more construction projects. Since then, several individual project bills amending the Reclamation and Wastewater and Groundwater Study and Facilities Act have been passed. To date, 10 bills authorizing projects or amending the Title 16 program have been introduced in the 108th Congress (see "Legislation," below).

Water reclaimed via Title 16 projects may be used for M&I water supply (non-potable purposes only), irrigation supply, groundwater recharge, fish and wildlife enhancement, or outdoor recreation. Nine Title 16 bills were introduced in the 107th Congress, three of which addressed financing of previously authorized projects (H.R. 131, H.R. 685, H.R. 1245, H.R. 1251(increase funding), H.R. 1261 (impose limits on funding), H.R. 1729 (increase ceiling on funding), H.R. 2115, S. 491, and S. 1385). One project authorization was enacted — the Lakehaven water reclamation project in Washington state (H.R. 2115, S. 1385). Another bill authorizing the Secretary of the Interior to redirect unexpended budget authority for the Central Utah Project for wastewater treatment and reuse and other purposes also became law (H.R. 4129; P.L. 107-366).

The general purpose of Title 16 projects is to provide supplemental water supplies by recycling/reusing agricultural drainage water, wastewater, brackish surface and groundwater, and other sources of contaminated water. Projects may be permanent or for demonstration purposes. Project construction costs are shared by a local project sponsor or sponsors and the federal government. The federal share is generally limited to a maximum of 25% of total project costs and in most cases the federal share is non-reimbursable, resulting in a *de facto* grant to the local project sponsor(s). Congress limited the federal share of individual projects to $20 million beginning in 1996 (P.L. 104-266). The federal share of feasibility studies is limited to 50% of the total, except in cases of "financial hardship"; however, the federal share must be reimbursed. The Secretary may also accept in-kind services that are determined to positively contribute to the study.

The Bureau's water reclamation and wastewater recycling program is limited to projects and studies in the 17 western states authorized in the Reclamation Act of 1902, as amended (32 Stat. 388), unless specifically authorized by Congress.[2] Authorized recipients of program assistance include "legally organized non-federal entities" (e.g., irrigation districts, water districts, and municipalities). Construction funding is generally limited to projects where (1) an appraisal investigation and feasibility study have been completed and approved by the Secretary; (2) the Secretary has determined the project sponsor is capable of funding the non-federal share of project costs; and (3) the local sponsor has entered a cost-share agreement committing to funding its share.

Total funding for the program for FY2002 was approximately $36 million — nearly $5.5 million more than enacted for FY2001. Final funding for FY2003 was 30.6 million.

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[2] Section 103(a)(4) of P.L. 106-566 directs the Secretary of the Interior to study recycling, reclamation, and reuse of water and wastewater for agricultural and non-agricultural uses in the state of Hawaii.

The Title 16 program was also subject to the OMB program review, which ultimately led to a lower request of $12.6 million — 65% less than was enacted for the program for FY2002 and 59% less than was enacted for FY2003.

Colorado River Water and California's 4.4 Plan. Colorado River water is apportioned among Upper and Lower Colorado River Basin States pursuant to the Boulder Canyon Project Act on 1928, Colorado River Compact of 1922, and a host of other legal instruments and agreements between involved parties. Under this body of law, known as the "Law of the River," California is to receive 4.4 million acre feet (maf) of water annually, while Arizona and Nevada are to receive 1.2 maf and 0.3 maf respectively. Because Arizona and Nevada were not able to use their full entitlement to Colorado River water until fairly recently, California for decades has been able to use more than its 4.4 maf share of water and has been using approximately 5.2 maf annually in recent years. Since 1997, however, both Arizona and Nevada have been receiving close to their full entitlement to Colorado River water, thereby increasing pressure on California to reduce its draw of water by approximately 700,000 - 800,000 acre feet.

Under the "Law of the River," the Secretary of the Interior may determine annually if and how much "surplus" water is available for use in the lower Colorado River basin. Since January 2001, and until just recently, the Secretary operated the river under regulations known as Interim Surplus Guidelines. These interim guidelines were developed in part to allow California to develop a plan to ease its transition from an approximate 5.2 maf draw of Colorado River water to the 4.4 maf allocation provided for under the Law of the River. The guidelines also appear to be related to a proposal to transfer 200,000 acre feet of water annually from the Imperial Irrigation District in southern California to the City of San Diego. Under the interim guidelines, a Quantification Settlement Agreement (QSA) — an agreement among relevant water agencies to quantify, limit, and re-allocate Colorado River entitlements (within California) — was to be signed and executed by December 31, 2002.

While a tentative agreement had been reached in early December 2002, the parties did not come to final agreement by the December 31 deadline. Reasons for the impasse reportedly included disagreement over potential impacts of the proposed transfer on the Imperial Valley agriculture community and impacts on the Salton Sea. In particular, it was not clear to all parties who would be held responsible or liable for any negative impacts reducing agricultural water run-off to the sea. Consequently, on January 1, the Secretary of the Interior announced that the surplus guidelines would no longer be in effect, reverting back to surplus guidelines in effect prior to June 2001. Further, the Secretary had determined that 2003 is a "normal" water year, so there was no surplus water to deliver. The result was two-fold: (1) the Secretary of the Interior limited California to its 4.4 maf entitlement, and (2) the Secretary reallocated water among the California water agencies with rights to Colorado River water.

The Secretary's reallocation decision was quickly challenged by the Imperial Irrigation District (IID), which was to receive less water than it had ordered and felt it was entitled to under the Law of the River. IID filed suit in the U.S. District Court, Southern District of California, on January 10, 2003 arguing the Secretary did not have the authority to "unilaterally" reduce IID's water supply. The suit contends the reduction was carried out as "punishment" for the district's failure to agree to a QSA supported by the Department. On February 24, the United Sates filed a Memorandum of Points and Authorities in Opposition

to Plaintiff's (IID's) Motion for a Preliminary Injunction, arguing that IID's "'merits' arguments ignore the beneficial use limitations to which its diversions of Colorado River water are subject."[3] On March 18, 2003, U.S. District Judge Thomas Whelan granted IID's preliminary injunction preventing Secretary Norton from reducing IID's allocation from the Colorado.

Accordingly, Secretary Norton subsequently redistributed supplies of Colorado River water among relevant rights holders based on the priority established under the 1931 Seven Party Agreement (described below). On April 17, 2003, an order was issued remanding the case to the Department of the Interior for a *de novo* "Part 417" review and staying the litigation in its entirety pending the *de novo* Part 417 review. A Part 417 Review requires the Regional Director of the Bureau of Reclamation's (Department of the Interior's) Lower Colorado River office to conduct consultations with Colorado River contractors to assess water requirements, conservation measures, and operation practices in the diversion, delivery, distribution, and use of Colorado River water, essentially to determine if water is being put to beneficial use.[4] In the meantime, several attempts to come to a new QSA have been made; however, it is not clear when parties to the agreement will finalize their decisions on how to quantify and settle Colorado River water allocation decisions.

Despite these efforts to come to an agreement on water use, on July 2, 2003, the Bureau of Reclamation issued its Part 417 Review, which approved 91% (2,824,100 acre-feet) of the Colorado River water ordered by IID for use in 2003. IID challenged the Part 417 Review determination. A re-evaluation was done after the challenge and approximately 92% was approved (2,835,500 acre-feet). IID has 30 days to appeal the determination before it becomes a final decision. While the four water agencies came to a new agreement to resolve the controversy in early September, and the California State Legislature has passed a package of 3 bills addressing the issues, the parties to date have not signed a new agreement. One of the unresolved issues, according to an IID board member, is the status of the IID suit against the Department of the Interior over the Part 417 review.

Salton Sea

A tentative agreement to transfer water from farmers in the Imperial Valley to municipal water districts in San Diego was scrubbed on December 31, 2002, when the deadline passed for several water agency boards to approve an agreement on how California's portion of Colorado River water will be apportioned. The proposed water transfer would have diverted agricultural water from farms in the Imperial and Coachella valleys to San Diego. This would have resulted in less water flowing into the Salton Sea, which scientists predicted would have caused the salinity of the sea to increase to threshold levels in a short amount of time (less than 10 years). The Salton Sea is a large, inland water body in California that is

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[3] Available at [http://www.usbr.gov/lc/region/pao/2003orders/declarations/brief.pdf], p. 2.

[4] *See* 43 C.F.R. Part 417, *Procedural Methods for Implementing Colorado River Water Conservation Measures with Lower Basin Contractors and Others*. The Department of the Interior published a notice in the *Federal Register* on April 29, 2003, seeking input on the recommendations and determinations authorized by 43 C.F.R. Part 417. *See* "Colorado River, Notice of Opportunity for Input Regarding Recommendations and Determinations Authorized by 43 C.F.R. Part 417, Imperial Irrigation District," 68 *Federal Register* 22738 (April 29, 2003).

saline-rich and is sustained by agricultural run-off from farmlands in nearby Imperial and Coachella valleys. The Sea provides permanent and temporary habitat for many species of plants and animals, including several endangered species.[5] The Sea also serves as an important recreational area for the region. The Salton Sea has been altered by increasing salinity caused by a steadily decreasing water table. High salinity levels have changed habitats and stressed several populations of plants and animals. The scope and costs of efforts to restore the Salton Sea was reported in a study done by the Department of the Interior.[6] It estimated that the cost of restoring the Salton Sea would range between $1 billion and $35 billion, depending on the restoration strategy used.

Several proposals have been floated to address Salton Sea issues, including a controversial proposal to fund restoration in the Salton Sea with $200 million in state funds for southern California water projects. The Metropolitan Water District of Southern California, a party to the Seven-Party Agreement, has voiced its opposition to such a proposal — which was the subject of inquiry from several California Representatives during a July 2, 2003, House Resources Water and Power Subcommittee hearing in San Diego. A set of three bills sent to the Governor of California for signing on September 12, 2003 contains provisions that would allocate an estimated $300 million for restoring the Salton Sea. As proposals for restoring the Salton Sea and related Colorado River issues continue to be negotiated, congressional oversight is expected to continue.

LEGISLATION

H.R. 142 (Miller, Gary)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Inland Empire regional water recycling project, to authorize the Secretary to carry out a program to assist agencies in projects to construct regional brine lines in California, and to authorize the Secretary to participate in the Lower Chino Dairy Area desalination demonstration and reclamation project. Introduced January 7, 2003; referred to Committee on Resources. House Resources Water and Power Subcommittee hearings held September 10, 2003.

H.R. 309 (Nunes)

Directs the Secretary of the Interior to conduct a study to determine the feasibility of increasing the capacity of water storage, increasing power generation, improving water supply reliability and quality, improving water management efficiency, and improving ecosystem function and flood control on the San Joaquin River through the construction of a reservoir at Temperance Flat and other reasonable measures. Introduced January 8, 2003; referred to Committee on Resources.

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[5] The Salton Sea is considered an important stopover for birds on the Pacific flyway.

[6] U.S. Department of the Interior, Bureau of Reclamation, *Salton Sea Study: Status Report*, January 2003.

H.R. 901 (Ose)

Authorizes the Secretary of the Interior to construct a bridge on federal land west of and adjacent to Folsom Dam in California, and for other purposes. Introduced February 25, 2003; reported by the House Committee on Resources July 14, 2003.

H.R. 1106 (Simpson)

Authorizes the Secretary of the Interior to convey certain facilities to the Fremont-Madison Irrigation District in the State of Idaho. Introduced March 5, 2003; referred to Committee on Resources.

H.R. 1156 (Sanchez)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to increase the ceiling on the federal share of the costs of phase I of the Orange County, California, Regional Water Reclamation Project. Introduced March 6, 2003; referred to Committee on Resources. House Resources Water and Power Subcommittee hearings held September 10, 2003.

H.R. 1598 (Cox)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in projects within the San Diego Creek Watershed, California, and for other purposes. Introduced April 3, 2003; referred to House Resources Subcommittee on Water and Power. On July 17, 2003, a markup session was held and the bill was forwarded to the full committee for a vote.

H.R. 1648 (Capps)

Authorizes the Secretary of the Interior to convey certain water distribution systems of the Cachuma Project, California, to the Carpinteria Valley Water District and the Montecito Water District. Introduced April 7, 2003; referred to Committee on Resources.

H.R. 1732 (Carter)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Williamson County, Texas, Water Recycling and Reuse Project, and for other purposes. Introduced April 10, 2003; referred to Resources Subcommittee on Water and Power. On July 17, 2003, a markup session was held and the bill was forwarded to the full committee for a vote.

H.R. 1760 (Thompson)

Establishes water conservation and habitat restoration programs in the Klamath River basin and provides emergency disaster assistance to fishermen, Indian tribes, small businesses, and others that suffer economic harm from the effects of the Klamath River basin fish kill of 2002. Introduced April 10, 2003; referred to Committee on Resources.

H.R. 2257 (Rehberg)

Conveys the Lower Yellowstone Irrigation Project, the Savage Unit of the Pick-Sloan Missouri Basin Program, and the Intake Irrigation Project to the appurtenant Irrigation Districts. Introduced May 22, 2003; referred to Committee on Resources.

H.R. 2355 (Abercrombie)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize certain projects in the State of Hawaii and amends the Hawaii Water Resources Act of 2000 to modify the water resources study. Introduced June 5, 2003; referred to Committee on Resources.

H.R. 2641 (Miller)

Authorizes the Secretary of the Interior to implement the CALFED Bay-Delta Program. Introduced on June 26, 2003; referred to Committees on Resources and on Transportation and Infrastructure. House Resources Committee hearings held July 24, 2003.

H.R. 2828 (Calvertt)

Authorizes the Secretary of the Interior to implement water supply technology and infrastructure programs aimed at increasing and diversifying domestic water resources. Title II authorizes implementation of certain CALFED activities. Introduced July 23, 2003; referred to Committees on Resources and on Transportation and Infrastructure. Resources Committee hearings held July 24, 2003.

H.R. 2960 (Ortiz)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Brownsville Public Utility Board water recycling and desalinization project. Introduced July 25, 2003; referred to Committee on Resources. On September 10, 2003, the House Resources Subcommittee on Water and Power held a hearing.

H.R. 2991 (Dreier)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Inland Empire regional recycling project and in the Cucamonga County Water District recycling project. Introduced September 3, 2003; referred to Committee on Resources. On September 10, 2003, the House Resources Subcommittee on Water and Power held a hearing.

S. 520 (Crapo)

Authorizes the Secretary of the Interior to convey certain facilities to the Fremont-Madison Irrigation District in the State of Idaho. Introduced March 5, 2003; referred to the Senate Committee on Energy and Natural Resources. Reported by the Committee on June 9, 2003 (S.Rept. 108-62). The bill was passed by unanimous consent by the Senate on June 16, 2003, with S.Amdt. 928. Introduced to the House on June 17, 2003; referred to the House Committee on Resources.

S. 625 (Smith)

Authorizes the Bureau of Reclamation to conduct certain feasibility studies in the Tualatin River Basin in Oregon, and for other purposes. Introduced March 13, 2003; referred to the Senate Committee on Energy and Natural Resources. On June 9, 2003, reported with an amendment and with S.Rept. 108-63. Passed the Senate on June 16, 2003; referred to the House Committee on Resources June 17, 2003.

S. 649 (Feinstein)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in projects within the San Diego Creek Watershed, California, and for other purposes. Introduced March 18, 2003; referred to Committee on Energy and Natural Resources. On May 14, 2003, hearings were held in the Energy and Natural Resources Subcommittee on Water and Power.

S. 900 (Burns)

Conveys the Lower Yellowstone Irrigation Project, the Savage Unit of the Pick-Sloan Missouri Basin Program, and the Intake Irrigation Project to the pertinent irrigation districts. Introduced April 11, 2003; referred to Committee on Energy and Natural Resources.

S. 960 (Akaka)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize certain projects in the State of Hawaii and amends the Hawaii Water Resources Act of 2000 to modify the water resources study. Introduced April 30, 2003; referred to Committee on Energy and Natural Resources. On May 15, 2003, hearings were held in the Energy and Natural Resources Subcommittee on Water and Power.

S. 993 (Smith)

Amends the Small Reclamation Projects Act of 1956, and for other purposes. Introduced May 5, 2003; referred to Committee on Energy and Natural Resources. On May 14, 2003, hearings were held in the Energy and Natural Resources Subcommittee on Water and Power.

S. 1058 (Allard)

Provides a cost-sharing requirement for the construction of the Arkansas Valley Conduit in the State of Colorado. Introduced May 14, 2003; referred to Committee on Energy and Natural Resources.

S. 1085 (Bingaman)

Provides for a Bureau of Reclamation program to assist states and local communities in evaluating and developing rural and small community water supply systems, and for other purposes. Introduced May 20, 2003; referred to Committee on Energy and Natural Resources.

S. 1097 (Feinstein)

Authorizes the Secretary of the Interior to implement the CALFED Bay-Delta Program. Introduced on May 21, 2003; referred to Committee on Energy and Natural Resources.

S. 1211 (Domenici)

Furthers the purposes of Title XVI of the Reclamation Projects Authorization and Adjustment Act of 1992, the "Reclamation Wastewater and Groundwater Study and Facilities Act", by directing the Secretary of the Interior to undertake a demonstration program for water reclamation in the Tularosa Basin of New Mexico, and for other purposes.

S. 1413 (Boxer)

Authorizes appropriations for conservation grants of the Environmental Protection Agency, to direct the Secretary of the Army and the Secretary of the Interior to conduct

expedited feasibility studies of certain water projects in the State of California, and for other purposes. Introduced July 15, 2003; referred to Committee on Environment and Public Works.

FOR ADDITIONAL READING

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