

**Statement of Lorri Gray-Lee, Regional Director  
Lower Colorado Region  
Bureau of Reclamation  
U.S. Department of the Interior  
before the  
Committee on Natural Resources  
Subcommittee on Water and Power**

**Field Hearing: Collaboration on the Colorado River  
Las Vegas, NV  
April 9, 2009**

Madam Chairwoman and Members of the Subcommittee, I am Lorri Gray-Lee, Regional Director of the Lower Colorado Region for the Bureau of Reclamation (Reclamation). I am pleased to be here with you today to talk about the roles of the Department of the Interior (Department), Reclamation, and the seven Colorado River Basin States in collaborative management and use of the Colorado River.

Population growth, drought, and climate change are the key concerns facing the Colorado River today and into the future. Currently, the basin is in the 11<sup>th</sup> year of an historic drought that has affected resources throughout the basin, including particularly water supply and power generation. On January 1, 2000, Lake Powell and Lake Mead, combined, were at about 95 percent of capacity, with more than 47 million acre-feet of water in storage in the two reservoirs. Today the two reservoirs have just over 24 million acre-feet of water in storage, and are at about 55 percent of capacity, combined. Water Year 2010 will be another below-average runoff year; current projections are that the runoff for the water year will only be about 68 percent of average. Enormous investments in surface water storage on the Colorado will enable us to meet all deliveries in the current water year, but we do not know how long or severe the drought will be. Against this backdrop, the Department and the Basin States have taken a number of positive and collaborative steps to be prepared to meet the challenges we face in managing the limited water supplies of the Colorado River.

**RECENT ACCOMPLISHMENTS**

Since the 1920's, the Department of the Interior has performed as a water manager as well as a facilitator - or, sometimes, as the Water Master in the Lower Basin under the "law of the river" - to guide the management and use of Colorado River water. As facilities to store and deliver water were constructed and as the Southwest came to rely to a greater degree on the Colorado River, the Department's role in the management of the Colorado River became more complex and challenging. In addition to the water supply and hydropower aspects of water management, in recent decades environmental stewardship of our riparian areas has grown in importance and as a focus of Reclamation's operations. Recently, the challenge of drought has required that all stakeholders, Federal, tribal, state and local, work together to find solutions to the water management challenges we face.

Accordingly, over the past decade and a half, several significant collaborative programs have been successfully implemented.

At a time of full reservoirs, the 2001 Interim Surplus Guidelines were developed to address the need for objective criteria to determine when the Lower Basin States – and particularly California – could access needed "surplus" water – i.e., water above their basic annual apportionment of 7.5 million acre-feet per

year. While the river is obviously not in surplus today, the relationships and processes employed to develop these guidelines have paid dividends in developing subsequent agreements, including the new guidelines for water supply shortages described below.

The Colorado River Water Delivery Agreement, also commonly referred to as the key element of the “California 4.4 Plan” was signed in 2003. This Federal agreement, which resolved Colorado River issues in California that had been unresolved for 75 years, demonstrated the importance of the institutional relationships that exist in the Basin, and proved that cooperation and collaboration among the Department, the seven Colorado River Basin States, four California water management agencies, and the San Luis Rey Settlement Parties could address and resolve even the most difficult of issues.

In 2004, the Arizona Water Settlements Act was finalized. Decades of hard work by tribes, the Department of the Interior, the State of Arizona, and water interests throughout the state of Arizona resulted in the largest Indian water rights settlement in U.S. history. This settlement showed that tribal claims, river management, and environmental stewardship issues could be creatively addressed and resolved through water rights settlements instead of litigation.

#### Water Supply – ALP, Drop 2 Reservoir Storage Project, and Navajo-Gallup

Reclamation’s Upper and Lower Colorado Regional offices are actively working on various water supply projects in both the Upper and Lower Colorado Basins. In the Upper Basin, the Animas-La Plata Project will fulfill the requirements of the 1988 Colorado Ute Indian Water Rights Settlement Act and the Colorado Ute Settlement Act Amendments of 2000, fulfilling tribal water rights dating back to 1868. The project is more than a source of water for the tribes; it will be an engine for economic development. Like other programs on the Colorado River system, this project demonstrates that we are able to meet identified needs through persistence, partnership, and collaboration.

Located in southern California near the U.S.-Mexico border west of Yuma, Arizona, the Drop 2 Reservoir Storage Project is an example of collaboration among the Department of the Interior and three lower basin municipal water supply utilities – the Southern Nevada Water Authority, the Central Arizona Water Conservation District, and the Metropolitan Water District of Southern California. These utilities have funded this project, which is being constructed by Reclamation. The project will conserve about 70,000 acre-feet of water each year. The municipal users will receive credits to use water from Lake Mead over the next quarter-century in return for and proportionate to the funding they have provided for the project’s construction. After that, the conserved water will be available as part of the flows captured in the Colorado River System, for the benefit of all water users.

The Bureau of Reclamation’s FY 2011 Budget requests \$12.5 million for the further completion of ALP, which is nearing completion.

The Navajo-Gallup Water Supply Project is an element in the settlement of the Navajo Nation’s water rights claims on the San Juan River in New Mexico. It is designed to provide water to: Fort Defiance and Window Rock, Arizona; Gallup, New Mexico; various Chapters of the Navajo Nation; the Navajo Agricultural Products Industry; and, if they choose, the Jicarilla Apache Nation. The project’s Planning Report and FEIS are complete and a ROD was signed by the Secretary of the Interior on October 1, 2009, approving Reclamation’s decision to proceed with implementation of the preferred alternative. Parties are preparing agreements and collecting design data. A timeline and budget are being developed in order to initiate project construction in fiscal year 2012. The Bureau of Reclamation’s FY 2011 Budget requests \$10 million for this project, and the Bureau of Indian Affairs budget contains \$6 million for the Navajo Nation Water Resources Development Trust Fund.

## Environmental Programs – MSCP and Glen Canyon AMP

The Lower Colorado River Multi-Species Conservation Program – or LCR MSCP - is a 50-year, multi-stakeholder, Federal and non-Federal partnership that seeks to balance the use of lower Colorado River water resources with the conservation of 26 native species and their habitats in compliance with the Endangered Species Act. The Bureau of Reclamation is the implementing agency and funds 50 percent of the program. The other 50 percent is funded by partners in Arizona, California, and Nevada.

Since 2005, the LCR MSCP has secured over 3,600 acres of land and 17,500 acre-feet of water to create and protect habitat for native species covered under the LCR MSCP and its included Habitat Conservation Plan. Approximately 1,000 acres have been established with native vegetation that will be managed for native species. And more than 146,000 native fish have been raised and stocked to augment existing populations in the lower Colorado River to move them toward self-sustaining populations. In addition, a robust research and monitoring program has been developed and implemented for LCR MSCP-covered species and their habitats.

The Glen Canyon Dam Adaptive Management Program is a cooperative process that involves 25 very diverse interests – including Federal, tribal, state and non-governmental organizations - brought together through a Federal Advisory Committee. It involves the operation of one of the most critical water storage and hydropower facilities in the nation – Glen Canyon Dam - and was established to help protect downstream resources in one of the world’s wonders, the Grand Canyon. The complexity of the efforts to balance water delivery, hydropower production, endangered species conservation and national park protection has required the collaboration and cooperation of the many diverse entities involved in this effort.

One of the more innovative and complex recommendations resulting from this program are the high flow experiments at Glen Canyon Dam that were designed to benefit both endangered fish and to improve sediment retention in the Grand Canyon to benefit recreational opportunities and preserve cultural sites. These experiments, initiated in 1996, are providing information that will help the Department in future decision-making regarding the management of the river. Throughout this program, we have carefully and respectfully considered the input of all stakeholder groups, including the seven basin states.

The Secretary recently announced a high flow experiment protocol for this program to allow for high flow releases from the Dam whenever appropriate, sand and sediment triggering conditions exist. He also said we need to start thinking about a longer term experimental and management plan for Glen Canyon Dam, to build on the good science and experimentation that has been going on through the Adaptive Management Program over the past 15 years. We need to put together a plan that incorporates the knowledge we’ve gained, but leaves flexibility for future adaptation. That’s not going to be easy, but the many different stakeholders involved in this process believe it is time to move forward, in partnership, with this effort.

## Hydropower

The drought is having an impact on hydropower production due to the low lake levels at Lake Powell and Lake Mead. However, Reclamation and the power users continue to work together at Hoover Dam, Glen Canyon Dam and elsewhere to implement plant efficiencies through our maintenance program. We are also working to facilitate “low head” hydropower in other locations (water drop of less than 65 feet and capacity less than 15,000 kW) and micro generating capacity (up to 100kW). Some examples within the Colorado River Basin include:

- Reclamation and the Maricopa Stanfield Irrigation and Drainage District (AZ) are discussing the potential for installing low head units along an open channel canal system, primarily at gate control features.
- Reclamation also is working with the Pima-Maricopa Irrigation Project (AZ) to incorporate low head hydro along multiple drop locations during construction of a canal system. Physical facilities are being constructed to include ready capability for future insertion of hydropower units.
- Reclamation is working with the Tohono O’odham Nation on preliminary studies to incorporate low head hydropower into their existing distribution system.
- The Uncompahgre Valley Water Users Association is pursuing hydropower development on the South Canal in Colorado, and initial discussions with Reclamation began in 2009.

#### Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead

In 2005, through direction from the Secretary and in consultation with the Basin States and other stakeholders, Reclamation began work to develop operational guidelines that could assist in future low-reservoir operational decisions. The Secretary also asked the Basin States to recommend a plan, so the Department would not have to impose one.

Through an extensive public involvement process the Basin States, Indian tribes, water and power entities, other Federal agencies, NGO’s, and the general public were engaged in the development of management guidelines. Given the United States’ obligations to Mexico under the 1944 Treaty that addresses Colorado River deliveries to Mexico, consultation meetings were also held with Mexico, through the International Boundary and Water Commission, to discuss these guidelines.

During the process of reaching this agreement, one of the key themes was that the Federal government – the Department of the Interior – would *facilitate*, not dictate, informed decision-making in the Colorado River Basin. But the Federal government’s role was a key catalyst for the success of this process.

In 2007, the Department adopted the *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead*. This historic seven-state agreement has been called the most important agreement on the river since the signing of the Colorado River Compact in 1922. These guidelines provide direction on how Lake Powell and Lake Mead will operate, how and when shortages will be distributed, provide tools that encourage users in the Lower Basin to conserve water, and provide additional operational flexibilities.

#### Collaborative Projects Resulting from 2007 Interim Guidelines

Collaborative efforts to identify and resolve Colorado River water management and use issues are not limited to just users within the United States. The Department, through the Bureau of Reclamation, with the Basin States are currently engaged in an active Bi-National Process with officials from Mexico, through the International Boundary and Water Commission, in efforts to address issues and find resolutions on concerns of mutual interest to both countries including augmentation, shortage,

conservation, and the environment. Non-governmental entities from both Nations are also actively participating in and contributing to this ongoing process.

## **LOOKING AHEAD: CONTINUED COLLABORATION ON FUTURE CHALLENGES**

In early May 2010, Reclamation will initiate a pilot run of the Yuma Desalting Plant. Again, this pilot run of the Yuma Desalting Plant at 1/3 capacity will take place as part of a collaborative process with three Lower Basin municipal utilities. Built in the 1980s to meet newly negotiated water quality standards under the framework of the 1944 Treaty with Mexico, the desalting plant has operated only for two brief test periods since it was completed in the early 1990s. The pilot run, which the municipal entities are helping fund, will provide information that will be useful in future considerations as to whether the plant could be successfully operated long-term for its intended purpose and enable Reclamation to compare that information with other methods for replacing bypass flows in the River.

On February 23 and 24, 2010 we conducted a workshop in Las Vegas to kick off the Department's WaterSMART program, and enlisted the help and ideas of stakeholders from throughout the Colorado River Basin to make this new program relevant and useful to these entities. While water sustainability has been important to the Department for many years, this program is an effort to provide better support for the innovative solutions that are springing up in the Colorado River Basin and across the country. The Bureau of Reclamation's FY 2011 Budget requested \$62 million for this program. In addition, USGS' FY 2011 Budget requested \$10.9 million for this program.

Reclamation's Title XVI water recycling and reuse program is probably the best known component of WaterSMART. Through Title XVI, Federal funding has been provided for planning and construction of more than two dozen water recycling and groundwater projects in the Lower Colorado Region in collaboration with local governmental entities. Under the Title XVI authorization in Public Law 102-575 and Reclamation's administration of the program, local project sponsors fund the majority of the projects' construction costs, and all of their operation and maintenance. The other components of the WaterSMART initiative include WaterSMART grants and water Basin Studies. The Basin Studies, including one focused on the Colorado River, will address the impacts of climate change and forecast future demands based on expected changes in water use due to increased temperatures.

## **CONCLUSION**

Regardless of the level of the program, collaboration and partnership are keys to successful accomplishment. Achieving collaborative agreement on tough issues has not always been easy – there has been, and continues to be, some tension and conflict among the many diverse Colorado River Basin interests and their needs and desires.

Recent years have brought a new spirit of partnership and collaboration to the Basin, and a greater inclusiveness of all interested parties and stakeholders in this river system. We are committed to continuing – and expanding – both the historical partnerships that have existed in the Basin for nearly a century, and these new, inclusive collaborative efforts that now characterize the management of this critical river system.

Madam Chairwoman, this concludes my written statement. I am pleased to answer any questions the Subcommittee may have.