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Oversight Hearing on
State of Western Water Resources

before the

House Subcommittee on Water and Power

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My name is Bill McDonald. I am the Regional Director of the Pacific Northwest Region and also am serving as Acting Commissioner of the Bureau of Reclamation (Reclamation). I appreciate the opportunity to be here today to discuss the state of western water resources.

The Subcommittee has asked for an assessment of the capacity of Bureau of Reclamation facilities to meet the water needs of the Western States in the short and long term. Let me begin with a short overview of the facilities which Reclamation has developed and the benefits which they yield.

Background

As the largest water resources management agency in the west, Reclamation administers or operates 348 reservoirs with a total storage capacity of 245 million acre-feet, 58 hydroelectric powerplants with an installed capacity of 14,744 megawatts, and more than 300 recreation sites in the 17 western states. These facilities enable Reclamation to meet important needs and provide numerous benefits:

- We provide one out of five western farmers with irrigation water for 10 million acres of farmland that produce 60 percent of the nation's vegetables and 25 percent of its fruit and nuts.
- We deliver water to more than 31 million people in the west, the most rapidly urbanizing region of the country.
- Our powerplants generate an average of more than 42 billion kilowatt hours of energy each year, making Reclamation the nation's second largest producer of hydroelectric power and the 11th largest generating utility in the United States. Reclamation produces enough electricity to serve 14 million people. Reclamation's Central Valley Project in California generated more than 6.5 billion kilowatt hours of energy in 1999 and serves approximately 2 million Californians. All power generated by Reclamation facilities is marketed by the Bonneville Power Administration and the Western Area Power Marketing Administration.
- Our projects support habitat with water for wildlife refuges, migratory waterfowl, anadromous and resident fish, and endangered and threatened species.
- Our reservoirs accommodate 90 million visits a year at more than 300 recreation sites.

All indications are that this year is shaping up to be a very dry year in many regions of the west, particularly in the Pacific Northwest. A below normal water inflow to Reclamation facilities means that water deliveries, power production and environmental requirements will have to be carefully balanced to satisfy to the greatest extent possible multiple project purposes.

Project Operations

In addressing future water needs Reclamation must continue to operate and maintain our projects, in accordance with all applicable federal laws and regulations, state water rights and interstate compacts and judicial decrees, and our contractual commitments to irrigators and other project water users. At the same time the Secretary of the Interior must fulfill tribal trust responsibilities and the United States' international treaty obligations with Mexico and Canada.

Balancing water supply and hydro power demands with environmental and other obligations is an increasingly complicated and difficult task which at times requires some reductions either in the water supplies available to our contractors or in the power which we are able to generate. More often than not, however, we are able to find middle ground which enables us to fulfill all of our obligations.

Enhancing the Efficiency of Use of Already Developed Water Supplies

New dams and reservoirs will probably be developed in the West in the years ahead only on a limited basis. Accordingly, increasing the efficiency of use of the water supplies which have already been developed will be a vital part of the West's future. I would like to highlight a few of the ways in which Reclamation is contributing in this regard.

Water Conservation. Water conservation is a key tool in expanding existing water supplies. As the 1998 Report of the Western Water Policy Review Advisory Commission said, "Water conservation, or improved efficiency of use, can have many benefits and should be the first approach considered for extending or augmenting available supplies."

The Reclamation Reform Act directs Reclamation to encourage water conservation and directs water districts receiving irrigation water to develop conservation plans. Some districts have employed state of the art conservation technology, including drip irrigation. Drip systems deliver water directly to individual plant roots, thereby eliminating evaporation and saving water and energy.

Through our Water Conservation Field Services Program, we provide water districts with technical and financial assistance to develop effective water conservation plans. While Reclamation has a role to play in

water conservation, there also are opportunities for state and local entities to offer incentives through rate restructuring, low interest loans for farmers to install more efficient irrigation facilities, and rebates for installation of efficient appliances, landscaping retrofits, and toilets.

Water Reuse. Recycled water is used for a variety of purposes, including agricultural and landscape irrigation, ground water recharge, and industrial cooling. Reclamation's water reuse program assists western cities in enhancing their water supplies by providing funds for the 25 projects authorized under Title XVI of Public Law 102-575, as amended. Since 1992, the Congress has authorized water reuse projects in the states of California, Nevada, Utah, New Mexico, Texas, Arizona, and Oregon. Nonfederal cost sharing partners pay at least 50 percent of the feasibility study costs and 75 percent of the construction costs. Total Federal costs for the 25 authorized projects is estimated at \$600 million. To date, approximately \$205 million has been made available in Federal assistance.

These projects are in various stages of planning, design and construction but all are estimated to be completed by 2012. Upon completion, they are expected to yield an additional 494,000 acre feet water for beneficial use.

Addressing an Aging Infrastructure

Having dependable supplies of water and power also requires that the infrastructure which Reclamation has developed over the past century be properly maintained. Approximately 50 percent of Reclamation's dams were built prior to 1950 and about 90 percent were constructed before current state-of-the-art design and construction practices were in place. Given our aging infrastructure, sustaining an appropriate level of annual maintenance of existing facilities, and making safety of dams modifications as required and on a timely basis, are critical to protect public safety and property and to ensure that the benefits of Reclamation's projects can continue to be realized.

As with our dams and water delivery systems, Reclamation's powerplants must also be maintained in a constant state of readiness. Again, sustained maintenance, and replacement and modernization of equipment and machinery over time, are critical to the readiness of our hydro power system.

In the face of the energy problems being experienced on the West coast, I would like to assure the Subcommittee that Reclamation is generating all of the electricity which it possibly can at this time. While we presently have some units down for planned maintenance, this is not affecting our ability to generate. This is because we have only enough water in our various reservoir systems to run the generators which are on line.

Facilitating Voluntary Water Transfers

Approximately 85 to 90 percent of the water consumed in the West is devoted to irrigated agriculture. In the face of rapid urbanization, the changing economics of farming, and the need to strike a balance with the appropriate protection of environmental values, voluntary transfers of water from willing agricultural sellers to willing buyers is one means by which the future water needs of the West will be addressed.

The Assistant Secretary for Water and Science approved *Principles Governing Voluntary Water Transactions That Involve or Affect Facilities Owned or Operated by the Department of the Interior* (the 1988 Principles) on December 16, 1988. Within the framework provided by the *1988 Principles*, Reclamation has been, and continues to be, supportive of voluntary transfers and conversions of project water in accordance with State and Federal law from existing to new uses. In this regard, Reclamation has issued policies which supplement and expand upon the 1988 *Principles* insofar as those principles pertain to transfers of project water.

The *1988 Principles* also pertain to the use of excess capacity in Reclamation projects for the storage and conveyance of non-project water. Within the framework provided by the *1988 Principles*, Reclamation has issued policies which address making excess capacity available under appropriate circumstances to assist in improving the management of the West's water resources.

Conclusion

Finding ways to meet water needs presents a great challenge for Reclamation and western communities. We look forward to working with the Subcommittee and with all water users and the interested public to develop ways to meet competing demands. Thank you for the opportunity to participate in today's hearing.