Testimony
David Modeer
General Manager
Central Arizona Project

House Committee on Appropriations
Subcommittee on Interior, Environment and Related Agencies

Support for $5.2 million for general water quality and $1.5 million for salinity control in Fiscal Year 2014 Funding for the Colorado River Basin Salinity Control Program under the Bureau of Land Management (BLM)
April 25, 2013

On behalf of the Central Arizona Water Conservation District (CAWCD), I encourage you to include $5.2 million for general water quality improvement efforts within the Colorado River Basin and an additional $1.5 million for salinity specific projects in the Bureau of Land Management's (BLM) Soil, Water and Air Program in Fiscal Year 2014. This funding will help protect the water quality of the Colorado River that is used by approximately 40 million people for municipal and industrial purposes and used to irrigate approximately 4 million acres in the United States.

CAWCD manages the Central Arizona Project, a multi-purpose water resource development and management project that delivers Colorado River water into central and southern Arizona. The largest supplier of renewable water in Arizona, CAP diverts an average of over 1.6 million acre-feet of Arizona's 2.8 million acre-foot Colorado River entitlement each year to municipal and industrial users, agricultural irrigation districts, and Indian communities.

Our goal at CAP is to provide an affordable, reliable and sustainable supply of Colorado River water to a service area that includes more than 80 percent of Arizona's population.

These renewable water supplies are critical to Arizona's economy and to the economies of Native American communities throughout the state. Nearly 90% of economic activity in the State of Arizona occurs within CAP's service area. CAP also helps the State of Arizona meet its water management and regulatory objectives of reducing groundwater use and ensuring availability of groundwater as a supplemental water supply during future droughts. Achieving and maintaining these water management objectives is critical to the long-term sustainability of a state as arid as Arizona.

Negative Impacts of Concentrated Salts:

Natural and man-induced salt loading to the Colorado River creates environmental and economic damages. EPA has identified that more than 60 percent of the salt load of the Colorado River comes from natural sources. The majority of land within the Colorado River Basin is federally owned, much of which is administered by BLM. Human activity, principally irrigation, adds to salt load of the Colorado River. Further, natural and human activities concentrate the dissolved salts in the River.

The U.S. Bureau of Reclamation (Reclamation) has estimated the current *quantifiable* damages at about $376 million per year to U.S. users with projections that damages would increase to more than five hundred million by 2030 if the program were not to continue. These damages include:

- a reduction in the yield of salt sensitive crops and increased water use to meet the leaching requirements in the agricultural sector,

- increased use of imported water and cost of desalination and brine disposal for recycling water in the municipal sector,

- a reduction in the useful life of galvanized water pipe systems, water heaters, faucets, garbage disposals, clothes washers, and dishwashers, and increased use of bottled water and water softeners in the household sector,

- an increase in the cost of cooling operations and the cost of water softening, and a decrease in equipment service life in the commercial sector,

- an increase in the use of water and the cost of water treatment, and an increase in sewer fees in the industrial sector,

- a decrease in the life of treatment facilities and pipelines in the utility sector, and

- difficulty in meeting wastewater discharge requirements to comply with National Pollutant Discharge Elimination System permit terms and conditions, and an increase in desalination and brine disposal costs due to accumulation of salts in groundwater basins.

Adequate funding for salinity control will prevent the water quality of the Colorado River from further degradation and avoid significant increases in economic damages to municipal, industrial and irrigation users.

History of the BLM Colorado River Basin Salinity Control Program

In implementing the Colorado River Basin Salinity Control Act of 1974, Congress recognized that most of the salts in the Colorado River originate from federally owned lands. Title I of the Salinity Control Act deals with the U.S. commitment to the quality of waters being delivered to Mexico. Title II of the Act deals with improving the quality of the water delivered to users in the United States. This testimony deals specific with Title II efforts. In 1984, Congress amended the Salinity Control Act and directed that the Secretary of the Interior develop a comprehensive program for minimizing salt contributions to the Colorado River from lands administered by BLM.

In 2000, Congress reiterated its directive to the Secretary and requested a report on the implementation of BLM's program (Public Law 106-459). In 2003, BLM employed a Salinity Coordinator to increase BLM efforts in the Colorado River Basin and to pursue salinity control

studies and to implement specific salinity control practices. With a significant portion of the salt load of the Colorado River coming from BLM administered lands, the BLM portion of the overall program is essential to the success of the effort. Inadequate BLM salinity control efforts will result in significant additional economic damages to water users downstream.

The threat of salinity continues to be a concern in both the United States and Mexico. Most recently, on November 20, 2012, a five year agreement, known as Minute 319, was signed between the U.S. and Mexico to guide future management of the Colorado River. Among the key issues addressed in Minute 319 included an agreement to maintain current salinity management and existing salinity standards. The CAWCD and other key water providers are committed to meeting these goals.

Conclusion:

Implementation of salinity control practices through the BLM Program has proven to be a very cost effective method of controlling the salinity of the Colorado River. In fact, the salt load of the Colorado River has now been reduced by roughly 1.2 million tons annually, reducing salinity in the Lower Basin by more than 100 ppm. However, shortfalls in funding levels have led to inefficiencies in the implementation of the overall Program. Therefore, additional funding is required in 2014 to meet this goal and prevent further degradation of the quality of the Colorado River with a commensurate increase in downstream economic damages.

CAWCD urges the subcommittee to include $5.2 million for general water quality improvement efforts within the Colorado River Basin and an additional $1.5 million for salinity specific projects in the Bureau of Land Management's (BLM) Soil, Water and Air Program. If adequate funds are not appropriated, significant damages from the higher salt concentrations in the water will be more widespread in the United States and Mexico.

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Senate Committee on Appropriations
Subcommittee on Energy and Water Development

Support for $15.4 million in Fiscal Year 2014 Funding for the Colorado River Basin Salinity Control Program under Reclamation's Basinwide Program
May 6, 2013

On behalf of the Central Arizona Water Conservation District (CAWCD), I encourage you to include $15.4 million for the U.S. Bureau of Reclamation's Basin-wide Program for the Colorado River Basin in the Fiscal Year 2014 Appropriation bill. Continued funding for the Basin-wide Program, which supports salinity control projects, will help protect the water quality of the Colorado River that is used by approximately 40 million people for municipal and industrial purposes and used to irrigate approximately 4 million acres in the United States.

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Our goal at CAP is to provide an affordable, reliable and sustainable supply of Colorado River water to a service area that includes more than 80 percent of Arizona's population.

These renewable water supplies are critical to Arizona's economy and to the economies of Native American communities throughout the state. Nearly 90% of economic activity in the State of Arizona occurs within CAP's service area. CAP also helps the State of Arizona meet its water management and regulatory objectives of reducing groundwater use and ensuring availability of groundwater as a supplemental water supply during future droughts. Achieving and maintaining these water management objectives is critical to the long-term sustainability of a state as arid as Arizona.

Negative Impacts of Concentrated Salts:

Natural and man-induced salt loading to the Colorado River creates environmental and economic damages. EPA has identified that more than 60 percent of the salt load of the Colorado River comes from natural sources. With the significant federal ownership in the Basin, most of this comes from federally administered lands. Human activity, principally irrigation, adds to salt load of the Colorado River. Further, natural and human activities concentrate the dissolved salts in the River.

The U.S. Bureau of Reclamation (Reclamation) has estimated the current *quantifiable* damages at about $376 million per year to U.S. users with projections that damages would increase to more than five hundred million by 2030 if the program were not to continue. These damages include:

- a reduction in the yield of salt sensitive crops and increased water use to meet the leaching requirements in the agricultural sector,

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- an increase in the use of water and the cost of water treatment, and an increase in sewer fees in the industrial sector,

- a decrease in the life of treatment facilities and pipelines in the utility sector, and

- difficulty in meeting wastewater discharge requirements to comply with National Pollutant Discharge Elimination System permit terms and conditions, and an increase in desalination and brine disposal costs due to accumulation of salts in groundwater basins.

Adequate funding for salinity control will prevent the water quality of the Colorado River from further degradation and avoid significant increases in economic damages to municipal, industrial and irrigation users.

History of the Colorado River Basin Salinity Control Program:

Recognizing the rapidly increasing salinity concentration in the Lower Colorado River and its impact on water users, Arizona joined with the other Colorado River Basin States in 1973 and organized the Colorado River Basin Salinity Control Forum (Forum). In 1974, in coordination with the Department of the Interior and the U.S. State Department, the Forum worked with Congress in the passage of the Colorado River Basin Salinity Control Act (Act) to offset increased damages caused by continued development and use of the waters of the Colorado River. Title I of the Salinity Control Act deals with the United States' commitment to the quality of water being delivered to Mexico. Title II of the Act deals with improving the quality of the water delivered to the U.S. users.

In the early years of the Program, Reclamation implemented salinity control through large projects which were funded with specific line item amounts. In 1995, Congress amended the Act

and created Reclamation's Basinwide Program. Under this program, Reclamation funds competitive proposals which will decrease the salt load to the Colorado River. Most of the received proposals target off-farm irrigation distribution systems such as canals and laterals. The lining or piping of canals and laterals prevents leakage into the groundwater and the dissolution and transportation of salts to the Colorado River and its tributaries. States provide a 30 percent cost share of the projects implemented by Reclamation.

The threat of salinity continues to be a concern in both the United States and Mexico. Most recently, on November 20, 2012, a five year agreement, known as Minute 319, was signed between the U.S. and Mexico to guide future management of the Colorado River. Among the key issues addressed in Minute 319 included an agreement to maintain current salinity management and existing salinity standards. The CAWCD and other key water providers are committed to meeting these goals.

Conclusion:

Implementation of salinity control practices through Reclamation's Basinwide Program has proven to be a very cost effective method of controlling the salinity of the Colorado River. In fact, the salt load of the Colorado River has now been reduced by roughly 1.2 million tons annually, reducing salinity in the Lower Basin by more than 100 ppm. However, shortfalls in recent Basinwide Program funding levels have led to inefficiencies in the implementation of the overall Program. The Plan of Implementation, as adopted by the states and approved by EPA, calls for 368,000 tons of additional salinity control measures to be implemented by Reclamation by 2030, or approximately 20,000 tons of new control each year. Therefore, additional funding is required in 2014 to meet this goal and prevent further degradation of the quality of the Colorado River with a commensurate increase in downstream economic damages.

CAWCD urges the subcommittee to include $15.4 million for the U.S. Bureau of Reclamation's Basin-wide Program for the Colorado River Basin in the Fiscal Year 2014 Appropriation bill. If adequate funds are not appropriated, significant damages from the higher salt concentrations in the water will be more widespread in the United States and Mexico.

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