

Testimony
presented by

Tony Willardson, Deputy Director
Western States Water Council
before the

House Committee on Resources
Water and Power Subcommittee
at a hearing on

Maintaining and Upgrading the Bureau of Reclamation's Facilities
to
Improve Power Generation, Enhance Water Supply
and
Keep our Homeland Secure

July 19, 2005

Dear Mr. Chairman and Members of the Subcommittee:

The Western States Water Council is an organization of eighteen western states. Our members are appointed by their respective governors, and include senior state water managers and administrators. We are closely associated with the Western Governors' Association (WGA).

The Bureau of Reclamation operates hundreds of dams and reservoirs in the West supplying water and power to millions of people, irrigating millions of acres for food and fiber, providing flood control and recreation, and maintaining instream flows for fish and wildlife habitat, including anadromous and threatened and endangered aquatic species. The value of federal Reclamation projects can not be overstated, particularly in assisting western communities survive the extended drought in the Southwest and Northwest. Two of Reclamation's express "mission goals" are: (1) managing, developing and protecting water and related resources to meet the needs of current and future generations; and (2) operating and maintaining facilities safely, reliably, and efficiently to protect the public investment.

Reclamation faces many serious challenges to balance and provide for a new mix of resource needs in the West due to population growth and changing values. While traditional agricultural demands continue to dominate use in the West, environmental uses have become more important to the public, while municipal and industrial development is demanding more and more high quality water. In the future, there will be even greater demands placed on the West's limited water resources and Reclamation's aging projects, many of which are well beyond their designed life.

Reclamation's estimate of foreseeable future rehabilitation and betterment (R&B) costs total approximately \$645 million. This figure includes estimates from each region for facilities operated and maintained by project sponsors. However, the water users were not asked to comment on Reclamation's estimated costs.

With respect to dam safety, the Bureau has already spent some \$895 million to take corrective actions at 84 dams defined as high hazard or subject to significant risks. Work has been completed at 69 of these structures. Reclamation has estimated it needs some \$227 million to complete corrective actions for all of these dams. There are 364 dams/dikes in Reclamation's inventory of high and significant hazard structures, where risks have been or are being reviewed. The annual cost to identify, analyze and evaluate potential safety problems is \$18 million, with another \$1.5 million for other Department of Interior dam safety work managed by Reclamation.

Spending under other Bureau programs which may have a rehabilitation component include the 2025 Challenge Grant, Field Services and Bridging-the-Headgate programs. Spending for the latter two programs has been roughly between \$9-\$14 million/year. Of note, for FY 2005, the Congress appropriated just over \$17 million (with rescissions and underfinancing) for Water 2025, with some \$10 million allocated for the Challenge Grant program. Over 100 proposals were received requesting \$35.5 million in federal cost sharing for projects with a total cost of \$115 million.

It would appear that current foreseeable demands for dam rehabilitation and betterment, dam safety and water delivery system improvements are approaching \$1 billion. Reclamation faces an enormous challenge. The Council recognizes the need to work together as federal-state-local partners to address this challenge. Reclamation's mission goals cover a number of long-term goals that include: (1) providing leadership in delivering water and power; (2) increasing water use efficiency and availability; (3) ensuring effective operations of facilities; and (4) operating, maintaining and rehabilitating facilities to ensure reliability and cost-effectiveness – to name a few. The Bureau's strategy for accomplishing these goals list several guiding principles that involve a continuing and close working relationship with traditional water users, while using partnerships to create sustainable solutions and leverage limited resources. In the West, we all have an important interest in federal project rehabilitation, but the solutions to problems related to aging infrastructure will require the formation of true partnerships. States and local districts want to be "partners" not "payers." They need to be actively involved in the evaluation, design and selection of alternatives.

In a 1997 report for the Western Water Policy Review Advisory Commission, the Council declared, "In the arid West, providing adequate water supplies to meet future demands continues to be a priority." Getting the most out of existing projects and maintaining existing infrastructure to ensure its safe and efficient operation has to be a primary objective.

The Administration and the Congress must make this a budget priority. The Congress, concerned with budget scoring problems, has rejected the Administration's FY 2006 request to allow Reclamation to spend certain revenues from water and power receipts in the Reclamation Fund for project operation and maintenance expenses without further appropriation. At present, Reclamation Fund receipts, which also include energy-related revenue from federal lands, exceed appropriations by roughly \$1 billion annually. The Council strongly believes the Administration should request and the Congress should approve legislation that would create a true revolving trust fund that will allow this money to be expended without further appropriation for project operation, maintenance, rehabilitation and replacement, in close consultation with western states.

Making more water available for new and expanded uses and increasing water use efficiency are critical, given the fast growing population of the West, subsequent demands for water for domestic and municipal uses, continuing agricultural water demands, and increasing demands for water for environmental uses, particularly the needs of endangered and threatened aquatic species. Further, Reclamation facilities play a key role in storing, managing and delivering water under numerous interstate compacts and international treaties and tribal water right settlements. These facilities must be maintained and operated so as to insure that U.S. interests are protected, and U.S. obligations fulfilled.

Reclamation projects have and will continue to play an essential role in meeting western water demands, and we can not afford to lose these invaluable water resources – many of which were developed several decades ago. The rehabilitation and efficient, effective and safe operation of these Reclamation facilities is critical. Moreover, project modifications, reoperations and reauthorization should be considered, as necessary and appropriate, to look at current water problems and opportunities to increase project water yields (and other benefits).

While Interior's Water 2025 Initiative is an example of Reclamation's efforts to address water resources challenges in the West before conflicts reach a critical impasse, as in the Klamath River Basin, western states believe the scope of the program was woefully inadequate to meet the growing need. Nevertheless, the success in leveraging federal, state and local resources through Water 2025's Challenge Grants is an example of what can be accomplished if we are willing to work together. It would appear that matching non-federal support could easily be found for \$100 million in federal money.

Federal water project transfers to local ownership, in addition to responsibility for projects' operation, is one area for action between Reclamation and state and local interests.

The billion dollar question is how should Reclamation programs and projects be funded? The President's FY06 budget request for the Water and Related Resources account totals \$802 million, down from \$859 million appropriated last year. Further, the request anticipates that off-setting receipts collected by the Western Area Power Administration (WAPA) for operation and maintenance and other expenses allocated by Reclamation to WAPA would reduce the final appropriation to some \$771.6 million. According to program and financing figures and estimates, new budgetary authority (gross) for obligation has dropped from \$994 million in

FY04, to \$972 million in FY05 and is projected to be \$919 million in FY06. Total gross outlays would be \$940 million, compared to an estimated \$1.028 billion in FY05 and \$953 million in FY04.

Meanwhile, the unobligated balance in the Reclamation Fund is expected to grow from \$3.877 billion at the end of FY04 to an estimated \$4.812 billion for FY05 and \$5.905 billion in FY06. Created by the Reclamation Act of 1902, the Reclamation Fund was envisioned as the means to finance western water and power projects with revenues from western resources. Its receipts are derived from water and power sales, project repayments, certain receipts from public land sales, leases and rentals in the 17 western states, as well as certain oil and mineral-related royalties. It is a special fund within the U.S. Treasury that is only available for expenditure pursuant to annual appropriation acts.

With growing receipts, in part due to high energy prices, and declining federal expenditures for Reclamation purposes, the unobligated figure gets larger and larger, while the money is actually spent elsewhere for other purposes. While receipts in the past were insufficient for the construction of major federal projects such as Grand Coulee and Hoover Dams, which required the appropriation of general Treasury funds, today it appears that the Reclamation Fund could serve as a revolving account that would pay for Reclamation and related water resources programs and needs in the West. Further, it would keep the proceeds from development of western resources in the West as the Congress envisioned in 1902.

Federal loan guarantee authority should also be provided to allow the Bureau of Reclamation to guarantee the repayment of state and local bonds for the rehabilitation and construction of projects. The WSWC has in the past supported such an insurance fund, as well as the use of tax-exempt bonds to finance water resources needs. State and local agencies have always financed the majority of their own water needs, but federal assistance has and will continue to be important and loan guarantees would be a valuable tool.

Perhaps it is time to focus federal financial resources intended to aid in western water development to help state and local agencies meet the future challenges of supplying adequate water of suitable quality in the face of growing municipal and industrial demands and federal requirements to protect public health and the environment.

Virtually every western state already has some type of water resources related financial assistance programs in place for local entities, some of which might be used for federal project cost sharing and rehabilitation of aging infrastructure. A summary of the types of financing used by these programs is attached. These programs might also be used to distribute federal resources, were such financial assistance available, meet local needs in dealing with aging nonfederal infrastructure.

Included with this testimony is a brief description of a few examples of some aging projects, state contributions and federal/state project or program partnerships for addressing present and future needs, which may include those related to aging infrastructure.

Arizona

Work on the Yuma Project, serving irrigated lands in Arizona and California, began in 1905. In 1912, the first water was delivered to Arizona. A combination of dams, canals, pumps, 218 miles of laterals, and 127 miles of drains serve over 68,000 acres of land. Current needs include canal lining, control of drainage water returns to meet treaty salinity requirements with Mexico, additional funding for adequate drainage in the Yuma area, repair of the Yuma desalting plant, and fixing problems related to Senator Wash (or adding more regulatory storage to control occasional losses or the over delivery of water to Mexico).

California

The Central Valley Project (CVP) in California provides water and drainage for millions of acres of land. Friant Dam on the San Joaquin River was completed in 1942. It provides conservation storage of over 500,000 acre-feet and diverts water into the Madera and Friant-Kern Canals, portions of which are in disrepair and need rehabilitation. Another serious problem, related not to aging infrastructure but the lack thereof, is the failure to complete the San Luis Drain due to environmental concerns over concentrating and disposing of selenium. A federal court has held the federal government responsible for solving the drainage problem as promised in the CVP's authorizing legislation. Finding an acceptable alternative, given there is no proven technology for selenium treatment, will require agreement on innovative and perhaps nonstructural actions.

The Central Valley Project Improvement Act (CVPIA) authorized fish and wildlife and environmental components as specific project purposes. The State of California has already provided more than \$90 million raised from the sale of bonds to implement the CVPIA and carry out numerous environmental restoration projects, such as Shasta Dam temperature control and various fish passage improvement projects. The local water agencies and districts that contract for the delivery of CVP water have also provided money through the environmental restoration fund created by the CVPIA.

There are other examples of significant state-federal partnerships, indirectly related to aging infrastructure. For the past five years, the State of California has provided the bulk of the money to fund implementation of the CALFED Bay-Delta Program. The State has also appropriated money from its General Fund in support of the Bureau of Reclamation's emergency drought response measures in the Klamath Basin.

Colorado

The Grand Valley Project is the oldest in Colorado. It began delivering water in 1917. Its diversion dam on the Colorado River continues to use the original works, with a unique design for raising and lowering its nine slide gates. These facilities provide much of the irrigation water for the Grand Junction area, diverting up to 1,675 cubic feet per second (cfs) for over 40,000 acres of alfalfa, beans, seed, potatoes, oats, barley and wheat, as well as orchards.

Horsetooth Dam is part of the Colorado Big Thompson Project, which helps stabilize the agricultural and industrial economy of northeastern Colorado. The earthfilled offstream dam was built between 1946 and 1949. In 1988, it was raised to its current height of 155 feet. It provides 5,430 acre-feet of active storage. It needs safety related work involving the grouting of gypsum seams in the surrounding rock. The Northern Colorado Water Conservation District has committed some \$100 million for the work in partnership with the Bureau of Reclamation.

Montana

The Milk River Project is one of Reclamation's oldest, and still depends on the same basic infrastructure built in the early 1900s. Water is stored and diverted from behind Lake Sherburne Dam on the St. Mary's River and delivered through a system of canals, siphons, and laterals to some 120,000 acres of land in northcentral Montana. These farm lands produce about 8.3% of Montana's cattle/calves, 7.8% of all irrigated hay, and 8.2% of all irrigated alfalfa. The project is also important to the Blackfeet tribe (the entire system is located on their reservation) and water allocations assumed under a 1909 international treaty with Canada. Water is also delivered to Bowdoin National Wildlife Refuge.

Many components of the diversion and delivery system have far exceeded their design life and are in critical need of repair or replacement, including two sets of inverted siphons that are gradually failing. Catastrophic failure of the system would mean economic and environmental devastation to the area, with repercussions across Montana. A Bureau of Reclamation appraisal level study of St. Mary Canal System Enhancements estimated rehabilitation costs to be between \$120-\$127 million. The State of Montana has appropriated \$13 million for this project, while federal appropriations to date total only \$1 million.

Washington

The State of Washington provides a number of programs providing assistance to various irrigation organizations and individual farms designed to improve water management. Since 1972, some \$75 million (about \$2 million/year at present) has been provided from Agricultural Water Supply Bonds to help irrigation districts with infrastructure improvements. In addition, from 2001 through 2007, \$10 million has been earmarked for Irrigation Efficiency Grants. Another \$4.5 million has been set aside for grants to help farmers meet water use metering and reporting requirements. Similarly, the State is providing \$7.4 million for grants for water storage and \$4 million for water conveyance systems for agriculture through 2007.

Moreover, the State is cooperating with the Bureau of Reclamation on the Yakima Basin Enhancement Project and has committed \$17.5 million, or about one-sixth of the projected cost, from its Agricultural Water Supply Bonds. Local entities are providing a similar match. The total estimated project cost is \$100 million, with a 35% non-federal cost share, for water conservation projects and irrigation district system improvements. Further, Washington has also committed \$4 million to cover half the cost of a study of increasing water storage in the Yakima Basin. Money provided to other irrigation districts may also be used to match federal funds.

Wyoming

The Wyoming Water Development Commission has been an active partner with the Bureau of Reclamation in a number of dam modification and dam safety projects, as well as irrigation system rehabilitation. In the 1980s, the state participated in financing dam safety work at Fontenelle Dam, part of the Colorado River Storage Project, in return for the ability to market some of the water in the reservoir. In the 1990s, Wyoming provided \$78 million dollars and cost shared enlargement of Buffalo Bill Dam under a similar arrangement. Of note, the State appropriated its share upfront, and waited on the Congress to eventually appropriate the federal match. In the Shoshone River basin in northwestern Wyoming, \$52 million dollars of rehabilitation needs have been identified in the four Bureau of Reclamation irrigation districts. The Bureau and the State of Wyoming cost shared on a 50-50 basis in a \$15 million dollar rehabilitation project for those districts in the past few years, but many needs remain.

Funding and expanding past and present Bureau of Reclamation programs to meet identified needs, and/or authorizing the use of Reclamation Fund money to capitalize a new federal revolving R&B and O&M fund (or otherwise assisting existing state and local programs), would go a long way towards meeting the growing demands placed on western water resources and preserving existing Bureau projects.

Current challenges may provide an opportunity to look beyond existing ownership and partnership arrangements, as well as authorized project purposes and benefits. Perhaps, we should consider new arrangements with multiple partners (including states) that would have a significant voice in future project rehabilitation, modifications, and operations. In the past, projects have been built by the Bureau of Reclamation projects (or Army Corps of Engineer projects, state water projects, districts projects and municipal projects) without much serious consideration or coordination of operations and benefits with other entities.

In the future, as we address the growing water needs in the West for many purposes, different agencies and stakeholders may have to come together and pool their available financial and other resources in new project specific partnerships, and other nonstructural agreements, in order to overcome the challenges and obstacles we face in resolving our aging infrastructure problems and insuring the region has an adequate water supply.

On behalf of our members and member states, we appreciate the opportunity to testify and I would be happy to answer any questions. Thank you.

Western States Water Council

September 23, 2002

Water and Wastewater Project Financing Matrix (Current State Sources)

	AK	AZ	CA	CO	ID	KS	MT	NB	NV	NM	ND	OK	OR	SD	TX	UT	WA	WY
Capital Financing Sources																		
General Fund Appropriations	X	X	X		X		X	X	X	X	X	X		X	X	X	X	X
Bonds & Other Debt Instruments		X ¹	X				X		X			X		X	X		X	
General Obligation Bonds		X	X ²				X		X	X			X		X		X	
Revenue Bonds		X	X		X		X		X			X	X					
Tax-Exempt Bonds			X		X						X	X	X					
Taxes (State & Federal))	X						X		X			X					X ³	
Severance Taxes/Mineral Leasing Money	X			X			X			X	X	X ⁴						X
Sales Tax Dedication									X							X		
User Fees		X					X		X									
State Water and Power Sales			X ²			X	X											
State Surcharges on Water Sales						X ⁵												
Other Special Fees		X ⁶																
Private Financing							X											
Leasing/Buy Back Arrangements																		
Federal Appropriations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Revolving Loan Fund Capitalization	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Other Miscellaneous Sources		X ⁷				X ⁸					X ⁹						X ¹⁰	

Financing Mechanisms/Vehicles WY	AK	AZ	CA	CO	ID	KS	MT	NB	NV	NM	ND	OK	OR	SD	TX	UT	WA
Direct Appropriations	X		X											X			
Revolving Loan Funds			X	X		X			X				X			X	X
Mirror Bonds/Bond Pooling					X				X				X				
State Lottery Backed Bond Proceeds													X				
Bond Guarantees														X			
Bond Insurance																X	
Competitive Loan/Grant Programs		X	X		X			X		X				X	X		
Dedicated Trust Funds														X		X	X
Storage Acquisition						X						X			X		
Other																	
Taxes - Cigarette																	X

1. Leveraged Bonds
2. State Water Project
3. Initial 6-year property tax levy
4. Percentage of the Gross Production Tax levied on oil and gas production. Only about 5% of our total annual funding comes from appropriation of general funds or gross production funds. About 35% comes from federal capitalization grants (SRFs) and about 60% comes from revenue bond and note proceeds. We issue revenue notes for our SRF state match each year.
5. Use Fees: .30/1000 gallons municipal and 0.3/1000 gallons industrial and stockwater
6. Ground water pumping tax
7. Interest, loan servicing fees, and loan repayments
8. One time contribution from legislature of \$5M from windfall
Special fees on agricultural use of fertilizers & pesticides
Kansas also uses lottery funds for water development
9. From tobacco settlement allocations
10. Bond Purchases, Interest, and Repayments

