Statement of Don A. Ostler Executive Director Upper Colorado River Commission Before the Senate Energy and Natural Resources Committee Subcommittee on Water and Power

Oversight Hearing Regarding the Colorado River Basin Supply and Demand Study July 16, 2013

Introduction

Good afternoon Chairman Schatz and members of the Subcommittee. Thank you for the opportunity to provide testimony on the important topic of the December 2012 Colorado River Basin Water Supply and Demand Study. My name is Don Ostler and I am here today as the Executive Director representing the Upper Colorado River Commission (the Commission). The Commission is an interstate water administrative agency created by State and federal ratification of the

1948 Upper Colorado River Basin Compact (Compact). The Commission is comprised of one person appointed by the Governor of each of the Upper Division States of Wyoming, Utah, Colorado and New Mexico. In addition, the President appoints one Commissioner to represent the United States. The responsibilities of this Commission include performance of all functions required of it by the Compact. Among the duties assigned include engaging in cooperative studies; making findings of the annual quantity of water used in the Upper Basin; making findings of the water deliveries to Lee Ferry (the Lower Basin); making findings of the necessity for and extent of curtailment of use required by the Compact; making findings of the quantity of reservoir losses and the share chargeable under the Compact to each state and finally; making findings of fact in the event of the occurrence of extraordinary drought or serious accident to the system in the Upper Basin which may affect the United States' obligations under the Mexican Water Treaty of 1944. As you can see, this Commission has been and will continue to be critically involved along with the Upper Division States in the administration of Colorado River water. The

Upper Basin includes the Colorado River and all tributary waters that drain into the River above Lee Ferry Arizona, a point about 16 miles downstream from Glen Canyon Dam. The Lower Basin includes the Colorado River and all tributary water draining into the River downstream of Lee Ferry Arizona prior to its passage into Mexico and includes water users in Arizona, Nevada, California and small parts of New Mexico and Utah.

Role of the States and the Commission in the Basin Study

The Colorado River Basin States and the Commission have long been involved in planning for development of the Colorado River water supply including forecasting supply and demand issues and developing strategies to address potential problems. For example, the Commission and Upper Basin States in partnership with Reclamation have conducted several hydrologic studies to determine the safe annual yield of the Colorado River in the Upper Basin. These studies have been used to guide development and use of Colorado River water in the Upper Basin. The seven Colorado River Basin States in cooperation with Reclamation have a history of working together to identify problems in advance and to cooperatively craft strategies to mitigate or avoid anticipated problems without disturbing the "Law of the River". Recent examples of this include the development of Interim Shortage Guidelines and Coordination of Reservoir Operations in 2007 to mitigate or avoid the effects of drought. In addition, the States recently played a major role along with the Department of the Interior (DOI) in initiating and conducting discussions with the government of Mexico to establish Minute 319 to the Mexican Water Treaty of 1944. This Minute allows Mexico to participate in shortage management and mitigation along with the United States and provides tools for conservation and possible future augmentation of the supply to the benefit of both nations. Throughout these processes, the States and the Commission have enjoyed a close working relationship with the DOI, working primarily with the Bureau of Reclamation to cooperatively identify and address problems within the Colorado River System. Maintaining this relationship is the key as we address future problems of supply and demand inasmuch as the states have the primary responsibility for managing water within their

boundaries and are the principal link with actual water users. DOI is the water master for the Lower Basin of the Colorado River and the operator of many of the large storage reservoirs that we depend upon, and the Commission is the water master for the Upper Basin.

The 2012 Basin Study (Basin Study)

The seven Colorado River Basin states and the Commission, being fully aware of future supply and demand imbalances, sought funding jointly with the Upper and Lower Colorado River Regions of the Bureau of Reclamation for the Basin Study through the DOI WaterSMART Program. The Basin States contributed 50% of the expense of this study and along with the Commission, fully participated with Reclamation in management and direction of the study. This study provided a vehicle to update and refine information from previous studies done by the various states and others with more specifics as we move closer to implementation of strategies to address supply and demand imbalances. As such, the overall imbalance identified in the study was not a large surprise to us or to the Lower Basin States. There is considerable

uncertainty in projecting future conditions in the Basin. Therefore the study identified numerous scenarios for anticipated future supply and demand conditions and then provided identification and evaluation of options and strategies to address supply and demand imbalances. The median of supply and demand imbalances projected through the year 2060 was 3.2 million acre-feet for the entire Colorado River Basin. A large number of options and strategies were evaluated to decrease system vulnerability. These included many different means to reduce demand, increase the supply and modify operations. It is clear from the study that no single option is adequate to significantly reduce vulnerability. It will require a portfolio of effective options and strategies to be implemented to accomplish this. Even then, system vulnerability will not be fully eliminated so shortage management plans during the worst drought conditions will still be required. It is important to note that both the Upper Basin and the Lower Basin face challenges, but the problems are different for each basin. The Upper Basin has yet to develop its full 1922 Compact apportionment and will continue to develop its supply. Such development will continue to be tempered by

better knowledge of future supply, more efficient management of water use and our ability to tolerate drought through development of management options. The study shows that the probability of a Compact driven curtailment of use, (or Compact call), is low for the Upper Basin over the 50 year study period even with additional projected growth in water use. The most significant factor affecting this probability is the assumptions used to estimate future supply including global climate models. It is also important to understand that significant local hydrological driven shortages, primarily on smaller tributaries without sufficient storage, exist now in the Upper Basin every year and will continue. The Lower Basin, which has not had to endure shortages to date, has already developed its full 1922 Compact apportionment and faces much more imminent potential of system mandated shortages as well as greater challenges about how to meet the needs of future municipal and industrial growth. Although the problems faced by the two basins are different, many problems are common. Because of coordinated reservoir operations, problems or shortages in one basin can have an impact on the other basin. The seven Basin States recognize the significant commonality of our vulnerabilities to supply and demand imbalance and are committed to mutual coordinated efforts to address problems.

Next Steps

The Basin States, the Commission and the Department of the Interior all recognize that we must move immediately to address the vulnerabilities identified in the Basin Study. In doing so it is imperative that the close working relationship between DOI and the Basin States is maintained and that all parties move forward in a coordinated fashion respectful of the various roles and responsibilities of the entities involved. The Colorado River Basin remains in a very severe 14 year drought, the continuation of which could drive Lake Powell to levels that threaten the ability to generate electrical power and Lake Mead to levels that require implementation of shortages within a few years. It is for these reasons that the states and DOI are initiating a "Next Steps" process now to address vulnerabilities. Plans have already been put in place to formulate workgroups of state, DOI and stakeholder representatives to

further refine options and strategies that may be implemented in both the near and long term. The seven Basin States and the Commission will continue their efforts to address near and long term water supply shortages. We will continue to need the full support of DOI as we address these difficult issues in partnership. The modeling, technical expertise and policy guidance of Reclamation as well as continued Congressional support of financial resources such as the WaterSMART Program are essential in moving forward with next steps. I am confident that in a collaborative approach relying upon the sound relationships that we have built in the past, we have the ability to address these problems before us. Thank you for your time Mr. Chairman and Subcommittee members.