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Western Water Resource Issues

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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 has spurred additional oversight of related issues, such as progress in restoring the Salton Sea. Action is also occurring 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 considering several Indian water rights settlement bills; however, these bills are not tracked in this issue brief.

MOST RECENT DEVELOPMENTS

On September 15, 2004, the Senate amended and passed by unanimous consent H.R. 2828 — a bill to authorize implementation of the CALFED Bay-Delta Program. The CALFED Program is a federal and state effort to coordinate water management and ecosystem 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. The House amended and passed its version of H.R. 2828 on July 9, 2004. While H.R. 2828 and S. 1097 are similar in many respects, they contain several differences. Chief among these differences is how water storage projects are authorized. The House version includes a controversial provision authorizing storage projects upon completion of project feasibility studies, subject to a disapproval resolution; the Senate bill instead includes a provision that triggers a determination of program imbalance if Congress does not authorize storage projects within a certain time.

The House Resources Committee held an oversight hearing on title transfer legislation on March 24, 2004. On September 22, 2004, the House Resources Committee amended and ordered reported by unanimous consent H.R. 3391, the Provo River Project Transfer Act. On September 28, the Senate Energy and Natural Resources Committee reported with an amendment in the nature of a substitute a related bill, S. 1876 (S.Rept. 108-365). These bills would transfer the title of the Murdock Canal in Utah to the Provo Water District. On July 16, the Senate Energy and Natural Resources Committee ordered reported H.R. 1648, which would authorize the Secretary of the Interior to transfer title of two Bureau of Reclamation water distribution systems to the Carpinteria Valley Water District and the Montecito Water District in Santa Barbara County, CA. The Senate passed the bill without amendment September 15.

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 RL32307, *Appropriations for FY2005: 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. For FY2004, $28.6 million was provided for Bureau site security.

Klamath River Basin

Controversy erupted in 2001 when the Bureau announced it would not release water from Upper Klamath Lake — part of its Klamath irrigation project — to approximately 200,000 acres of farm and pasture lands within the roughly 235,000-acre project service area. The operational change was made to make water available for three fish species under ESA protection (two endangered sucker species, and a threatened coho salmon population). The Klamath Project straddles the Oregon/California border and has been the site of increasingly complex water management issues involving several tribes, fishermen, farmers, environmentalists, and recreationists. Upstream farmers are generally pitted against fishermen, Native American interests, and other downstream users, and many sides have policy concerns involving valuable sectors of the local economy. Farmers point to their contractual rights to water deliveries from the federal Klamath Project and to hardships for their families if water is cut off; others assert that the salmon fishery is more valuable and that farmers could be provided temporary economic assistance, while salmon extinction would be permanent. Still others assert that there are ways to serve all interests, or that the science underlying the determinations of the relevant agencies is simply wrong. Specifically at issue is how to operate the Bureau's project facilities to meet irrigation contract obligations without jeopardizing the three listed fish.

To address this issue, the Bureau issued a 10-year operations plan in February 2002 and a biological assessment (a process necessary under the ESA) for operating its Klamath Project. However, subsequent biological opinions found that the Bureau's 10-year operations plan would likely jeopardize the continued existence of the listed suckers and coho salmon, as well as adversely modify 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 multiyear operations of the project is ongoing; on April 7, 2004, the Bureau issued its 2004 operations plan. In both years, the Bureau states that the current year plan is consistent with the 2002 biological opinions. The ESA agencies (FWS and NOAA Fisheries) have not issued a biological opinion on the one-year operations plans and instead are working within the biological opinions released in May 2002.

Because of the controversy in 2001, the Secretary of the Interior asked the National Research Council (NRC) to evaluate the federal biological opinions that had been used to prevent the Bureau from delivering water to farmers in 2001. The NRC released an interim report in February 2002, and a final report in October 2003, both of which concluded there was neither sound scientific basis for maintaining Upper Klamath Lake levels and increased river flows as recommended in the 2001 biological opinions, nor sufficient basis for

supporting the lower flows in the Bureau's original operations plan for 2001. Further, the NRC concluded (1) that recovery of endangered suckers and threatened coho salmon in the Klamath Basin might best be achieved by broadly addressing land and water management concerns and (2) that the operation of the Klamath Project (as opposed to operation of other basin projects such as that on the Trinity River) was not the cause of a 2002 lower basin fish kill and that changes in project operation at the time of the fish kill would not have prevented it.

In the 108th Congress, H.R. 1760 would establish water conservation and habitat restoration programs in the Klamath River Basin and provide emergency disaster assistance to those who suffered economic harm from the Klamath River Basin fish kill of 2002. A prohibition on Interior Department funding for the Klamath Fishery Management Council was included in the FY2004 Interior Appropriations bill, passed by the House on July 17, 2003, but was deleted in conference (H.R. 2691, H.Rept. 108-330). It is not clear whether the Bureau's recent announcement of a "dry" water year for the 2004 growing season will spawn further congressional action.

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 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, seven 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 (became P.L. 108-85, September 2003); S. 900 and H.R. 2257, dealing with transfer of the Lower Yellowstone Project; H.R. 1648, dealing with portions of the Cachuma project; and H.R. 3391 and S. 1876, dealing with the transfer of the Provo River 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. For FY2005, the Administration has requested $15 million for "authorized activities that are consistent with the CALFED Bay-Delta Program." For FY2004, $9 million was appropriated for activities that support the CALFED Bay-Delta Program goals. For more information on funding investigations and other appropriations issues, see CRS Report RL32307, *Appropriations for FY2005: 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. On May 21, 2003, 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. Meanwhile, the House Resources Committee held a series of CALFED oversight hearings, including one in May 2003 on cross-cut budget issues and three field hearings in California in June 2003, 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, 2003, Chairman Calvert of the House Resources Water and Power Subcommittee introduced another CALFED-related bill (H.R. 2828). On October 30, 2003, the Senate Energy and Natural Resources Committee held a hearing on S. 1097. Issues such as funding levels for the CALFED Bay-Delta Program, balanced implementation, and cost allocation provisions were discussed. S. 1097 was marked up April 28 and ordered reported with an amendment in the nature of a substitute; it was reported as amended on May 20 (S.Rept. 108-268). H.R. 2828 was marked up and ordered reported June 25, 2004 (H.Rept. 108-573). After defeating a motion to recommit the bill with instructions to delete a controversial storage project authorization provision, the House approved H.R. 2828, as amended, by voice vote on July 9, 2004. On September 15, 2004, the Senate amended and passed under unanimous consent H.R. 2828 in lieu of S. 1097. The Senate-amended H.R. 2828 now awaits House action.

While the House and Senate versions of H.R. 2828 contain differences, the chief difference is how the bills address water storage project authorization. The House bill would "pre-authorize" construction of storage projects based on feasibility studies that adhere to requirements provided in the bill, and subject to a congressional disapproval resolution. The Senate bill takes a very different approach and instead sets a timeline for Congress to consider the authorization of storage projects listed in the bill. If a storage project is not authorized under the Senate bill within the specified timeline, an "imbalance determination" is triggered, which forces a re-balancing process and reconsideration of the project (and alternatives) by Congress.

In general, storage proponents have voiced concern that environmental aspects of the program have outpaced progress on developing new water supplies. On the other hand, some environmental groups and others have vocally opposed storage language such as the "pre-authorization" language. Some also believe granting authorization (subject to a disapproval resolution) prior to completion of project feasibility studies would amount to a forfeiture of congressional authority over final projects and that the Senate may again reject a bill with "pre-authorization" language. Given these positions, it appears the new Senate language attempts to ensure that storage projects remain in the CALFED program component mix without pre-authorizing specific projects. A key question for congressional decision makers is whether the language in the Senate bill is sufficient to meet the objectives of storage proponents without losing support from other stakeholders involved in the debate.

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 October 15, 2003, Senator Domenici introduced S. 1732 to authorize the Secretary of the Interior to establish a rural water supply program to plan, design, and construct projects in Reclamation States as defined by the bill. This bill was preceded by S. 1085, which was introduced on May 15 by Senator Bingaman 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. These bills differ according to factors such as the scope of their water supply program; eligibility criteria, program priorities, and implementation; ability to pay for construction, operation and maintenance; and feasibility studies and reporting requirements. 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.

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.[1] 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 FY2003 was 30.6 million. The Title 16 program was also subject to the OMB program review, which ultimately led to a lower request of $12.6 million for FY2004 — 65% less than was enacted for the program for FY2002 and 59% less than enacted for FY2003. Total funding for Title 16 projects for FY2004 was $28.4 million. The Administration requested $11.5 million for FY2005.

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

[1] 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.

Canyon Project Act of 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 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.

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. From 2001 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 its 4.4 allocation. 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 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 who would be held responsible or liable for any negative impacts of 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. The result was two-fold: (1) the Secretary of the Interior immediately 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.

On October 10, 2003, the four California water agencies signed a new QSA for the Colorado River which was later approved by U.S. Interior Secretary. The agreement allows California to gradually reduce its over-dependence on the Colorado River to 4.4 million acre-feet in the absence of surplus water through voluntary agriculture-to-urban water transfers and other water supply programs. Provisions from the agreement call for a potential transfer of up to 200,000 acre-feet of water from Imperial Irrigation District (IID) to San Diego starting at $258 per acre-foot; a restoration funding program whereby the state of California purchases up to 1.6 maf of water from IID for sale to MWD to generate up to $300 million for Salton Sea restoration; the lining of the All-American and Coachella Canals, with 77,000 acre-feet of water produced annually as a result of those conservation measures going to the San Diego County Water District Authority (SDWDA) for 110 years; and the termination of the *de novo* Part 417 Review issued by Secretary Norton as well as the dismissal of the suit IID filed against the federal government in January 2003.

While many proclaimed the agreement would mark an end to perpetual conflict on the allocation of Colorado River water supplies in California, the deal has already prompted two lawsuits alleging that the negotiations failed to adequately evaluate the damage to the

Imperial Valley's environment and economy that would result from the impact of a reduction of water use on the county's 500,000 acres of farmland.

Salton Sea

A set of three bills enacted by the State of California on September 12, 2003 contains provisions that would allocate an estimated $300 million for restoring the Salton Sea. This funding for the Salton Sea was secured when the QSA, discussed above, was passed. The agreement will attempt to protect inflows to the sea for 15 years and establish a restoration fund that will receive money from fees collected from water sales in the region.

The Salton Sea is a large, inland water body in California that is saline-rich and is sustained by agricultural run-off from farmlands in nearby Imperial and Coachella valleys. It provides permanent and temporary habitat for many species of plants and animals, including several endangered species.[2] It 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.[3]

Several proposals have been floated to address Salton Sea issues. On April 22, 2004, the Salton Sea Authority endorsed a restoration plan for the Salton Sea that calls for the construction of a causeway across the center of the sea. This would separate the sea into two basins, an 85,000-acre North Basin that would reach salinity levels similar to the ocean, and a southern section that would consist of wetlands areas as well as numerous recreational lakes ranging from freshwater to hyper-saline. The estimated cost of this project is $738 million. This plan is now under review by the California Department of Water Resources. As proposals for restoring the Salton Sea and related Colorado River issues continue to be negotiated, congressional oversight is expected to continue.

LEGISLATION

P.L. 108-233, H.R. 1598

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. Signed into law May 28, 2004.

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 carry out a program to assist agencies in projects to construct regional brine lines in California, and to participate in the Lower Chino Dairy Area desalination

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

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

project. Introduced January 7, 2003. Passed the House on July 19, 2004, and sent to the Senate Committee on Energy and Natural Resources.

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.Rept. 108-202).

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. Ordered reported on May 19, 2004. Passed the House on July 19, 2004, and sent to the Senate Committee on Energy and Natural Resources.

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. Ordered reported by unanimous consent October 29, 2003; reported November 17, H.Rept. 108-363. Passed House November 17, 2003. Sent to Senate Committee on Energy and Natural Resources; ordered reported June 16, 2004 and placed on the Senate Legislative Calendar. Senate passed by unanimous consent without amendment on September 15, 2004. Awaits President's signature.

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. Ordered reported by unanimous consent October 29, 2003; reported November 17, H.Rept. 108-364. Passed House November 17, 2003. Sent to Senate committee on Energy and Natural Resources. Ordered reported June 16, 2004, and placed on the Senate Legislative Calendar.

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. Hearings held May 18, 2004.

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. 2828 (Calvert)

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 Transportation and Infrastructure. Resources Committee held hearings July 24, 2003; forwarded to full committee September 25, 2003. Amended and ordered reported. Passed the House on July 9, 2004. Amended and passed the Senate by unanimous consent September 15, 2004.

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. House Resources Subcommittee on Water and Power held a hearing September 10, 2003. Mark-up session held and ordered reported on July 14, 2004.

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. House Resources Subcommittee on Water and Power held a hearing September 10, 2003. Ordered reported on May 5, 2004 and reported on May 20 (H.Rept. 108-506). Passed the House on July 19, 2004, and sent to the Senate Committee on Energy and Natural Resources.

H.R. 3391 (Cannon)

To authorize the Secretary of the Interior to convey certain lands and facilities of the Provo River Project. Introduced October 29, 2003, and referred to the House Subcommittee on Water and Power. On July 8, 2004, forwarded to the full committee; full committee ordered reported by unanimous consent September 22. See S. 1876 for related bill.

H.R. 3466 (Lewis)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Yucaipa Valley Regional Water Supply Renewal Project. Introduced November 11, 2003; referred to Committee on Resources.

H.R. 3747 (Walden)

Authorizes the Bureau of Reclamation to participate in the rehabilitation of the Wallowa Lake Dam in Oregon, and for other purposes. Introduced January 28, 2004 and referred to the House Resources Committee. Hearings held March 24, 2004.

H.R. 3900 (Capps)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the design, planning, and construction of permanent facilities for the GREAT project to reclaim, reuse, and treat impaired waters

water in the area of Oxnard, California. Introduced March 24, 2004 and referred to the House Resources Committee. Hearings held March 24, 2004.

H.R. 3945 (Calvert)

Amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the design, planning, and construction of a project to reclaim and reuse wastewater within and outside of the service area of the City of Corona Water Utility, California. Introduced March 11, 2004 and referred to the House Resources Committee.

H.R. 4045 (Pombo)

Authorizes the Secretary of the Interior to prepare a feasibility study with respect to the Mokelumne River, and for other purposes. Introduced March 25, 2004 and referred to the House Resources Committee. Ordered reported by the full committee on June 14, 2004.

H.R. 4389 (Issa)

Authorizes the Secretary of the Interior to construct facilities to provide water for irrigation, municipal, domestic, military, and other uses from the Santa Margarita River, California, and for other purposes. Introduced May 19, 2004, and referred to the House Resources Committees. Subcommittee hearing held June 23, 2004.

H.R. 4459 (Pombo)

Authorizes the Secretary of the Interior, acting through the Bureau of Reclamation and in coordination with other Federal, State, and local government agencies, to participate in the funding and implementation of a balanced, long-term groundwater remediation program in California, and for other purposes. Introduced May 20, 2004, and referred to the House Resources Committee. Ordered reported by the full committee on June 14, 2004.

H.R. 4606 (Baca)

To authorize the Secretary of the Interior, acting through the Bureau of Reclamation and in coordination with other federal, state, and local government agencies, to participate in the funding and implementation of a balanced, long-term groundwater remediation program in California, and for other purposes. Introduced June 17, 2004, and referred to the House Resources Committee. Ordered reported on July 14, 2004.

H.R. 4775 (Reyes)

To amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the El Paso, Texas, water reclamation, reuse, and desalinization project, and for other purposes. Introduced July 7, 2004, and referred to the House Committee on Resources.

H.R. 4907 (Issa)

To amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Elsinore Valley Municipal Water District Wildomar Service Area Recycled Water Distribution Facilities and Alberhill Wastewater Treatment and Reclamation Facility Projects. Introduced July 22, 2004, and 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. Reported with an amendment and with S.Rept. 108-63 June 9, 2003. Passed Senate June 16, 2003; referred to the House Committee on Resources June 17. Reported November 17, H.Rept. 108-369.

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. Hearings held May 14, 2003. (See H.R. 1598, which became P.L. 108-233).

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. Hearings held May 19, 2004.

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 February 11, 2004, ordered reported *with* an amendment (S.Rept. 108-232). Passed Senate May 19, 2004 with amendments and referred to the House Committee on Resources on June 1, 2004.

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. Energy and Natural Resources Subcommittee on Water and Power held hearings May 13, 2003.

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. Hearing held March 25, 2004.

S. 1097 (Feinstein)

Authorizes the Secretary of the Interior to implement the CALFED Bay-Delta Program. Introduced May 21, 2003; referred to Committee on Energy and Natural Resources. Hearing held October 30, 2003. Reported May 20, 2004 (S.Rept. 108-268), and placed on the Senate Legislative Calendar. Senate amended and passed H.R. 2828 September 15 in lieu of S. 1097.

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. Introduced June 9, 2003; referred to Committee on Energy and Natural Resources. Ordered reported with an amendment in the nature of a substitute on July 14, 2004.

S. 1876 (Bennett)

Authorizes the Secretary of the Interior to convey certain lands and facilities of the Provo River Project. Introduced November 18, 2003, and referred to the Senate Committee on Energy and Natural Resources. Hearings held May 19, 2004. Full committee reported with an amendment in the nature of a substitute on September 28, 2004 (S.Rept. 108-365).

S. 2218 (Domenici)

Directs the Secretary of the Interior to establish a rural water supply program in the Reclamation States for the purpose of providing a clean, safe, affordable, and reliable water supply to rural residents and for other purposes; authorizes the Secretary to conduct appraisal and feasibility studies for rural water projects, and establishes the guidelines for any projects authorized under this program. Introduced March 22, 2004; referred to the Committee on Energy and Natural Resources. Hearing held March 25, 2004. (See also S. 1732, introduced by request of the Administration.)

S. 2460 (Domenici)

Provides assistance to the State of New Mexico for the development of comprehensive state water plans, and for other purposes. Introduced May 20, 2004, and referred to the Senate Committee on Energy and Natural Resources. Ordered reported with an amendment in the nature of a substitute on July 14, 2004.

S. 2511 (Domenici)

Directs the Secretary of the Interior to conduct a feasibility study of a Chimayo water supply system; provides for the planning, design, and construction of a water supply, reclamation, and filtration facility for Espanola, New Mexico, and for other purposes. Introduced June 8, 2004; referred to the Senate Committee on Energy and Natural Resources. Ordered reported with an amendment in the nature of a substitute on July 14, 2004.

S. 2513 (Bingaman)

Authorizes the Secretary of the Interior to provide financial assistance to the Eastern New Mexico Rural Water Authority for the planning, design, and construction of the Eastern New Mexico Rural Water System, and for other purposes. Introduced June 9, 2004; referred to the Senate Committee on Energy and Natural Resources. Hearings held June 17, 2004.