Water and Power Subcommittee Oversight Hearing
U.S. Bureau of Reclamation Water Conservation Initiative
March 16, 2010

Statement of Patricia Mulroy
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Before the
Subcommittee on Water and Power,
Committee on Energy and Natural Resources
United States Senate

Madam Chairman, I am Patricia Mulroy, General Manager of the Southern Nevada Water Authority (SNWA), Las Vegas, Nevada. I am pleased to provide my views to you today concerning the Bureau of Reclamation's Basin Study Program and specifically the Colorado River Basin Water Supply and Demand Study (Study), a cooperative effort between Reclamation and the seven Colorado River Basin States (Basin States). I would also like to describe our efforts at SNWA to promote water conservation to help meet our current and future demands.

BACKGROUND

The Colorado River Basin (Basin) includes parts of the seven states of Arizona, California, Colorado, New Mexico, Nevada, Utah and Wyoming and is one of the most critical sources of water in the west. The Colorado River and its tributaries provide water to over 30 million people for municipal use, supply water to irrigate nearly 4 million acres of land, and is also the lifeblood for at least 15 Native American tribes, 7 National Wildlife Refuges, 4 National Recreation areas, and 5 National Parks.

Many of the largest urban areas of the west and southwest such as Denver, Salt Lake City, Albuquerque, Las Vegas, Phoenix, Tucson, Los Angeles and San Diego rely on the Colorado River or its tributaries for all or a part of the water supply. Hydropower facilities along the Colorado River provide more than 4,200 Megawatts of generating capacity, helping to meet the power needs of the west while reducing the use of fossil fuels. The Colorado River is also vital to Mexico to meet both agricultural and municipal water needs.

Most of the flow of the Colorado River and its tributaries originates as snowmelt from high mountain areas in Wyoming, Utah, and Colorado and moves downstream through some of the most arid regions of the U.S. Because of variations in weather and water use, Colorado River flows have fluctuated significantly each year and throughout the year. The reservoirs on the mainstream and its tributaries provide storage capacity of approximately four times the average annual natural flow. This storage has provided the ability to meet most demands in the Basin, even over periods of sustained drought, such as has been experienced since 2000.

However, concern has increased regarding the adequacy of Colorado River runoff to meet future needs. This is based on recent severe and persistent drought, projection of continued population growth in the west and southwest, and predictions by Climate Scientists for as much as 10-30 percent decreases in average yield of the Colorado River due to climate change.

In fact, water supply and demand imbalances already exist in some geographic areas in the Basin and are projected to increase in both magnitude and extent in the future. Over the past nine years, average annual Upper Basin water use has decreased by approximately 400,000 acre-feet (a decrease of approximately 11 percent) due in large part to water shortages caused by the current drought.

BASIN STATES AND RECLAMATION WILL CONDUCT COLORADO RIVER BASIN WATER SUPPLY AND DEMAND STUDY

The Basin States strongly support Reclamation's ongoing Water Conservation Initiative which includes the Challenge Grant, Title XVI, and Basin Study Programs. All of these Programs offer potential ways to help evaluate and meet current and future water supply challenges in the west and southwest areas served by the Colorado River.

The Study is one example of how the Water Conservation Initiative can provide assistance in managing the Basin's limited water supply. The Basin States received notification from Reclamation in September of this year that our proposal was selected and would receive Federal cost-share funding. Reclamation has Federal funds in the amount of $1,000,000 that will be provided over a two-year period toward completion of this Study. The Basin States have committed to a 50 percent cost share with Reclamation through cash and in-kind services to match the Federal contribution.

The Study will analyze through the year 2060 water supply and demand imbalances throughout the Basin and in those regions outside the Basin that receive Colorado River water, assess options for resolving such imbalances, and develop recommendation to address current and projected imbalances. We view the Study as a critical next step in moving forward to address both short-term and long-term water supply needs and for identifying potential solutions for the Basin. It will build upon previous efforts by water utilities, the Basin States, and Reclamation to manage the Colorado River in the most effective way possible. We have worked closely with Reclamation to develop the necessary agreements and the final Plan of Study. I am pleased to report that the Study was initiated in January of this year.

While we deeply appreciate the Federal contribution for this Study, we have some concern about whether the federal and non-federal funding will be sufficient to get the best results for a study of this scope and magnitude. We urge Congress to carefully consider the potential to provide additional funding to enable further cost sharing to fully achieve the goals of the Study.

SOUTHERN NEVADA WATER AUTHORITY'S WATER CONSERVATION PROGRAMS

I would now like to describe SNWA's conservation programs to provide the Subcommittee insight with respect to our efforts to help manage, conserve and stretch our supply of Colorado River water. While my remarks will focus on SNWA, I would point out that most urban and agricultural water entities throughout the Basin also have aggressive conservation programs.

As you know, the Las Vegas area is located in one of the most arid parts of the U.S. At present, 90% of SNWA's water supply comes from the Colorado River. Promoting the efficient use of water is central to our mission. Our success in increasing efficiency of water use and reduction of water waste wherever possible has a direct link to the volume of water we will need in the future.

While we consider conservation as one of the resources in our water portfolio, it is fundamentally different from other water resources. Unlike our "wet" resources such as the Colorado River, banked water, and groundwater, conservation is a tool we use to reduce overall demands.

We have implemented a number of conservation activities since our formation in 1991. While we actively promote indoor conservation, our greatest opportunity for water conservation lies in reducing outdoor use, which accounts for about 60% of SNWA's water use. We use several tools to aggressively promote conservation in the SNWA service area. These include regulation, water pricing, incentives and education.

During the past 18 years, city and county governments have adopted a variety of land use codes and water use ordinances to promote more efficient use of water in the Southern Nevada area. For example, a 2003 code for construction of new homes prohibits turf in the front yard and limits it to 50% of the backyard landscaping. Restrictions also prohibit watering during the hottest times of day and limit how often residents may water during the week on a seasonal basis. More stringent policies have also been implemented to offset drought impacts and more recently these have become permanent measures to assist in overall conservation of water.

Water rates, including block or tiered rates, are one of our most effective conservation tools. Higher rates are charged as water use increases. This measure encourages efficiency while ensuring affordability of water for essential uses. Rates are reviewed regularly to ensure they keep up with inflation, maintain their effectiveness in encouraging conservation, and maintain the fiscal integrity of the water utility.

A variety of incentives are encouraging community participation in water conservation. Incentives encourage residential and commercial property owners to convert lawn to water-efficient landscaping. For example, since its inception, we have provided nearly 155 million dollars toward removal of turf as part of our Water Smart Landscapes Program. This has resulted in conversion of over 140 million square-feet of lawn (over

3,200 acres); saving more than 7 billions gallons of water annually in the SNWA service area.

Last but not least, education is an integral element of our conservation program. This tool helps communities in the Southern Nevada area learn about the importance of conservation and what they can do to help conserve water.

In closing, we will continue our efforts in conservation; however it is clear that conservation alone will not enable us and many other water users in the Basin to meet the projected Basin water demands through 2060. Additional development of water resources will be required. The efforts of all the water managers and users in the Basin will be needed to accomplish this goal. In our view, the Study and Reclamation's efforts in other areas of its Water Conservation Initiative are critical factors in achieving this goal.

Madam Chairman, we thank you and other members of this Subcommittee for your interest, support, and efforts to assure that the Basin and adjacent regions that receive Colorado River water will continue to have adequate supplies in the future.

I would be pleased to answer any questions.