

**COLORADO RIVER BOARD OF CALIFORNIA**

770 FAIRMONT AVENUE, SUITE 100  
GLENDALE, CA 91203-1068  
(818) 500-1625  
(818) 543-4685 FAX



July 31, 2014

**NOTICE OF REGULAR MEETING OF THE  
COLORADO RIVER BOARD**

**NOTICE IS HEREBY GIVEN** pursuant to the call of the Chairperson, Dana B. Fisher, Jr., by the undersigned Executive Director of the Colorado River Board of California that a regular meeting of the Board Members is to be held as follows:

Date: Wednesday, August 13, 2014
Time: 10 a.m.
Place: Board Room San Diego County Water Authority 4677 Overland Avenue San Diego, CA 92123 TEL: (858) 522-6733, FAX: (858) 522-6565

The Colorado River Board of California welcomes any comments from members of the public pertaining to items included on this agenda and related topics. Oral comments can be provided at the beginning of each Board meeting; while written comments may be sent to Mr. Dana B. Fisher, Jr., Chairperson, Colorado River Board of California, 770 Fairmont Avenue, Suite 100, Glendale, California, 91203-1068.

An Executive Session may be held in accordance with provisions of Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code and in accordance with Sections 12516 and 12519 of the Water Code to discuss matters concerning interstate claims to the use of Colorado River System waters in judicial proceedings, administrative proceedings, and/or negotiations with representatives from other states or the federal government.

Requests for additional information may be directed to: Ms. Tanya M. Trujillo, Executive Director, Colorado River Board of California, 770 Fairmont Avenue, Suite 100, Glendale, CA 91203-1068, or 818-500-1625. A copy of this Notice and Agenda may be found on the Colorado River Board's web page at [www.crb.ca.gov](http://www.crb.ca.gov).

A copy of the meeting agenda, showing the matters to be considered and transacted, is attached.

Tanya M. Trujillo  
Executive Director

attachment: Agenda

Regular Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, August 13, 2014  
10:00 a.m.

Board Room  
San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123

**REVISED AGENDA**

At the discretion of the Board, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated upon and may be subject to action by the Board. Items may not necessarily be taken up in the order shown.

1. Call to Order
2. Opportunity for the Public to Address the Board (Limited to 5 minutes)  
As required by Government Code, Section 54954.3(a)
3. Administration
  - a. Consideration and Approval of the Minutes of the Meeting held June 11, 2014  
**(Action)**
4. Colorado River Basin Water Reports
  - a. Reports on current reservoir storage, reservoir releases, projected water use, and forecasted river flows
  - b. State and Local Water Reports
5. Update regarding the 2014 California Drought
6. Progress Report regarding implementation of California's Colorado River Water Use Plan
7. Comments by Terry Fulp, Lower Colorado Regional Director, Bureau of Reclamation
8. Staff Reports regarding Colorado River Basin Programs
  - a. Update regarding Basin State Drought Contingency Planning efforts
  - b. Review status of the Colorado River Basin Water Supply and Demand Study
  - c. Review status of the implementation of Minute 319
  - d. Review status of the Salinity Control Forum, Workgroup, and Advisory Council
  - e. Review status of the Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental Management Plan EIS
  - f. Review status of the Lower Colorado River Multi-Species Conservation Program
    - i. Update regarding Hualapai Tribe Water Rights Settlement/Planet Ranch



Minutes of Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, June 11, 2014

A Meeting of the Colorado River Board of California (Board) was held in the Vineyard Room, of the Radisson Ontario Hotel, Room 306, 2200 E. Holt Boulevard, Ontario, California, on Wednesday, June 11, 2014.

Board Members and Alternates Present

Bud Pocklington  
Dana Bart Fisher, Jr., Chairman  
Franz De Klotz  
James Hanks  
Henry Kuiper  
Glen Peterson

David Pettijohn  
Doug Wilson  
Jeanine Jones, Designee  
Department of Water Resources  
David Vigil, Designee  
Department of Fish & Wildlife

Board Members and Alternates Absent

Stephen Benson  
Terese Ghio  
Christopher Hayes  
James McDaniel

John Powell, Jr.

Others Present

Steve Abbott  
Tim Blair  
John Carter  
Shane Chapman  
J.C. Jay Chen  
Dan Denham  
Michael Hughes  
Lisa Johansen  
Kathy Kunsz  
Eric Katz  
Tom Levy  
Kara Mathews

Thang (Vic) Nguyen  
Carrie Oliphant  
Autumn Plourd  
Angela Rashid  
Tom Ryan  
Jack Seiler  
Ed Smith  
Mark Stuart  
Michael Touhey  
Reymundo Trejo  
Tanya Trujillo  
Mark Van Vlack  
Jerry Zimmerman

## **CALL TO ORDER**

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:05 a.m.

## **OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD**

Chairman Fisher asked if there was anyone in the audience who wished to address the Board on items on the agenda or matters related to the Board. Hearing none, Chairman Fisher moved to the next agenda item.

## **ADMINISTRATION**

### **Approval of Minutes of the May 14, 2014 Colorado River Board Meeting**

Chairman Fisher asked if there was a motion to approve the May 14, 2014 minutes. Ms. Jones moved that the minutes be approved, seconded by Mr. Wilson, and unanimously carried, the May 14, 2014, meeting minutes were approved.

### **Next Board Meeting**

Executive Director Trujillo reported that the Colorado River Board (CRB) Meeting scheduled for July may be cancelled and that next meeting, scheduled for August 13, 2014, will be held in San Diego.

### **Announcement of New Principal Engineer at the Colorado River Board**

Ms. Trujillo also announced the hiring of new Principal Engineer, Thang (Vic) Nguyen. Mr. Nguyen introduced himself to the Board and briefly discussed his work history. Mr. Nguyen worked with the California Department of Water Resources for 21 years working within many different divisions. Most recently, Mr. Nguyen had been working on California drought issues.

### **Colorado River Board Budget and Six Agency Committee Agreement**

Referring to 2014-2015 Fiscal Year Budget documents previously distributed to the Board, Chairman Fisher requested approval of the budget resolution. Mr. Kuiper moved to approve the budget resolution with the caveat to discuss the 2014-2015 Fiscal Year Budget in more detail. Mr. Wilson seconded the motion.

Mr. Wilson asked about budget details relating to salaries, benefits and utilities. Ms. Trujillo explained that the CRB budget is derived from the Governor's budget and the budget consists of two major components—personnel (i.e. salaries and benefits, and

operations (i.e. rent). Ms. Trujillo explained that if increases or decreases to the base budget are required, those changes must be approved by the State budget office in Sacramento. In response to a question raised by Mr. Kuiper regarding unused budget monies, Chairman Fisher stated that periodically the Board will pass resolutions to get reimbursed from the State for any unused funding that the Six Agency Committee has contributed.

The motion approving the Board's FY-14/15 budget was adopted by unanimous consent.

## **COLORADO RIVER BASIN WATER REPORT & DROUGHT UPDATE**

### Colorado River Basin Water Report

Executive Director Trujillo reported that as of June 2, 2014, the water level at Lake Mead was at 1,087 feet with 10.63 million acre-feet (maf) of storage, or 41% of capacity, while the water level at Lake Powell was at 3,590 feet with 10.85 maf of storage, or 45% of capacity. The total System active storage as of June 2<sup>nd</sup> was 29.14 maf, or 49% of capacity, which is 2.08 maf less than one year ago when the System storage was at 52% of capacity. As of June 2, 2014, the Upper Colorado River Basin reservoirs other than Lake Powell ranged from 68% to 95% of their capacities.

Ms. Trujillo also reported that the unregulated inflow into Lake Powell for Water Year 2014, is forecast to be 10.8 maf, or 100% of average. The Colorado River Basin Forecast Center's Snow Conditions Map dated June 3, 2014, indicates above average snowpack conditions in some areas, but now reflects normal spring runoff conditions.

Ms. Trujillo provided a brief overview of the current drought conditions within California. She stated that the drought conditions within California have not significantly improved and that Governor Brown's April 25, 2014, and January 17, 2014, State of Emergency Proclamations continue to remain in effect. She reported that the Department of Water Resources continues to issue weekly Drought Briefs to provide updates on current conditions and key action items taking place regarding the drought. The June 3, 2014 U.S. Drought Monitor map for California indicates that over 75% of the State continues to experience extreme or exceptional drought conditions and 100% of the state continues to experience some level of drought conditions. Ms. Trujillo also reported that she attended a recent meeting of the Western Governors Association, and that the Governors of other western states made a point of acknowledging the California situation and the actions being taken to mitigate the hardships created by the drought.

Ms. Trujillo then reported that Reclamation recently finalized the 2013 Article V Decree Accounting Report for Colorado River water uses in Arizona, California, and Nevada. She stated that a draft of the report had been circulated for review and comment among the three Lower Basin States and that the final report was now available on-line on Reclamation's Lower Colorado Region webpage. She reported that the overall consumptive use in the Lower Basin in 2013 was 7.48 maf.

She also reported that in 2013, California met the “benchmark” associated with agricultural use reductions established in the 2003 Quantification Settlement Agreement. In 2013, California's agricultural use, as adjusted for IID and CVWD reductions for Indian and miscellaneous PPR holders' use, MWD's reduction for Priority 1, 2, and 3b use, and paybacks by agricultural entities, was 56,452 acre-feet below the 2012 Benchmark of 3.47 million acre-feet. Additionally, she reported that IID exceeded the amount of water conservation generated to payback overruns occurring in 2011 and 2012 by approximately 30,000 acre-feet and is on track to continue its overrun paybacks in 2014.

Finally, Ms. Trujillo briefed the Board that in 2013, approximately 1.373 maf of water was delivered to Mexico in accordance with the 1944 Water Treaty between the United States and Mexico. She stated that in accordance with Section III.1 of Minute No. 319, Mexico deferred delivery of 126,812 acre-feet of its allotment in CY 2013, and that about 72,000 acre-feet of water was delivered to Mexico in excess of the deliveries ordered by Mexico in accordance with the Treaty. There was brief discussion among Board members acknowledging that progress is being made to reduce the quantities of excess Treaty deliveries, but that work still remains to conserve and retain more of this water in the system.

Ms. Trujillo updated the Board regarding the development of the 2015 Annual Operating Plan (AOP) for the Colorado River System. She stated that Reclamation has released its first draft of the 2015 AOP and on May 28, 2014, held the first consultation webinar regarding the plan. She reminded the Board that pursuant to the 2007 Guidelines for the Interim Operation of Lake Mead and Lake Powell, the prediction results from Reclamation's August 24-month study are used to determine the release amount from Lake Powell, and that initial indications are that 9.0 million acre-feet will be released next year. She went on to report that the current projection indicates that the Normal or ICS Surplus Condition is projected as the Lower Basin's operating tier. Ms. Trujillo stated that the next consultation meetings are scheduled for July 31 and September 4 at McCarran Airport in Las Vegas, Nevada. During the July meeting, California will report on the progress of meeting the Interim Surplus Guidelines benchmark and otherwise implementing the 4.4 Plan. Finally, Ms. Trujillo reported that the draft AOP and Reclamation's May 28, 2014 presentation can be found on-line on Reclamation's Upper and Lower Colorado Region webpages.

#### State and Local Reports

Mr. Mark Stuart, with DWR's Southern District Office, provided the Board with a quick overview of the current statewide precipitation and water storage conditions. Mr. Stuart indicated that the snowpack is effectively gone in the Sierras and that the runoff was approximately 35% of normal. With respect to storage in State Water Project reservoirs, he reported that it was just below 50% of capacity.

Board Member Glen Peterson, of the Metropolitan Water District of Southern California, reported that storage in MWD's reservoir system continues to decline, but that the Colorado River Aqueduct continues to run at full capacity. He also stated that MWD is actively engaged in public awareness campaigns related to the drought and water conservation throughout much of southern California.

Board Member David Pettijohn, of the Los Angeles Department of Water and Power, reported that 2014 is likely to be the Los Angeles Aqueduct's lowest yield in history, and follows the extremely low yield in 2013. He stated that the City of Los Angeles is currently spending \$35 million annually in conservation efforts, and has implemented mandatory restrictions on water use within the City, including restricting landscape watering to just three days per week. He also indicated that DWP has partnered with MWD to increase the turf grass removal program from \$2.00/square foot to \$3.00/square foot. There has been a significant increase in the number of households who are removing lawns and replacing with more drought-tolerant plant species.

### California Drought Update

Board Member Jeanine Jones gave a presentation comparing the current 2012-2014 California drought to past droughts. This was the same presentation she gave at the June 4<sup>th</sup> Drought Briefing in Sacramento that focused on the operations of the State Water Project and federal Central Valley Project under very dry conditions.

Ms. Jones began by presenting a figure indicating the percent of average precipitation from June 2011 to June 2014 to reflect that California has been in a 3-year drought. The colors depict that all of California has been very dry in recent years. She next described the precipitation for the current water year using the Northern Sierra precipitation 8-station index, which serves as a wetness index for the Sacramento River hydrologic region. She noted that the Sacramento River watershed as well as the San Joaquin watershed will likely end up being the third driest year on record, only to be beaten by 1923/1924, the single driest water year, and by 1977. Ms. Jones predicted the water-year would end at about 40% and 60% of average for the San Joaquin and Sacramento River watersheds, respectively.

Ms. Jones next depicted the drought in terms of statewide runoff. Again, out of 113 years of USGS records, the driest single year for statewide runoff (21% of average) was 1977. Drought impact is a function of duration, so the drought periods during the 1920s and 1930s and from 1987 to 1992 are probably the largest in terms of impact. She also noted that the California population has increased significantly from less than 10 million in the 1920s and 1930s to 30 million in the 1990s and to about 38 million today, thereby increasing the demand for water.

Ms. Jones showed a graph of irrigated crop acreage from 1870 to 2010 that indicated total acreage peaked at 10 million acres in the 1970s and has declined slightly since then due to urbanization. One reason for the lack of irrigated agriculture in the 1920s and 1930s was that large water projects such as MWD's Colorado River Aqueduct,

Hoover Dam, and Shasta Dam had not been constructed. She also noted that before major water projects were built, salinity in the Delta was uncontrolled. But after the 1940s, salinity intrusion into the Delta became significantly less because projects have been built to manage salinity in the estuary.

Ms. Jones then compared the State Water Project allocations for three dry years in 1991, 2009, and 2014 (allocation only at 5%). A lot of factors affecting allocations have changed since 1991 including regulatory constraints and implementation of the Central Valley Project Improvement Act, Bay-Delta Water Quality Control standards, and San Joaquin River restoration.

Finally, Ms. Jones explained that studies by Desert Research Institute show that there is not really a strong correlation to predict between an El Nino or La Nina year for Northern California, which is considered to be in a grey area. For example, modeling results suggest that drought periods in the 1920s and 1930s were largely La Nina years; however, for the more recent dry periods in 1977 and 1991-1992, it was El Nino. She said that we would need consistent, major precipitation events to break the current drought cycle.

## **COLORADO RIVER BASIN PROGRAM REPORTS**

### **Colorado River Basin Water Supply and Demand Study**

Executive Director Trujillo reported that the Coordinating Committee met in May and heard updates from each of the workgroups, which include the Municipal and Industrial (M&I) Conservation, Agricultural Conservation, Environmental Flows and Recreation workgroups. The Metropolitan Water District is one of the co-chairs of the M&I Workgroup, while Imperial Irrigation District is a co-chair of the Agricultural Conservation workgroup. It is anticipated that drafts of the Phase 1 reports will be completed in July. The M&I report will analyze the existing and planned conservation efforts in the basin, as well as, highlight conservation case studies in different areas in the Basin. Ms. Trujillo reported that gathering and collecting the data for these efforts has been challenging because the states and even individual water districts use different methodologies for calculating water savings and demonstrating conservation efforts. However, the data has revealed that, on average, there has been a 20 percent reduction in the per capita water use in the Basin since the 1990's.

Regarding the Agricultural Conservation workgroup report, Ms. Trujillo stated the Phase 1 report will also analyze existing and planned conservation efforts, as well as feature case studies of these efforts within the Basin. Ms. Trujillo noted that California is ahead of many states regarding agricultural conservation and transfer efforts. California's experience with agricultural conservation and opportunities associated with expanding agricultural conservation efforts will be outlined within the report.

Ms. Trujillo reported that the Environmental and Recreational Flows Workgroup report will analyze three focus reaches along rivers located in the Basin – the Green and

Colorado River near Grand Junction in the Upper Basin and the Bill Williams River in the Lower Basin. The analysis will include a review of existing environmental and recreational flow programs, potential funding for these programs and tools such as water banking or development of private-public partnerships.

Ms. Trujillo also reported that the Tribal Water Study, which Reclamation is working on with the Ten Tribes Partnership in the Basin, is anticipated to be completed by the end of 2015.

### Minute 319 Implementation

Referring to a photo presentation showing the positive impacts of the “pulse flow”, Executive Director Trujillo reported on the progress of the pulse flow. Ms. Trujillo stated that the pulse flow has successfully made a connection between the river and the Gulf of California. Currently, the experiment is now in the monitoring phase that is evaluating the effects of the recent pulse flow on generation of additional riparian habitat and species usage along the Lower Colorado River in the Delta. Ms. Trujillo noted that Mexico still has supplies of Colorado River water available, pursuant to Minute 319, to implement releases of water to maintain a base-flow in targeted river reaches in an effort to maintain and/or enhance habitats created or affected by the pulse-flow release. These base-flows may be periodically utilized over the next 2-3 years.

Ms. Trujillo reported that on May 30, 2014, the Hydrology Workgroup met with Mexican partners to discuss how to evaluate the hydrology in the Basin. Ms. Trujillo explained that Mexico is not tied into the same system of measuring drought, operating the Basin’s reservoirs or using NOAA’s projections that the United States utilizes. Further, Ms. Trujillo stated that through Minute 319, Mexico has agreed to share in shortages and it has been necessary to educate them as much as possible on the tools that are used to evaluate and operate the reservoir system in the Basin and as a way to improve relations with them. Ms. Trujillo noted that the Annual Operating Plan consultations and other hydrological reports that U.S. water users participate in have been made available to Mexico.

Ms. Trujillo also reported that the All American Canal workgroup discussed Mexico’s potential connection to the All American Canal, which will require coordination with Imperial Irrigation District (IID). Director Hanks described a discussion during a recent IID Board meeting regarding the potential bi-national connection to the All-American Canal. Further, Ms. Trujillo explained that after the major earthquake in 2010 that damaged water delivery infrastructure, Mexico requested alternative delivery points for Colorado River Water to avoid a similar scenario in the future.

Ms. Trujillo also reported that the bi-national projects workgroup discussed the status of potential conservation projects proposed in Mexico that would be funded, in part, by Metropolitan Water District, IID, Southern Nevada Water Authority, Central Arizona Project, and the Federal Government. In addition, the workgroup also discussed

the potential for desalination projects in Mexico. Chairman Fisher commented that the proposed projects, as well as work done on Minute 319 has fostered goodwill between the United States and Mexico and provides a good foundation for future discussions and negotiations related to new Minutes to the Treaty and binational projects.

#### Colorado River Basin Salinity Control Program

Ms. Trujillo reported that the Colorado River Basin Salinity Control Forum, Advisory Council, and Work Group were meeting at Jackson Lake Lodge in Grand Teton National Park, Wyoming, during the week of June 10-13, 2014. She briefly reviewed the Forum's agenda for the upcoming meeting, and indicated the two primary areas of concern revolving around the completion of the Paradox Valley Unit EIS, and the short- and long-term solvency of the Lower Basin Development Fund which is utilized by the Lower Basin States to make annual cost-share contributions for implementation of the Program. Ms. Trujillo also reported that she participated in a series of meetings in Washington, D.C. related to federal appropriations for Reclamation's salinity control efforts and the USDA's Environmental Quality Incentives Program. Both of these major federal programs are critical to long-term salinity control efforts in the Basin.

#### Glen Canyon Dam—Long-Term Experimental Management Plan EIS Process

Ms. Trujillo reported that the Glen Canyon Dam Adaptive Management Work Group (AMWG) held a brief webinar in late-May to review and approve the first year of its triennial budget. This budget is primarily associated with the on-going and proposed activities of the U.S. Geological Survey's Grand Canyon Monitoring and Research Center. Finally, Ms. Trujillo indicated that the Basin States and Interior agencies continue to make progress in developing appropriate alternatives for analysis in the Long-Term Experimental and Management Plan (LTEMP) EIS being developed by Reclamation and the National Park Service.

#### U.S. Department of Agriculture's Regional Conservation Partnership Program

Ms. Trujillo reported that a new program has been initiated through the USDA Natural Resources Conservation Service. The "Regional Conservation Partnership Program" is a significant grant funding opportunity and has approximately \$400 million available for funding opportunities in the first year, and over \$1 billion for the total program. She indicated that the Colorado River Basin has been designated a "critical conservation area" providing a higher prioritization for funding of conservation-related activities through the Regional Conservation Partnership Program. Ms. Trujillo indicated that several basin wide initiatives including salinity control, the Lower Colorado River Multi-Species Conservation Program, as well as some of the potential activities stemming from the Basin Study may be eligible for grant funding opportunities through the Program.

## QSA Litigation Update

Mr. Steve Abbott reported that U.S. Ninth Circuit Court of Appeals dismissed the 2013 lawsuit brought by the Imperial County Air Pollution Control District and County of Imperial challenging the Secretary of Interior's approval of the Federal Secretarial Implementation Agreement (SIA) associated with 2003 Quantification Settlement Agreement. The Plaintiffs questioned whether the Secretary fully complied with the National Environmental Policy Act (NEPA) and the Federal Clean Air Act before executing the SIA. The Ninth Circuit Court of Appeals dismissed the lawsuit stating that the Air Pollution Control District and County of Imperial did not have legal standing to bring the lawsuit. Further, Mr. Abbott reported that the Ninth Circuit ruled that the NEPA claims of insufficiency. Summarizing, Mr. Abbott stated that the May 2014 ruling by the Court of Appeals rejected the standing issue, determined that the NEPA analysis was sufficient, and with respect to the Clean Air Act claim, the Court found that there were no direct or indirect emissions as a result of the Secretary's approval of the Water Delivery Agreement of the QSA.

Finally, Mr. Abbott reported that the U. S. Department of Justice recently intervened on a lawsuit brought by the Agua Caliente Tribe against the Desert Water Agency and Coachella Valley Water District seeking Federal Reserved Rights to groundwater in the Coachella Valley Basin. The two water districts have advised the United States District Court that they do not want to oppose the intervention motion. Mr. Abbott explained that the Department of Justice will intervene as a Plaintiff, seeking decreed reserved water rights for the Tribe and to prohibit the water districts from over-drafting groundwater.

## Announcements/Notices

Ms. Trujillo reported that the Board packet included Reclamation's recent policy regarding the use of Colorado River water or facilities in growing operations associated with the cultivation of marijuana, citing the Controlled Substances Act of 1970.

## Adjournment

With no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn the meeting. Upon the motion of Mr. Peterson, seconded by Mr. Kuiper, and unanimously carried, the meeting was adjourned at 11:42 a.m. on June 11, 2014.



Aug 04, 2014

## LOWER COLORADO WATER SUPPLY REPORT

River Operations  
Bureau of Reclamation

Questions: [BCOOWaterops@usbr.gov](mailto:BCOOWaterops@usbr.gov)

(702) 293-8373

<http://www.usbr.gov/lc/region/g4000/weekly.pdf>

	PERCENT	Content 1000 ac-ft (kaf)	Elev. (Feet above mean sea level)	7-Day Release (CFS)
CURRENT STORAGE	FULL			
LAKE POWELL	52%	12,532	3608.02	12,900
* LAKE MEAD	38%	10,053	1080.51	15,200
LAKE MOHAVE	94%	1,708	643.32	13,200
LAKE HAVASU	96%	592	448.62	9,700
TOTAL SYSTEM CONTENTS **	51%	30,441		
As of 08/03/2014				
SYSTEM CONTENT LAST YEAR	51%	30,246		
* Percent based on capacity of 26,120 kaf or elevation 1219.6 feet.				
** TOTAL SYSTEM CONTENTS includes Upper & Lower Colorado River Reservoirs, less Lake Mead exclusive flood control space.				
Salt/Verde System	49%	1,132		
Painted Rock Dam	0%	0	530.00	0
Alamo Dam	5%	47	1085.28	25
Forecasted Water Use for Calendar Year 2014 (as of 08/04/2014) (values in kaf)				
NEVADA			256	
SOUTHERN NEVADA WATER SYSTEM				225
OTHERS				30
CALIFORNIA			4,295	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				757
IRRIGATION DISTRICTS				3,431
OTHERS				106
ARIZONA			2,766	
CENTRAL ARIZONA PROJECT				1,563
OTHERS				1,204
TOTAL LOWER BASIN USE				7,317
DELIVERY TO MEXICO - 2014 (Mexico Scheduled Delivery + Preliminary Yearly Excess <sup>1</sup> )				1,522
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - AUGUST FINAL FORECAST DATED 08/01/2014				
		MILLION ACRE-FEET	% of Normal	
FORECASTED WATER YEAR 2014		10.152	94%	
PRELIMINARY OBSERVED APRIL-JULY 2014		6.923	97%	
JULY OBSERVED INFLOW		0.838	77%	
AUGUST INFLOW FORECAST		0.450	90%	
		Upper Colorado Basin	Salt/Verde Basin	
WATER YEAR 2014 PRECIP TO DATE		99% (27.3")	65% (14.7")	
CURRENT BASIN SNOWPACK		NA (NA)	NA (NA)	

<sup>1</sup> Delivery to Mexico forecasted yearly excess calculated using year-to-date observed and projected excess.

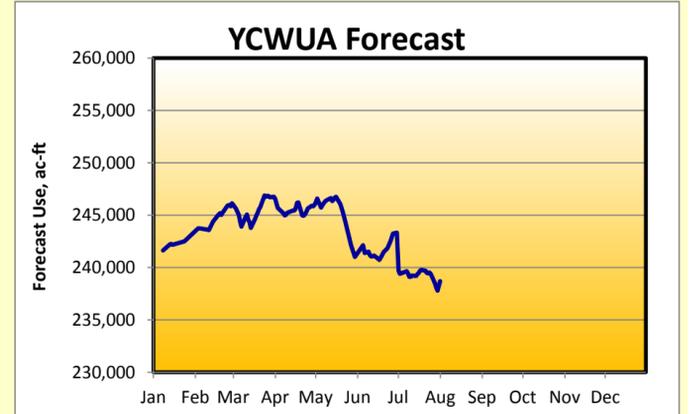
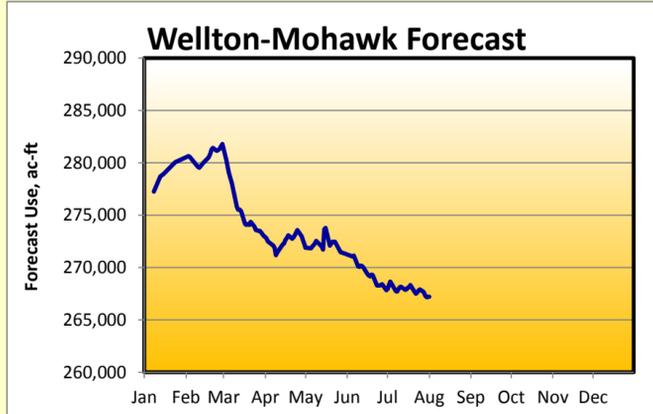
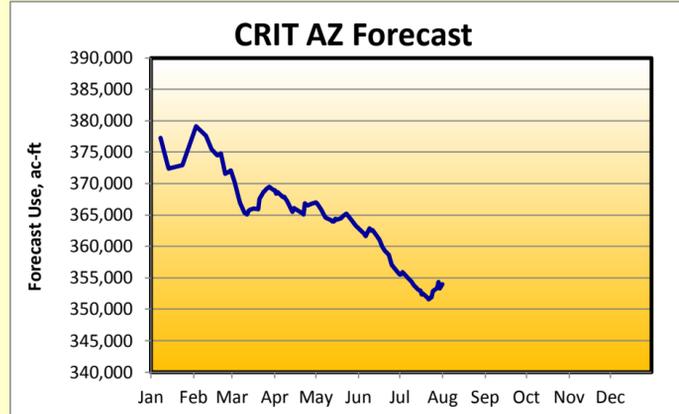
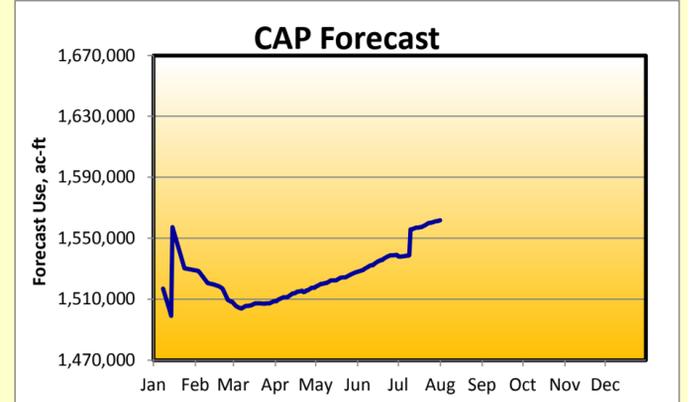
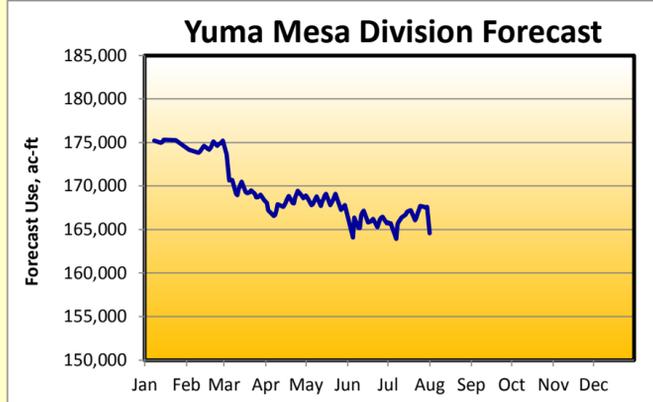
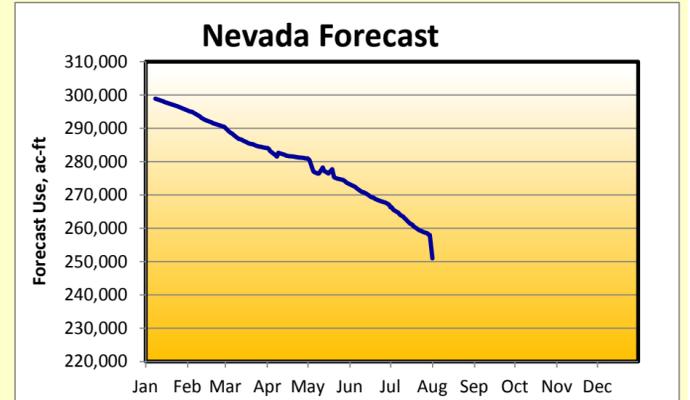
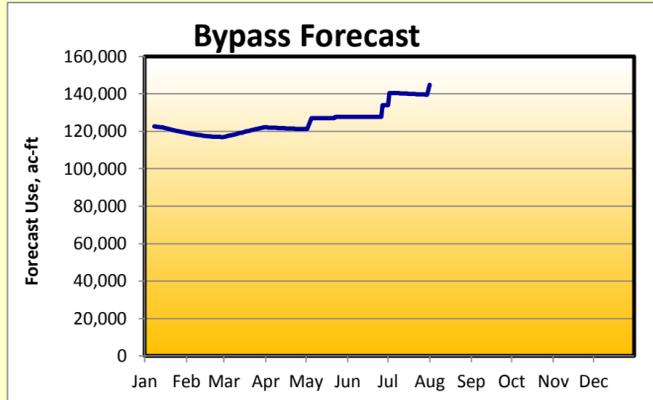
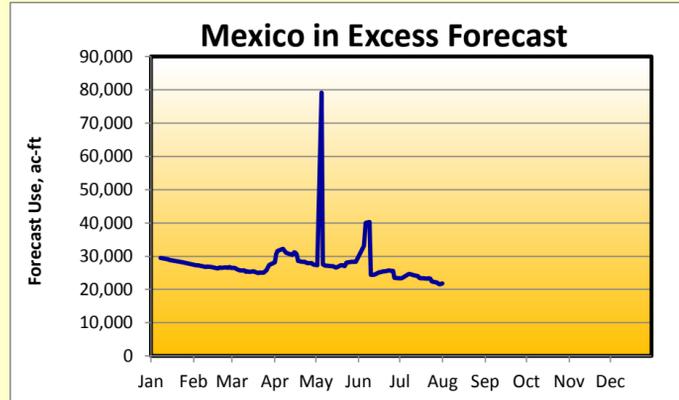
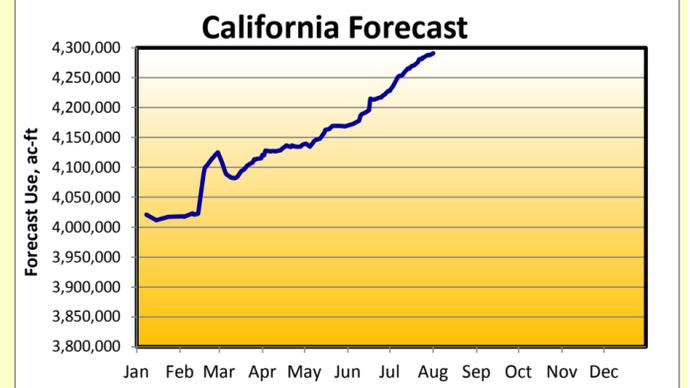
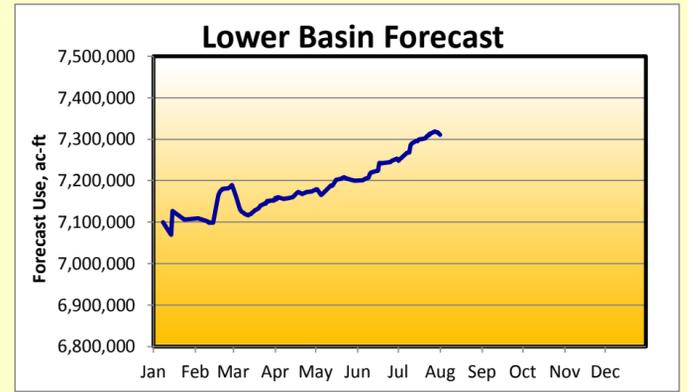
**U.S. BUREAU OF RECLAMATION  
LOWER COLORADO REGION  
PROVISIONAL CY2014**

ARIZONA, CALIFORNIA, NEVADA, MEXICO  
FORECAST OF END OF YEAR CONSUMPTIVE USE  
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS<sup>1</sup>  
(ACRE-FEET)

**WATER USE SUMMARY**

	Use To Date CY2014	Forecast Use CY2014	Approved Use <sup>2</sup> CY2014	Excess to Approval CY2014
ARIZONA	1,755,960	2,768,799	2,790,672	-21,873
CALIFORNIA	2,944,146	4,291,143	4,057,609	<b>233,534</b>
NEVADA	133,652	251,004	300,000	-48,996
<b>STATES TOTAL<sup>3</sup></b>	<b>4,833,758</b>	<b>7,310,946</b>	<b>7,148,281</b>	<b>162,665</b>
MEXICO IN SATISFACTION OF TREATY (Including downward delivery) TO MEXICO AS SCHEDULED	1,137,942	1,521,798	1,500,000	<b>21,798</b>
MEXICO IN EXCESS OF TREATY	1,128,644	1,500,000		
BYPASS PURSUANT TO MINUTE 242	9,298	21,798		
	85,705	144,728		
<b>TOTAL LOWER BASIN &amp; MEXICO</b>	<b>6,057,405</b>	<b>8,977,472</b>		

1/ Incorporates Jan-May USGS monthly data and 80 daily reporting stations which may be revised after provisional data reports are distributed by the USGS. Use to date estimated for users reporting monthly and annually.  
2/ These values reflect adjusted apportionments. See Adjusted Apportionment calculation on each state page.  
3/ Includes unmeasured returns based on estimated consumptive use/diversion ratios by user from studies provided by Arizona Department of Water Resources, Colorado River Board of California, and Reclamation.



Graph notes: Jan 1 forecast use is scheduled use in accordance with the Annual Operating Plan's state entitlements, available unused entitlements, and over-run paybacks. A downward sloping line indicates use at a lower rate than scheduled, upward sloping is above schedule, and a flat line indicates a use rate equal to schedule. Lower priority users such as CAP, MWD, and Robt.B.Griffith may adjust use rates to meet state entitlements as higher priority use deviates from schedule. Abrupt changes in the forecast use line may be due to a diversion schedule change or monthly updating of provisional realtime diversions.

**U.S. BUREAU OF RECLAMATION  
LOWER COLORADO REGION  
PROVISIONAL CY2014**

**NOTE:**

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CALIFORNIA WATER USERS  
FORECAST OF END OF YEAR CONSUMPTIVE USE  
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS  
[California Schedules and Approvals](#)  
[Historic Use Records \(Water Accounting Reports\)](#)

<u>WATER USER</u>	<u>Use To Date CY2014</u>	<u>Forecast Use CY2014</u>	<u>Estimated Use CY2014</u>	<u>Excess to Estimated Use CY2014</u>	<u>Diversion To Date CY2014</u>	<u>Forecast Diversion CY2014</u>	<u>Approved Diversion CY2014</u>	<u>Excess to Approved Diversion CY2014</u>
CALIFORNIA PUMPERS	1,283	1,959	1,959	---	2,291	3,499	3,499	0
FORT MOJAVE INDIAN RESERVATION, CA	5,391	7,554	8,996	---	10,021	14,041	16,720	-2,679
CITY OF NEEDLES (includes LCWSP use)	1,264	1,931	1,931	0	1,781	2,720	2,720	0
METROPOLITAN WATER DISTRICT	651,517	755,497	546,660	---	653,213	758,495	549,763	---
COLORADO RIVER INDIAN RESERVATION, CA	2,255	3,444	3,444	---	3,869	5,909	5,909	0
PALO VERDE IRRIGATION DISTRICT	305,553	441,445	454,108	---	616,997	984,997	994,500	-9,503
YUMA PROJECT RESERVATION DIVISION	40,652	55,086	47,886	---	64,053	102,553	102,700	-147
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	25,094	31,608	23,055	---	30,826	48,326	49,100	-774
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	27,320	35,240	24,831	---	33,227	54,227	53,600	<b>627</b>
YUMA ISLAND PUMPERS	3,257	4,974	4,974	---	5,893	9,001	9,001	0
FORT YUMA INDIAN RESERVATION - RANCH 5	442	675	675	---	799	1,221	1,221	0
IMPERIAL IRRIGATION DISTRICT	1,677,268	2,578,153	2,544,150	<b>34,003</b>	1,658,047	2,604,123	2,645,857	---
SALTON SEA SALINITY MANAGEMENT	45,131	90,000	90,000	0	46,922	101,532	93,451	---
COACHELLA VALLEY WATER DISTRICT	209,578	349,578	352,000	-2,422	217,231	364,274	366,370	---
OTHER LCWSP CONTRACTORS	426	650	650	---	665	1,016	1,016	0
CITY OF WINTERHAVEN	45	69	69	---	68	104	104	0
CHEMEHUEVI INDIAN RESERVATION	84	128	128	---	7,425	11,340	11,340	0
<b>TOTAL CALIFORNIA</b>	<b>2,944,146</b>	<b>4,291,143</b>			<b>3,289,275</b>	<b>4,964,825</b>	<b>4,804,171</b>	

**CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION**

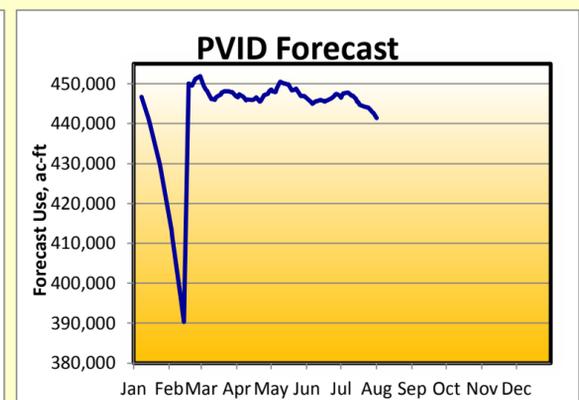
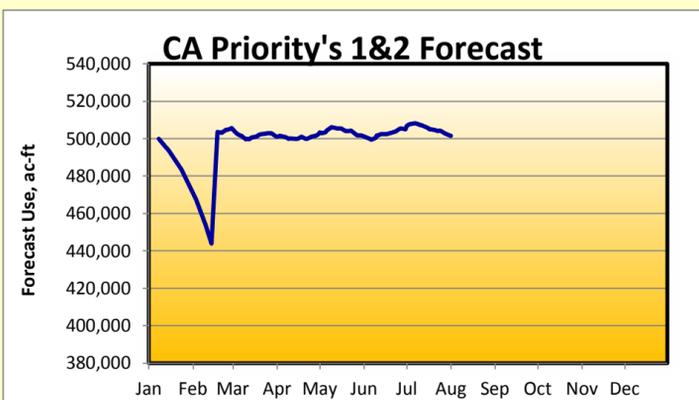
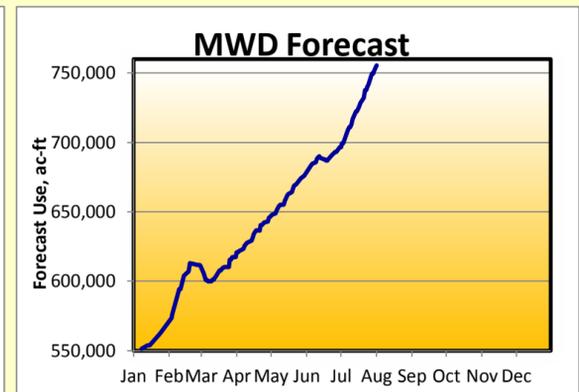
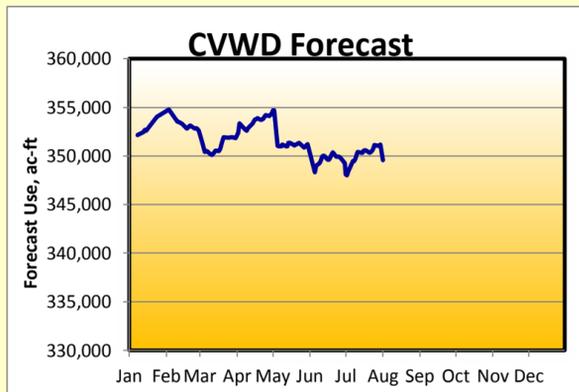
California Basic Apportionment	4,400,000
Payback of IOPP Overrun (IID)	-117,391
Intentionally Created Surplus Water (IID)	-25,000
Creation of Extraordinary Conservation ICS (MWD)	-200,000
<b>Total State Adjusted Apportionment</b>	<b>4,057,609</b>
Excess to Total State Adjusted Apportionment	233,534

**ISG ANNUAL TARGET COMPARISON CALCULATION**

Priorities 1, 2, 3b Use (PVID+YPRD+Island+PVID Mesa)	501,505
MWD Adjustment	-81,505
Total California Agricultural Use (PVID+YPRD+Island+IID+CVWD)	3,429,236
California Agricultural Paybacks	117,391
Misc. PPRs Covered by IID and CVWD	14,500
California ICS Creation (IID ICS)	25,000
<b>Total Use for Target Comparison <sup>1</sup></b>	<b>3,504,622</b>
ISG Annual Target (Exhibit B)	3,455,000
Amount over/(under) ISG Annual Target	49,622

NOTES: Click on California Schedules and Approvals above for incoming diversion schedules and approvals.

1/ Includes MWD Adjustment, California Agricultural Use and Paybacks, IID-CVWD covered PPRs, and taking out the MWD-CVWD Exchange



**U.S. BUREAU OF RECLAMATION  
LOWER COLORADO REGION  
PROVISIONAL CY2014**

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ARIZONA WATER USERS  
FORECAST OF END OF YEAR CONSUMPTIVE USE  
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS

[Arizona Schedules and Approvals](#)  
[Historic Use Records \(Water Accounting Reports\)](#)

<b>WATER USER</b>	<b>Use To Date CY2014</b>	<b>Forecast Use CY2014</b>	<b>Estimated Use CY2014</b>	<b>Excess to Estimated Use CY2014</b>	<b>Diversion To Date CY2014</b>	<b>Forecast Diversion CY2014</b>	<b>Approved Diversion CY2014</b>	<b>Excess to Approved Diversion CY2014</b>
ARIZONA PUMPERS	11,681	17,841	17,841	---	18,075	27,607	27,607	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	92	143	143	---	92	143	143	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	107	191	191	---	107	191	191	0
DAVIS DAM PROJECT	1	1	1	---	35	54	54	0
BULLHEAD CITY	3,236	6,922	8,523	---	4,830	10,330	12,720	-2,390
MOHAVE WATER CONSERVATION	324	495	495	---	483	738	738	0
BROOKE WATER LLC	137	210	210	---	208	317	317	0
MOHAVE VALLEY IDD	13,476	22,784	22,617	---	24,956	42,192	41,883	<b>309</b>
FORT MOJAVE INDIAN RESERVATION, AZ	24,708	38,208	42,120	---	45,755	70,755	78,000	-7,245
GOLDEN SHORES WATER CONSERVATION DISTRICT	156	238	238	---	234	357	357	0
HAVASU NATIONAL WILDLIFE REFUGE	3,828	4,807	3,563	---	29,704	41,184	41,820	-636
LAKE HAVASU CITY	4,603	8,509	9,083	---	7,424	13,724	14,650	-926
CENTRAL ARIZONA PROJECT	977,964	1,561,666	1,528,908	---	977,964	1,561,666	1,528,908	---
TOWN OF PARKER	230	368	359	---	507	890	935	-45
COLORADO RIVER INDIAN RESERVATION, AZ	232,255	353,988	376,964	---	399,614	642,417	662,402	-19,985
EHRENBURG IMPROVEMENT ASSOCIATION	160	244	244	---	225	343	343	0
CIBOLA VALLEY IRRIGATION DISTRICT	11,098	16,951	16,951	---	15,522	23,707	23,707	0
CIBOLA NATIONAL WILDLIFE REFUGE	8,342	12,741	12,741	0	13,455	20,550	20,550	0
IMPERIAL NATIONAL WILDLIFE REFUGE	1,713	2,616	2,616	0	2,766	4,224	4,224	0
YUMA PROVING GROUND	279	486	550	---	279	486	550	-64
GILA MONSTER FARMS	3,226	4,559	5,244	---	5,514	8,081	9,156	-1,075
WELLTON-MOHAWK IDD	173,159	267,179	278,000	-10,821	246,615	405,021	424,997	---
CITY OF YUMA	9,210	16,070	16,452	-382	15,163	26,271	26,358	-87
MARINE CORPS AIR STATION YUMA	775	1,466	1,718	---	775	1,466	1,718	-252
UNION PACIFIC RAILROAD	20	30	24	---	28	48	48	0
UNIVERSITY OF ARIZONA	315	494	536	---	315	494	536	-42
YUMA UNION HIGH SCHOOL DISTRICT	160	209	148	---	202	268	200	<b>68</b>
DESERT LAWN MEMORIAL	30	46	46	---	43	66	66	0
NORTH GILA VALLEY IDD	7,009	10,025	12,384	---	29,960	50,309	51,963	-1,654
YUMA IRRIGATION DISTRICT	24,216	38,696	42,991	---	43,009	71,209	76,600	-5,391
YUMA MESA IDD	72,296	115,842	119,077	---	122,402	206,676	217,488	-10,812
UNIT "B" IRRIGATION DISTRICT	12,447	20,357	20,408	---	17,653	31,353	33,450	-2,097
FORT YUMA INDIAN RESERVATION	914	1,396	1,396	---	1,408	2,150	2,150	0
YUMA COUNTY WATER USERS' ASSOCIATION	156,237	238,668	241,118	---	225,971	366,971	383,000	-16,029
COCOPAH INDIAN RESERVATION	1,394	4,106	6,599	---	1,407	5,557	10,055	-4,498
RECLAMATION-YUMA AREA OFFICE	162	247	247	---	162	247	247	0
RETURN FROM SOUTH GILA WELLS								
<b>TOTAL ARIZONA</b>	<b>1,755,960</b>	<b>2,768,799</b>	<b>2,790,746</b>		<b>2,252,862</b>	<b>3,638,062</b>	<b>3,698,131</b>	
<b>CAP</b>	<b>977,964</b>	<b>1,561,666</b>				<b>1,561,666</b>		
<b>ALL OTHERS</b>	<b>777,996</b>	<b>1,207,133</b>	<b>1,261,838</b>			<b>2,076,396</b>	<b>2,169,223</b>	
<b>YUMA MESA DIVISION, GILA PROJECT</b>	<b>103,521</b>	<b>164,563</b>	<b>250,000</b>	<b>-85,437</b>		<b>328,194</b>		

**ARIZONA ADJUSTED APPORTIONMENT CALCULATION**

Arizona Basic Apportionment	2,800,000
Payback of IOPP overruns - (Cocopah and Beattie)	-328
CAGR/YMIDD Pilot Conservation Program <sup>1</sup>	-9000
Total State Adjusted Apportionment	<u>2,790,672</u>
Excess to Total State Adjusted Apportionment	-21,873
 Estimated Allowable Use for CAP	 1,585,026

<sup>1/</sup> CAWCD has agreed to forebear 9,000 acre-feet during phase one of the study, during which time CAGR will refine the estimate of the actual conservation yield of the program.

NOTES: Click on Arizona Schedules and Approvals above for incoming diversion schedules and approvals.

**U.S. BUREAU OF RECLAMATION  
LOWER COLORADO REGION  
PROVISIONAL CY2014**

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NEVADA WATER USERS  
 FORECAST OF END OF YEAR CONSUMPTIVE USE  
 FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS  
[Nevada Schedules and Approvals](#)  
[Historic Use Records \(Water Accounting Reports\)](#)

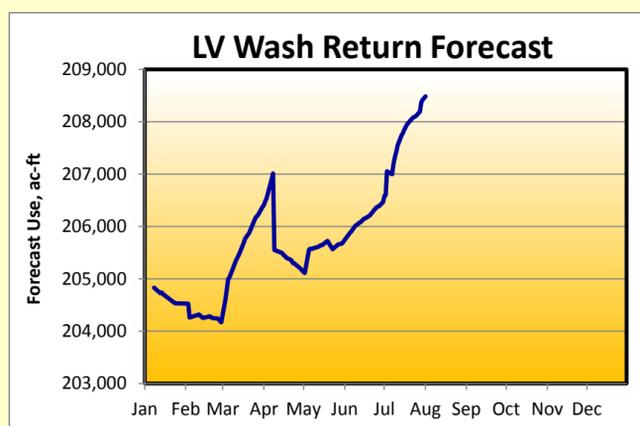
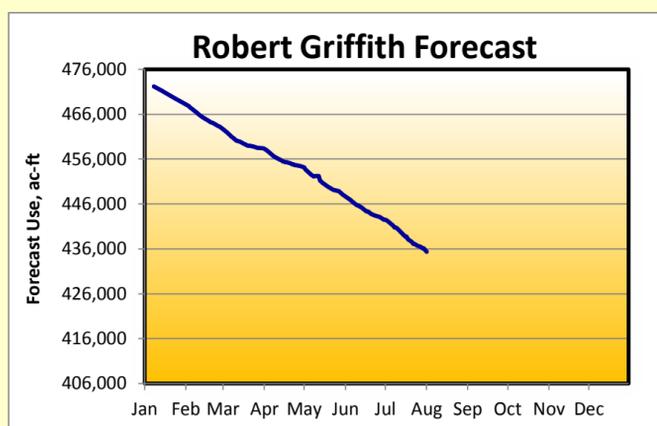
<u>WATER USER</u>	<u>Use To Date CY2014</u>	<u>Forecast Use CY2014</u>	<u>Estimated Use CY2014</u>	<u>Excess to Estimated Use CY2014</u>	<u>Diversion To Date CY2014</u>	<u>Forecast Diversion CY2014</u>	<u>Approved Diversion CY2014</u>	<u>Excess to Approved Diversion CY2014</u>
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	243,677	435,371	473,360	-37,989	243,600	435,294	473,360	-38,066
LAKE MEAD NRA, NV - Diversions from Lake Mead	265	492	568	---	265	492	568	-76
LAKE MEAD NRA, NV - Diversions from Lake Mohave	99	192	224	---	99	192	224	-32
BASIC MANAGEMENT INC.	2,153	5,486	8,208	---	2,153	5,486	8,208	-2,722
CITY OF HENDERSON (BMI DELIVERY)	6,437	12,133	15,878	---	6,437	12,133	15,878	-3,745
NEVADA STATE DEPT. OF FISH & GAME	4	36	12	<b>24</b>	189	368	300	---
PACIFIC COAST BUILDING PRODUCTS INC.	335	751	928	---	335	751	928	-177
BOULDER CANYON PROJECT	26	40	40	---	47	72	72	0
BIG BEND WATER DISTRICT	1,229	2,363	2,062	---	2,427	4,775	4,961	-186
FORT MOJAVE INDIAN TRIBE	1,348	2,621	3,685	---	2,012	3,912	5,500	-1,588
LAS VEGAS WASH RETURN FLOWS	-121,921	-208,481	-204,964	---				
<b>TOTAL NEVADA</b>	<b>133,652</b>	<b>251,004</b>	<b>300,001</b>	<b>-37,965</b>	<b>257,564</b>	<b>463,475</b>	<b>509,999</b>	<b>-46,592</b>
SOUTHERN NEVADA WATER SYSTEM (SNWS)	121,756	226,890				435,294		
ALL OTHERS	11,896	24,114				28,181		
NEVADA USES ABOVE HOOVER	131,075	246,020				454,788		
NEVADA USES BELOW HOOVER	2,577	4,984				8,687		

**Tributary Conservation & Imported Intentionally Created Surplus**

Total Requested Tributary Conservation Intentionally Created Surplus	37,000
Total Requested Imported Conservation Intentionally Created Surplus	9,000
5% System Cut for Creation of Intentionally Created Surplus	-2,300
<b>Total Intentionally Created Surplus Left in Lake Mead</b>	<b>43,700</b>

**NEVADA ADJUSTED APPORTIONMENT CALCULATION**

Nevada Basic Apportionment	300,000
Excess to Total State Adjusted Apportionment	-48,996



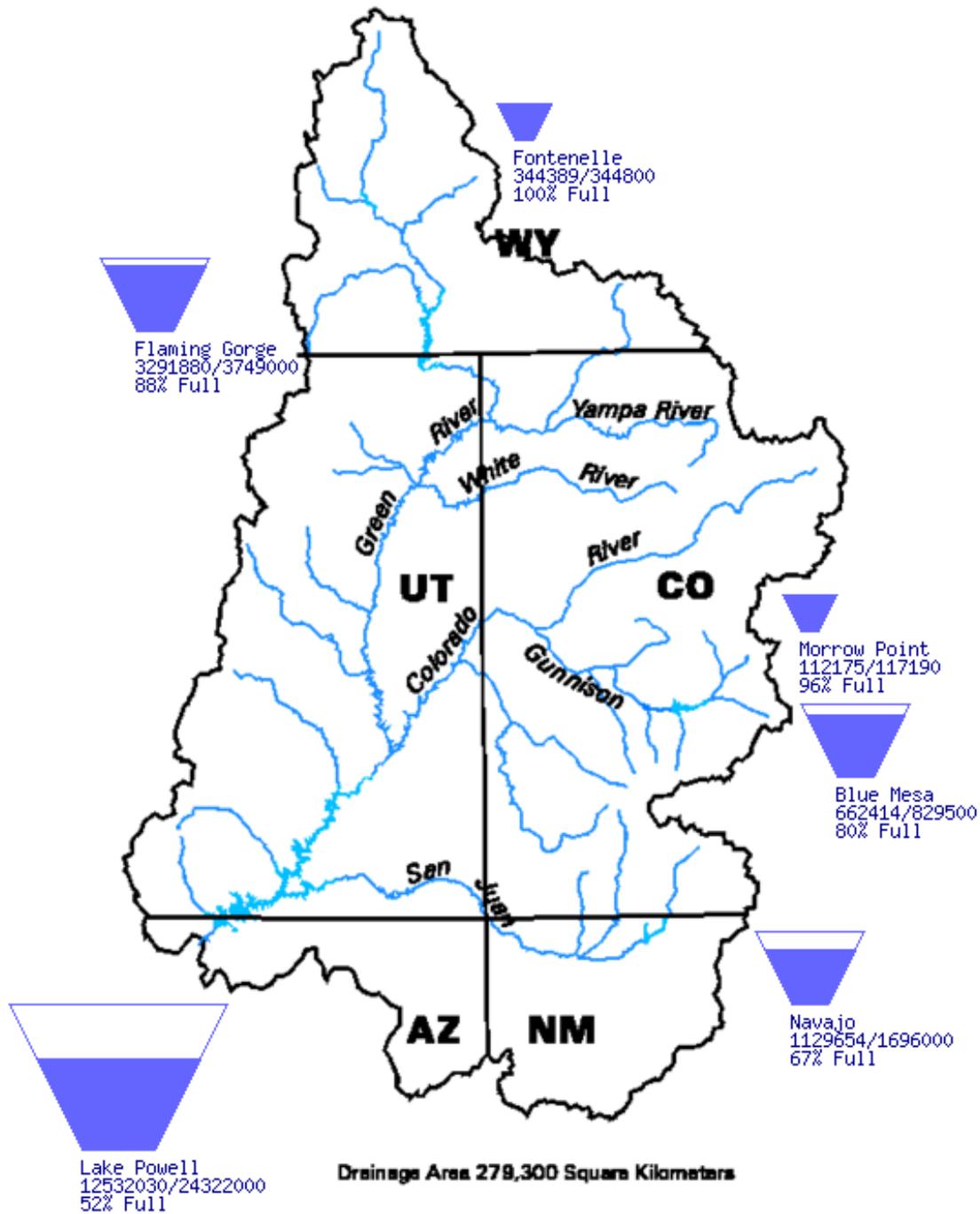
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

# Upper Colorado Region Water Resources Group

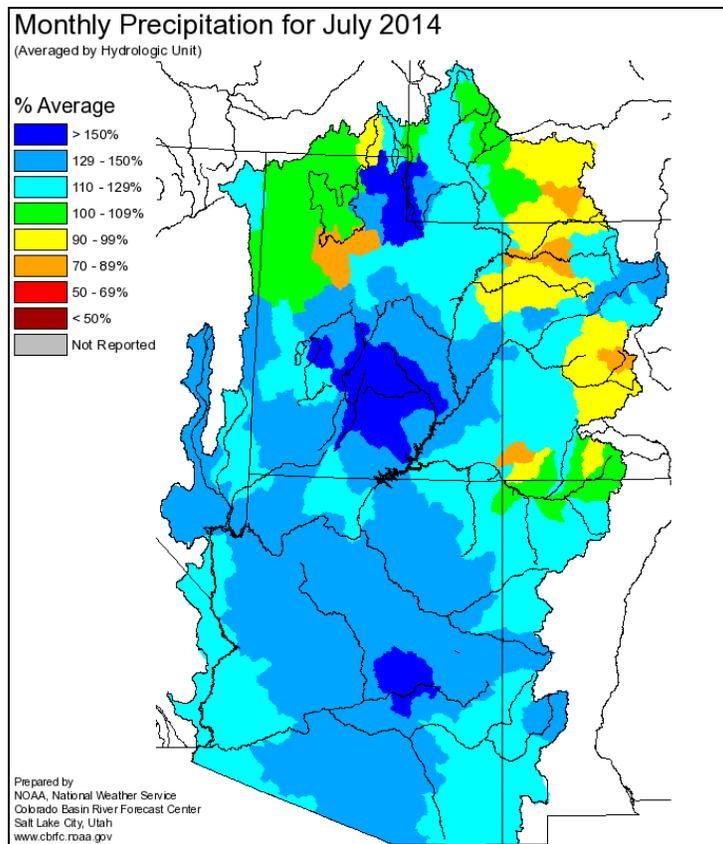
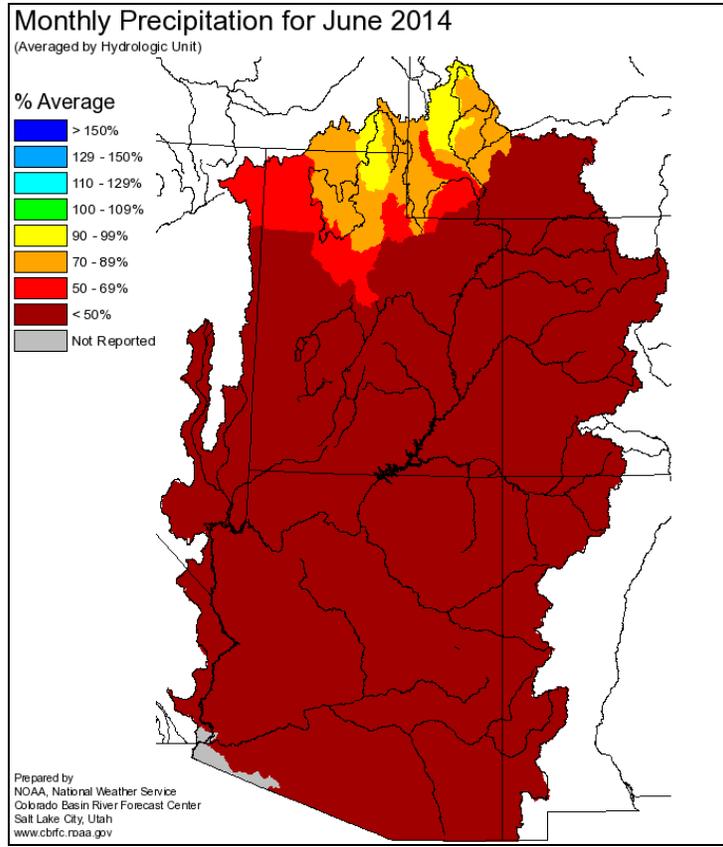
## River Basin Tea-Cup Diagrams

Data Current as of:  
08/03/2014

### Upper Colorado River Drainage Basin



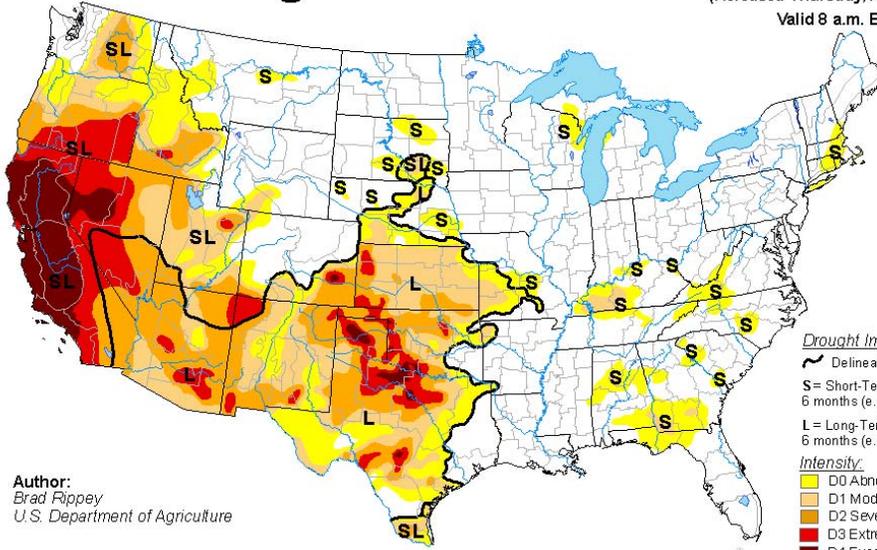
NOAA National Weather Service Monthly Precipitation Maps for June and July 2014



USDA United States Drought Monitor Map

# U.S. Drought Monitor

**August 5, 2014**  
 (Released Thursday, Aug. 7, 2014)  
 Valid 8 a.m. EDT

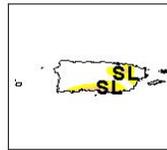
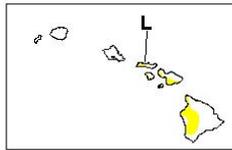
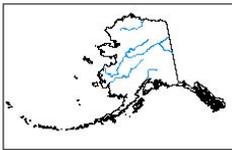


Author:  
 Brad Rippey  
 U.S. Department of Agriculture

**Drought Impact Types:**  
 ~ Delineates dominant impacts  
 S= Short-Term, typically less than 6 months (e.g. agriculture, grasslands)  
 L= Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

**Intensity:**  
 D0 Abnormally Dry  
 D1 Moderate Drought  
 D2 Severe Drought  
 D3 Extreme Drought  
 D4 Exceptional Drought

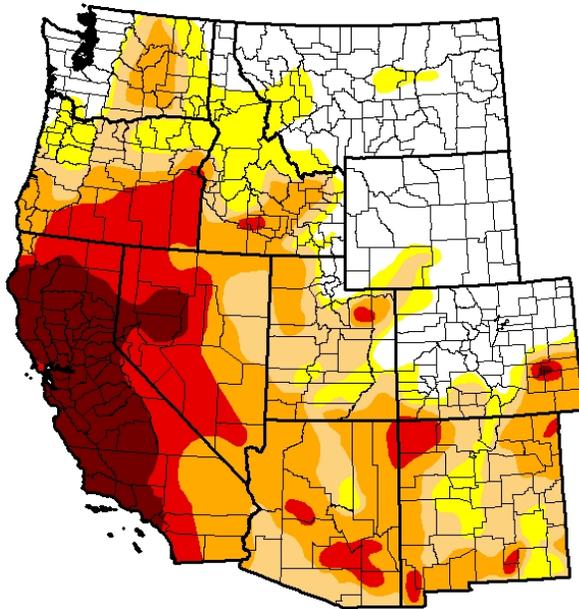
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

## U.S. Drought Monitor West

**August 5, 2014**  
 (Released Thursday, Aug. 7, 2014)  
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	27.71	72.29	60.17	43.74	21.35	8.94
<b>Last Week</b> 7/29/2014	27.73	72.27	60.93	44.49	21.68	8.98
<b>3 Months Ago</b> 5/9/2014	30.20	69.80	61.47	45.60	19.60	4.69
<b>Start of Calendar Year</b> 1/23/2013	22.20	77.80	51.44	31.11	7.75	0.63
<b>Start of Water Year</b> 10/1/2013	25.25	74.75	58.96	34.18	5.57	0.63
<b>One Year Ago</b> 8/6/2013	13.20	86.80	77.41	57.03	18.96	3.62

**Intensity:**  
 D0 Abnormally Dry  
 D1 Moderate Drought  
 D2 Severe Drought  
 D3 Extreme Drought  
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

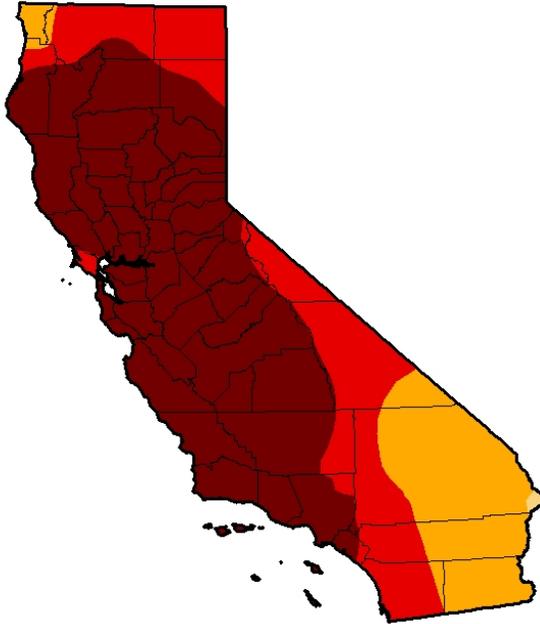
Author:  
 Brad Rippey  
 U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

**U.S. Drought Monitor  
California**

**August 5, 2014**  
(Released Thursday, Aug. 7, 2014)  
Valid 8 a.m. EDT



*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	99.80	81.92	58.41
<b>Last Week</b> 7/29/2014	0.00	100.00	100.00	100.00	81.89	58.41
<b>3 Months Ago</b> 5/6/2014	0.00	100.00	100.00	95.93	76.68	24.77
<b>Start of Calendar Year</b> 12/31/2013	2.61	97.39	94.25	87.53	27.59	0.00
<b>Start of Water Year</b> 10/1/2013	2.63	97.37	95.95	84.12	11.36	0.00
<b>One Year Ago</b> 8/6/2013	0.00	100.00	98.23	93.86	0.00	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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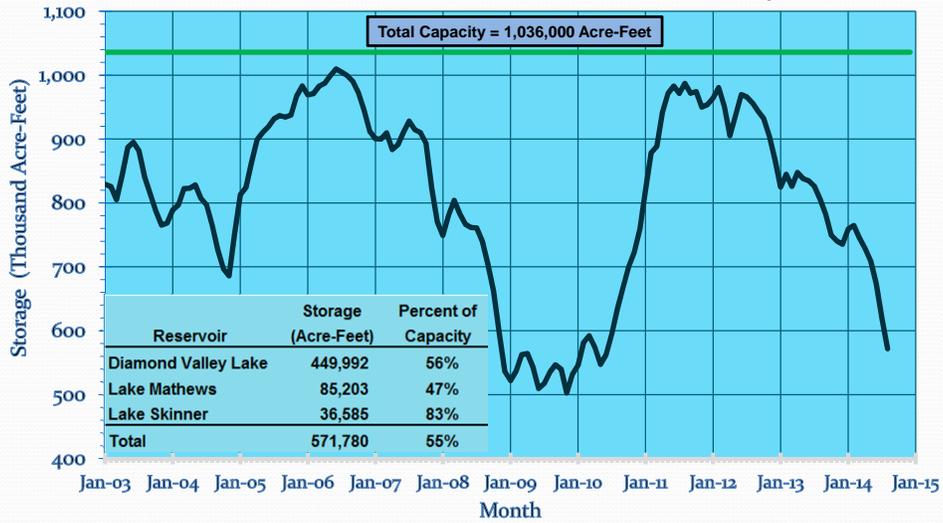
**Author:**  
Brad Rippey  
U.S. Department of Agriculture



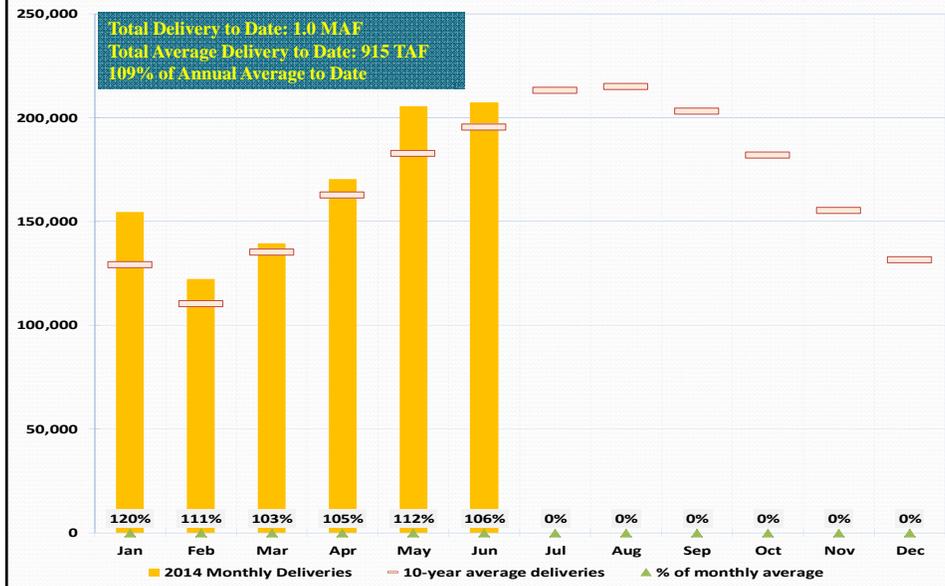
<http://droughtmonitor.unl.edu/>

## MWD's Combined Reservoir Storage as of August 1, 2014

### Lake Skinner, Lake Mathews, and Diamond Valley Lake

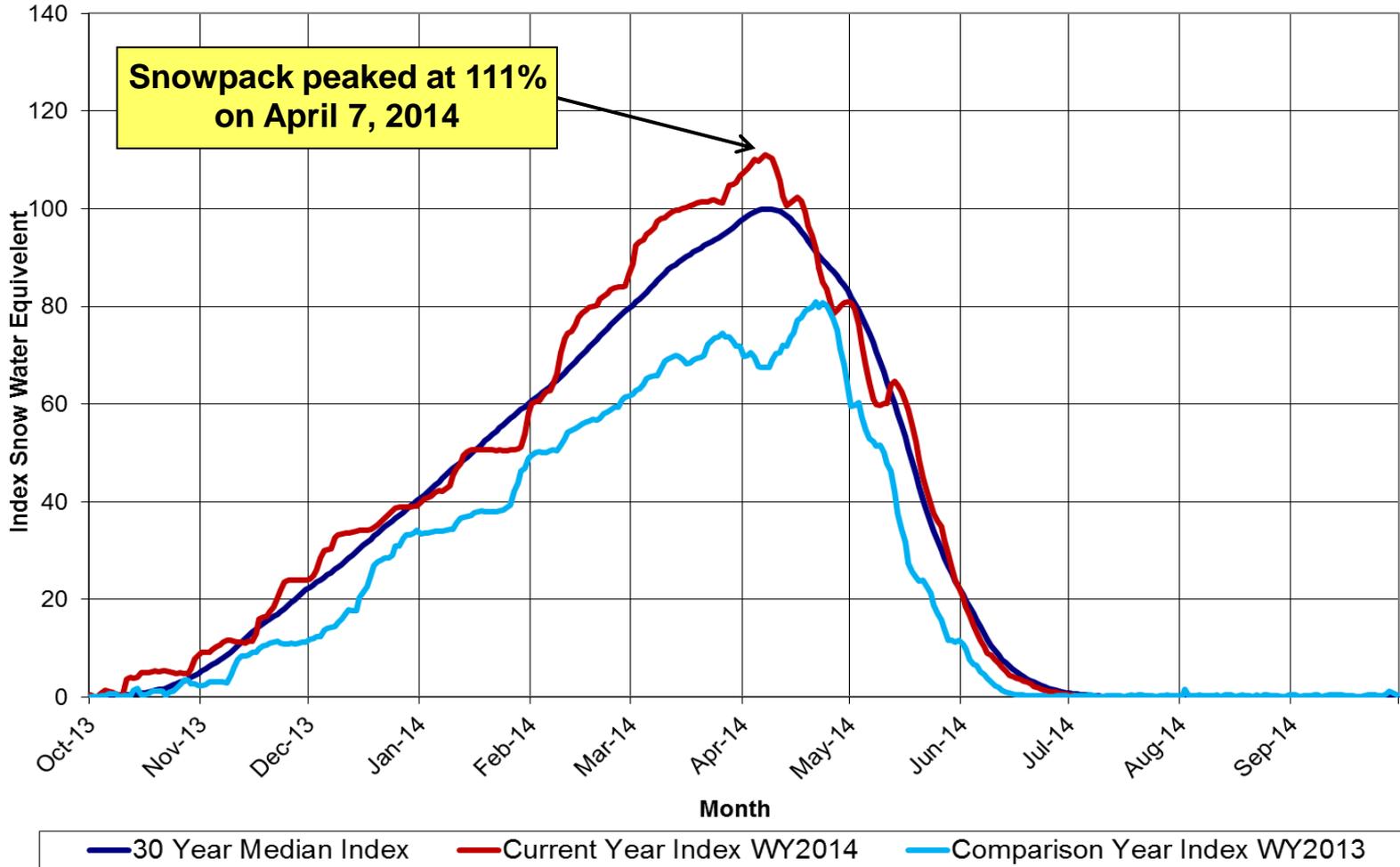


## 2014 Water Deliveries to Member Agencies (AF)



# Upper Basin Hydrology

Upper Colorado River Basin Snotel Tracking  
Aggregate of 116 Snotel Sites above Lake Powell



Data Provided by the Natural Resource Conservation Service

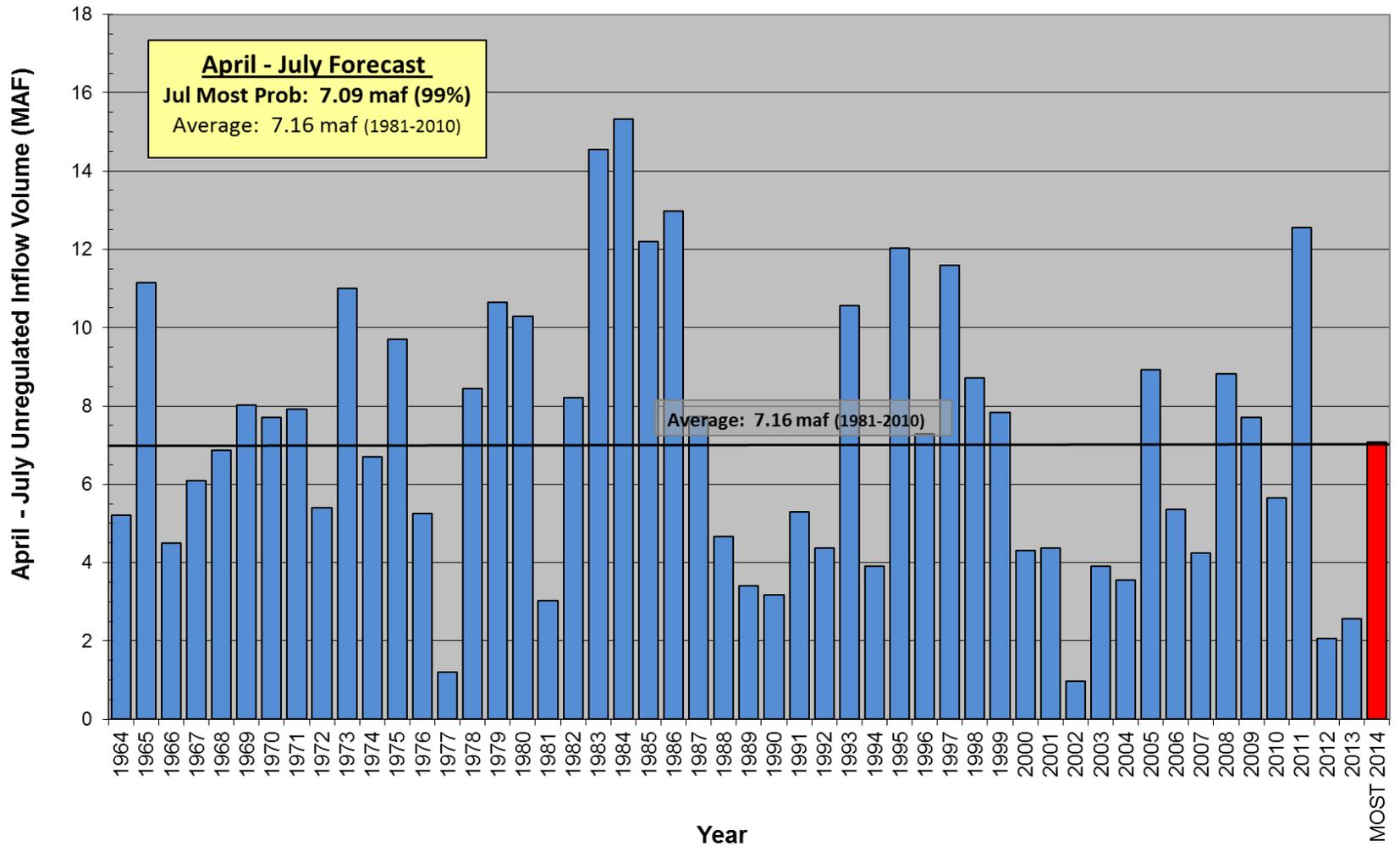
[http://www.usbr.gov/uc/water/notice/Graphs/Upper\\_Colorado.html](http://www.usbr.gov/uc/water/notice/Graphs/Upper_Colorado.html)

RECLAMATION

# Lake Powell Unregulated Inflow

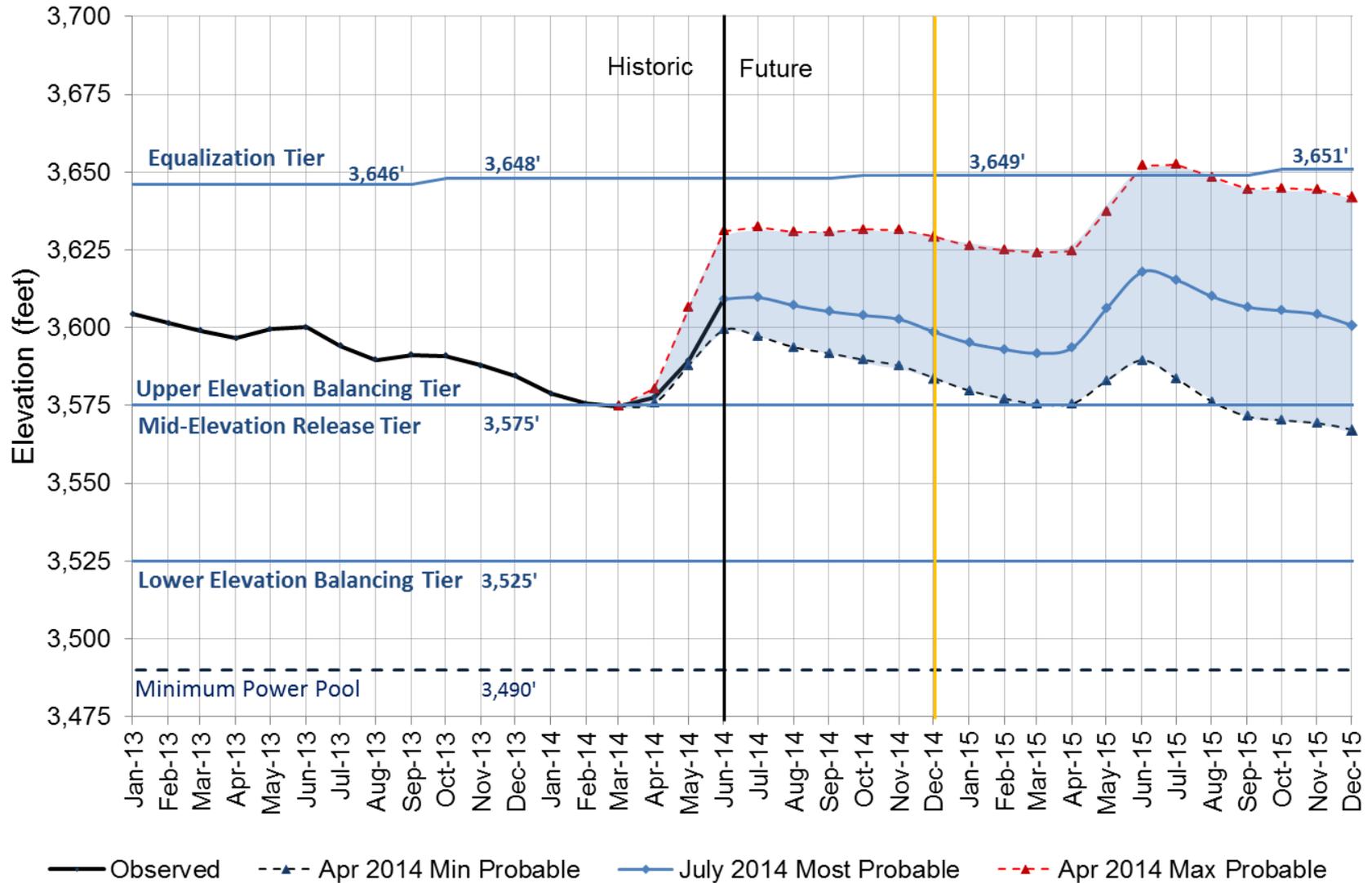
## Apr - Jul 2014 Forecast (issued July 1)

### Comparison with History



# Lake Powell End of Month Elevations

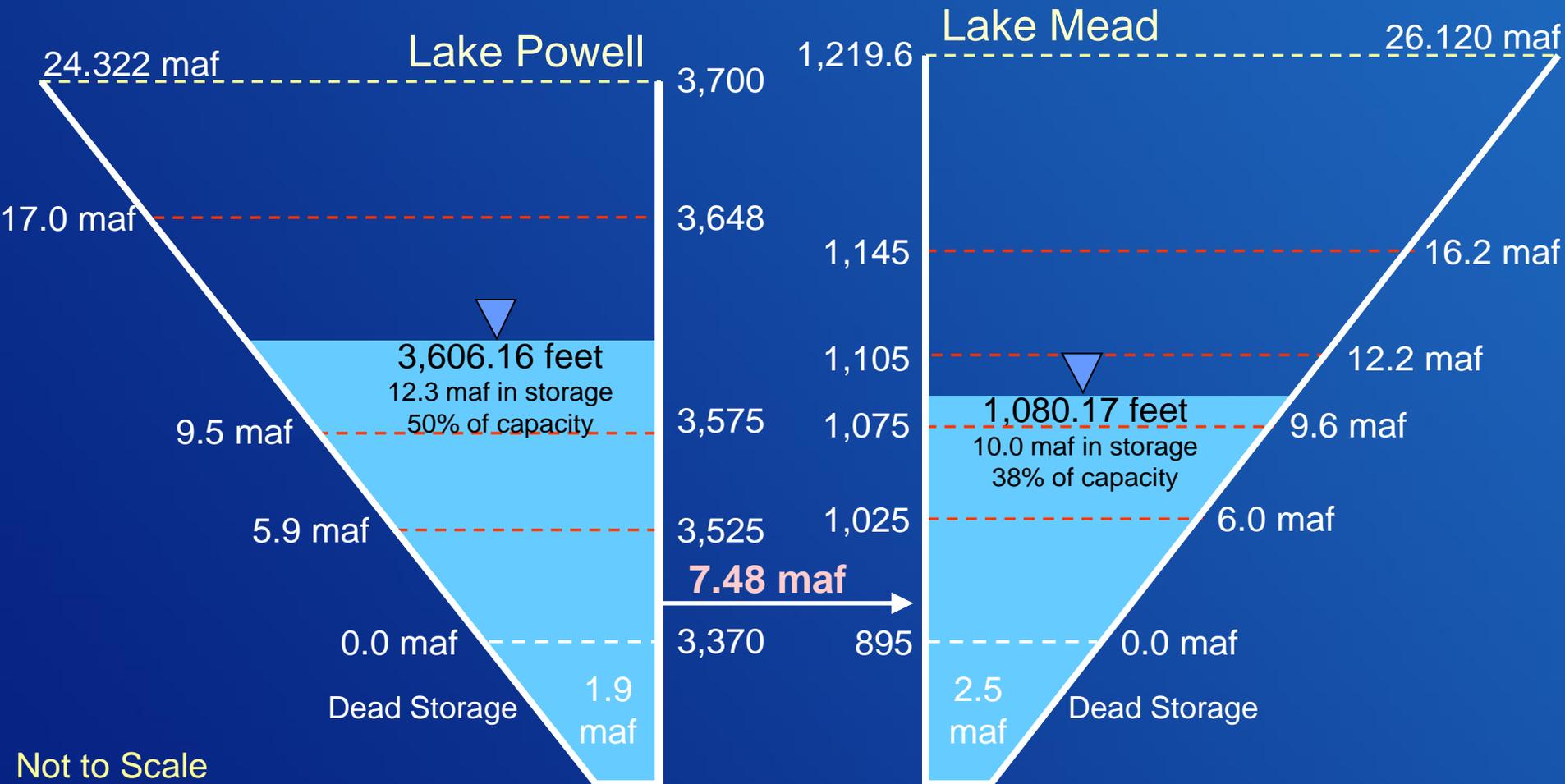
## Historic and projected based on April and July modeling



# End of Water Year 2014 Projections

July 2014 24-Month Study Most Probable Inflow Scenario<sup>1</sup>

Projected WY Unregulated Inflow into Powell = 10.31 maf (95% of average)

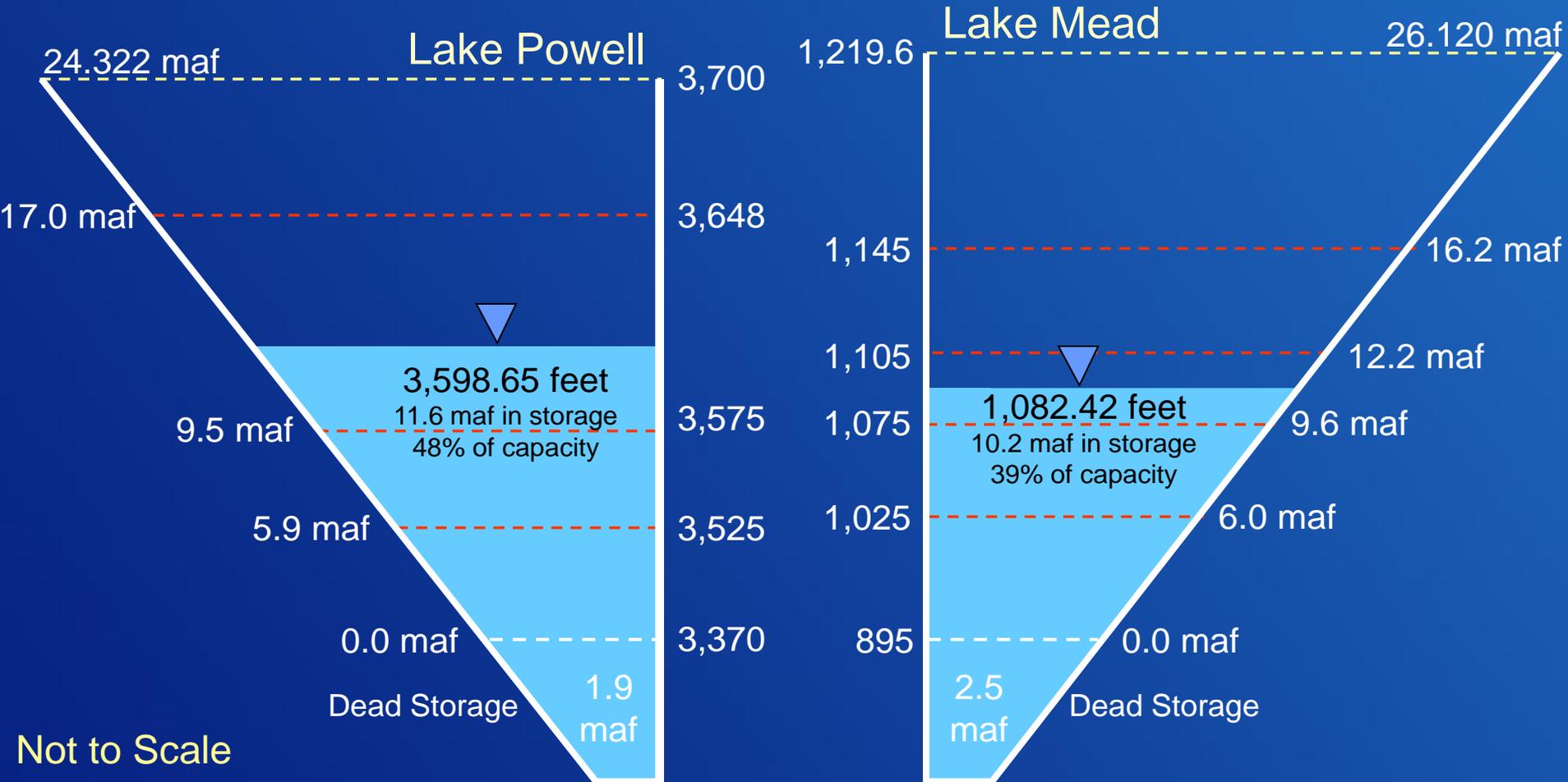


Not to Scale

<sup>1</sup> WY 2014 unregulated inflow into Lake Powell is based on the CBRFC outlook dated 7/1/14.

# End of Calendar Year 2014 Projections

## July 2014 24-Month Study Most Probable Inflow Scenario<sup>1</sup>



<sup>1</sup> WY 2014 unregulated inflow into Lake Powell is based on the CBRFC outlook dated 7/1/14.

# Lake Powell & Lake Mead Operational Table

Projected Operational Tiers for Water/Calendar Year 2015 based on the July 2014 24-Month Study

Lake Powell			Lake Mead		
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) <sup>1</sup>	Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) <sup>1</sup>
3,700	<b>Equalization Tier</b> Equalize, avoid spills or release 8.23 maf	24.3	1,220	<b>Flood Control Surplus or Quantified Surplus Condition</b> Deliver > 7.5 maf	25.9
3,636 - 3,666 (2008-2026)	<b>Upper Elevation Balancing Tier<sup>3</sup></b> Release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	15.5 - 19.3 (2008-2026)	1,200 (approx.) <sup>2</sup>	<b>Domestic Surplus or ICS Surplus Condition</b> Deliver > 7.5 maf	22.9 (approx.) <sup>2</sup>
	<b>Normal or ICS Surplus Condition</b> Deliver ≥ 7.5 maf		1,145	15.9	
3,575	<b>Mid-Elevation Release Tier</b> Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	9.5	1,105	<b>Normal or ICS Surplus Condition</b> Deliver ≥ 7.5 maf	11.9
3,525		5.9	1,075	<b>Shortage Condition</b> Deliver 7.167 <sup>4</sup> maf	9.4
3,490	<b>Lower Elevation Balancing Tier</b> Balance contents with a min/max release of 7.0 and 9.5 maf	4.0	1,050	<b>Shortage Condition</b> Deliver 7.083 <sup>5</sup> maf	7.5
3,370		0	1,025	<b>Shortage Condition</b> Deliver 7.0 <sup>6</sup> maf	5.8
			1,000	<b>Shortage Condition</b> Deliver 7.0 <sup>6</sup> maf Further measures may be undertaken <sup>7</sup>	4.3
			895		0

**Diagram not to scale**

<sup>1</sup> Acronym for million acre-feet

<sup>2</sup> This elevation is shown as approximate as it is determined each year by considering several factors including Lake Powell and Lake Mead storage, projected Upper Basin and Lower Basin demands, and an assumed inflow.

<sup>3</sup> Subject to April adjustments which may result in a release according to the Equalization Tier

<sup>4</sup> Of which 2.48 maf is apportioned to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

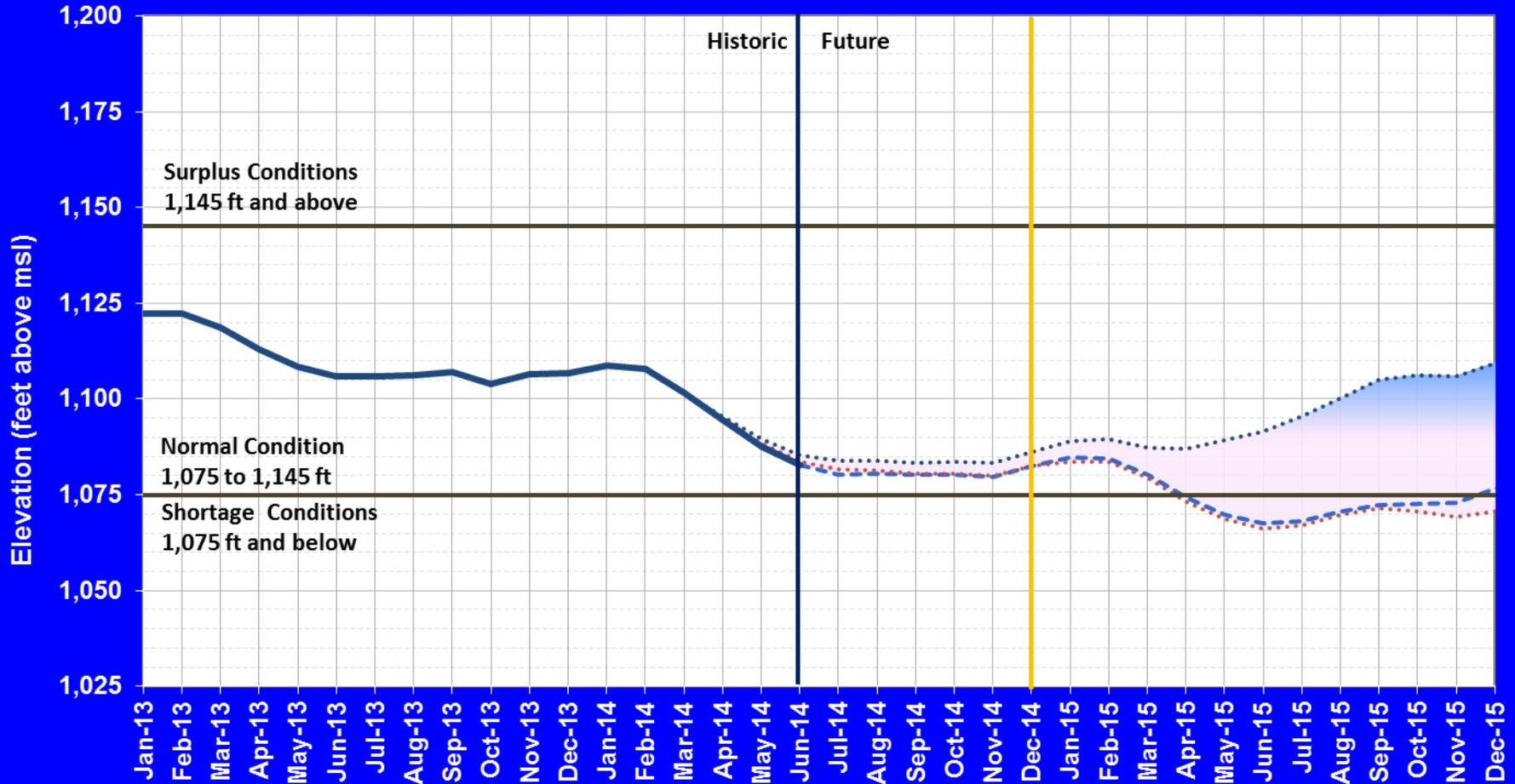
<sup>5</sup> Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

<sup>6</sup> Of which 2.32 maf is apportioned to Arizona, 4.4 maf to California, and 0.280 maf to Nevada

<sup>7</sup> Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

# Lake Mead End of Month Elevations

Projections from April and July 2014 24-Month Study Inflow Scenarios



- ..... April 2014 Probable Maximum Inflow with Lake Powell Release of 7.48 maf Water Year 2014 and 11.44 maf in Water Year 2015
- - - July 2014 Most Probable Inflow with Lake Powell Release of 7.48 maf in Water Year 2014 and 9.00 maf in Water Year 2015
- ..... April 2014 Probable Minimum Inflow with Lake Powell Release of 7.48 maf in Water Year 2014 and 9.00 maf in Water Year 2015
- Historical Elevations





## Weekly Drought Brief Monday, August 4, 2014

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### CURRENT CONDITIONS

**Fire Activity:** CAL FIRE has responded to 3,813 wildfires across the state since January 1, burning 44,408 acres. This year's fire activity is well above the year-to-date average of 2,801 wildfires on 35,168 acres. CAL FIRE responded to over 250 new wildfires last week, including the Day Fire in Modoc County that started on Wednesday, July 30, which has burned more than 7,000 acres and is only 5% contained.

**Reservoir Levels (% capacity):** [Reservoir Levels](#) as of July 31 remain low, including: Don Pedro 44%; Exchequer 21%; Folsom Lake 42%; Lake Oroville 35%; Millerton Lake 53%; New Melones 26%; Pine Flat 14%; San Luis 22%; Lake Shasta 35%; and Trinity Lake 35%. An update of water levels at [other smaller reservoirs](#) is also available.

**Vulnerable Water Systems:** The State Water Board's Drinking Water Program is providing technical and funding assistance to several communities facing drinking water shortages, and is monitoring water systems across the state to determine if new support is needed. This week, over \$8.8 million has been identified for specific emergency drinking water projects out of \$15 million appropriated in March for this purpose. Updated information can be found at the [CDPH Drinking Water Program](#) website during the three (3) month transition period. For more information regarding the transfer, please visit the [State Water Board's Drinking Water Program](#) website.

**Recent precipitation:** No significant rain fell over the last week and no rain is expected soon.

### KEY ACTION ITEMS FROM THIS WEEK

- **State Board Mandatory Conservation Regulations Now in Effect:** The state's first-ever emergency regulations mandating urban water conservation became effective on Tuesday, July 29, following final approval by the Office of Administrative Law (OAL).

The [final regulations](#), adopted by the State Water Resources Control Board on July 15, prohibit certain outdoor water uses and require local water agencies to activate their water shortage contingency plans at a level that includes mandatory outdoor irrigation restrictions. The regulations will be in effect until April 25, 2015, unless they are extended or repealed. More information is available on the State Board's [Conservation Regulation Portal](#) and in a new [Frequently Asked Questions](#) document.

- **W21: Water in the 21st Century Legislation Introduced:** California Sens. Barbara Boxer and Dianne Feinstein along with their House colleagues Reps. Grace Napolitano (D-CA-32) and Peter DeFazio (D-OR) [introduced legislation to promote water conservation and recycling](#) on Thursday, July 31. The identical House and Senate bills, entitled "W21: Water in the 21st Century," expand rebates and grants for water conservation and efficiency; support local investments in water recycling and improved groundwater management and storage; invest in research into water-saving technologies and desalination; and establish an open water data system.

- **Emergency Food Aid, Rental and Utility Assistance:** The California Department of Social Services (CDSS) has provided to date over 172,000 boxes of food to community food banks in drought-impacted counties. Approximately 117,500 boxes of food have been picked up by 61,906 households. By this Friday, August 8, an additional 15,100 will be delivered to six counties. Local food banks continue to target this food aid to residents most impacted by the drought.

The non-profit group La Cooperativa continues to distribute the \$10 million state-funded emergency rental assistance to impacted families and individuals across counties most impacted by the drought. As of Wednesday, July 30, the Department of Housing and Community Development (HCD) has reported that a total of \$1,716,748 is committed; and \$1,060,932 in funds has been issued to 923 applicants in 18 counties.

The Department of Community Services and Development (CSD) has created a \$600,000 program to help families pay their water bills. This program targets families in 10 counties that are experiencing “exceptional” drought. As of Friday, July 25, CSD has reported that a total of \$9,149 has been issued to 149 households in 4 counties.

- **Santa Clara Valley Launches New Conservation Media Campaign:** The Santa Clara Valley Water District has [launched a new summer water conservation media campaign](#) that encourages residents to reduce outdoor watering and let lawns go a little brown this summer. The ‘Brown is the New Green’ campaign highlights how a lawn can survive even with significantly reduced water.
- **SCWC, Clear Channel Launch Conservation Campaign:** Southern California Water Committee and Clear Channel Outdoor [unveiled a new partnership and advertising campaign](#) on Thursday, July 31, to encourage Californians to save water during the ongoing drought. The campaign features a water-saving character called [Lawn Dude](#) who will appear on digital billboards across Southern California and share conservation tips on social media.
- **Comments Period Closes on Draft BDCP:** The public comment period on the draft Bay Delta Conservation Plan (BDCP) came to a close on Tuesday, July 29, capping a 228-day review period that began Dec. 13, 2013. [Twelve public meetings](#) were held throughout California in January and February to provide more information on the contents of the draft BDCP and associated draft environmental impact report / environmental impact statement (EIR/EIS).
- **Water Saving Tips Promoted Across the State:** The state’s newly improved water conservation website, [SaveOurWater.com](#), is promoting the “Don’t Waste Summer” campaign. This campaign provides a new conservation tip each day for the 100 days of summer. Supporters can sign up for daily email tips, and share Save Our Water’s [Twitter](#) and [Facebook](#) feeds for this public awareness campaign.
- **Open Burn Ban in Affect across the State:** Open burning continues to be prohibited on 31 million acres of land across the state due to the [burn ban that CAL FIRE](#) has directed through the coordination of its unit chiefs. This ban on open burning in state responsibility areas (outside of cities and towns) reduces wildfire danger amidst extremely dry conditions.
- **Drought Response Funding:** \$687 million in state drought funding that was appropriated in March through emergency legislation continues to advance toward meeting critical needs. Over \$61 million of this funding addresses emergency water needs, food aid and housing

assistance to drought-impacted communities. Nearly \$21 million of those funds are already in communities providing assistance and additional funds are being readied as drought impacts worsen. Nearly \$625 million of the emergency funds appropriated in March came from sources dedicated to capital improvements to water systems. Since March, state agencies have expedited grant approvals, getting over \$21 million immediately allocated to grantees that were pre-approved for certain projects. As planned in March, the next \$200 million of expedited capital funding will be awarded this fall, with the remaining \$250 million granted by mid next-year. State government has also appropriated tens of millions in funding to CAL FIRE over its typical budget to enable staffing-up fire crews much earlier this fire season.

- **Governor's Drought Task Force:** The Taskforce continues to meet daily to take actions that conserve water and coordinate state response to the drought.

### Local Government

- **Local Emergency Proclamations:** A total of 51 local Emergency Proclamations have been received to date from city, county, and tribal governments, as well as special districts:
  - **21 Counties:** Glenn, Inyo, Humboldt, Kern, Kings, Lake, Madera, Mariposa, Mendocino, Merced, Modoc, Santa Barbara, San Joaquin, San Luis Obispo, Shasta, Siskiyou, Sonoma, Sutter, Tulare, Tuolumne, and Yuba.
  - **12 Cities:** Brooktrails Township (Mendocino County), City of Willits (Mendocino County), City of St. Helena (Napa County), City of Calistoga (Napa County), City of American Canyon (Napa County), City of Santa Barbara (Santa Barbara County), City of Montague (Siskiyou County), City of Live Oak (Sutter County), City of San Juan Bautista (San Benito County), City of Lodi (San Joaquin County), City of Ripon (San Joaquin County), and City of Rio Dell (Humboldt County).
  - **7 Tribes:** Hoopa Valley Tribe (Humboldt County), Yurok Tribe (Humboldt County), Tule River Indian Tribe (Tulare County), Karuk Tribe (Siskiyou/Humboldt Counties), Sherwood Valley Pomo Indian Tribe (Mendocino County), Yocha Dehe Wintun Nation (Yolo County), and Cortina Indian Rancheria (Colusa County).
  - **11 Special Districts:** Lake Don Pedro Community Services District (Stanislaus County), Placer County Water Agency (Placer County), Twain Harte Community Services District (Tuolumne County), Carpinteria Valley Water District (Santa Barbara County), Meiners Oaks Water District (Ventura County), Mariposa Public Utility District (Mariposa County), Goleta Water District (Santa Barbara County), Montecito Water District (Santa Barbara County), Tuolumne Utilities District (Tuolumne County), Mountain House Community Service District (San Joaquin County), Nevada Irrigation District (Nevada County).
- **Water Agency Conservation Efforts:** The Association of California Water Agencies (AWCA) [has identified](#) several hundred local water agencies that have implemented water conservation actions. These water agencies [are responding to the drought](#) by implementing conservation programs, which include voluntary calls for reduced water usage and mandatory restrictions where water shortages are worst.
- **County Drought Taskforces:** A total of 26 counties have established drought task forces to coordinate local drought response. These counties include: Butte, Kern, Kings, Lake, Madera,

Mendocino, Merced, Modoc, Monterey, Nevada, Orange, Placer, Plumas, Sacramento, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Siskiyou, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, and Napa.

- **Tribal Taskforce:** One tribe has established a drought task force to coordinate tribal drought response. This tribe includes: Hoopa Valley Tribe (Humboldt County).

#### **DROUGHT RELATED WEBSITES FOR MORE INFORMATION**

##### **[Drought.CA.Gov](#): California's Drought Information Clearinghouse**

State's Water Conservation Campaign, [Save our Water](#)  
Local Government, [Drought Clearinghouse and Toolkit](#)

California Department of Food and Agriculture, [Drought information](#)  
California Department of Water Resources, [Current Water Conditions](#)  
California Data Exchange Center, [Snow Pack/Water Levels](#)  
California State Water Resources Control Board, Water Rights, [Drought Info and Actions](#)  
California Natural Resources Agency, [Drought Info and Actions](#)  
State Water Resources Control Board, Drinking Water, [SWRCB Drinking Water Program](#)  
California State Water Project, [Information](#)

[U.S. Drought Monitor](#) for current conditions throughout the region  
[U.S. Drought Portal](#), National Integrated Drought Information System (NIDIS)  
National Weather Service [Climate Predictor Center](#)  
USDA Drought Designations by County [CA County Designations](#)  
USDA Disaster and Drought Assistance Information [USDA Programs](#)  
U.S. Small Business Administration Disaster Assistance Office: [www.sba.gov/disaster](http://www.sba.gov/disaster)





## **News Release July 31, 2014**

Contacts: Crystal Thompson, Central Arizona Project, (623) 869-2138, Travis Thompson, Denver Water, (303) 628-6700, Scott Huntley, Southern Nevada Water Authority, (702) 249-4453, Armando Acuna, Metropolitan Water District of Southern California (530) 574-3111, Rose Davis, U.S. Bureau of Reclamation, (702) 293-8421

## **U.S. Department of the Interior and Western municipal water suppliers reach landmark collaborative agreement**

**Colorado River basin municipalities and federal government join forces for greater water security**

In support of the Colorado River basin states drought contingency planning to address a long-term imbalance on the Colorado River caused by years of drought conditions, municipal water providers in Arizona, California, Nevada and Colorado and the federal government signed a landmark water conservation agreement this week called the Colorado River System Conservation program.

Central Arizona Project, Denver Water, The Metropolitan Water District of Southern California and Southern Nevada Water Authority are partnering with the U.S. Bureau of Reclamation to contribute \$11 million to fund pilot Colorado River water conservation projects. The projects will demonstrate the viability of cooperative, voluntary compensated measures for reducing water demand in a variety of areas, including agricultural, municipal and industrial uses.

For more than a decade, a severe drought — one of the worst in the last 1,200 years — has gripped the Colorado River, causing the world’s most extensive storage reservoir system to come closer and closer to critically low water levels. The Colorado River and its tributaries provide water to nearly 40 million people for municipal use, and the combined metropolitan areas served by the Colorado River represent the world’s 12th largest economy, generating more than \$1.7 trillion in Gross Metropolitan Product per year along with agricultural economic benefits of just under \$5 billion annually.

“This is a critically important first step, and I applaud the far sighted municipal water providers for beginning to address the imbalance in supply and demand on the Colorado River that could seriously affect the economy and the people who rely upon the river,” said U.S. Deputy Secretary of the Interior Mike Connor. “There is still much work to be done, and the Interior Department is committed to supporting the efforts of the Colorado River Basin States and other stakeholders as partners in improving water management and operations, particularly during this historic drought.”

“This situation is becoming increasingly critical. We are already dealing with unprecedented pressure on the southern California region’s water system,” said Jeffrey Kightlinger, general manager for The Metropolitan Water District of Southern California. “This innovative program is aimed at expanding conservation efforts from a local level to a collaborative system-wide program.”

Without collaborative action now, water supplies, hydropower production, water quality, agricultural output and recreation and environmental resources are all at risk, in both the upper and lower basins.

"This agreement represents a unique approach to save water and protect the Colorado River system from the impacts of the on-going drought and the current imbalance between supplies and demands in the Basin," said Central Arizona Project Board President Pam Pickard. "It is an important milestone in interstate collaboration, with CAP working with partners in California, Nevada, Colorado and the federal government to improve the health of the Colorado River."

All water conserved under this program will stay in the river, helping to boost the declining reservoir levels and benefiting the health of the entire river system.

"Half of Denver's water supply comes from the Colorado River, so we have a direct interest in the health of the entire system," said Jim Lochhead, Denver Water CEO. "This is a proactive contingency plan for drought years to help secure our water supply future with a balanced, economic and environmental approach. This is clearly the right thing to do for our customers, our future water supply and the basin."

The Colorado River System Conservation program will provide funding for pilot conservation programs in 2015 and 2016. Successful programs can be expanded or extended to provide even greater protection for the Colorado River system.

"The time has come for our states to work together to develop contingency strategies to manage the Colorado River under extreme drought conditions that threaten the levels of Lakes Mead and Powell," said John Entsminger, general manager for the Southern Nevada Water Authority. "As Lake Mead continues to drop toward critical levels, we must simultaneously begin to take collective action now and plan additional future measures."

In order to ensure that local concerns are addressed, and that there is equity and fairness among all parties, in the Lower Colorado River Basin, the Bureau of Reclamation will manage the conservation actions in Arizona, California and Nevada in a manner consistent with past programs, while in the Upper Basin, the Upper Basin states of Colorado, New Mexico, Utah and Wyoming, and the Upper Colorado River Commission will have a direct role in program efforts.

###

AGREEMENT AMONG  
THE UNITED STATES OF AMERICA, THROUGH THE  
DEPARTMENT OF THE INTERIOR,  
BUREAU OF RECLAMATION,  
THE CENTRAL ARIZONA WATER CONSERVATION DISTRICT,  
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,  
DENVER WATER, AND  
THE SOUTHERN NEVADA WATER AUTHORITY,  
FOR A PILOT PROGRAM FOR FUNDING THE CREATION OF COLORADO RIVER  
SYSTEM WATER THROUGH VOLUNTARY WATER CONSERVATION AND  
REDUCTIONS IN USE

1. PREAMBLE: THIS AGREEMENT (“Agreement”) is entered into this 30<sup>th</sup> day of July, 2014 (“Effective Date”), by and between the UNITED STATES OF AMERICA (“United States”), represented by the Secretary of the Interior (“Secretary”) acting through the officials executing this Agreement, the CENTRAL ARIZONA WATER CONSERVATION DISTRICT, a multi-county water conservation district duly organized and existing under the laws of the State of Arizona (“CAWCD”), the METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, a regional public water district duly organized under California law (“MWD”), DENVER WATER, a municipal corporation and political subdivision of the State of Colorado (“DW”), and the SOUTHERN NEVADA WATER AUTHORITY, a political subdivision of the State of Nevada (“SNWA”), each being referred to individually as “Party” and collectively as the “Parties”, and pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), designated the Reclamation Act, and acts amendatory thereof or supplementary thereto, the Act of March 4, 1921 referred to as the Contributed Funds Act (41 Stat. 1404, 43 U.S.C. § 395), the Act of January 12, 1927 (44 Stat. 957, 43 U.S.C. § 397a), the Act of December 21, 1928 (45 Stat. 1057), designated the Boulder Canyon Project Act, the Act of April 11, 1956 (70 Stat. 105), designated the Colorado River Storage Project Act; the Act of September 30, 1968 (82 Stat. 885), designated the Colorado River Basin Project Act, the Act of

June 24, 1974 (88 Stat. 266), designated the Colorado River Basin Salinity Control Act, as amended, and the Act of March 30, 2009 (123 Stat. 991), known as the Omnibus Public Land Management Act, all of which acts are part of the body of law commonly known and referred to as Federal Reclamation law.

2. RECITALS:

2.1 WHEREAS, for the purposes of controlling floods, improving navigation, regulating the flow of the Colorado River, and providing for storage and delivery of stored water for the reclamation of public lands and other beneficial uses exclusively within the United States, the Secretary, acting under and pursuant to the provisions of the Colorado River Compact and the Boulder Canyon Project Act, has constructed and is now operating and maintaining in the mainstream of the Colorado River at Black Canyon that certain structure known and designated as Hoover Dam and incidental facilities, creating thereby a reservoir designated as Lake Mead;

2.2 WHEREAS, the Boulder Canyon Project Act provides, among other things, that the Secretary is authorized, under such general regulations as he or she may prescribe, to contract for the storage of water in Lake Mead and for the delivery of such water at such points as may be agreed upon for irrigation and domestic uses;

2.3 WHEREAS, the Boulder Canyon Project Act provides further that no person shall have or be entitled to have the use, for any purpose, of the stored water in Lake Mead, except by contract with the Secretary;

2.4 WHEREAS, the Colorado River Storage Project Act and the Colorado River Basin Project Act authorized, among other things, the Secretary to construct and operate Glen Canyon Dam and Lake Powell, which allows the Upper Division States to utilize their share of the Colorado River and meet their obligations to the Lower Division States under the Colorado River Compact;

2.5 WHEREAS, the Colorado River Basin Salinity Control Act of 1974 authorized the Secretary to implement various projects to reduce salinity in the Colorado River Basin and directed the Secretary to undertake research on additional methods for accomplishing that objective;

2.6 WHEREAS, the United States Bureau of Reclamation, hereinafter referred to as “Reclamation,” adopted a Policy Establishing a Demonstration Program for System Conservation of Colorado River Water (“Demonstration Policy”) on May 26, 2006, and extended the Policy in 2009. The Demonstration Policy expired on December 31, 2010;

2.7 WHEREAS, recognizing the effects of ongoing drought in the Colorado River Basin, the purpose of the Demonstration Policy was to establish a demonstration or “pilot” program of voluntary agreements with eligible holders of Colorado River water entitlements to conserve a portion of their approved annual consumptive use of Colorado River water for the benefit of Colorado River system storage;

2.8 WHEREAS, one of the purposes of the Pilot Program defined below and established herein shall be to further investigations and system benefits initiated under the Demonstration Policy;

2.9 WHEREAS, MWD and Reclamation entered into an agreement pursuant to the Demonstration Policy on August 15, 2006, whereby owners of land within the Palo Verde Irrigation District (“PVID”) voluntarily fallowed land within the PVID service area that was eligible to receive Colorado River water pursuant to an agreement between PVID and MWD;

2.10 WHEREAS, pursuant to the August 15, 2006, agreement between Reclamation and MWD, Reclamation paid MWD to undertake fallowing on a voluntary basis within PVID, with the goal of conserving 10,000 acre-feet of Colorado River water for the benefit of the overall Colorado River system;

2.11 WHEREAS, the Yuma Mesa Irrigation and Drainage District (“YMIDD”) and Reclamation entered into agreements pursuant to the Demonstration Policy on February 4, 2008,

October 7, 2008, and December 28, 2009, whereby Reclamation paid YMIDD to undertake fallowing on a voluntary basis within YMIDD to conserve Colorado River water for the benefit of the overall Colorado River System;

2.12 WHEREAS, the Colorado River System has been suffering from the effects of a drought that began 14 years ago, leading to substantially decreased water elevation levels in both Lakes Mead and Powell;

2.13 WHEREAS, recent Colorado River System modeling projections show a serious near-term risk that water elevations in both Lakes Mead and Powell could decline to levels that would trigger shortages and could interrupt the ability of certain municipal users to draw or benefit from water from both lakes and certain hydropower users to benefit from hydroelectric energy generation;

2.14 WHEREAS, in December 2012, Reclamation and the seven Colorado River Basin States completed the Colorado River Basin Water Supply and Demand Study (“Basin Study”), with the purpose of defining future imbalances in water supply and demand through the year 2060, and to develop and analyze options and strategies to resolve those imbalances;

2.15 WHEREAS, results from the Basin Study show that without further proactive steps, there may be a long-term and potentially significant imbalance in future water supply and demand. Options to address these imbalances include increased agricultural and municipal water conservation;

2.16 WHEREAS, municipal water agencies in the Colorado River Basin provide a secure water supply to over 30 million residents in the United States, meeting basic human needs and sustaining vital economic functions in the region, United States and the world. Based on their many shared interests, municipal water agencies in the Colorado River Basin have been working together for nearly 20 years on initiatives to develop water supplies, manage demand through conservation, and operate Colorado River System reservoirs for the benefit of multiple interests;

2.17 WHEREAS, all CAWCD municipal customers supplied by the Central Arizona Project, including Phoenix and Tucson, have been successful in reducing per capita consumption by making significant investments in conservation, reuse, and infrastructure. The City of Phoenix has reduced water use by 35 percent since 1980, while approximately 97 percent of the City of Scottsdale's reclaimed water is reused for turf irrigation or recharge efforts. CAWCD municipal customers remain committed to expand these investments;

2.18 WHEREAS, in MWD's service area, southern California urban agencies have funded agricultural and urban conservation measures which have allowed the State of California to reduce its use of Colorado River water by 20 percent over the last decade. In addition, through investments in water conservation and local supply management, including recycling, urban southern California imports less water today than it did 20 years ago, despite the region having added more than 4 million people. MWD remains committed to expand these efforts;

2.19 WHEREAS, DW has reduced its overall water use by over 20 percent since 2002 while serving an ever-increasing population, in part through its nationally recognized Use Only What You Need campaign. DW has expended over \$100 million in its various conservation programs to save a cumulative total of over 1 million acre-feet of water, much of which has benefited the Colorado River Basin. DW has constructed a recycled water treatment plant, and is steadily increasing service to parks, golf courses, and industrial users in its service area using recycled water. DW remains committed to expand these efforts;

2.20 WHEREAS, SNWA's annual water consumption decreased by nearly 32 billion gallons between 2002 and 2013, despite a population increase of 480,000 people during that time. This equates to a reduction of approximately 30 percent in southern Nevada's gallons per capita per day demand. Southern Nevada currently reclaims nearly all of its wastewater, either through Colorado River return flow credits or direct reuse. SNWA remains committed to expand these efforts;

2.21 WHEREAS, the Parties propose to establish a Pilot Program (defined below) whereby users of Colorado River water would be compensated for voluntary reductions in water use, including the fallowing of agricultural lands or increased water efficiency, and whereby other system losses or demands would be eliminated in order to create conserved water for storage in Lakes Powell and Mead so as to manage water elevation levels in Lakes Mead and Powell above critically low elevations, to benefit the overall Colorado River System, and to reduce salinity;

2.22 WHEREAS, the Parties desire to cooperate with the users of water for agricultural purposes, avoid adverse economic and environmental impacts, and compensate voluntary reductions of consumptive use of water by fallowing agricultural lands only to the extent such reductions in consumptive use avoids injury to existing water rights;

2.23 WHEREAS, CAWCD, MWD, DW, and SNWA are willing and able pursuant to the terms of this Agreement to make monetary capital contributions to implement the Pilot Program in recognition of financial commitments from the United States for the Pilot Program;

2.24 WHEREAS, Reclamation has committed to further the objectives of this Agreement and the Pilot Program by making available \$3 million within its existing authorities and available funding for system conservation efforts pursuant to the Pilot Program;

2.25 WHEREAS, other entities have expressed interest in potentially contributing capital for the Pilot Program; and

2.26 WHEREAS, the Parties desire to set forth their understanding as to the monetary contributions that will be provided by CAWCD, MWD, DW, SNWA, the United States, and any additional parties, with respect to these contributions and services.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the Parties agree as follows:

3. APPLICABILITY: Participation in System Conservation activities as part of the Pilot Program implemented pursuant to this Agreement within the Lower Division States shall be

limited to Entitlement Holders (as defined below). Participation in System Conservation activities as part of the Pilot Program implemented pursuant to this Agreement within the Upper Division States shall be limited to Upper Basin Colorado River Water Users (as defined below).

4. DEFINITIONS: For the purpose of this Agreement, the following definitions shall apply:

4.1 Colorado River Compact means the document signed on November 24, 1922, at Santa Fe, New Mexico, pursuant to an act of Congress approved August 19, 1921 (42 Stat. 171). The Colorado River Compact was approved in Section 13(a) of the Boulder Canyon Project Act.

4.2 Colorado River System shall have the meaning ascribed to such term in the Colorado River Compact.

4.3 Consolidated Decree means the decree entered by the United States Supreme Court in the matter of *Arizona v. California* on March 27, 2006 (547 U.S. 150).

4.4 Consumptive Use means diversions from the Colorado River System, less any return flow to the river that is available for consumptive use in the United States or in satisfaction of the Mexican Treaty Obligation. Consumptive use from the Colorado River includes the consumptive use of water drawn from the Colorado River System by underground pumping. The Mexican Treaty Obligation is set forth in the February 3, 1944 Water Treaty between Mexico and the United States, including supplements and associated Minutes of the International Boundary and Water Commission.

4.5 Entitlement Holder means a person, or entity, within the Lower Division States or Mexico that: (i) has an existing authorization to divert or order Colorado River water, (ii) with the consent of (i) is located within the water service area of (i); or (iii) has control of state appropriated water rights on the Muddy and Virgin Rivers, all as reasonably required for beneficial uses.

4.6 Local Funding Agencies means CAWCD, MWD, DW, and SNWA, all of which are public entities that use water from the Colorado River Basin for municipal purposes.

4.7 Lower Division States means Arizona, California, and Nevada, as defined in the Colorado River Compact.

4.8 Mainstream shall have the meaning ascribed to such term in the Consolidated Decree.

4.9 Pilot Program means the program described in this Agreement.

4.10 System Conservation means a voluntary, measurable reduction of consumptive use of Colorado River water, including the elimination of system losses or reduction in demands through increased efficiency, by an Entitlement Holder or Upper Basin Colorado River Water User through the Pilot Program. All water conserved as a result of the Pilot Program shall be for the sole purpose of increasing storage levels in Lakes Mead and Powell as a benefit to the Colorado River System, and shall not accrue to the benefit or use of any individual user. System Conservation does not include measures: (i) required by Reclamation under its existing contract(s) for delivery of water with an Entitlement Holder, (ii) required by Reclamation to avoid non-beneficial or unreasonable use determinations, (iii) implemented for the purpose of paying back an Inadvertent Overrun by an Entitlement Holder, (iv) implemented by the Entitlement Holder or an Upper Basin Colorado River Water User to meet consumptive use reduction obligations under any transfer, acquisition, or conservation agreement with another party, (v) implemented for monetary payment or other valuable consideration from any third-party not a signatory to this Agreement, (vi) for which an Entitlement Holder receives Intentionally Created Surplus or Intentionally Created Mexican Allocation credits; or (vii) voluntarily or administratively or judicially ordered to be undertaken by an Entitlement Holder or an Upper Basin Colorado River Water User for purposes other than System Conservation.

4.11 System Conservation Implementation Agreement means an agreement to implement System Conservation entered into between Reclamation and an Entitlement Holder or between an Upper Basin Colorado River Water User and the Upper Basin Contracting Entity. Local Funding Agencies shall be third-party beneficiaries of all System Conservation

Implementation Agreements, and shall be entitled to all rights thereunder including specifically the right of enforcement.

4.12 Upper Basin Colorado River Water User means a person or entity within an Upper Division State that has an existing authorization under applicable state law to divert Colorado River System water as reasonably required for beneficial uses.

4.13 Upper Basin Contracting Entity means an entity to be agreed upon by the Parties, such as, by way of example, the Upper Colorado River Commission, the Colorado River Basin Salinity Control Forum, an Upper Division State or States, or Reclamation.

4.14 Upper Division States means Colorado, New Mexico, Utah, and Wyoming, as defined in the Colorado River Compact.

5. GENERAL TERMS AND CONDITIONS:

5.1 Effective Date. This Agreement shall become effective upon the date set forth in Article 1 of this Agreement (the Effective Date) and shall remain in effect until the latter of: (i) two years from the Effective Date; or (ii) December 31 of the year in which the latest System Conservation Implementation Agreement expires.

5.2 Purpose. The purpose of this Agreement is to initiate a Pilot Program for System Conservation to determine whether System Conservation is a sufficiently cost-effective, robust, and feasible method to partially mitigate the impacts of salinity and ongoing drought on the Colorado River System by managing water elevation levels in Lakes Mead and Powell above critically low elevations as a first priority, with the ancillary benefit of enhancing flows in areas upstream of storage reservoirs.

5.3 Reclamation/Upper Basin Contracting Entity Responsibilities. Reclamation shall consult with the Local Funding Agencies, respective Basin States, and other appropriate entities regarding implementation of the Pilot Program. For projects in the Lower Division States, Reclamation shall process requests for and review of Pilot Program proposals, enter into and administer System Conservation Implementation Agreements with Entitlement Holders selected

for inclusion in the Pilot Program, and verify and document consumptive use reductions under the Pilot Program, consistent with this Agreement. For projects in the Upper Division States, the Upper Basin Contracting Entity shall enter into and administer System Conservation Implementation Agreements with Upper Basin Colorado River Water Users selected for inclusion in the Pilot Program. Prior to entering into any System Conservation Implementation Agreement, Reclamation or the Upper Basin Contracting Entity, as applicable, shall enter into a project specific funding agreement with the participating Local Funding Agencies providing for, among other things, the timing of Local Funding Agency contributions, and project specific performance metrics.

5.4 Sequence of Pilot Program Proposals. The Parties will seek proposals from Entitlement Holders following the effective date of this Agreement; provided that no proposals shall be sought until Reclamation has completed all appropriate documentation and approvals, including environmental compliance documentation, as appropriate. The Parties will begin seeking proposals from Upper Basin Colorado River Water Users for implementation during 2015, subject to consultation with the Upper Division States.

5.5 Selection of Pilot Program Participants. The Parties will jointly select Entitlement Holder and Upper Basin Colorado River Water User proposals for inclusion in the Pilot Program based on factors including, without limitation and not in order of importance, the following:

5.5.1 The consistency of the proposal with the requirements of this Agreement;

5.5.2 The need to implement geographically diverse conservation measures, including conservation in both the Upper and Lower Colorado River Basins, to most effectively demonstrate the efficacy of Colorado River System-wide efforts to reduce salinity and maximize the volume of water remaining in Lakes Mead and Powell;

5.5.3 The proposed cost per acre-foot of System Conservation;

5.5.4 The relative size of the proposed project;

5.5.5 The comparative ease or difficulty of administering the contract and verifying the proposed System Conservation, reduction in salinity, or increase in the quantity of water flowing into Lakes Mead and/or Powell;

5.5.6 The amount of time required to implement the activities needed to generate System Conservation;

5.5.7 Required environmental compliance;

5.5.8 Considering the character and relative amount of proposed reductions in consumptive use, the potential for third-party economic impacts that would not be adequately mitigated via compensation to be paid under the proposed program;

5.5.9 The number of intervening water users that are located between the proposed project and Lakes Mead or Powell;

5.5.10 The number and relative difficulty of obtaining any required third-party consents or forbearance agreements;

5.5.11 The degree to which the proposed project will generate measureable increases in flows or water quality that are beneficial for habitat and the environment;

5.5.12 The degree to which the proposed project is consistent with, or leverages additional funding from, other programs, including salinity control and Natural Resources Conservation Service (NRCS) programs; and

5.5.13 The location and timing of increases in flows or water quality from the proposed project.

5.5.14 In addition to the foregoing, the Parties shall consider and utilize, as appropriate, the evaluation criteria developed by Reclamation for the WaterSMART Program evaluation (attached as Attachment 1). Reclamation will document the utilization of the foregoing criteria as part of its consideration for any proposed System Conservation project as part of the Pilot Program.

5.6 Unanimity Required. The Parties' goal is that a System Conservation Implementation Agreement would receive approval by Reclamation and each of the Local Funding Agencies; provided, however, that this provision shall not preclude any of the Parties, or any combination of them, from entering into unrelated contracts with Entitlement Holders or Upper Basin Colorado River Water Users to conserve water in accordance with applicable law or any other program or contract. Further, if a Local Funding Agency does not agree with accepting a proposed System Conservation project into the Pilot Program, a System Conservation Implementation Agreement for the project may still be available, but no funds from the dissenting Local Funding Agency will be used to fund that project; provided, however, that in no event shall a System Conservation Implementation Agreement be executed without the consent of the Local Funding Agency (CAWCD, MWD, DW, or SNWA) located within the same state as the proposed System Conservation project. The Parties shall make no more than \$8.25 million of the funds made available pursuant to this Agreement for proposed System Conservation projects with Entitlement Holders. For proposed System Conservation projects with Upper Basin Colorado River Water users, the Parties shall: (i) seek input regarding potential and proposed projects from the members of the Colorado River Basin Salinity Control Forum; and (ii) approve a System Conservation Implementation Agreement only with the consent of the respective Governor's Representative of the Colorado River Basin state in which the proposed project is located. Within one year from the execution of this Agreement, the Local Funding Agencies shall meet and confer on the progress of implementing projects in the Upper Basin.

5.7 Form of System Conservation Implementation Agreement. Entitlement Holders and Upper Basin Colorado River Water Users selected for participation in the Pilot Program shall be required to execute a System Conservation Implementation Agreement with Reclamation or the Upper Basin Contracting Entity, as applicable. The form of the System Conservation Implementation Agreements may differ based upon the unique needs of each Entitlement Holder or Upper Basin Colorado River Water User and the type of System

Conservation being funded. If an existing agreement is established between a Party and the Entitlement Holder or Upper Colorado Basin River Water User prior to this Agreement, the Party may use that existing agreement and seek reimbursement through a System Conservation Implementation Agreement for its costs, provided that all water conserved as a result of that existing agreement shall be for the sole purpose of increasing storage levels in Lakes Mead and Powell as a benefit to the Colorado River System, and shall not accrue to the benefit or use of any individual user.

5.8 Payments to Participating Entitlement Holders and Upper Basin Colorado River Water Users. Compensation for System Conservation shall be paid by Reclamation or the Upper Basin Contracting Entity from the amounts contributed by the Local Funding Agencies and the funding available from Reclamation for the Pilot Program. Where feasible, Entitlement Holders and Upper Basin Colorado River Water Users shall be paid some or all of the required payments in arrears (after verification has occurred).

5.9 Coordination with NRCS. On-farm water conservation improvements that complement the voluntary water conservation projects proposed through this program may be considered for NRCS funding and technical assistance to the extent such assistance is available. Complementing NRCS Farm Bill programs include the Environmental Quality Incentive Program (EQIP) and Agricultural Water Enhancement Program (AWEP), which are the primary programs that address water quantity and water quality conservation practices. Reclamation will ensure that any proposed project is coordinated with the respective NRCS State Conservationist to assess opportunities for potential NRCS funding and technical assistance.

5.10 Evaluation of Pilot Program. The Local Funding Agencies and Reclamation will evaluate the results of the Pilot Program after its conclusion and consult with the seven Colorado River Basin States and other interested parties to determine whether the Pilot Program should be extended or a long-term System Conservation program should be adopted.

6. CAPITAL CONTRIBUTIONS:

6.1 United States. The United States, through Reclamation, will provide up to \$3 million in funding towards the total Pilot Program costs. Provided, however, that if additional Federal funding becomes available through grants as authorized by Congress, such money can be added to this Agreement without requiring additional contributions from the Local Funding Agencies or amendment of this Agreement.

6.2 Local Funding Agencies. The Local Funding Agencies shall contribute up to \$2 million each towards the Pilot Program costs on schedules that will be determined at such time as projects are approved for implementation pursuant to the Pilot Program. Any unobligated funds after implementing this Agreement, shall be returned to each Local Funding Agency in proportion to the amount contributed.

6.3 Other Entities. Other entities, such as non-governmental organizations, may also provide funding for System Conservation projects under the Pilot Program described in this Agreement by providing money through a Local Funding Agency.

7. ACCOUNTING FOR SYSTEM CONSERVATION WATER:

7.1 Conserved Water. In addition to commitments contained in System Conservation Implementation Agreements, with regard to System Conservation water created pursuant to the Pilot Program, the Local Funding Agencies agree not to request delivery of any of the System Conservation water created pursuant to the Pilot Program to any Entitlement Holder, Upper Basin Colorado River Water User, or a third-party. The System Conservation water created pursuant to this Agreement and a System Conservation Implementation Agreement shall accrue to the benefit of the overall Colorado River System, not for the benefit of any Local Funding Agency, System Conservation Implementation Agreement signatory, or third-party.

7.2 Accounting. Reclamation will provide information regarding the amount of any System Conservation water created by an Entitlement Holder pursuant to the Pilot Program in its annual Colorado River accounting and water use report prepared under Article V of the

Consolidated Decree. Reclamation will provide information regarding the amount of any System Conservation water created by an Upper Basin Colorado River Water User through independent reports and after consultation with the state in which the conservation took place. Reclamation will consult with the Parties on accounting and verification and will consult with the Parties prior to the publication of such data.

7.3 Duplication of Effort. The Parties may already have established programs or processes to calculate consumptive use reductions. For example, additional fallowing on the Virgin River could be tracked simultaneously with SNWA's Intentionally Created Surplus accounting. To the extent complementary efforts exist, Reclamation should utilize the information provided from these efforts. The Parties agree not to seek repayment for any additional costs related to calculating consumptive use reductions.

7.4 Overrun Payback Obligations. An Entitlement Holder that is paying back an overrun under the Inadvertent Overrun and Payback Policy may concurrently participate in the Pilot Program, but will first be obligated to meet its annual overrun payback obligation before forbearing any additional water available for System Conservation under this Agreement and would only be compensated for the additional water forborne beyond its payback obligations.

8. NON-WAIVER: No Party to this Agreement shall be considered to have waived any right hereunder except when such waiver of the right is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or a relinquishment of any such rights for the future, but such provisions and rights shall continue and remain in full force and effect.

9. UNCONTROLLABLE FORCES: No Party shall be considered to be in default in the performance of any of its obligations under this Agreement when a failure of performance shall be due to any cause beyond the control of the Party affected, including but not limited to, facilities failure, flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance,

labor disturbance, sabotage, and restraint by court or public authority which by exercise of due diligence and foresight such Party could not have reasonably expected to avoid. A Party rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force shall give prompt written notice of such act to the other Parties and shall exercise due diligence to remove such inability with all reasonable dispatch.

10. REPRESENTATIONS AND WARRANTIES:

10.1 Each Party has all legal power and authority to enter into this Agreement and to perform its obligations hereunder on the terms set forth in this Agreement, and the execution and delivery hereof by each Party and the performance by each Party of its obligations hereunder shall not violate or constitute an event of default under the terms or provisions of any agreement, document, or instrument to which each of the Parties is a party or by which each Party is bound.

10.2 Each Party warrants and represents that the individual executing this Agreement on behalf of the Party has the full power and authority to bind the Party he or she represents to the terms of this Agreement.

10.3 This Agreement constitutes a valid and binding agreement of each Party, enforceable against each Party in accordance with its terms.

10.4 Each Party: (i) warrants and represents that such Party is authorized by, and has undertaken all prerequisite actions required by, applicable Federal and State laws and regulations to perform the obligations and exercise the rights contemplated herein, (ii) acknowledges that such warranty and representation is a material inducement to, and has been relied upon by, the other Parties in entering into this Agreement and performing their respective obligations hereinafter; and (iii) with respect to projects that are considered or approved for implementation pursuant to the Pilot Program, the Parties will cooperate to use reasonable best efforts in the support, preservation and defense thereof, including any lawsuit or administrative proceeding challenging the legality, validity or enforceability related to such project, and will to the extent appropriate enter into such agreements, including joint defense or common interest agreements,

as are necessary therefor; provided that each Party shall bear its own costs of participation and representation in any such matter.

11. GOVERNING LAW: This Agreement shall be interpreted, governed by, and construed under applicable Federal law. To the extent permissible under the Federal Rules of Civil Procedure and other applicable Federal authority, venue for adjudication of any disputes under this Agreement shall be in an appropriate Federal court.

12. BINDING EFFECT AND LIMITED ASSIGNMENT: The provisions of this Agreement shall apply to and bind the successors and assigns of the Parties upon receipt of written agreement to the terms of this Agreement, but no assignment or transfer of this Agreement or any right or interest therein shall be valid until approved in writing by all Parties. This Agreement is and shall be binding upon and shall inure to the benefit of the Parties and, upon dissolution, the legal successors and assigns of their assets and liabilities.

13. AMENDMENT, MODIFICATION, AND/OR SUPPLEMENT: This Agreement may be amended, modified, or supplemented only by the written agreement of the Parties. No amendment, modification, or supplement shall be binding unless it is in writing and signed by all Parties.

14. DRAFTING CONSIDERATIONS: Each Party and its counsel have participated fully in the drafting, review, and revision of this Agreement, each of whom is sophisticated in the matters to which this Agreement pertains, and no one Party shall be considered to have drafted this Agreement.

15. NOTICES: All notices and requests required or allowed under the terms of this Agreement shall be in writing and shall be mailed first class postage paid to the following entities at the following addresses:

RECLAMATION:

Regional Director  
Lower Colorado Region  
Attention: LC-1000  
500 Fir Street  
Boulder City, NV 89005

Regional Director  
Upper Colorado Region  
125 South State Street, Room 6107  
Salt Lake City, UT 84138-1147

CAWCD:

Central Arizona Water Conservation District  
23636 North 7<sup>th</sup> Street  
Phoenix, AZ 85024-3801  
Attn: General Manager

MWD:

The Metropolitan Water District of Southern California  
P.O. Box 54153  
Los Angeles, CA 90054-0153  
Attn: General Manager

DW:

Denver Water  
1600 West 12<sup>th</sup> Avenue  
Denver, CO 80204-3412  
Attn: CEO/Manager

SNWA:

Southern Nevada Water Authority  
1001 South Valley View Boulevard, MS #485  
Las Vegas, NV 89153  
Attn: General Manager

A Party may change its address by giving the other Parties notice of the change in writing.

16. JUDICIAL REMEDIES NOT FORECLOSED: Nothing in this Agreement shall be construed: (i) as in any manner abridging, limiting, or depriving any Party of any means of enforcing any remedy either at law or in equity for the breach of any of the provisions hereof, or of any other remedy which it would otherwise have; or (ii) as depriving any Party of any defense thereto which would otherwise be available.

17. AVAILABILITY OF INFORMATION: Subject to applicable Federal laws and regulations, each Party to this Agreement shall have the right during office hours to examine and make copies of the other Party's books and records relating to matters covered by this Agreement.

18. CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS: The expenditure or advance of any money or the performance of any obligation of the United States under this Agreement shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Parties from any obligations under this Agreement. No liability shall accrue to the United States in case funds are not appropriated or allotted.

19. OFFICIALS NOT TO BENEFIT: No Member of or Delegate to the Congress, or Resident Commissioner, or official of CAWCD, MWD, DW, or SNWA, or any Elector or Electors shall benefit from this Agreement other than as a water user or landowner in the same manner as other water users or landowners.

20. NO THIRD-PARTY BENEFICIARIES: This Agreement and any agreements made or actions taken pursuant hereto are made solely for the benefit of the Parties. No Party to this Agreement intends for this Agreement to confer any benefit upon any person or entity not a signatory to this Agreement, whether as a third-party beneficiary or otherwise.

21. COUNTERPARTS: This Agreement may be executed in counterparts, each of which shall be an original and all of which, together, shall constitute only one Agreement.

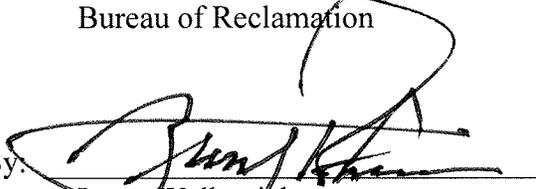
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first written above.

Approved as to legal sufficiency:

**THE UNITED STATES OF AMERICA**

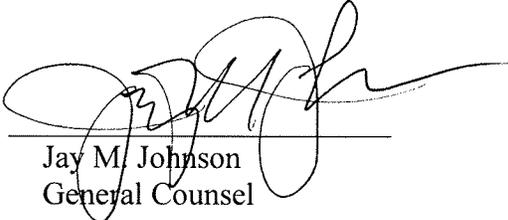
By: 

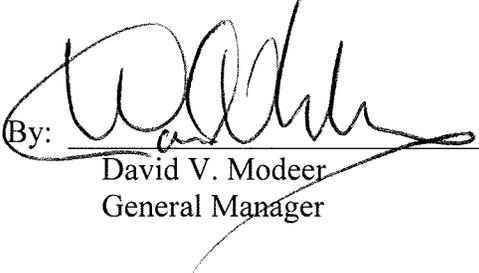
By:   
Terrance J. Fulp  
Lower Colorado Regional Director  
Bureau of Reclamation

By:   
Larry Walkoviak  
Upper Colorado Regional Director  
Bureau of Reclamation

Approved as to form:

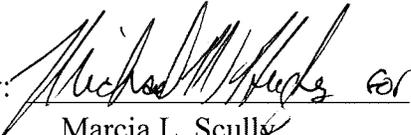
**CENTRAL ARIZONA WATER  
CONSERVATION DISTRICT**

By:   
Jay M. Johnson  
General Counsel

By:   
David V. Modeer  
General Manager

Approved as to form:

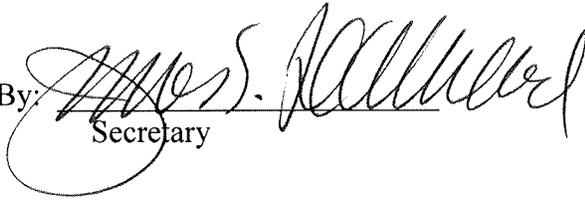
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By:   
\_\_\_\_\_  
Marcia L. Scully  
General Counsel

By:   
\_\_\_\_\_  
Jeffrey Righthinger  
General Manager

Attest:

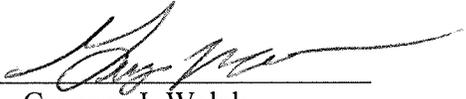
**DENVER BOARD OF WATER  
COMMISSIONERS**

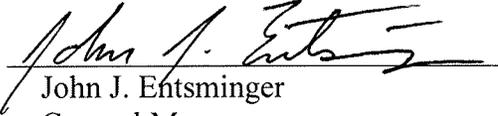
By:   
Secretary

By:   
President

Approved as to form:

**SOUTHERN NEVADA WATER  
AUTHORITY**

By:   
\_\_\_\_\_  
Gregory J. Walch  
General Counsel

By:   
\_\_\_\_\_  
John J. Entsminger  
General Manager

**Lower Colorado River Multi-Species Conservation Program  
Planet Ranch Land and Water Acquisition  
Key Terms**

**Background**

- City of Scottsdale owned Planet Ranch. The City entered into a Purchase Agreement With Freeport Minerals Company, a mining company, for their purchase of the ranch. Freeport was interested in acquiring the ranch so that they could sever and transfer approximately 2/3 of the water rights up to their Wikieup wellfield (located on the Big Sandy River). The water rights transfer would be a paper water rights transfer in that Freeport has existing pre-1919 surface water rights. These additional water rights would be used to provide additional protection for their pumping
- There were a number of conditions in the Purchase Agreement that needed to be met before the Purchase Agreement could be finalized. These included a portion of the ranch (land and water rights) being secured by the LCR MSCP and the United States agreeing to waivers of Freeport's water rights. The Department of Interior Agencies agreed to negotiate a deal for the sever and transfer as long as water neutrality was maintained in the Bill Williams River basin (i.e. Freeport did not increase their pumping beyond current amounts). In 2009 the LCR MSCP Steering Committee approved Reclamation continuing discussions with Freeport for securing a portion of the land and water rights for the LCR MSCP.
- Negotiations between Freeport and Department of Interior Agencies followed to negotiate a deal. During the negotiations, Freeport made a decision to go ahead and file the sever and transfer applications with the Arizona Department of Water Resources. The Department of Interior Agencies (FWS, BLM, BIA) and AGFD, because Freeport had not yet agreed to a cap on their pumping, filed protests with ADWR. ADWR agreed to not take administrative action on the sever and transfer and protests while negotiations continued.
- In December of 2011 Freeport purchased Planet Ranch from the City of Scottsdale. Agreements with the Agencies was reached on a number of issues, including the cap, but there were still issues concerning impacts to tribal trust resources (Hualapai has small reservation and allotments in basin) and waivers from the United States. During this time, a Federal water rights settlement negotiation team was established to settle Hualapai water rights on the Colorado, Verde, and Bill Williams Rivers. Freeport worked with the Tribe to include the Sever and Transfers, the LCR MSCP acquisition, and the US waivers into the negotiations. Freeport also agreed to address potential impacts to tribal trust resources.
- Further discussions of the Planet Ranch acquisition occurred within the Settlement discussions with the Hualapai Tribe. Because of larger issues concerning settlement of the tribes Settlement rights on the Colorado River, a decision was made to separate out the settlement into two phases, with Phase One focusing on the Bill Williams River Basin.
- In Spring 2014, an agreement was reached on the Bill Williams portion of the settlement and federal legislation was introduced into both the US House and Senate in June 2014. The legislation directs the Secretary of the Interior to enter into two agreements; the Big

Sandy River – Planet Ranch Water Rights Settlement Agreement and the Hualapai Tribe Bill Williams River Water Rights Settlement Agreement.

## Key Terms

### Components of Deal:

- BIA, USFWS, and BLM will conditionally withdraw pending protests to Freeport's sever and transfer applications
- AGFC will conditionally withdraw its pending protest to Freeport's sever and transfer applications
- The Arizona Department of Water Resources shall conditionally approve Freeport's applications to sever and transfer 8,851 acre-feet of water from Planet Ranch and 1,181 acre-feet of water from Lincoln Ranch to Freeport's Wickiup well field, which will be diverted for use at the Freeport's Bagdad copper mine.
- The Arizona Department of Water Resources shall conditionally approve Freeport's application to sever and transfer 5,541 acre-feet of water from Planet Ranch for use within the MSCP lease area.
- Lease, Donation Agreement, and Lease Assignment will be put into Escrow.
- On the Enforceability Date (after legislation is passed and the federal register notice is published with a statement of findings)
  - DOI and AGFD withdrawal of objections becomes effective
  - ADWR Order approving the Sever and Transfers (Freeport's and MSCP's) becomes effective. MSCP water rights will be issued on AGFD's name.
  - Reclamation's Lower Colorado River Multi-Species Conservation Program (MSCP) and Freeport execution of a lease of certain lands and appurtenant water rights within the Planet Ranch for inclusion in the MSCP program become effective (note legislation says that approval of the MSCP Steering Committee is required for this to occur)
  - Freeport receives \$8.3 million for the lease of certain lands within Planet Ranch to the LCR MSCP
  - Freeport will execute a donation of the LCR MSCP leased lands to the Arizona Game and Fish Commission (AGFC)
  - Freeport will assign the existing certificated water rights associated with the LCR MSCP leased lands to the AGFC
  - Freeport will assign the Reclamation lease to AGFD.

### Protections:

- Freeport agrees to limit its diversion of surface water from the Big Sandy River alluvium to 10,055 acre-feet per year (afy).
- Freeport's water right claims of 40,071 afy within the Wickiup well field will be permanently subject to the 10,055 afy pumping limitation
- The 10,055 afy limitation shall be binding on Freeport's successors and assigns

- Freeport will maintain written records of the amount of water pumped annually from the Wickieup well field to the Bagdad mine, and provide pumping records to the U.S. annually
- If Freeport exceeds the 10,055 afy limitation, they will pay back the water the following year.

**Waivers:**

- AGFC water rights, including the MSCP water rights, are confirmed by Freeport
- Freeport's Bill Williams watershed water rights are confirmed by AGFC
- Freeport's Planet and Lincoln Ranch water rights are confirmed by DOI
- Mutual waivers and Release of Claims by all parties

S 2503 IS

113th CONGRESS

2d Session

**S. 2503**

To direct the Secretary of the Interior to enter into the Big Sandy River-Planet Ranch Water Rights Settlement Agreement and the Hualapai Tribe Bill Williams River Water Rights Settlement Agreement, to provide for the lease of certain land located within Planet Ranch on the Bill Williams River in the State of Arizona to benefit the Lower Colorado River Multi-Species Conservation Program, and to provide for the settlement of specific water rights claims in the Bill Williams River watershed in the State of Arizona.

**IN THE SENATE OF THE UNITED STATES**

**June 19, 2014**

Mr. FLAKE (for himself and Mr. MCCAIN) introduced the following bill; which was read twice and referred to the Committee on Indian Affairs

**A BILL**

To direct the Secretary of the Interior to enter into the Big Sandy River-Planet Ranch Water Rights Settlement Agreement and the Hualapai Tribe Bill Williams River Water Rights Settlement Agreement, to provide for the lease of certain land located within Planet Ranch on the Bill Williams River in the State of Arizona to benefit the Lower Colorado River Multi-Species Conservation Program, and to provide for the settlement of specific water rights claims in the Bill Williams River watershed in the State of Arizona.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE.**

This Act may be cited as the 'Bill Williams River Water Rights Settlement Act of 2014'.

**SEC. 2. PURPOSES.**

The purposes of this Act are--

(1) to achieve a fair, equitable, and final settlement of certain claims among certain parties to water rights in the Bill Williams River watershed in the State of Arizona for--

(A) the Hualapai Tribe (acting on behalf of the Tribe and members of the Tribe); and

(B) the Department of the Interior, including, and acting on behalf of, the constituent bureaus of the Department and, as specified, the United States as trustee for the Hualapai Tribe, the members of the Tribe, and the allottees;

(2) to approve, ratify, and confirm--

(A) the Big Sandy River-Planet Ranch Water Rights Settlement Agreement entered into among the Hualapai Tribe, the United States as trustee for the Tribe, the members of the Tribe and allottees, the Secretary of the Interior, the Arizona department of water resources, and others, to the extent the Big Sandy River-Planet Ranch Agreement is consistent with this Act; and

(B) the Hualapai Tribe Big Sandy River-Planet Ranch Water Rights Settlement Agreement entered into among the Tribe, the United States, and the Freeport Minerals Corporation, to the extent the Hualapai Tribe Agreement is consistent with this Act;

(3) to authorize and direct the Secretary--

(A) to execute the duties and obligations of the Secretary under the Big Sandy River-Planet Ranch Agreement, the Hualapai Tribe Agreement, and this Act;

(B)(i) to remove objections to the applications for the severance and transfer of certain water rights, in partial consideration of the agreement of the parties to impose certain limits on the extent of the use and transferability of the severed and transferred water right and other water rights; and

(ii) to provide confirmation of those water rights; and

(C) to carry out any other activity necessary to implement the Big Sandy River-Planet Ranch Agreement and the Hualapai Tribe Agreement in accordance with this Act;

(4) to advance the purposes of the Lower Colorado River Multi-Species Conservation Program;

(5) to secure a long-term lease for a portion of Planet Ranch, along with appurtenant water rights primarily along the Bill Williams River corridor, for use in the Conservation Program;

(6) to bring the leased portion of Planet Ranch into public ownership for the long-term benefit of the Conservation Program; and

(7) to secure from the Freeport Minerals Corporation non-Federal contributions--

(A) to support a tribal water supply study necessary for the advancement of a settlement of the claims of the Tribe for rights to Colorado River water; and

(B) to enable the Tribe to secure Colorado River water rights and appurtenant land, increase security of the water rights of the Tribe, and facilitate a settlement of the claims of the Tribe for rights to Colorado River water.

### **SEC. 3. DEFINITIONS.**

In this Act:

(1) ADWR- The term `ADWR' means the Arizona department of water resources, established pursuant to title 45 of the Arizona Revised Statutes (or a successor agency or entity).

(2) ALLOTMENT- The term `allotment' means any allotment that--

(A) was originally allotted to an individual Indian in the allotting document;

(B) is located on land outside the boundaries of an Indian reservation within Mohave County, Arizona; and

(C) as of the enforceability date, is held in trust by the United States for the benefit of an allottee.

(3) ALLOTTEE- The term `allottee' means any individual who holds a beneficial real property interest in an allotment.

(4) ARIZONA GAME AND FISH COMMISSION- The term `Arizona Game and Fish Commission' means the entity established pursuant to title 17 of the Arizona Revised Statutes to control the Arizona game and fish department (or a successor agency or entity).

(5) BAGDAD MINE COMPLEX AND BAGDAD TOWNSITE- The term `Bagdad Mine Complex and Bagdad Townsite' means the geographical area depicted on the map attached as exhibit 2.9 to the Big Sandy River-Planet Ranch Agreement.

(6) BIG SANDY RIVER-PLANET RANCH AGREEMENT-

(A) IN GENERAL- The term `Big Sandy River-Planet Ranch Agreement' means the Big Sandy River-Planet Ranch Water Rights Settlement Agreement dated [Struck out->] [ xxxxxx, 2014 ] [<-Struck out] and entered into among--

(i) the Tribe;

(ii) Department, including, and acting on behalf of, the

constituent bureaus of the Department and, as specified, the United States as trustee for the Hualapai Tribe, the members of the Tribe, and the allottees;

(iii) the Arizona Game and Fish Commission;

(iv) ADWR; and

(v) the Corporation.

(B) INCLUSIONS- The term `Big Sandy River-Planet Ranch Agreement' includes--

(i) all exhibits to the agreement referred to in subparagraph (A);

(ii) any amendments necessary to make the agreement consistent with this Act; and

(iii) any other amendment approved by the parties to the agreement that are affected by the amendment (including the Secretary, acting on behalf of the United States).

(7) BILL WILLIAMS RIVER WATERSHED- The term `Bill Williams River watershed' means the watershed drained by the Bill Williams River and the tributaries of that river, including the Big Sandy and Santa Maria Rivers.

(8) CONSERVATION PROGRAM- The term `Conservation Program' has the meaning given the term `Lower Colorado River Multi-Species Conservation Program' in section 9401 of the Omnibus Public Land Management Act of 2009 (Public Law 111-11; 123 Stat. 1327).

(9) CORPORATION-

(A) IN GENERAL- The term `Corporation' means the Freeport Minerals Corporation, incorporated in the State of Delaware.

(B) INCLUSIONS- The term `Corporation' includes all subsidiaries, affiliates, successors, and assigns of the Freeport Minerals Corporation (such as Byner Cattle Company, incorporated in the State of Nevada).

(10) DEPARTMENT- The term `Department' means the Department of the Interior.

(11) ENFORCEABILITY DATE- The term `enforceability date' means the applicable date described in section 9.

(12) FREEPORT GROUNDWATER WELLS-

(A) IN GENERAL- The term `Freeport Groundwater Wells' means the

5 wells identified by ADWR well registration numbers--

- (i) 55-592824;
- (ii) 55-595808;
- (iii) 55-595810;
- (iv) 55-200964; and
- (v) 55-908273.

(B) INCLUSIONS- The term `Freeport Groundwater Wells' includes any replacement of a well referred to in subparagraph (A) drilled by or for the Corporation to supply water to the Bagdad Mine Complex and Bagdad Townsite.

(C) EXCLUSIONS- The term `Freeport Groundwater Wells' does not include any other well owned by the Corporation at any other location.

(13) HUALAPAI TRIBE AGREEMENT-

(A) IN GENERAL- The term `Hualapai Tribe Agreement' means the Hualapai Tribe Bill Williams River Water Rights Settlement Agreement dated [Struck out->] [ xxxxxx, 2014 ] [<-Struck out] entered into among--

- (i) the Tribe;
- (ii) the United States, as trustee for the Tribe, the members of the Tribe, and the allottees; and
- (iii) the Corporation.

(B) INCLUSIONS- The term `Hualapai Tribe Agreement' includes--

- (i) all exhibits to the agreement referred to in subparagraph (A);
- (ii) any amendments necessary to make the agreement consistent with this Act; and
- (iii) any other amendments approved by--

(I) each party to the agreement that is affected by the amendment; and

(II) the Secretary.

(14) HUALAPAI TRIBE WATER RIGHTS SETTLEMENT AGREEMENT- The term `Hualapai Tribe Water Rights Settlement Agreement' means the settlement agreement in the process of negotiation as of the date of

enactment of this Act among the Tribe, the United States, the State of Arizona, the Central Arizona Water Conservation District, the Salt River Agricultural Improvement and Power District and Salt River Valley Water Users Association, and the Corporation to resolve the claims of the Tribe for rights to Colorado River water and Verde River water.

(15) INJURY- The term `injury', with respect to a water right, means any interference with, diminution of, or deprivation of the water right under Federal, State, or other law.

(16) LINCOLN RANCH- The term `Lincoln Ranch' means the property owned by the Corporation described in the special warranty deed recorded on December 4, 1995, at Book 1995 and Page 05874 in the official records of La Paz County, Arizona.

(17) PARCEL 1- The term `Parcel 1' means the parcel of land that--

(A) is depicted as 3 contiguous allotments identified as 1A, 1B, and 1C on the map attached to the Big Sandy River-Planet Ranch Agreement as exhibit 2.10; and

(B) is held in trust for certain allottees.

(18) PARCEL 2- The term `Parcel 2' means the parcel of land that--

(A) is depicted on the map attached to the Big Sandy River-Planet Ranch Agreement as exhibit 2.10; and

(B) is held in trust for certain allottees.

(19) PARCEL 3- The term `Parcel 3' means the parcel of land that--

(A) is depicted on the map attached to the Big Sandy River-Planet Ranch Agreement as exhibit 2.10;

(B) is held in trust for the Tribe; and

(C) is part of the Hualapai Reservation pursuant to Executive Order 1368 of June 2, 1911.

(20) PARTY- The term `party' means an individual or entity that is a signatory to--

(A) the Big Sandy River-Planet Ranch Agreement;

(B) the Hualapai Tribe Agreement; or

(C) an exhibit to the Big Sandy River-Planet Ranch Agreement or the Hualapai Tribe Agreement.

(21) PLANET RANCH- The term `Planet Ranch' means the property owned by the Corporation described--

(A) in the special warranty deed recorded on December 14, 2011, at Book 2011 and Page 05267 in the official records of La Paz County, Arizona; and

(B) as Instrument No. 2011-062804 in the official records of Mohave County, Arizona.

(22) SECRETARY- The term `Secretary' means the Secretary of the Interior.

(23) SEVER AND TRANSFER APPLICATIONS- The term `sever and transfer applications' means the applications filed or amended by the Corporation and pending on the date of enactment of this Act to sever and transfer certain water rights--

(A) from Lincoln Ranch and from Planet Ranch to the Wikieup Wellfield for use at the Bagdad Mine Complex and Bagdad Townsite; and

(B) from portions of Planet Ranch (as determined on the date on which the applications were filed or amended) to new locations within Planet Ranch.

(24) TRIBE- The term `Tribe' means the Hualapai Tribe, organized under section 16 of the Act of June 18, 1934 (25 U.S.C. 476) (commonly known as the `Indian Reorganization Act'), and recognized by the Secretary.

(25) WATER RIGHT- The term `water right' means--

(A) any right in or to groundwater, surface water, or effluent under Federal, State, or other law; and

(B) for purposes of subsections (d) and (e) of section 5, any right to Colorado River water.

(26) WIKIEUP WELLFIELD- The term `Wikieup Wellfield' means the geographical area depicted on the map attached as exhibit 2.10 to the Big Sandy River-Planet Ranch Agreement.

#### **SEC. 4. BIG SANDY RIVER-PLANET RANCH AGREEMENT.**

(a) In General- Except to the extent that any provision of, or amendment to, the Big Sandy River-Planet Ranch Agreement conflicts with this Act--

(1) the Big Sandy River-Planet Ranch Agreement is authorized, ratified, and confirmed; and

(2) any amendment to the Big Sandy River-Planet Ranch Agreement executed to make the Big Sandy River-Planet Ranch Agreement consistent with this Act is authorized, ratified, and confirmed.

(b) Execution- To the extent that the Big Sandy River-Planet Ranch Agreement

does not conflict with this Act, and in support of the purposes of this Act, the Secretary shall execute--

(1) the Big Sandy River-Planet Ranch Agreement (including all exhibits to the Big Sandy River-Planet Ranch Agreement requiring the signature of the Secretary);

(2) any amendment to the Big Sandy River-Planet Ranch Agreement (including any amendment to an exhibit of the Big Sandy River-Planet Ranch Agreement requiring the signature of the Secretary) that is necessary to make the Big Sandy River-Planet Ranch Agreement consistent with this Act; and

(3) a conditional withdrawal of each objection filed by the Bureau of Indian Affairs, the Bureau of Land Management, and the United States Fish and Wildlife Service to the sever and transfer applications in the form set forth in exhibit 4.2.1(ii)(b) to the Big Sandy River-Planet Ranch Agreement.

(c) Discretion of Secretary- The Secretary may execute any other amendment to the Big Sandy River-Planet Ranch Agreement (including any amendment to an exhibit to the Big Sandy River-Planet Ranch Agreement requiring the signature of the Secretary) that is not inconsistent with this Act, if the amendment does not require approval by Congress.

(d) Prohibition- The Secretary shall not file an objection to any amendment to the sever and transfer applications or any new sever or transfer application filed by the Corporation to accomplish the sever and transfer of 10,055 acre-feet per year of water rights from Planet Ranch and Lincoln Ranch to the Wikieup Wellfield, subject to the condition that the form of such an amendment or new application shall be substantially similar to a form attached to the Big Sandy River-Planet Ranch Agreement as exhibit 4.2.1(ii)(a)(1) or 4.2.1(ii)(a)(2).

## **SEC. 5. HUALAPAI TRIBE AGREEMENT.**

(a) In General- Except to the extent that any provision of, or amendment to, the Hualapai Tribe Agreement conflicts with this Act--

(1) the Hualapai Tribe Agreement is authorized, ratified, and confirmed; and

(2) any amendment to the Hualapai Tribe Agreement executed to make the Hualapai Tribe Agreement consistent with this Act is authorized, ratified, and confirmed.

(b) Execution- To the extent that the Hualapai Tribe Agreement does not conflict with this Act, and in support of the purposes of this Act, the Secretary shall execute--

(1) the Hualapai Tribe Agreement (including all exhibits to the Hualapai

Tribe Agreement requiring the signature of the Secretary); and

(2) any amendment to the Hualapai Tribe Agreement (including any amendment to an exhibit of the Hualapai Tribe Agreement requiring the signature of the Secretary) that is necessary to make the Hualapai Tribe Agreement consistent with this Act.

(c) Discretion of Secretary- The Secretary may execute any other amendment to the Hualapai Tribe Agreement (including any amendment to an exhibit to the Hualapai Tribe Agreement requiring the signature of the Secretary) that is not inconsistent with this Act, if the amendment does not require approval by Congress.

(d) Contribution of Corporation to Economic Development Fund-

(1) IN GENERAL- The contribution of the Corporation to the economic development fund of the Tribe, as provided in section 8.1 of the Hualapai Tribe Agreement--

(A) may be used by the Tribe for the limited purpose of enabling the Tribe--

(i) to acquire Colorado River water rights with the intent to increase the security of the water rights of the Tribe; and

(ii) to otherwise facilitate the use of water on the Hualapai Reservation; and

(B) shall be considered to be a non-Federal contribution that counts toward any non-Federal contribution associated with a settlement of the claims of the Tribe for rights to Colorado River water.

(2) LIMITATION ON TRANSFER OF WATER RIGHTS- The Colorado River water rights acquired by the Tribe may be used off the Hualapai Reservation only for irrigation of acquired appurtenant land, or for storage in accordance with Federal and State law in a permitted recharge facility in the State of Arizona, subject to the conditions that--

(A) the Tribe shall not seek to transfer or sell accumulated long-term storage credits generated from the storage of the acquired Colorado River water rights; and

(B) the Tribe shall not seek approval to change the place of use of the acquired Colorado River water rights, except for the purposes of storing the water in accordance with subparagraph (A).

(3) EXPIRATION- The authority provided under paragraph (2) expires on the earlier of--

(A) the date on which the Hualapai Tribe Water Rights Settlement Agreement becomes enforceable; and

(B) December 31, 2039.

(4) COLORADO RIVER WATER RIGHTS COUNTED AGAINST CLAIMS OF TRIBE-

(A) IN GENERAL- If the Hualapai Tribe Water Rights Settlement Agreement does not become enforceable by December 31, 2039, any Colorado River water rights acquired by the Tribe with the contribution of the Corporation to the economic development fund of the Tribe shall be counted, on an acre-foot per acre-foot basis, toward the claims of the Tribe for rights to Colorado River water in any subsequent settlement or adjudication of those claims.

(B) EFFECT OF PARAGRAPH- Nothing in this paragraph restricts any claim for rights of the Tribe to Colorado River water in any subsequent settlement or adjudication.

(e) Future Limitations on Land Taken Into Trust- As provided in section 10.11 of the Hualapai Tribe Agreement, the parties to the Hualapai Tribe Agreement shall negotiate in good faith with other parties the terms under which any land within the State of Arizona held or acquired in fee by the Tribe may be taken into trust by the United States for the benefit of the Tribe, with any applicable terms to be incorporated into a future agreement settling the claims of the Tribe for rights to Colorado River water, and the Federal law approving the agreement, subject to approval by Congress.

**SEC. 6. WAIVERS, RELEASES, AND RETENTION OF CLAIMS.**

(a) Claims by Department Under Big Sandy River-Planet Ranch Agreement-

(1) IN GENERAL- Except as provided in paragraph (3), the Secretary is authorized to execute a waiver and release of all claims of the Department against the Corporation under Federal, State, or any other law for--

(A) all past and present claims for injury to water rights resulting from the diversion of water by the Corporation from the Wikieup Wellfield or the Freeport Groundwater Wells arising prior to the enforceability date;

(B) all claims for injury to water rights arising after the enforceability date resulting from the diversion of water by the Corporation from the Wikieup Wellfield or the Freeport Groundwater Wells in a manner not in violation of the Big Sandy River-Planet Ranch Agreement; and

(C) all past, present, and future claims arising out of, or relating in any manner to, the negotiation or execution of the Big Sandy River-Planet Ranch Agreement.

(2) EFFECTIVE DATE- The waivers and releases of claims under paragraph

(1) shall--

(A) be in the form set forth in exhibit 7.2(ii) to the Big Sandy River-Planet Ranch Agreement; and

(B) take effect on the enforceability date.

(3) RETENTION OF RIGHTS- The Department shall retain all rights not expressly waived under paragraph (1), including the right--

(A) to assert any claim for breach of, or to seek enforcement of, the Big Sandy River-Planet Ranch Agreement or this Act in any United States court or State court of competent jurisdiction; and

(B) to assert any past, present, or future claim to a water right that is not inconsistent with the Big Sandy River-Planet Ranch Agreement or this Act.

(b) Claims by Tribe and United States as Trustee Under Big Sandy River-Planet Ranch Agreement-

(1) IN GENERAL- Except as provided in paragraph (3), the Tribe and the United States, acting as trustee for the Tribe and members of the Tribe, are authorized to execute a waiver and release of all claims against the Corporation for--

(A) any water rights of the Tribe or the United States as trustee for the Tribe and members of the Tribe with respect to Parcel 3 in excess of 300 acre-feet per year;

(B) all past and present claims for injury to water rights arising before the enforceability date resulting from the diversion of water by the Corporation from the Wikieup Wellfield or the Freeport Groundwater Wells; and

(C) all claims for injury to water rights arising after the enforceability date resulting from the diversion of water by the Corporation from the Wikieup Wellfield or the Freeport Groundwater Wells in a manner not in violation of the Big Sandy River-Planet Ranch Agreement or the Hualapai Tribe Agreement.

(2) EFFECTIVE DATE- The waivers and releases of claims under paragraph (1) shall--

(A) be in the form set forth in exhibit 7.1(ii) to the Hualapai Tribe Agreement; and

(B) take effect on the enforceability date.

(3) RETENTION OF RIGHTS- The Tribe and the United States, acting as trustee for the Tribe and members of the Tribe, shall retain all rights not expressly waived under paragraph (1), including the right--

(A) to assert any claim for breach of, or to seek enforcement of, the Big Sandy River-Planet Ranch Agreement or this Act in any United States court or State court of competent jurisdiction; and

(B) to assert any past, present, or future claim to a water right that is not inconsistent with the Big Sandy River-Planet Ranch Agreement or this Act.

(c) Claims by United States as Trustee for Allottees Under Big Sandy River-Planet Ranch Agreement-

(1) IN GENERAL- Except as provided in paragraph (3), the United States, acting as trustee for the allottees, is authorized to execute a waiver and release of all claims against the Corporation for--

(A) any water rights of the allottees or the United States as trustee for the allottees with respect to--

(i) Parcel 1 in excess of 82 acre-feet per year; or

(ii) Parcel 2 in excess of 312 acre-feet per year;

(B) all past and present claims for injury to water rights arising before the enforceability date resulting from the diversion of water by the Corporation from the Wikieup Wellfield or the Freeport Groundwater Wells; and

(C) all claims for injury to water rights arising after the enforceability date resulting from the diversion of water by the Corporation from the Wikieup Wellfield or the Freeport Groundwater Wells in a manner not in violation of the Big Sandy River-Planet Ranch Agreement.

(2) EFFECTIVE DATE- The waivers and releases of claims under paragraph (1) shall--

(A) be in the form set forth in exhibit 7.1(ii) to the Hualapai Tribe Agreement; and

(B) take effect on the enforceability date.

(3) RETENTION OF RIGHTS- The United States, acting as trustee for the allottees, shall retain all rights not expressly waived under paragraph (1), including the right--

(A) to assert any claim for breach of, or to seek enforcement of, the Big Sandy River-Planet Ranch Agreement or this Act in any United States court or State court of competent jurisdiction; and

(B) to assert any past, present, or future claim to a water right that is not inconsistent with the Big Sandy River-Planet Ranch Agreement or this Act.

(d) Claims by Tribe and United States as Trustee Under Hualapai Tribe Agreement-

(1) IN GENERAL- Except as provided in paragraph (3), the Tribe and the United States, acting as trustee for the Tribe, members of the Tribe, and the allottees, as part of the performance of obligations under the Hualapai Tribe Agreement, are authorized to execute a waiver and release of all claims that the Tribe or the United States as trustee for the Tribe, members of the Tribe, or the allottees may have against the Corporation under Federal, State, or any other law, for--

(A) all past and present claims for injury to water rights resulting from the diversion of water by the Corporation from the Bill Williams River watershed arising prior to the enforceability date;

(B) all claims for injury to water rights arising after the enforceability date resulting from the diversion of water by the Corporation from the Bill Williams River watershed in a manner not in violation of the Hualapai Tribe Agreement; and

(C) all past, present, and future claims arising out of, or relating in any manner to, the negotiation or execution of the Hualapai Tribe Agreement.

(2) EFFECTIVE DATE- The waivers and releases of claims under paragraph (1) shall--

(A) be in the form set forth in exhibit 7.1(ii) to the Hualapai Tribe Agreement; and

(B) take effect on the enforceability date.

(3) RETENTION OF RIGHTS- The Tribe and the United States, acting as trustee for the Tribe, the members of the Tribe, and the allottees, shall retain all rights not expressly waived under paragraph (1), including the right to assert--

(A) subject to paragraph 10.5 of the Hualapai Tribe Agreement, a claim for breach of, or to seek enforcement of, the Hualapai Tribe Agreement or this Act in any United States court or State court of competent jurisdiction;

(B) any claim for injury to, or to seek enforcement of, the rights of the Tribe under any applicable judgment or decree approving or incorporating the Hualapai Tribe Agreement; and

(C) any past, present, or future claim to water rights that is not inconsistent with the Hualapai Tribe Agreement or this Act.

(e) Claims by Tribe Against United States Under Big Sandy River-Planet Ranch Agreement and Hualapai Tribe Agreement-

(1) IN GENERAL- Except as provided in paragraph (3), the Tribe, on behalf of the Tribe and the members of the Tribe, is authorized to execute a waiver and release of all claims against the Department and the agents and employees of the Department for--

(A) all past, present, and future claims relating to injury to water rights associated with Parcel 3 in excess of 300 acre-feet per year that the Department, acting as trustee for the Tribe, asserted or could have asserted against any party to the Hualapai Tribe Agreement, including the Corporation;

(B) all past and present claims relating to injury to water rights arising before the enforceability date associated with Parcel 3, including any injury from withdrawal of a protest to the sever and transfer applications;

(C) all claims relating to injury to water rights arising after the enforceability date associated with Parcel 3, except for injury to the water right for 300 acre-feet per year associated with Parcel 3; and

(D) all past, present, and future claims relating to any potential injury arising out of, or relating in any manner to, the negotiation or execution of the Big Sandy River-Planet Ranch Agreement or the Hualapai Tribe Agreement.

(2) EFFECTIVE DATE- The waivers and releases of claims under paragraph (1) shall--

(A) be in the form set forth in, as applicable--

(i) exhibit 7.6(ii) to the Big Sandy River-Planet Ranch Agreement; or

(ii) exhibit 7.3(ii) to the Hualapai Tribe Agreement; and

(B) take effect on the enforceability date.

(3) RETENTION OF RIGHTS- The Tribe shall retain all rights not expressly waived under paragraph (1), including the right--

(A) to assert any claim for breach of, or to seek enforcement of, the Big Sandy River-Planet Ranch Agreement, the Hualapai Tribe Agreement, or this Act in any United States court or State court of competent jurisdiction; and

(B) to assert any past, present, or future claim to a water right that is not inconsistent with the Big Sandy River-Planet Ranch Agreement, the Hualapai Tribe Agreement, or this Act.

## **SEC. 7. ADMINISTRATION.**

(a) Limited Waiver of Sovereign Immunity-

(1) IN GENERAL- In the case of a civil action described in paragraph (2)--

(A) the United States or the Tribe, or both, may be joined in a civil action commenced by any party to the Big Sandy River-Planet Ranch Agreement or the Hualapai Tribe Agreement; and

(B) any claim by the United States or the Tribe to sovereign immunity from the civil action is waived for the sole purpose of resolving any issue regarding the interpretation or enforcement of, as applicable--

(i) this Act;

(ii) the Big Sandy River-Planet Ranch Agreement; or

(iii) the Hualapai Tribe Agreement.

(2) DESCRIPTION OF CIVIL ACTION- A civil action referred to in paragraph (1) is a civil action filed by any party in a United States court or State court that--

(A) relates solely and directly to the interpretation or enforcement of this Act, the Big Sandy River-Planet Ranch Agreement, or the Hualapai Tribe Agreement;

(B) does not seek any award against the United States or the Tribe for monetary damages, costs, or attorneys' fees; and

(C) names the United States or the Tribe as a party.

(b) Antideficiency-

(1) IN GENERAL- Notwithstanding any authorization of appropriations to carry out this Act, the expenditure or advance of any funds, and the performance of any obligation by the Department in any capacity, pursuant to this Act shall be contingent on the appropriation of funds for that expenditure, advance, or performance.

(2) LIABILITY- The Department shall not be liable for the failure to carry out any obligation or activity authorized by this Act if adequate appropriations are not provided to carry out this Act.

(c) Public Access- Nothing in this Act prohibits reasonable public access to Planet Ranch or Lincoln Ranch in a manner that is consistent with all applicable Federal and State laws and any applicable conservation management plan implemented under the Conservation Program.

## **SEC. 8. ENVIRONMENTAL COMPLIANCE.**

(a) In General- In implementing the Big Sandy River-Planet Ranch Agreement,

the Hualapai Tribe Agreement, and this Act, the Secretary shall comply with all applicable Federal environmental laws (including regulations), including--

(1) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

(2) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).

(b) Execution of Agreements- The execution by the Secretary of the Big Sandy River-Planet Ranch Agreement and the Hualapai Tribe Agreement in accordance with this Act shall not constitute a major Federal action for purposes of section 102 of the National Environmental Policy Act of 1969 (42 U.S.C. 4332).

(c) United States Enforcement Authority- Nothing in this Act, the Big Sandy River-Planet Ranch Agreement, or the Hualapai Tribe Agreement affects any right of the United States to take any action (including any environmental action) under any law (including regulations and common law) relating to human health, safety, or the environment.

## **SEC. 9. ENFORCEABILITY DATE.**

(a) In General- Except as provided in subsection (b), the enforceability date shall be the date on which the Secretary publishes in the Federal Register a statement of findings that--

(1)(A) to the extent that the Big Sandy River-Planet Ranch Agreement or the Hualapai Tribe Agreement conflict with this Act, the applicable agreement has been revised by amendment to eliminate the conflict; and

(B) the Big Sandy River-Planet Ranch Agreement and the Hualapai Tribe Agreement have been executed by all parties to those agreements;

(2) the Corporation has submitted to ADWR a conditional amendment of the sever and transfer applications for the Lincoln Ranch water right and amendments to the sever and transfer applications for Planet Ranch and Lincoln Ranch water rights consistent with section 4.2.1(ii)(a) of the Big Sandy River-Planet Ranch Agreement;

(3) the Secretary and the Arizona Game and Fish Commission have executed and filed with ADWR a conditional withdrawal of each objection described in section 4(b)(3);

(4)(A) ADWR has issued a conditional order approving the sever and transfer applications of the Corporation; and

(B) all objections to the sever and transfer applications have been--

(i) conditionally withdrawn; or

(ii) resolved in a decision issued by ADWR that is final and

nonappealable;

(5) the Secretary has provided a notice to the parties to the Big Sandy River-Planet Ranch Agreement and the Hualapai Tribe Agreement that the Department has completed the legally required environmental compliance described in section 8;

(6) the steering committee for the Conservation Program has approved and authorized the manager of the Conservation Program to execute the lease in the form as set forth in exhibit 2.33 to the Big Sandy River-Planet Ranch Agreement; and

(7) the waivers and releases authorized by section 6 have been executed by the Tribe and the Secretary.

(b) Ratification and Execution of Agreements- Notwithstanding subsection (a), for purposes of sections 4, 5, and 8, the Secretary shall carry out the requirements of this Act as promptly as practicable after the date of enactment of this Act.

(c) Failure of Enforceability Date To Occur- If the Secretary does not publish a statement of findings under subsection (a) by December 15, 2015, or an extended date agreed to by the Tribe, the Secretary, and the Corporation, after providing reasonable notice to the State of Arizona--

(1) this Act is repealed effective beginning on the later of--

(A) December 31, 2015; and

(B) the date that is 14 days after the extended date agreed to by the Tribe, the Secretary, and the Corporation, after providing reasonable notice to the State of Arizona;

(2) any action taken by the Secretary to carry out this Act shall cease, and any agreement executed pursuant to this Act, shall be void; and

(3) the Tribe, members of the Tribe, the allottees, and the United States, acting as trustee for the Tribe, members of the Tribe, and the allottees, shall retain the right to assert past, present, and future claims to water rights and claims for injury to water rights in the Bill Williams River watershed.

END

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6 IN THE UNITED STATES DISTRICT COURT  
7 FOR THE DISTRICT OF ARIZONA  
8

9 Navajo Nation,

10 Plaintiff,

11 v.

12 United States Department of the Interior; et  
13 al.,

14 Defendants.

No. CV-03-00507-PCT-GMS

**ORDER**

15 Pending before the Court are multiple related motions. They include: (1)  
16 Defendants United States Department of the Interior (the “Department”), Secretary of the  
17 Interior Sally Jewell, Bureau of Reclamation, and Bureau of Indian Affairs’ (the “Federal  
18 Defendants”) Motion to Dismiss (Doc. 240), (2) Defendant-Intervenor State of Arizona’s  
19 Motion to Dismiss (Doc. 242), (3) Defendant-Intervenors Metropolitan Water District of  
20 Southern California and Coachella Valley Water District’s (the “Metropolitan  
21 Defendants”) Motion to Dismiss (Doc. 243), (4) Defendant-Intervenors Salt River Project  
22 Agricultural Improvement and Power District and the Salt River Water Users’  
23 Association’s (the “SRP Defendants”) Motion to Dismiss and to Join Required Parties  
24 (Doc. 249), (5) Defendant-Intervenor Central Arizona Water Conservation District’s  
25 Motion to Dismiss (Doc. 250), (6) Defendant-Intervenor Imperial Irrigation District’s  
26 Motion to Dismiss (Doc. 251), (7) the Hopi Tribe’s Motion to Intervene (Doc. 252), (8)  
27 the Hopi Tribe’s Motion to Dismiss (Doc. 253), and (9) Defendant-Intervenors Colorado  
28 River Commission of Nevada, State of Nevada, and Southern Nevada Water Authority’s

1 (the “Nevada Defendants”) Motion to Dismiss (Doc. 254).

2 For the following reasons, the Federal Defendants’ Motion to Dismiss is granted  
3 and the remaining Motions are denied as moot.

## 4 **BACKGROUND**

### 5 **I. The Navajo Nation**

6 Plaintiff Navajo Nation (the “Nation”) is a federally recognized Indian Tribe.  
7 (Doc. 281, “Second Amended Complaint” (“SAC”) ¶ 10.) The Navajo Nation’s  
8 Reservation (the “Reservation”) is the largest Indian reservation in the United States,  
9 with land spanning over 13 million acres located in Arizona, New Mexico, and Utah. (*Id.*  
10 ¶ 11.) The Reservation was originally established by the Treaty of June 1, 1868, 15 Stat.  
11 667, and was expanded by a number of Executive Orders and Acts of Congress between  
12 1868 and 1964. (*Id.* ¶ 12.) The Reservation is adjacent to the Colorado River and is  
13 located in both the Upper and Lower Basins of the Colorado River Basin. (*Id.*) This case  
14 concerns only the lands located in the Lower Basin in Arizona (the “Lower Basin”). (*Id.* ¶  
15 5.)

16 The SAC alleges that by establishing the Reservation, “the United States impliedly  
17 reserved for the benefit of the Navajo Nation a sufficient amount of water to carry out the  
18 purposes for which the Reservation was created, specifically to make the Reservation a  
19 livable homeland for the Nation’s present and future generations.” (*Id.* ¶ 14.) It further  
20 alleges that an effect of establishing the Reservation “was to create a trust relationship  
21 between the Navajo Nation and the United States,” (*Id.* ¶ 15), that “requires [the United  
22 States] to protect the Navajo Nation’s land and the water necessary to make those lands  
23 livable as a permanent homeland for the Navajo Nation” (*Id.* ¶ 16).

24 The Nation alleges that the United States has failed in its trust obligation to assert  
25 and protect the Nation’s water rights by “expressly” leaving “open the question of the  
26 Navajo Nation’s beneficial rights to the waters of the Colorado River.” (*Id.* ¶¶ 17–18, 20–  
27 22.) The Nation claims that it has asked the Department to address the extent of the  
28 Nation’s rights to use, and its interest in, water from the Lower Basin, but that the

1 Department has not done so. (*Id.* ¶ 25.) Further, the Federal Defendants “have never  
2 sought, through judicial or administrative means, to quantify or estimate the Navajo  
3 Nation’s rights to water from the mainstream of the Colorado River in the Lower Basin.”  
4 (*Id.* ¶ 26.)

## 5 **II. Winters and Reservation Water Rights**

6 The Nation asserts that it has water rights in the Lower Basin of the Colorado  
7 River pursuant to *Winters v. United States*, 207 U.S. 564 (1908), and its progeny.  
8 Beginning with its decision in *Winters*, the Supreme Court “has long held that when the  
9 Federal Government withdraws its land from the public domain and reserves it for a  
10 federal purpose, the Government, by implication, reserves appurtenant water then  
11 unappropriated to the extent needed to accomplish the purpose of the reservation.”  
12 *Cappaert v. United States*, 426 U.S. 128, 138 (1976). “In so doing the United States  
13 acquires a reserved right in unappropriated water which vests on the date of the  
14 reservation and is superior to the rights of future appropriators.” *Cappaert*, 426 U.S. at  
15 138. Further, this right “is not dependent on beneficial use” and “retains priority despite  
16 non-use.” *In re Gen. Adjudication of All Rights to Use Water in Gila River Sys. & Source*,  
17 201 Ariz. 307, 310–11, 35 P.3d 68, 71–72 (2001). This doctrine applies to Indian  
18 reservations. *Cappaert*, 426 U.S. at 138; *Colo. River Water Cons. Dist. v. United States*,  
19 424 U.S. 800, 805 (1976); *United States v. Dist. Court for Eagle Cnty.*, 401 U.S. 520,  
20 522–23 (1971); *Arizona v. California*, 373 U.S. 546, 601 (1963) [*Arizona I*]; *FPC v.*  
21 *Oregon*, 349 U.S. 435 (1955); *United States v. Powers*, 305 U.S. 527 (1939); *Winters* 207  
22 U.S. 564.

23 In 1952, the State of Arizona brought suit against the State of California and seven  
24 of its public agencies, alleging that it was entitled to a certain quantity of water from the  
25 lower Colorado River under the Colorado River Compact of 1922 and the Boulder  
26 Canyon Project Act. (Doc. 240-1 at 9.) Arizona sought a decree confirming its title to that  
27 quantity of water. (*Id.*) The United States sought and was granted leave to intervene in  
28 that action. *Arizona v. California*, 347 U.S. 985 (1954). In the action, in its role as trustee,

1 the United States claimed federally reserved *Winters* water rights in the Lower Colorado  
2 River on behalf of a number of entities, including the Nation. (Doc. 240-1 at 9.)  
3 However, the United States filed its *Winters* rights claim on behalf of the Nation only  
4 with respect to water from the Little Colorado River, a tributary of the Colorado. (*Id.*)  
5 The Supreme Court referred all of the matters in the *Arizona v. California* litigation to a  
6 Special Master for evidentiary proceedings. (*Id.*) The Special Master recommended that  
7 conflicting claims to the Little Colorado River not be adjudicated in *Arizona v.*  
8 *California*, and the Supreme Court, in its 1963 Opinion, affirmed that recommendation.  
9 373 U.S. 546, 595 (1963) (the “1963 Opinion”). Thus, while the United States did file  
10 and present a claim for rights to the Little Colorado River on behalf of the Nation, that  
11 claim was not ultimately adjudicated in that action. (Doc. 240-1 at 10.) Therefore no  
12 determination was made as to whether the Nation was entitled to any particular quantity  
13 of water coming from the Little Colorado River.

### 14 **III. The Challenged Administrative Actions**

15 Following this 1963 Opinion, the Court issued the 1964 Decree. 376 U.S. 340  
16 (1964). Under Article II of the 1964 Decree and the Boulder Canyon Project Act, 43  
17 U.S.C. §§ 617–617u, the Secretary is responsible for the allocation of the waters of the  
18 mainstream of the Colorado River among California, Arizona, and Nevada (the “Lower  
19 Basin States”), and for deciding which users in those Lower Basin States will be  
20 delivered water under the Act. (SAC ¶ 33.) The Secretary has undertaken various actions  
21 to do so which the Nation now challenges. These include:

- 22 • *Record of Decision, Colorado Interim Surplus Criteria; Final Environmental*  
23 *Impact Statement, reprinted at* 66 Fed. Reg. 7772, 7773–82 (Jan 25, 2001)  
24 (“Surplus Guidelines ROD”) for the *Colorado River Interim Surplus Criteria*  
25 *Final Environmental Impact Statement* (Dec. 2000) (“Surplus Guidelines FEIS”),  
26 pursuant to Article III(3)(b) of the *Criteria for Coordinated Long-Range*  
27 *Operation of the Colorado River Reservoirs Pursuant to the Colorado River Basin*  
28 *Project Area Act of September 30, 1968* (P.L. 90-537) (June 8, 1970) (“LROC”).

1 The Surplus Guidelines ROD adopted guidelines for the Secretary to determine  
2 when there is a surplus of water from the Colorado River for use within the Lower  
3 Basin States. The LROC requires the Secretary to determine the extent to which  
4 the requirements of mainstream water uses in those states can be met in any year.  
5 The Surplus Guidelines FEIS considered five alternatives for interim surplus  
6 guidelines. (SAC ¶¶ 36–40.)

- 7
- 8 • *Record of Decision, Colorado River Interim Guidelines for Lower Basin*  
9 *Shortages and Coordinated Operations for Lake Powell and Lake Mead, reprinted*  
10 *at 73 Fed. Reg. 19,873 (Apr. 11, 2008) (“Shortage Guidelines ROD”)* for the *Final*  
11 *Environmental Impact Statement, Colorado River Interim Guidelines for Lower*  
12 *Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead*  
13 (Oct. 2007) (“Shortage Guidelines FEIS”). The Shortage Guidelines ROD adopted  
14 guidelines for the Secretary to use to manage Lake Powell and Lake Mead under  
15 low reservoir and drought conditions. The Shortage Guidelines FEIS analyzed five  
16 alternatives for those interim shortage guidelines. (SAC ¶¶ 41–45.)
  - 17 • *Final Environmental Impact Statement, Implementation Agreement, Inadvertent*  
18 *Overrun and Payback Policy, and Related Federal Actions* (Oct. 2002)  
19 (“Implementation Agreement FEIS”). The Secretary, through the Bureau of  
20 Reclamation, developed the Implementation Agreement FEIS to analyze a  
21 procedure requiring the Secretary to deliver California’s share of Colorado River  
22 water in accordance with a certain agreement and to require payback of water used  
23 in excess of the amounts set forth in contracts entered into under the Boulder  
24 Canyon Project Act. (SAC ¶¶ 46–49.)
  - 25 • *Offstream Storage of Colorado River Water and Development and Release of*  
26 *Intentionally Created Unused Apportionment in the Lower Division States*, 64  
27 Fed. Reg. 58,986 (Nov. 1, 1999), 43 C.F.R. pt. 414. The Secretary adopted final  
28 regulations under which she may enter into certain agreements with the Lower  
Basin States to permit offstream storage of those States’ individual entitlements.

1 (SAC ¶¶ 50–51.)

- 2
- 3 • The *Storage and Interstate Release Agreement* (Dec. 18, 2002) (“Storage and  
4 Release Agreement”) with the States of Nevada and Arizona, pursuant to the  
5 regulations described above, creates a program of interstate water banking of those  
6 States’ entitlements under the Decree in *Arizona v. California*. (SAC ¶¶ 52–55.)

7 The Nation does not allege that any of these actions actually regulate any of its  
8 activities. Instead, it argues that because the United States did not determine the extent  
9 and quantity of the Navajo Nation’s water rights under *Winters*, the Secretary’s  
10 subsequent actions in connection with the management of the Lower Basin, pursuant to  
11 the Decree describing the management of the Colorado River in *Arizona v. California*,  
12 376 U.S. 340 (1964) (“the 1964 Decree”), have otherwise allocated the waters of the  
13 Colorado River in a way “that threaten[s] the availability of Colorado River water to  
14 satisfy the Navajo Nation’s rights and needs.” (*Id.* ¶ 29.) The Nation alleges that these  
15 actions “establish[] a system of reliance upon the Colorado River that ensures that entities  
16 other than the Navajo Nation will continue to rely on water supplies claimed by, reserved  
17 for, needed by, and potentially belonging to the Navajo Nation.” (*Id.* ¶ 31.) In turn,  
18 “[s]uch reliance will operate to make allocation of Colorado River water to the Navajo  
19 Nation to satisfy its water rights or meet the needs of the Navajo Nation and its members  
20 increasingly difficult.” (*Id.*)

21 The United States “generally agrees that [the Nation] has reserved water rights  
22 under the *Winters* doctrine.” (Doc. 240-1 at 41.) But, it claims it has assisted the Nation  
23 with acquisition of water supply in the San Juan Settlement and that it is currently  
24 pursuing the establishment of *Winters* rights in the ongoing general adjudication of the  
25 Little Colorado River System (*Id.*), and that additional mainstream water may be  
26 available to the Nation should the various applicable parties be able to arrive at a water  
27 rights settlement under the Arizona Water Settlements Act (*Id.* at 33–34).

#### 28 **IV. Claims One, Two, Three, and Five**

In Claims One, Two, Three, and Five of its Second Amended Complaint, the

1 Nation alleges that the Federal Defendants violated the National Environmental Policy  
2 Act (“NEPA”) and the Administrative Procedure Act (“APA”) by undertaking the actions  
3 to manage the Lower Basin flow described above.

4 In Claim One, the Nation alleges that the Implementation of the Surplus  
5 Guidelines violates NEPA and the APA. It claims that the United States failed to meet the  
6 NEPA requirement to take a hard look at all of the effects of proposed federal action  
7 because it did not consider the rights of the Nation. (SAC ¶¶ 63, 64.) Further, the Nation  
8 claims that the Surplus Guidelines FEIS states that the United States examined all Indian  
9 water rights that could be affected by implementation of the LROC, but that this  
10 statement is false because the United States did not consider the needs of the Nation’s  
11 possible right to mainstream water in the Lower Basin. The Nation argues that, as a result  
12 of these failures, the documents are “arbitrary, capricious, an abuse of discretion, [and]  
13 otherwise not in accordance with law,” “contrary to constitutional right, power, privilege,  
14 or immunity,” and “in excess of statutory jurisdiction, authority, or limitations, [and]  
15 short of statutory right.” (*Id.* ¶ 67.)

16 In Claim Two, the Nation alleges that the Implementation of the Shortage  
17 Guidelines was similarly deficient because the United States claimed in the Shortage  
18 Guidelines FEIS that it examined all Indian water rights that could be affected by  
19 implementation of the LROC, but did not actually consider the needs of the Nation. (*Id.*  
20 ¶¶ 69–71.)

21 In Claim Three, the Nation alleges that the Development of the Implementation  
22 Agreement FEIS is also lacking as the Implementation Agreement FEIS also purports to  
23 have examined all Indian water rights that could have been impacted, but did not do so  
24 because it did not actually consider the needs of the Nation. (*Id.* ¶¶ 73–76.)

25 In Claim Five, the Nation alleges that the Federal Defendants violated NEPA and  
26 the APA by entering into the Storage and Release Agreement. It claims that the  
27 Agreement fails to consider the Nation’s unquantified rights and memorialized a plan for  
28 water banking without considering those rights. (*Id.* ¶¶ 82–84.)

1           **V.     Claim Four**

2           In Claim Four, the Nation alleges that the Implementation of the Interstate  
3 Banking Regulations violates the APA. It alleges that the Secretary failed to protect the  
4 Nation’s rights to and interests in the water from the Lower Basin. In so doing, the  
5 regulations allow entitlement holders other than the Nation to store water they would  
6 otherwise be unable to use and allows those entitlement holders to develop reliance upon  
7 the use of those waters, which may potentially belong to the Nation. (*Id.* ¶¶ 78–79.) This,  
8 the Nation alleges, resulted in a final rule that is “arbitrary, capricious, an abuse of  
9 discretion, [and] otherwise not in accordance with law,” “contrary to constitutional right,  
10 power, privilege, or immunity,” and “in excess of statutory jurisdiction, authority, or  
11 limitations, [and] short of statutory right.” (*Id.* ¶ 80.)

12           **VI.    Claim Seven**

13           In Claim Seven, the Nation notes that under *Winters*, it requires water from the  
14 Lower Basin of the Colorado River to fulfil its purpose as a permanent homeland. (*Id.* ¶  
15 90.) By failing to determine the extent and quantity of the Nation’s water rights, the  
16 United States breached its fiduciary obligation to the Nation. (*Id.* ¶ 91.)

17           **VII. Pending Motions**

18           The Nation brought these six claims against the Federal Defendants.<sup>1</sup> (Doc. 281.)  
19 The Federal Defendants now move to dismiss each of these claims. (Doc. 240.) In their  
20 Motion to Dismiss, the Federal Defendants argue that Plaintiff has failed to establish  
21 standing to bring Claims One through Five and that it has failed to identify a breach of a  
22 specific, enforceable trust obligation and waiver of sovereign immunity that allows it to  
23 bring Claim Seven. (*Id.*)

24           Additionally, various Defendant-Intervenors have joined the case and filed their  
25 own Motions to Dismiss. (Docs. 242, 243, 249, 250, 251, and 254.)<sup>2</sup> Also pending are the  
26

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27           <sup>1</sup> The Nation voluntarily struck their Sixth Claim for Relief. (SAC ¶¶ 85–88.)

28           <sup>2</sup> The SRP Defendants’ Motion to Dismiss also includes their Motion to Join  
Required Parties. (Doc. 249.)

1 Hopi Tribe’s Motion to Intervene (Doc. 252) and Motion to Dismiss (Doc. 251).

## 2 DISCUSSION

### 3 I. Legal Standard

4 The Court may only reach the merits of a dispute if it has jurisdiction to do so.  
5 *Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 93–95 (1998). Jurisdiction is limited  
6 to subject matter authorized by the Constitution or by statute. *Kokkonen v. Guardian Life*  
7 *Ins. Co.*, 511 U.S. 375, 377 (1994). Under Rule 12(b)(1), a defendant may challenge at  
8 any time a federal court’s jurisdiction to hear a case. *See* Fed. R. Civ. P. 12(b)(1),  
9 12(h)(3). In such a challenge, the defendant may either facially or factually attack the  
10 plaintiff’s complaint for lack of subject matter jurisdiction. A facial challenge asserts that  
11 the complaint, on its face, fails to allege facts that would invoke federal jurisdiction. *Safe*  
12 *Air For Everyone v. Meyer*, 373 F.3d 1035, 1039 (9th Cir. 2003). A factual attack, on the  
13 other hand, disputes the veracity of allegations in the complaint that would, if true,  
14 invoke federal jurisdiction. *Id.*

### 15 II. Standing

16 To establish Article III standing to seek injunctive relief, “a plaintiff must show  
17 that he is under threat of suffering ‘injury in fact’ that is concrete and particularized; the  
18 threat must be actual and imminent, not conjectural or hypothetical; it must be fairly  
19 traceable to the challenged action of the defendant; and it must be likely that a favorable  
20 judicial decision will prevent or redress the injury.” *Summers v. Earth Island Inst.*, 555  
21 U.S. 488, 493 (2009) (citing *Friends of Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*,  
22 528 U.S. 167, 180–81 (2000)).

23 Under the first prong, the Nation alleges that it is under the threat of suffering  
24 “injury in fact” due to the challenged administrative actions in Counts One through Five.  
25 The Nation states that in establishing the Navajo Reservation, “the United States  
26 impliedly reserved for the benefit of the Navajo Nation a sufficient amount of water to  
27 carry out the purposes for which the Reservation was created, specifically to make the  
28 Reservation a livable homeland for the Nation’s present and future generations.” (Doc.

1 281, SAC ¶ 14.) While the Nation alleges that they have these water rights, they also  
2 assert that the United States has never adjudicated, quantified, or estimated these rights as  
3 to the mainstream of the Colorado River in the Lower Basin. (*Id.* ¶¶ 25–26.) However,  
4 consistent with *Winters*, the Nation does not challenge the Federal Defendants’ assertion  
5 that the priority of any such rights will not be legally impacted by any of the challenged  
6 administrative actions. That is because any such water rights “vested at least as early as  
7 the date of each congressional act or executive order setting aside the Reservation lands”  
8 (*Id.* ¶ 14), which occurred between 1868 and 1964 (*Id.* ¶ 12), many decades before any of  
9 the challenged administrative actions (*Id.* ¶¶ 36, 41, 46, 50). Further, under *Winters*, any  
10 such rights would retain priority despite non-use.

11 The Nation also does not allege that any of the challenged actions directly regulate  
12 any of the Nation’s activities. Instead, they assert that the actions regulate third-party  
13 activities, and that this regulation, devised without consideration of the Nation’s potential  
14 water rights, could cause injury to the Nation because it “establishes a system of reliance  
15 upon the Colorado River that ensures that entities other than the Navajo Nation will  
16 continue to rely on water supplies claimed by, reserved for, needed by, and potentially  
17 belonging to the Navajo Nation.” (*Id.* ¶ 31.) In turn, “[s]uch reliance will operate to make  
18 allocation of Colorado River water to the Navajo Nation to satisfy its water rights or meet  
19 the needs of the Navajo Nation and its members increasingly difficult.” (*Id.*)

20 Here, in Claims One, Two, Three, and Five, the Nation alleges a number of  
21 procedural violations under NEPA. For these claims, the Nation may demonstrate injury  
22 under the standard for demonstrating a procedural injury under that statute. To show that  
23 these alleged procedural violations constitute a cognizable injury for purposes of  
24 establishing Article III standing, the Nation “must demonstrate that (1) [Defendants]  
25 violated certain procedural rules; (2) these rules protect [Plaintiff’s] concrete interests;  
26 and (3) it is reasonably probable that the challenged action will threaten their concrete  
27 interests.” *Center for Food Safety v. Vilsack*, 636 F.3d 1166, 1171 (9th Cir. 2011) (citing  
28 *Citizens for Better Forestry*, 341 F.3d at 969–70)).

1 Here, the Court will assume without deciding that the Federal Defendants violated  
2 some procedural rules of NEPA, that the Nation has some kind of interest in the water of  
3 the Lower Basin, and the procedural rules protect the Nation's interests in that water.  
4 This satisfies the first two prongs of the NEPA injury inquiry. Under the third prong, the  
5 Nation must demonstrate that it is "reasonably probable" that the challenged  
6 administrative actions will threaten their interests. The Nation has not done so. As  
7 explained above, the only injury the Nation asserts in this case is that the challenged  
8 administrative actions will create a system of reliance that will somehow make it harder  
9 for the Nation to satisfy its water rights, even though the Nation concedes that these  
10 challenged actions do not vitiate those rights or otherwise legally alter those rights under  
11 *Winters*. The Nation does not explain how any "system of reliance" created by the  
12 challenged administrative actions could nonetheless injure the Nation's interests. Without  
13 this connection, the Nation has not demonstrated that it is "reasonably probable" that the  
14 actions will threaten their interests. Thus, in Claims One, Two, Three, and Five, the  
15 Nation fails to establish injury under the standard for establishing a NEPA procedural  
16 injury and therefore the Nation does not have Article III standing to bring those claims.

17 In Claim Four, the Nation alleges that the Implementation of the Interstate  
18 Banking Regulations violates the APA, but not NEPA. As the Nation does not bring  
19 Claim Four under NEPA, it is not relevant whether it meets the Ninth Circuit's  
20 requirements for establishing injury under that particular statute. However, the Nation  
21 must still establish injury under this Claim for Article III standing. As in Claims One,  
22 Two, Three, and Five, the Nation alleges that the challenged regulations will allow  
23 entitlement holders other than the Nation to develop a system of reliance on water that  
24 may someday be determined to belong to the Nation. As with Claims One, Two, Three  
25 and Five, the Nation fails to allege any facts to suggest that any possible injury deriving  
26 from a theoretical, future "system of reliance" is "actual or imminent" as opposed to  
27 merely "conjectural or hypothetical." *Summers*, 555 U.S. at 493. Thus, Plaintiffs also fail  
28

1 to establish standing to bring Claim Four.<sup>3</sup>

2 **III. Breach of Trust Claim**

3 **A. Trust Relationship**

4 In its Claim Seven, the Nation challenges the Federal Defendants’ alleged breach  
5 of their fiduciary trust responsibility. (SAC ¶¶ 90–91.) The Nation asserts that “[t]he  
6 Department has failed to determine the extent and quantity of the water rights of the  
7 Navajo Nation to the waters of the Colorado River, or otherwise determine the amount of  
8 water which the Navajo Nation requires from the Lower Basin of the Colorado River to  
9 meet the needs of the Navajo Nation and its members.” (*Id.*) To remedy this alleged  
10 violation, it asks the Court to enjoin “further breaches of the United States’ trust  
11 responsibility.” (*Id.* ¶ L.) The Nation claims that this “primary breach of trust claim is not  
12 premised on the APA.” (Doc. 282 at 67.)

13 While the Ninth Circuit recognizes that the United States owes a general trust  
14 responsibility to Indian tribes, “unless there is a specific duty that has been placed on the  
15 government with respect to Indians, [the government’s general trust obligation] is  
16 discharged by [the government’s] compliance with general regulations and statutes not  
17 specifically aimed at protecting Indian tribes.” *Gross Ventre Tribe v. United States*, 469  
18 F.3d 801, 810 (9th Cir. 2006) (quoting *Morongo Band of Mission Indians v. FAA*, 161  
19 F.3d 569, 574 (9th Cir. 1998)). Here, the Nation argues that the Colorado River Compact  
20 of 1922 created a specific, enforceable trust obligation in stating that “[n]othing in this  
21 compact shall be construed as affecting the obligations of the United States of America to  
22 Indian tribes.” (Doc. 282 at 64; Doc. 293 at 14.) But, by its terms, this statement does not  
23

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24  
25 <sup>3</sup> A plaintiff bringing a suit under the APA must also fulfill statutory standing  
26 requirements by establishing “(1) that there has been final agency action adversely  
27 affecting the plaintiff, and (2) that, as a result, it suffers legal wrong or that its injury falls  
28 within the zone of interests of the statutory provision the plaintiff claims was violated.”  
*Citizens for Better Forestry*, 341 F.3d at 976 (citations omitted). Because the Nation does  
not establish Article III standing to bring its APA/NEPA claims, the Court need not  
address whether the Nation meets the additional requirements for statutory standing.

1 create any new or additional obligations of the United States of America to Indian tribes.  
2 It merely recognizes the existence of such rights as may have pre-existed the Compact.  
3 The Nation has not identified a relevant, specific duty that pre-existed the Compact and  
4 that was owed to it by the Federal Defendants that would either support its general breach  
5 of trust claim or its claim that the Federal Defendants have breached a specific duty to the  
6 Nation in undertaking any of the challenged management activities in the Lower Basin.

7 No party contests that the United States has a trust responsibility to the Nation  
8 consistent with *Winters* that pre-existed the Compact. No party contests that the Nation  
9 was allocated no water right in the Lower Basin as a result of *Arizona v. California*. Yet  
10 when, as a current result of *Arizona v. California* the Nation has no present, existing and  
11 determined right in the allocation of that water, the Nation does not point to any duty that  
12 either existed before or after the Compact that requires the United States, in regulating  
13 the use of the waters between the present determined and existing rights holders, to  
14 include the potential future interest which may accrue to the Nation as a result of *Winters*.  
15 The allegation of such facts simply is insufficient to meet the specificity requirement set  
16 forth in *Gross Ventre* as a prerequisite for a breach of trust claim.<sup>4</sup> Further, the Nation's  
17 claim to Lower Basin water would be wholly unimpaired by any third-party claim that  
18 post-dated the time from which the Nation could base its claim through *Winters*. This  
19 only highlights the non-existence of a breach of trust claim against the United States for  
20 actions taken with third parties that post-date the time from which the Nation bases its  
21 claims.

## 22 **B. Sovereign Immunity**

23 To bring Claim Seven or any other claim against the Federal Defendants, the  
24 Nation must also identify an applicable waiver of sovereign immunity. "A party may  
25

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26  
27 <sup>4</sup> The Court, of course, makes no determination as to whether a claim for breach of  
28 trust could be stated against the United States under other factual circumstances, such as  
for example, if the Nation was unable to obtain on its own and the United States refused  
to otherwise pursue a determination whether the Nation had any right in Lower Basin  
waters.

1 bring a cause of action against the United States only to the extent [the United States] has  
2 waived its sovereign immunity. A party bringing a cause of action against the federal  
3 government bears the burden of demonstrating an unequivocal waiver of immunity.”  
4 *Cunningham v. United States*, 786 F.2d 1445, 1446 (9th Cir. 1986) (citations omitted).  
5 “A waiver of the Federal Government’s sovereign immunity must be unequivocally  
6 expressed in statutory text.” *Lane v. Pena*, 518 U.S. 187, 192 (1996) (citations omitted).  
7 Further, “a waiver of the Government’s sovereign immunity will be strictly construed, in  
8 terms of its scope, in favor of the sovereign.” *Id.* As the SAC specifies that it seeks relief  
9 under the APA, 5 U.S.C. §§ 701–06 (*Id.* ¶ 8), the Court will consider whether that statute  
10 contains a waiver of sovereign immunity that would allow the Nation to bring its Claim  
11 Seven, even though the Nation does state that its Claim Seven falls outside the bounds of  
12 the APA (Doc. 282 at 67).

13 The APA waives sovereign immunity for certain actions brought against the  
14 Federal Government. 5 U.S.C. § 702. In relevant part, it states that “[a]n action in a court  
15 of the United States seeking relief other than money damages and stating a claim that an  
16 agency or an officer or employee thereof acted or failed to act in an official capacity . . .  
17 shall not be dismissed . . . on the ground that it is against the United States.” *Id.* Section  
18 704, which describes the scope of reviewable agency action under the APA, states in  
19 relevant part that judicial review extends to “final agency action for which there is no  
20 other adequate remedy in a court.” 5 U.S.C. § 704. *See also Gallo Cattle v. U.S. Dep’t of*  
21 *Agric.*, 159 F.3d 1194, 1198 (9th Cir. 1998) (describing that “the APA’s waiver of  
22 sovereign immunity contains several limitations” including § 704, which limits review to  
23 actions “made reviewable by statute or final agency action”).

24 As the Nation notes, the Ninth Circuit has held that this § 704 limitation does not  
25 limit the § 702 waiver for some constitutional claims. *See Presbyterian Church v. United*  
26 *States*, 870 F.2d 518, 526 (9th Cir. 1989) (declining to read “§ 702 as preserving  
27 sovereign immunity in claims for equitable relief against government investigations  
28 alleged to violate First and Fourth Amendment rights”); *See also Robinson v. Salazar*,

1 885 F. Supp. 2d 1002, 1027–28 (E.D. Cal. 2012) (reconciling the Ninth Circuit’s  
2 opinions in *Gallo Cattle* and *Presbyterian Church*, noting that *Presbyterian Church* was  
3 limited to the availability of a sovereign immunity waiver to bring constitutional claims).  
4 However, no such constitutional claims are present in this action. The APA also waives  
5 sovereign immunity under 5 U.S.C. § 706(1) for certain claims challenging agency  
6 inaction. However, a § 706(1) claim must assert that an agency failed to take a discrete  
7 agency action that it is actually required to take. *Norton v. S. Utah Wilderness Alliance*,  
8 542 U.S. 55, 64 (2004). The Nation concedes that it is not bringing any § 706(1) claims  
9 in this case. (Doc. 282 at 67.)

10 Here, Claim Seven is indeed a claim for relief other than damages, brought against  
11 the United States. However, Claim Seven does not challenge any final agency action or  
12 allege any constitutional claim. (Doc. 282 at 67.) Because the Nation fails to challenge  
13 any particular final agency action or bring a constitutional claim, Claim Seven falls  
14 outside of the scope of the APA’s waiver of sovereign immunity and is thus barred. The  
15 Nation invites the Court to adopt a broad reading of *Presbyterian Church* that would  
16 expand its reading of the APA’s waiver beyond constitutional claims to encompass a  
17 general breach of trust claim. *See Robinson*, 885 F. Supp. 2d at 1027–28; *but see*  
18 *Valentini v. Shinseki*, 860 F. Supp. 2d 1079, 1101 (C.D. Cal. 2012). The Court declines  
19 that invitation. The Nation alleges no other applicable waiver of sovereign immunity.  
20 Therefore, Claim Seven is dismissed as barred by the Federal Defendants’ sovereign  
21 immunity.

## 22 CONCLUSION

23 Plaintiff fails to establish the injury in fact necessary to confer standing to bring its  
24 claims One through Five and has voluntarily struck its Claim Six. In addition, Plaintiff  
25 fails to identify a waiver of sovereign immunity that permits it to bring Claim Seven. The  
26 Court thus lacks subject matter jurisdiction to consider the merits of the Nation’s Second  
27 Amended Complaint. Due to this lack of subject matter jurisdiction, the Second Amended  
28 Complaint is dismissed without prejudice pursuant to the Federal Defendant’s Motion to

1 Dismiss (Doc. 240). The Court denies the other pending Motions to Dismiss (Docs. 242,  
2 243, 249, 250, 251, 253, 254) and the Hopi Tribe's Motion to Intervene (Doc. 252) as  
3 moot.

4 **IT IS THEREFORE ORDERED THAT:**

5 1. Defendants United States Department of the Interior, Secretary of the  
6 Interior Sally Jewell, Bureau of Reclamation, and Bureau of Indian Affairs' (collectively  
7 the Motion to Dismiss (Doc. 240) is **granted**.

8 2. Defendant-Intervenor State of Arizona's Motion to Dismiss (Doc. 242) is  
9 **denied as moot**.

10 3. Defendant-Intervenors Metropolitan Water District of Southern California  
11 and Coachella Valley Water District's Motion to Dismiss (Doc. 243) is **denied as moot**.

12 4. Defendant-Intervenors Salt River Project Agricultural Improvement and  
13 Power District and the Salt River Water Users' Association's Motion to Dismiss and to  
14 Join Required Parties (Doc. 249) is **denied as moot**.

15 5. Defendant-Intervenor Central Arizona Water Conservation District's  
16 Motion to Dismiss (Doc. 250) is **denied as moot**.

17 6. Defendant-Intervenor Imperial Irrigation District's Motion to Dismiss  
18 (Doc. 251) is **denied as moot**.

19 7. Intervenor Hopi Tribe's Motion to Intervene (Doc. 252) is **denied as moot**.

20 8. Intervenor Hopi Tribe's Motion to Dismiss (Doc. 253) is **denied as moot**.

21 9. Defendant-Intervenors Colorado River Commission of Nevada, State of  
22 Nevada, and Southern Nevada Water Authority's Motion to Dismiss (Doc. 254) is **denied**  
23 **as moot**.

24 ///

25 ///

26 ///

27 ///

28 ///



113<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# S. 2530

To amend title 18, United States Code, to prohibit the importation or exportation of mussels of a certain genus, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

JUNE 25, 2014

Mr. HELLER introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To amend title 18, United States Code, to prohibit the importation or exportation of mussels of a certain genus, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Protecting Lakes  
5       Against Quaggas Act of 2014” or as the “PLAQ Act of  
6       2014”.

7       **SEC. 2. IN GENERAL.**

8       Section 42 of title 18, United States Code, is amend-  
9       ed—

10               (1) in subsection (a)(1)—

1 (A) by striking “of the zebra mussel of the  
2 species *Dreissena polymorpha*”; and

3 (B) by inserting after “*Hypophthalmich-*  
4 *thys nobilis*,” the following: “of the species of  
5 mussels of the genus *Dreissena*”; and

6 (2) by adding at the end the following:

7 “(d) Nothing in this section applies to—

8 “(1) the importation or transportation of pro-  
9 hibited species through the operation of a public  
10 water system or a related water conveyance, storage,  
11 or distribution facility; or

12 “(2) the possession or conveyance of water sup-  
13 plies containing prohibited species by a public water  
14 system operator.”.

○

# United States Senator Dianne Feinstein

Jul 31 2014

## Feinstein, Boxer Introduce Water in the 21st Century Act

*Washington*—Senators Dianne Feinstein and Barbara Boxer (both D-Calif.) today introduced the *Water in the 21st Century Act*, a bill to help communities nationwide better prepare for the future by providing new incentives and investments to help residents, businesses and local water agencies to conserve, recycle and manage limited water supplies.

The legislation would expand rebates and grants for water conservation and efficiency; support local investments in water recycling and improved groundwater management and storage; invest in research into water-saving technologies and desalination; and establish an open water data system. The measure would also help local communities take steps to become better prepared for drought.

**“I am pleased to cosponsor the Water in the 21st Century act. It includes practical, effective programs for conservation, recycling, research and water projects that are important elements to help meet California’s water challenges,”** Senator Feinstein said. **“This bill complements the Emergency Drought Relief Act – which we are currently negotiating with the House – to help California and the West confront this and future droughts.”**

**“Anyone who knows California knows that we have forever fought about water and it’s time to change the story,”** Senator Boxer said. **“We’re doing just that with ‘W21: Water in the 21st Century,’ which will help us prepare for the future by conserving, recycling and better managing our precious water supplies.”**

The legislation includes a number of important provisions that would help communities in California and across the country:

### **Efficiency and conservation**

Strengthens EPA’s WaterSense program, which promotes water conservation in products, buildings, and landscapes through information and

rebates. The bill authorizes \$50 million to administer the program and \$700 million for rebates, through FY2019, and then funds them at FY2019 levels adjusted for inflation thereafter.

Creates a new grant program within the Environmental Protection Agency for local water systems to conserve water, increase water efficiency or reuse water; modify or relocate existing water system infrastructure made or projected to be made inoperable by climate change impacts; preserve or improve water quality, and other projects.

### **Water recycling, storage, and integrated water management**

Leverages federal financing – through loan guarantees and matching grants – to help support projects on a regional scale, including water recycling, ground water management, water storage and water conveyance infrastructure.

\$250 million over five years for secured loans.

\$150 million for integrated regional water management, reclamation, and recycling projects grants.

### **Innovation through research, data and technology**

Establishes an open water data system at the Department of the Interior.

Reauthorizes the Water Resources Research Act at \$9 million a year through 2020.

Reauthorizes the Water Desalination Act at \$3 million a year through 2020.

Directs the Secretary of the Army to review reservoir operations and assess whether there is a benefit in adjusting operations to take into account improved forecasting data.

### **Drought preparedness**

Establishes Drought Resilience Guidelines for state and local agencies through EPA in coordination with USDA, Commerce and Interior.

Directs U.S. Fish and Wildlife Service, in consultation with state and federal agencies, to prepare a salmon drought plan to address the impacts of drought on the salmon population.

The legislation is supported by the Western Recycled Water Coalition, WaterNow, the Clean Water Construction Coalition, the Northern California Water Association, the North Bay Water Reuse Authority and the WateReuse Association. For the text of the legislation, click [here](#).

Senators Feinstein and Boxer have also introduced the *California Emergency Drought Relief Act of 2014*, an emergency measure that would provide immediate relief to communities that are suffering from the historic drought impacting California and other Western states.

###

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Permalink: <http://www.feinstein.senate.gov/public/index.cfm/2014/7/feinstein-boxer-introduce-water-in-the-21st-century-act>



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

Office of the General Manager

June 30, 2014

Mr. Michael J. Lacey  
Director  
Arizona Department of Water Resources  
3550 North Central Avenue  
Phoenix, AZ 85012

Ms. Tanya M. Trujillo  
Executive Director  
Colorado River Board of California  
770 Fairmont Avenue, Suite 100  
Glendale, CA 91303-1035

Ms. Jayne Harkins  
Executive Director  
Colorado River Commission of Nevada  
555 East Washington Avenue, Suite 3100  
Las Vegas, NV 89101-1065

Dear Mr. Lacey and Mses. Trujillo, and Harkins:

Metropolitan's 2015 Plan for the Creation of  
Extraordinary Conservation Intentionally Created Surplus

In accordance with Article 2.5(A) of the Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement, enclosed is The Metropolitan Water District of Southern California's (Metropolitan) Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus During Calendar Year 2015 (Plan). We are seeking approval to create 200,000 acre-feet of Extraordinary Conservation Intentionally Created Surplus during 2015. Metropolitan's Plan demonstrates how all requirements of the Forbearance Agreement will be met in the creation of Extraordinary Conservation Intentionally Created Surplus.

Metropolitan looks forward to the Secretary of the Interior's review and approval of the Plan in consultation with the Lower Division States. Should you have any questions regarding our Plan, please contact Jan Matusak of Metropolitan's staff at (213) 217-6772.

Very truly yours,

A handwritten signature in black ink that reads "Bill Hasencamp".

William Hasencamp  
Manager of Colorado River Resources

JPM:tt

Enclosure

Mr. Michael J. Lacey, Ms. Tanya M. Trujillo, and Ms. Jayne Harkins

Page 2

June 30, 2014

cc: Mr. Kevin E. Kelley  
General Manager  
Imperial Irrigation District  
P.O. Box 937  
Imperial, CA 92251-0937

Mr. John Entsminger  
General Manager  
Southern Nevada Water Authority  
100 City Parkway, Suite 700  
Las Vegas, NV 89106-4615

Mr. Jim Barrett  
General Manager  
Coachella Valley Water District  
P.O. Box 1058  
Coachella, CA 92236-1058

Mr. Ed Smith  
General Manager  
Palo Verde Irrigation District  
180 West 14th Avenue  
Blythe, CA 92225-2714

Mr. David G. Brownlee  
City of Needles  
817 Third Street  
Needles, CA 92363-2933

# The Metropolitan Water District of Southern California

## Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus During Calendar Year 2015

### Introduction

This plan for the creation of Extraordinary Conservation Intentionally Created Surplus (ICS) has been prepared pursuant to the specifications outlined in Section 3.B.1 on page 40 of the *Record of Decision: Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead* signed by the Secretary of the Interior (Secretary) on December 13, 2007.

Four separate activities are described in this plan, each of which are incorporated as an exhibit to the December 13, 2007, *Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement* among the Arizona Department of Water Resources, the Palo Verde Irrigation District, the Imperial Irrigation District, the City of Needles, the Coachella Valley Water District, the Metropolitan Water District of Southern California (Metropolitan), the Southern Nevada Water Authority, and the Colorado River Commission of Nevada.

The projected yields of these extraordinary conservation activities for calendar year 2015 are as follows:

		(acre-feet)
<b>Activity 1:</b>	Metropolitan Funded Palo Verde Irrigation District Forbearance and Fallowing Program	86,650*
<b>Activity 2:</b>	Metropolitan Funded Imperial Irrigation District Water Conservation Program	105,000**
<b>Activity 3:</b>	Metropolitan Funded Water Supply from Desalination	67,402
<b>Activity 4:</b>	Metropolitan Funded Water Supply from Lower Colorado Water Supply Project	8,150
Total		267,202
<p>*Amount may be reduced depending upon Metropolitan's fallowing call for the period beginning August 1, 2015. **Amount may be reduced depending upon Coachella Valley Water District's use of up to 20,000 acre-feet.</p>		

From the yields of these extraordinary conservation activities, Metropolitan plans to create a total of 200,000 acre-feet of Extraordinary Conservation ICS during 2015.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

Documentation that the ICS Plan of Creation is in Conformance with any State or Agency  
Agreements regarding ICS

The amount of Extraordinary Conservation ICS that Metropolitan plans to create is within the limits of Extraordinary Conservation ICS that can be created and accumulated in Lake Mead by Metropolitan under the December 13, 2007, *California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus*. Absent the creation of Extraordinary Conservation ICS, this water would otherwise be beneficially used by Metropolitan through diversion into the Colorado River Aqueduct. The amount of Extraordinary Conservation ICS that Metropolitan may create is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the Bureau of Reclamation's (Reclamation) October 10, 2003, Inadvertent Overrun and Payback Policy. Reclamation has previously received a copy of the December 13, 2007, Agreement which documents the terms and conditions for the creation and delivery of Extraordinary Conservation ICS by the California water agencies which are parties to the Agreement.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 1: Metropolitan Funded Palo Verde Irrigation District Forbearance and Fallowing Program**

Project Description

Under the August 18, 2004, *Forbearance and Fallowing Program Agreement* with the Palo Verde Irrigation District (PVID) and landowner agreements for fallowing in PVID, Metropolitan pays landowners within the Palo Verde Valley to annually fallow a portion of their land, foregoing the planting and irrigation of crops, allowing PVID to forbear use of water on lands that historically were and otherwise would be irrigated, increasing the amount of water available to Metropolitan.

The volume of water that becomes available to Metropolitan is governed by the October 10, 2003, *Quantification Settlement Agreement*<sup>1</sup> (QSA) and the October 10, 2003, *Colorado River Water Delivery Agreement*.<sup>2</sup> Under these agreements:

- Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2<sup>3</sup> that is greater than 420,000 acre-feet in a calendar year, or
- Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

Palo Verde Valley landowners voluntarily decided in 2004 whether to participate in the 35-year program, with those participants agreeing to stop irrigating from 9 to 35 percent of their land in any year at Metropolitan's request. Upon one-year notice, Metropolitan has the option to change the percentage of land fallowed, with an increase in the percentage effective for a two-year period. The land taken out of agricultural production is maintained and rotated once every one to five years. The maximum amount of farmland taken out of production at any one time is 25,947 acres; however, fallowing in excess of 23,508 acres is limited to a total of ten years under the 35-year program. The landowner is responsible for payment of taxes, PVID water tolls, vegetation abatement, dust control and all other costs related to the fallowed lands. Parcels to be fallowed must be at least 5 acres. Through May 2014, Metropolitan has paid a total of \$191.1 million in Program costs and anticipates paying another \$9.6 million in Program costs in 2014.

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<sup>1</sup> The parties to the Quantification Settlement Agreement are Imperial Irrigation District, Coachella Valley Water District, and Metropolitan.

<sup>2</sup> The parties to the Colorado River Water Delivery Agreement are the United States, Imperial Irrigation District, Coachella Valley Water District, Metropolitan, and the San Diego County Water Authority.

<sup>3</sup> The Yuma Project Reservation Division holds California's Priority 2.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 1**

Term of the Activity

The Forbearance and Fallowing Program Agreement with PVID terminates on July 31, 2040. Metropolitan has issued a Fallowing Call for 13,263 acres for the period commencing August 1, 2014. It is assumed that Metropolitan will issue a Fallowing Call for the maximum number of acres to be fallowed for the period commencing August 1, 2015 through July 31, 2016.

Estimate of the Amount of Water that Will be Conserved and Description of How it is Estimated

The volume of projected savings during calendar year 2015 is 86,650 acre-feet based on the amount of water used for irrigation in the Palo Verde Valley in 2013. The monthly tabulation of this projected savings is as follows:

Month	Monthly Irrigation Use Fraction*	Number of Acres to be Fallowed	Reduced Consumptive Use (acre-feet)**
January	0.051250	13,263	680
February	0.238012	13,263	3,157
March	0.464130	13,263	6,156
April	0.519004	13,263	6,884
May	0.768284	13,263	10,190
June	0.787559	13,263	10,445
July	0.658416	13,263	8,733
August	0.688489	25,947***	17,864 ***
September	0.450369	25,947***	11,686 ***
October	0.303192	25,947***	7,867 ***
November	-0.000277	25,947***	(7)***
December	0.115442	25,947***	2,995***
<b>Total</b>			<b>86,650***</b>

\*Monthly fraction of annual use of 5.043870 acre-feet per acre.  
 \*\*Volumes rounded to the nearest acre-foot.  
 \*\*\*Amount may be reduced depending upon fallowing call.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon designation of fallowed acreage, a Metropolitan representative visits the field on the date when fallowing is to commence and verifies that fallowing conditions have been met. The same procedure is followed when program participants make changes in the area or location of fallowed lands.

In addition to field verification by Metropolitan, Reclamation staff plan to conduct an independent verification during the spring and fall of 2015. Similar to past years' practice, Reclamation staff plans to select 5 percent of the acreage fallowed for inspection. On-site inspection would be made of all selected fields to observe fallowing conditions and take

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 1**

photographs. A report would be prepared that confirms extraordinary conservation implementation, and includes field observations and relevant photographs of fallowing conditions in PVID.

A calendar year 2015 Fallowed Land Verification Report will be prepared jointly by PVID, Metropolitan, and Reclamation. The Report will determine the actual amount of water saved in 2015 by the Program.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to the provisions of the California Environmental Quality Act (CEQA), PVID, certified the “Final Environmental Impact Report for the Proposed Palo Verde Irrigation District Land Management, Crop Rotation and Water Supply Program” and adopted its Findings of Fact on September 18, 2002. Because no significant impacts would result with Program implementation, as determined by PVID, no statement of overriding considerations and no mitigation monitoring or reporting program were required. Metropolitan certified that it reviewed and considered the information in the certified 2002 Final EIR and adopted PVID’s findings on October 22, 2002.

Documentation that the Intentionally Created Surplus Is in Addition to Conservation Implemented to Meet Other Obligations

Metropolitan is the beneficiary of the conserved water through the August 18, 2004, *Forbearance and Fallowing Program Agreement* with PVID and landowner agreements for fallowing in PVID. Metropolitan would not transfer the conserved water to another agency, nor would Metropolitan conserve the water for another agency, nor would Metropolitan pay back an Inadvertent Overrun and Payback Policy obligation in 2015 as Metropolitan does not have existing obligations to do so. Reclamation has previously received a copy of the August 18, 2004 Agreement, including its Exhibit A, the form of the *Landowner Agreement for Fallowing in the Palo Verde Irrigation District*, which documents the terms and conditions of the Program.

Total Volume of Water to be Conserved and/or the Time Period for the Conservation Project

The total volume of water to be conserved by the Program is estimated to range from 1.87 million acre-feet to 3.75 million acre-feet over the period January 1, 2005 to July 31, 2040, the date on which the Agreement terminates.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 1**

Capital Investment Required to Implement the Project

Metropolitan invested \$73.5 million in sign-up payments paid to Palo Verde landowners, \$6 million in funding for community improvement programs paid to the Palo Verde Valley Community Improvement Fund, and expended \$3.3 million in Program setup costs.

Annual Operation, Maintenance, and Replacement Costs

Annual payments to landowners, Metropolitan tenants, and for administrative costs to PVID through 2012 have been as follows:

Year	Annual Payments to:	
	Landowners and Metropolitan Tenants (million \$)	PVID (million \$)
2005	21.0	1.0
2006	8.5	0.5
2007	8.7	0.3
2008	15.6	0.1
2009	16.2	0.2
2010	16.6	0.2
2011	16.2	0.2
2012	4.1	0.2
2013	4.2	0.2

Amount of Water Conserved by the Program to Date and Utilization of the Conserved Water to Date to Meet Specific Conservation Requirements Including ICS Creation

Water saved by the Program has assisted in meeting the 2006, 2009, and 2012 benchmarks, and the 2005, 2007, 2008, 2010, and 2013 targets specified in Exhibit B of the October 10, 2003, *Colorado River Water Delivery Agreement*<sup>4</sup>.

<sup>4</sup> All consumptive use of priorities 1 through 3 excluding overruns plus 14,500 acre-feet of miscellaneous and Indian reservations present perfected rights' use plus payback of overruns must be within 25,000 acre-feet of the amount stated in Exhibit B.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
 Calendar Year 2015  
**Activity 1**

The amount of water saved by the Program to date and the amount of ICS created have been as follows:

Year	Amount of Conserved Water Generated (acre-feet)	Amount of ICS Created (acre-feet)
2005	108,666	
2006	102,039*	50,000
2007	65,310**	2,382
2008	94,303	0
2009	120,247***	55,836
2010	116,310****	100,864
2011	122,216	120,000
2012	73,662	73,662
2013	32,750	0
* Excludes 3,000 acre-feet of water saved which was provided to Reclamation for system conservation. ** Excludes 7,000 acre-feet of water saved which was provided to Reclamation for system conservation. *** Excludes 24,078 acre-feet of water saved by the Emergency Fallowing Program. **** Excludes 32,304 acre-feet of water saved by the Emergency Fallowing Program.		

Time Remaining for the Program and/or the Volume of Water that Remains to be Conserved

The Program is scheduled to end on July 31, 2040. The volume of water that remains to be conserved ranges from a minimum of 1.02 million acre-feet to a maximum of 2.90 million acre-feet over the period January 1, 2015 to July 31, 2040.

## Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus Calendar Year 2015

### **Activity 2: Metropolitan Funded Imperial Irrigation District Water Conservation Program**

#### Project Description

Under the December 22, 1988, *Agreement for the Implementation of a Water Conservation Program and Use of Conserved Water* (1988 Conservation Agreement) as amended and the December 19, 1989, *Approval Agreement* (1989 Approval Agreement) as amended, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for IID's agreement to not use 105,000 acre-feet of water annually.

The program implemented structural and non-structural measures—extraordinary measures to conserve water—including,

- concrete lining of 13 miles of existing main canals and 200 miles of lateral canals,
- construction of two local reservoirs and three spill-interceptor canals with four reservoirs,
- installation of 14 non-leak gates,
- automation of the distribution system,
- delivery of water to farmers on a 12-hour basis,
- improvements in on-farm water management through the installation of drip irrigation systems, and
- installation of tailwater pumpback systems.

Through May 2014, Metropolitan has paid IID a total of \$287.7 million for program costs.

#### Term of the Activity

The term of the 1988 Conservation Agreement as amended and the 1989 Approval Agreement as amended, extends through at least December 31, 2041, or 270 days beyond the termination of the October 10, 2003, *Quantification Settlement Agreement*, whichever is later, with extensions to this term as specified in the agreements.

#### Estimate of the Amount of Water that Will be Conserved

As specified in the May 14, 2007, second amendment to the 1988 Conservation Agreement, it is anticipated that 105,000 acre-feet of water will be made available by the program during calendar year 2015. Of this volume, pursuant to the 1989 Approval Agreement, Metropolitan would reduce its use of this water by up to 20,000 acre-feet to allow Coachella Valley Water District (CVWD) to use this water should CVWD need this water. Exhibit H to the *Lower Colorado River Basin ICS Forbearance Agreement* provides that:

“The amount of EC ICS that can be created during any Year is limited to the amount of water resulting from the program that Metropolitan does not consumptively use, up to

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 2**

105,000 acre-feet, plus any reduction in calculated IID conveyance losses as a result of IID conveying less water through its conveyance and distribution system due to the conservation of water from this program. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following...:

*Limitations on Creation of EC ICS*

...

- c) The amount of EC ICS created pursuant to this Exhibit is limited to the IID reduction shown in column 4 of Exhibit B to the October 10, 2003 Colorado River Water Delivery Agreement, less any portion of that reduction that results in delivery of water to Coachella Valley Water District.”

Proposed Methodology for Verification of the Amount of Water Conserved

IID’s reduction in net diversions at Imperial Dam permits the Secretary to deliver water made available for Metropolitan absent the creation of Extraordinary Conservation ICS.

Through 2006, the Conservation Verification Consultants prepared and presented to the Water Conservation Measurement Committee an annual report on the estimated amount of water conserved by the program and each project thereof. A Systemwide Monitoring Program was developed to identify and explain trends in IID system performance as a function of the operational environment within which the IID/Metropolitan conservation projects operated. The Systemwide Monitoring Program was designed to function over the life of the IID/Metropolitan program to:

- Identify changes in on-farm irrigation practices.
- Identify changes in main and lateral canal operations and zanjero accounting procedures.
- Provide data support for the five-year verification updates.
- Provide a basis for separating water savings associated with IID/Metropolitan-sponsored conservation projects from water savings associated with measures implemented by others. In this case, the Systemwide Monitoring Program provides valuable baseline data for separating the effects of a new program from those attributable to the IID/Metropolitan program.
- Fulfill the requirement for overall verification specified in the 1989 Approval Agreement.

Forty sites were selected and developed to provide data required for systemwide monitoring.

In order to collect and process the flow data needed in support of the water conservation verification activities for the 1988 Conservation Agreement projects, an automated data collection, quality control, processing and retrieval system was developed under the IID/Metropolitan program. The system was designed to include many of the control sites for the

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 2**

various projects as well as the sites needed for systemwide monitoring. In December 1995, data processing procedures developed by the Conservation Verification Consultants were institutionalized and incorporated into IID's Water Information System.

Beginning January 1, 1996, conservation verification data were processed and stored using Water Information System applications and capabilities. IID data collected prior to January 1, 1996, which were processed by the Conservation Verification Consultants for use in determining annual projected water conservation savings over the life of the program, were also stored in the Water Information System. The Water Information System management system was developed to generate daily, monthly, calendar year, and water year tables, summary tables and bar charts that have been presented in an annual Processed Flow Data document and an annual Projected Water Conservation Savings report.

The last published Projected Water Conservation Savings report will be made available to Reclamation upon its request.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Metropolitan's Board of Directors certified on December 22, 1988, that it reviewed and considered the environmental information contained in the final program Environmental Impact Report prepared by IID entitled "Proposed Water Conservation Program and Initial Water Transfer". Reclamation complied with the National Environmental Policy Act through execution of Categorical Exclusion No. LC-89-2 on January 6, 1989, for the "Water Conservation Program, Imperial Irrigation District, Imperial County, California".

Project specific documents completed by IID pursuant to the California Environmental Quality Act are described in the table on the following page.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
 Calendar Year 2015  
**Activity 2**

<b>Project Name</b>	<b>California Environmental Quality Act Documentation</b>
Trifolium Reservoir Project	Negative Declaration filed on August 20, 1986
South Alamo Canal Lining Phase I Project	Categorical Exemption filed on September 11, 1987
South Alamo Canal Lining Phase II Project	Categorical Exemption filed on September 6, 1989
“Z” Reservoir	Initial Environmental Study published in May 1989; Negative Declaration published on September 6, 1989; Addendum to the Negative Declaration filed on November 22, 1989
Lateral Concrete Lining Project, 265 Miles	Environmental Assessment and Initial Study published in January 1990; Categorical Exemption filed on January 26, 1990
Rositas Supply Canal Concrete Lining Project	Environmental Assessment and Initial Study published in June 1990; Categorical Exemption filed on August 15, 1990
Vail Supply Canal Lining Project	Categorical Exemption filed on August 15, 1990
Lateral Interceptor Pilot Project	Initial Environmental Study published in April 1990; Negative Declaration published on May 23, 1990; and an Addendum to the Negative Declaration filed on August 15, 1990
Westside Main Canal Concrete Lining Project	Initial Environmental Study published in June 1990; Negative Declaration filed on October 5, 1990
System Automation Project	Categorical Exemption published in July 1990; Categorical Exemption filed on September 11, 1990
Westside Main Canal Concrete Lining Project	Initial Environmental Study published in June 1990; Negative Declaration filed on October 5, 1990
Non-Leak Gates Project	Categorical Exemption published in August 1990 and filed on September 6, 1990
12-Hour Delivery Project	Categorical Exemption filed on December 21, 1990
Irrigation Water Management Project	IID determined Project to be exempt from the California Environmental Quality Act on August 23, 1991
Modified East Lowline and Trifolium Interceptors, and Completion Projects	Final Environmental Impact Report published in May 1994; on June 8, 1994, IID certified the Final Environmental Impact Report, made a Statement of Findings and adopted a Statement of Overriding Considerations

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015  
**Activity 2**

Documentation that the Intentionally Created Surplus Is in Addition to Conservation Implemented to Meet Other Obligations

Metropolitan is the beneficiary of the water being conserved through the 1988 Conservation Agreement and the 1989 Approval Agreement. While Metropolitan would not transfer the conserved water to another agency, nor would Metropolitan pay back an Inadvertent Overrun and Payback Policy obligation in 2015 as Metropolitan does not have existing obligations to do so, Metropolitan may be requested to reduce its use of the conserved water by up to 20,000 acre-feet in 2015 by CVWD. Reclamation has previously received a copy of the 1988 Conservation Agreement, 1989 Approval Agreement, and amendments which document the terms and conditions of the Program.

Total Volume of Water to be Conserved and/or the Time Period for the Conservation Project

The total volume of water to be conserved by the Program is estimated to range from 5.08 million acre-feet over the period January 1, 1990 to December 31, 2041 to 8.94 million acre-feet over the period January 1, 1990 to September 27, 2078—which would be 270 days after the termination of the QSA, provided that the QSA does not terminate until December 31, 2077. The agreement could extend beyond September 27, 2078 pursuant to Section 3.5 of the 1988 Conservation Agreement, and would continue thereafter until terminated as specified in Section 7.2 or in Article V of the 1988 Conservation Agreement.

Capital Investment Required to Implement the Project

Metropolitan invested \$112.5 million in capital and \$23 million in indirect payments paid to IID.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 2**

Annual Operation, Maintenance, and Replacement Costs

Annual direct payments to IID through May 2014 have been as follows:

Year	(million \$)
1990	0.6
1991	1.1
1992	2.3
1993	2.8
1994	1.9
1995	2.8
1996	1.8
1997	6.5
1998	4.8
1999	5.5
2000	5.5
2001	4.4
2002	5.8
2003	6.8
2004	7.9
2005	8.1
2006	8.8
2007	9.0
2008	9.8
2009	8.7
2010	10.1
2011	10.0
2012	9.6
2013	11.9
2014 through May	5.6

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**Activity 2**

Amount of Water Conserved by the Program to Date and Utilization of the Conserved Water to Date to Meet Specific Conservation Requirements Including ICS Creation

Water saved by the Program has assisted in meeting the 2003, 2006, 2009, and 2012 benchmarks, and the 2004, 2005, 2007, 2008, 2010 and 2013 targets specified in Exhibit B of the October 10, 2003, *Colorado River Water Delivery Agreement*<sup>1</sup>. The amount of water saved by the Program to date and the amount of ICS created have been as follows:

Year	Amount of Conserved Water Generated (acre-feet)	Amount of ICS Created (acre-feet)
1990	6,110	
1991	26,700	
1992	33,929	
1993	54,830	
1994	72,870	
1995	74,570	
1996	90,880	
1997	97,740	
1998	107,160	
1999	108,500	
2000	109,460	
2001	106,880	
2002	104,940	
2003	105,130	
2004	101,900	
2005	101,940	
2006	101,160	
2007	105,000	0
2008	105,000	0
2009	105,000	0
2010	105,000	0
2011	103,940	65,704
2012	104,140	93,677
2013	105,000	0

Time Remaining for the Program and/or the Volume of Water that Remains to be Conserved

The total volume of water to be conserved by the Program is estimated to range from 2.84 million acre-feet over the period January 1, 2015 to December 31, 2041 to 6.69 million acre-feet over the period January 1, 2015 to September 27, 2078—which would be 270 days after the termination of the QSA, provided that the QSA does not terminate until December 31, 2077. The agreement could extend beyond September 27, 2078 pursuant to

<sup>1</sup> All consumptive use of priorities 1 through 3 excluding overruns plus 14,500 acre-feet of miscellaneous and Indian reservations present perfected rights' use plus paybacks of overruns must be within 25,000 acre-feet of the amount stated in Exhibit B.

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**Activity 2**

Section 3.5 of the 1988 Conservation Agreement, and would continue thereafter until terminated as specified in Section 7.2 or in Article V of the 1988 Conservation Agreement.

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**Activity 3: Metropolitan Funded Water Supply from Desalination**

Metropolitan provides financial support to its member agencies to implement groundwater desalination projects in its service area that are described below. Metropolitan enters into agreements to pay for water produced by each individual project for multi-year terms. Metropolitan contributions are based on a sliding scale up to \$250 per acre-foot.

In order to determine the appropriate Metropolitan contribution, agencies are required to submit to Metropolitan annual project costs and production data at the conclusion of each fiscal year of operation. Metropolitan verifies the amount of desalted water production and associated project unit cost through an annual reconciliation process. In addition, Metropolitan periodically conducts an audit of agencies' records pertaining to desalted water production and costs.

The projected yield of these groundwater desalination projects for calendar year 2015 is as follows:

Project	Projected 2015 Yield (acre-feet)
Beverly Hills Desalter	1,283
Capistrano Beach Desalter	911
Chino Basin Desalination Program	24,600
Irvine Desalter	4,768
Irvine Ranch Water District Wells 21 and 22	5,500
Lower Sweetwater Desalter	3,200
Madrona Desalination Facility	1,596
Menifee Desalter	2,900
Oceanside Desalter (Mission Basin Expansion)	4,650
San Juan Basin Desalter	5,450
Tapo Canyon Desalter	324
Temescal Basin Desalter	10,000
Tustin Desalter	2,220
Total	67,402

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
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**Activity 3**

***Beverly Hills Desalter***

Project Description

The Beverly Hills Desalter includes a treatment plant, extraction wells, a collection pipeline, a booster pump, a product water pipeline to connect to Beverly Hills' water distribution system, and a concentrate waste disposal pipeline. The project pumps and treats brackish groundwater from the Hollywood Basin. Concentrate is discharged to the sanitary sewer system through which it is conveyed to the City of Los Angeles' Hyperion Wastewater Treatment Plant.

Term of the Activity

The 20-year agreement between Metropolitan and the City of Beverly Hills terminates at the end of April 2023.

Estimate of the Amount of Water that Will be Conserved

The Beverly Hills Desalter is projected to produce 1,283 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Beverly Hills Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, Beverly Hills prepared and approved a Mitigated Negative Declaration for the Beverly Hills Desalter. Beverly Hills filed a Notice of Determination for the project on August 19, 1998. Metropolitan's Board of Directors certified that it reviewed and considered the information provided in the Mitigated Negative Declaration for the Beverly Hills Desalter and adopted Beverly Hills' findings related to the project on September 15, 1998.

***Capistrano Beach Desalter***

Project Description

The Capistrano Beach Desalter includes a treatment plant, extraction wells, a collection pipeline, a booster pump, a product water pipeline to connect to South Coast Water District's water distribution system, and a concentrate waste disposal pipeline. The project pumps and treats brackish groundwater from the San Juan Basin. Concentrate is discharged to the Chiquita Ocean Outfall.

## Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus

Calendar Year 2015

### Activity 3

#### Term of the Activity

The 20-year agreement between Metropolitan, Municipal Water District of Orange County and the South Coast Water District will terminate on June 30, 2026.

#### Estimate of the Amount of Water that Will be Conserved

The Capistrano Beach Desalter is projected to produce 911 acre-feet of water during calendar year 2015.

#### Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Capistrano Beach Desalter.

#### Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, South Coast Water District approved a Program EIR for the San Juan Capistrano Property and the Project in December 2002. An additional Mitigated Negative Declaration for the project was adopted in 2003.

### ***Chino Basin Desalination Program***

#### Project Description

The Chino Basin Desalter No. 1 treats groundwater containing high concentrations of total dissolved solids, nitrates and volatile organic compounds, and conveys product water to the cities of Chino, Chino Hills, and Norco and Jurupa Community Services District. Groundwater is pumped from 14 wells throughout the Chino Basin area to the Desalter, where reverse osmosis, ion exchange and air stripping processes are utilized. The project includes a pipeline and structures connecting existing Jurupa and City of Ontario water systems, a three-million gallon reservoir, and two booster pumping stations. Brine is transported by a regional brine line and subsequently discharged to the ocean. The Chino Basin Desalter No. 1 design capacity is 14.2 million gallons per day.

The Chino Basin Desalter No. 2 serves water to Jurupa, Ontario, Norco and the Santa Ana River Water Company. Groundwater from eight wells near the City of Eastvale is treated by reverse osmosis (six million gallons per day) and ion exchange (four million gallons per day) treatment systems. The project includes raw water pipelines to convey groundwater to the desalting facilities, pipelines to convey treated water to the existing potable systems, a three-million gallon clearwell, a five-million gallon storage reservoir, and three booster pumping stations. The Chino Basin Desalter No. 2 is currently being expanded to a design capacity of 20.5 million gallons per day through construction of additional extraction wells, raw water pipelines, treatment facilities and product water delivery facilities.

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**Activity 3**

Once the expansion project is complete, the Chino Desalters will have the capability to produce up to 35,200 acre-feet of product water annually.

Term of the Activity

In 2011, Metropolitan entered into a consolidated agreement under the Local Resources Program with the Inland Empire Utilities Agency, Western Municipal Water District, and Chino Basin Desalter Authority for the Chino Basin Desalination Program over a 20-year term, terminating in June 2031.

Estimate of the Amount of Water that Will be Conserved

The Chino Basin Desalination Program is projected to produce 24,600 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for Chino Basin Desalter No. 1 and Chino Basin Desalter No. 2.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the Santa Ana Watershed Project Authority (SAWPA) prepared three Negative Declarations for the Chino Basin Desalter No. 1. SAWPA signed Notices of Determination for the project on September 16, 1991 (Chino Basin Desalter No. 1), December 30, 1991 (Chino West Desalter), and June 12, 1992 (Chino Basin Desalination System). Mitigation measures were adopted by SAWPA. Metropolitan's Board of Directors certified that it reviewed and considered the Negative Declarations for the project on May 10, 1994.

Metropolitan's Board of Directors determined that the proposed actions, including authorizing the General Manager to execute the Chino Basin Desalter No. 2 agreement, were exempt from CEQA pursuant to Sections 15306 and 15378(b)(4) of the State CEQA Guidelines on June 12, 2007.

Metropolitan's Board of Directors reviewed and considered information provided in the 2011 Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan prepared and adopted by the Chino Basin Desalter Authority, and determined that the proposed Phase 3 Expansion was not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

## Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus

Calendar Year 2015

### Activity 3

#### *Irvine Desalter*

##### Project Description

The Irvine Desalter includes a seven million gallon per day reverse osmosis desalination system, nine wells, yard piping, and brine disposal piping. Treatment facilities consist of threshold inhibitor and acid injection systems, cartridge filters, booster pumps, reverse osmosis membrane units, decarbonation facilities, chlorine disinfection, and an on-site storage reservoir. Brackish water is pumped from the Orange County Basin. Product water is delivered to the Irvine Ranch Water District's service area. Brine is discharged at the County Sanitation Districts of Orange County (CSDOC) facility in Fountain Valley.

##### Term of the Activity

The 20-year agreement between Metropolitan, Municipal Water District of Orange County, Orange County Water District (OCWD) and the Irvine Ranch Water District will terminate at the end of August 2027.

##### Estimate of the Amount of Water that Will be Conserved

The Irvine Desalter is projected to produce 4,768 acre-feet of water during calendar year 2015.

##### Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Irvine Desalter.

##### Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, OCWD filed a Notice of Preparation of an Environmental Impact Report (EIR) on October 27, 1989. The final EIR was adopted in 1990.

#### *IRWD Wells 21 and 22 Desalter*

##### Project Description

The Irvine Ranch Water District's (IRWD) Wells 21 and 22 Desalter includes rehabilitation of a treatment plant, brine disposal and pipelines. The treatment plant employs reverse osmosis and cartridge filters to remove total dissolved solids and nitrates. Product water is delivered to IRWD's existing 42-inch diameter pipeline. The brine concentrate is conveyed to the Orange County Sanitation District's existing sewer system.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
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**Activity 3**

Term of the Activity

The 25-year agreement between Metropolitan and Irvine Ranch Water District terminates at the end of June 2037.

Estimate of the Amount of Water that Will be Conserved

The IRWD Wells 21 and 22 Desalter is projected to produce 5,500 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the IRWD Wells 21 and 22 Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the Irvine Ranch Water District prepared the Wells 21 and 22 and Tustin Legacy Well 1 Project Mitigated Negative Declaration (MND). Mitigation measures were made a condition of approval of the project. Metropolitan's Board of Directors certified that it reviewed and considered the information provided in the Mitigated Negative Declaration for the plan prior to reaching a decision on the project and adopted Irvine Ranch Water District's findings related to the project on January 11, 2011.

***Lower Sweetwater Desalter***

Project Description

The Lower Sweetwater Desalter includes wells, replenishment facilities, a treatment plant, neutralization plant, brine disposal, and pipelines. The treatment plant employs reverse osmosis and blending to desalt brackish water. Product water is pumped to the Sweetwater Authority's distribution system for use by National City and South Bay Irrigation District. Concentrate is discharged to San Diego Bay through the Upper Paradise Creek flood control channel.

Term of the Activity

The 20-year agreement between Metropolitan and the San Diego County Water Authority terminates at the end of January 2020.

Estimate of the Amount of Water that Will be Conserved

The Lower Sweetwater Desalter is projected to produce 3,200 acre-feet of water during calendar year 2015.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 3**

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Lower Sweetwater Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the Sweetwater Authority prepared and certified an EIR for the Lower Sweetwater Desalter. Mitigation measures were made a condition of approval of the project by the Sweetwater Authority. A Notice of Determination for the project was filed on May 23, 1996. Metropolitan's Board of Directors certified that it reviewed and considered the EIR for the project on July 9, 1996.

***Madrona Desalination Facility***

Project Description

The Madrona Desalination Facility includes two wells and treatment of water from the West Coast Basin by reverse osmosis. Product water is conveyed to the City of Torrance's distribution system by booster pump. Concentrate is discharged to the ocean.

Term of the Activity

The 20-year agreement between Metropolitan and the City of Torrance terminates at the end of June 2022.

Estimate of the Amount of Water that Will be Conserved

The Madrona Desalination Facility is projected to produce 1,596 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Madrona Desalination Facility.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the Water Replenishment District of Southern California (WRD) prepared and approved a Mitigated Negative Declaration for the Madrona Desalination Facility. Metropolitan's Board of Directors certified that it reviewed and considered the Initial Findings and Mitigated Negative Declaration for the project and adopted the WRD finding related to the project on October 13, 1998.

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**Activity 3**

***Menifee Desalter***

Project Description

The Menifee Desalter treats brackish water from five wells in the Perris and Menifee Subbasins through reverse osmosis. Product water is pumped into Eastern Municipal Water District's potable distribution system. Concentrate is disposed through the Temescal Valley and Santa Ana regional interceptors to the ocean.

Term of the Activity

The 20-year agreement between Metropolitan and Eastern Municipal Water District terminates at the end of November 2021.

Estimate of the Amount of Water that Will be Conserved

The Menifee Desalter is projected to produce 2,900 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Menifee Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the Eastern Municipal Water District prepared an EIR for the Menifee Desalter. On February 9, 1993, Metropolitan's Board of Directors certified that it considered the environmental effects of the Menifee Basin Desalter as shown in the EIR prior to making a decision on the project and found that the mitigation measures for the project were within the responsibility and jurisdiction of other public agencies and have been or can and should be adopted by those agencies.

***Oceanside Desalter (Mission Basin Expansion)***

Project Description

The Oceanside Desalter (Mission Basin Expansion) includes three wells, a cartridge filtration facility, and water conveyance facilities. Brackish water is pumped from the Mission Basin. Product water is delivered to the City of Oceanside. Concentrate is disposed into the ocean.

Term of the Activity

The current 20-year agreement between Metropolitan and the San Diego County Water Authority terminates at the end of July 2023.

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**Activity 3**

Estimate of the Amount of Water that Will be Conserved

The Oceanside Desalter (Mission Basin Expansion) is projected to produce 4,650 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Oceanside Desalter (Mission Basin Expansion).

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the City of Oceanside prepared and approved a Negative Declaration and Notice of Exemption for the Oceanside Desalter (Mission Basin Expansion). Mitigation measures were made a condition of approval of the project by Oceanside. A Notice of Exemption for the project was filed on February 11, 1998 and a Notice of Determination for the project was filed on July 22, 1998. Metropolitan's Board of Directors certified that it reviewed and considered the Negative Declaration and Notice of Exemption for the project and adopted Oceanside's finding related to the project on August 18, 1998.

***San Juan Basin Desalter***

Project Description

The San Juan Basin Desalter consists of five wells, a four million gallon per day reverse osmosis treatment plant, pretreatment to remove iron and manganese, a pump station, a product water pipeline, and a concentrate disposal pipeline. Brackish water is pumped from the Lower San Juan Basin. Product water is delivered to the Capistrano Valley Water District. Concentrate is conveyed to the ocean through the Chiquita Land Outfall and the Serra Ocean Outfall.

Term of the Activity

The 20-year agreement between Metropolitan and the Municipal Water District of Orange County terminates at the end of December 2024.

Estimate of the Amount of Water that Will be Conserved

The San Juan Basin Desalter is projected to produce 5,450 acre-feet of water during calendar year 2015.

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**Activity 3**

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the San Juan Basin Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the San Juan Basin Authority prepared and approved a Mitigated Negative Declaration for the San Juan Basin Groundwater Management and Facility Plan that addressed the San Juan Basin Desalter. Metropolitan's Board of Directors certified that it reviewed and considered the information provided in the Mitigated Negative Declaration for the Plan prior to reaching a decision on the project and adopted the San Juan Basin Authority's findings related to the project on August 18, 1998.

***Tapo Canyon Desalter***

Project Description

The Tapo Canyon Desalter includes wells, a two million gallon per day reverse osmosis desalination plant, storage tanks, and pipeline. Brackish water is pumped from the Simi Valley Groundwater Basin. Product water is delivered to the City of Simi Valley. Brine is conveyed to the existing sewer system.

Term of the Activity

The 25-year agreement between Metropolitan and the Calleguas Municipal Water District terminates at the end of August 2031.

Estimate of the Amount of Water that Will be Conserved

The Tapo Canyon Desalter is projected to produce 324 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Tapo Canyon Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, the project qualified under a Class 2 Categorical Exemption because the project included rehabilitation and replacement of existing equipment where older components are replaced by new components with the same purpose and capacity. On April 12, 2005,

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**Activity 3**

Metropolitan's Board of Directors determined that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Section 15302 of the State CEQA Guidelines).

***Temescal Basin Desalter***

Project Description

The Temescal Basin Desalter includes wells, reverse osmosis treatment, transmission, product water, and brine disposal pipelines. Brackish water is pumped from the Temescal Subbasin. Product water is delivered to the City of Corona. Brine is discharged to the ocean through the Santa Ana Regional Interceptor.

Term of the Activity

The 25-year agreement between Metropolitan and Western Municipal Water District terminates at the end of June 2025.

Estimate of the Amount of Water that Will be Conserved

The Temescal Basin Desalter is projected to produce 10,000 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Temescal Basin Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, Corona prepared and approved a Mitigated Negative Declaration for the Temescal Basin Desalter. Mitigation measures were made a condition of approval of the project. Metropolitan's Board of Directors certified that it reviewed and considered the information provided in the Mitigated Negative Declaration for the Temescal Basin Desalter and adopted Corona's findings related to the project on February 9, 1999.

***Tustin Desalter***

Project Description

The Tustin Desalter includes wells, a two million gallon per day reverse osmosis desalination plant, and pipeline. Brackish water is pumped from the Orange County Basin. Product water is delivered to the City of Tustin. Brine is conveyed to the County Sanitation Districts of Orange County wastewater treatment facilities via a sewer.

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Calendar Year 2015  
**Activity 3**

Term of the Activity

The 20-year agreement between Metropolitan and the Municipal Water District of Orange County terminates at the end of August 2016.

Estimate of the Amount of Water that Will be Conserved

The Tustin Desalter is projected to produce 2,220 acre-feet of water during calendar year 2015.

Proposed Methodology for Verification of the Amount of Water Conserved

Upon request, Metropolitan will make available to Reclamation for inspection Metropolitan's verification file for the Tustin Desalter.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Pursuant to CEQA, Orange County Water District prepared an Initial Study and Negative Declaration for the Tustin Desalter. Mitigation measures were made a condition of approval of the project. A Notice of Determination for the project was filed on July 18, 1991. Metropolitan's Board of Directors certified that it reviewed and considered the information contained in the Initial Study and Negative Declaration and found that any changes and alterations were within the responsibility of another agency on December 10, 1991.

Documentation that the Intentionally Created Surplus Is in Addition to Conservation Implemented to Meet Other Obligations

Metropolitan is the beneficiary of the water being desalted through each of the 13 projects. Metropolitan would not transfer the desalted water to another agency, nor would Metropolitan desalt the water for another agency, nor would Metropolitan pay back an Inadvertent Overrun and Payback Policy obligation in 2015 as Metropolitan does not have existing obligations to do so. A copy of the agreements which Metropolitan has executed to provide financial support to implement the desalination projects is available upon Reclamation's request.

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 Calendar Year 2015  
**Activity 3**

Total Volume of Water to be Conserved and/or the Time Period for the Conservation Project

The total volume of water to be conserved and the time period for each desalting project is as follows:

Project	Time Period for Metropolitan Financial Support	Total Volume of Water to be Conserved (acre-feet)
Beverly Hills Desalter	2003-2023	32,000
Capistrano Beach Desalter	2007-2027	19,000
Chino Basin Desalination Program	2000-2031	660,000
Irvine Desalter	2007-2027	95,000
IRWD Wells 21 and 22 Desalter	2012-2037	128,000
Lower Sweetwater Desalter	2000-2020	63,000
Madrona Desalination Facility	2002-2022	34,000
Menifee Desalter	2002-2021	52,000
Oceanside Desalter (Mission Basin Expansion)	1993-2023	88,000
San Juan Basin Desalter	2004-2024	63,000
Tapo Canyon Desalter	2010-2031	18,000
Temescal Basin Desalter	2001-2025	232,000
Tustin Desalter	1996-2016	40,000
<b>Total</b>		<b>1,524,000</b>

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 Calendar Year 2015  
**Activity 3**

Capital Investment Required to Implement the Project and Annual Operation, Maintenance, and Replacement Costs

Metropolitan's payments for water desalted by each of the projects is as follows:

Project	Total Payments through Fiscal Year 2013-14 (million \$)
Beverly Hills Desalter	3.1
Capistrano Beach Desalter	1.2
Chino Basin Desalination Program	38.2
Irvine Desalter	5.0
IRWD Wells 21 and 22 Desalter	0.3
Lower Sweetwater Desalter	7.0
Madrona Desalination Facility	4.5
Menifee Desalter	4.7
Oceanside Desalter (Mission Basin Expansion)	6.6
San Juan Basin Desalter	6.6
Tapo Canyon Desalter	0.02
Temescal Basin Desalter	11.7
Tustin Desalter	3.3
Total	92.22

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**Activity 3**

Amount of Water Conserved by the Program to Date and Utilization of the Conserved Water to Date to Meet Specific Conservation Requirements Including ICS Creation

The amount of desalted water conserved by the program to date and the amount of ICS created have been as follows:

Project	Amount of Water Conserved by the Program to Date (acre-feet)
Beverly Hills Desalter	12,525
Capistrano Beach Desalter	4,908
Chino Basin Desalination Program	172,233
Irvine Desalter	19,871
IRWD Wells 21 and 22 Desalter	1,482
Lower Sweetwater Desalter	43,437
Madrona Desalination Facility	18,132
Menifee Desalter	25,492
Oceanside Desalter (Mission Basin Expansion)	47,946
San Juan Basin Desalter	26,412
Tapo Canyon Desalter	235
Temescal Basin Desalter	117,098
Tustin Desalter	32,399
<b>Total</b>	<b>522,170</b>

Year	Amount of ICS Created (acre-feet)
2007	0
2008	0
2009	0
2010	0
2011	0
2012	12,338
2013	0

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**Activity 3**

Time Remaining for the Program and/or the Volume of Water that Remains to be Conserved

The amount of time remaining for each desalting project and the volume of water for which Metropolitan financial support is anticipated are:

Project	Remaining Time Period for Metropolitan Financial Support	Estimate of Total Volume of Water to be Conserved (acre-feet)
Beverly Hills Desalter	2014-2023	19,475
Capistrano Beach Desalter	2014-2027	14,092
Chino Basin Desalination Program	2014-2031	457,767
Irvine Desalter	2014-2027	75,129
IRWD Wells 21 and 22 Desalter	2014-2037	126,518
Lower Sweetwater Desalter	2014-2020	19,563
Madrona Desalination Facility	2014-2022	15,868
Menifee Desalter	2014-2022	26,508
Oceanside Desalter (Mission Basin Expansion)	2014-2023	40,054
San Juan Basin Desalter	2014-2024	36,588
Tapo Canyon Desalter	2014-2031	17,765
Temescal Basin Desalter	2014-2021	114,902
Tustin Desalter	2014-2016	7,601
<b>Total</b>		<b>971,830</b>

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**Activity 4: Metropolitan Funded Water Supply from the Lower Colorado Water Supply Project**

Project Description

In 1986, Public Law 99-655, the Lower Colorado Water Supply Act, authorized the Secretary, through Reclamation, to construct, operate, and maintain the Lower Colorado Water Supply Project (Project). The Project is comprised of a well field that pumps groundwater from the Sand Hills area of California into the All-American Canal. The purpose of the Project at the time of its authorization was to provide an alternative water supply for parties using Colorado River water without rights or with insufficient rights. These parties pay the Project costs for producing water and exchange that water with IID. The Project is authorized to supply up to 10,000 acre-feet of water annually. Under a contract with Reclamation, the City of Needles assumed the administrative responsibility for non-federal Project beneficiaries within San Bernardino, Riverside, and Imperial Counties. Stage 1 of the Project was completed in 1996.

In 2005, Public Law 109-103 amended the Act to authorize the Secretary to contract with certain additional entities for the use of Project water under such terms as the Secretary determined would benefit the interest of Project users along the Colorado River. Through 2006, contracting parties used about 1,000 acre-feet of water from the Project annually with the primary user of the Project being Needles. There was a concern that over time, the groundwater pumped by the Project will become too saline for use leaving the Project beneficiaries without an available water supply. On March 26, 2007, Reclamation, Needles, and Metropolitan entered into a contract allowing Metropolitan to access the unused capacity of the Project. The contract ensures no interference with the Secretary's management of Colorado River system reservoirs and regulatory structures.

Term of the Activity

The Project contract with the United States and the City of Needles terminates on December 31, 2045. If Needles elects to exercise its option under a separate contract with Reclamation to renew that contract for an additional term of 50 years ending on December 31, 2095, Metropolitan has the option to renew its Project contract for an additional term of 50 years. Unused Project capacity is projected to be available to Metropolitan through 2059.

Estimate of the Amount of Water that Will be Conserved

The Project is projected to conserve 9,720 acre-feet of water during calendar year 2015, assuming construction of a third and fourth well will be completed in July and October 2015, respectively and then placed into operation. Of this amount, 8,150 acre-feet is expected to be made available to Metropolitan.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 4**

Proposed Methodology for Verification of the Amount of Water Conserved

Project water will be measured at point(s) designated by Reclamation. The measuring and controlling devices remain at all times under the control of Reclamation. Authorized representatives of Reclamation have access to the measuring and controlling devices at all times. IID reports the amount of Project water discharged into the All-American Canal on a monthly basis to Reclamation. Reclamation's "Colorado River Accounting and Water Use Report, Arizona, California, and Nevada, Calendar Year 2015" will report the amount of Project water available to Metropolitan.

Documentation Regarding State or Federal Permits or Other Regulatory Approvals

Metropolitan's Board of Directors adopted the CEQA determination on February 13, 2007, that the proposed action qualifies under a Categorical Exemption (Class 1, Section 15301 of the State CEQA Guidelines). Reclamation complied with the National Environmental Policy Act through publication of the "Lower Colorado Water Supply Study, California, Planning Report/Environmental Assessment, July 1986" and the preparation of a Finding of No Significant Impact.

Documentation that the Intentionally Created Surplus Is in Addition to Conservation Implemented to Meet Other Obligations

Metropolitan is the beneficiary of the Project water made available as a result of unused capacity through the March 26, 2007 Project *Contract among the United States, the City of Needles, and The Metropolitan Water District of Southern California* as amended. Metropolitan would not transfer the Project water to another agency, nor would the water be conserved for another agency, nor would Metropolitan pay back an Inadvertent Overrun and Payback Policy obligation in 2015 as Metropolitan does not have existing obligations to do so. Reclamation has a duplicate original of the March 26, 2007 Contract, and the May 3, 2010 Contract Amendment No. 1, which document the terms and conditions of the availability of Project water to Metropolitan.

Total Volume of Water to be Conserved and/or the Time Period for the Conservation Project

The total volume of water to be conserved by the Project is estimated to total about 360,000 acre-feet over the period January 1, 2003 to December 31, 2045, the date on which the Agreement terminates, assuming the third and fourth wells are placed into operation in 2015. Of this amount, nearly 226,000 acre-feet is estimated to be unused capacity available to Metropolitan. An estimated additional 500,000 acre-feet would be conserved over the period January 1, 2046 to December 31, 2095 if Needles elects to exercise its option under a separate contract with Reclamation.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
Calendar Year 2015

**Activity 4**

Capital Investment Required to Implement the Project

Through May 2014, Metropolitan has invested \$3.8 million in a Water Quality Maintenance Trust Fund administered by Needles. Withdrawals may be made from the Trust Fund for: costs of constructing Stage II of the Project; reimbursement for the remaining Stage I capital costs that Needles has paid for capacity in excess of 800 acre-feet which has not been paid by other Project beneficiaries; studies; reducing the total dissolved solids concentration of Project water; and costs of acquisition of an alternative supply. Reclamation constructed Stage I of the Project, at a cost of nearly \$1.1 million, which was repaid with interest by holders of Project capacity by October 1, 2012.

Annual Operation, Maintenance, and Replacement Costs

Annual payments by Metropolitan for operation, maintenance, replacement, and administrative costs through May 2014 have been as follows:

Year	Annual Payments (million \$)
2007	0.2
2008	0.3
2009	0.2
2010	0.2
2011	0.3
2012	0.2
2013	0.6
2014 through May	0.2

Amount of Water Conserved by the Program to Date and Utilization of the Conserved Water to Date to Meet Specific Conservation Requirements Including ICS Creation

Water conserved by the Project has assisted in meeting the 2006, 2009, and 2012 benchmarks, and the 2005, 2007, 2008, 2010 and 2013 targets specified in Exhibit B of the October 10, 2003, *Colorado River Water Delivery Agreement*<sup>1</sup>. The amount of the water conserved by the Program to date, the amount of water made available to Metropolitan, and the amount of ICS created have been as follows:

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<sup>1</sup> All consumptive use of priorities 1 through 3 excluding overruns plus 14,500 acre-feet of miscellaneous and Indian reservations present perfected rights' use plus payback of overruns must be within 25,000 acre-feet of the amount stated in Exhibit B.

Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus  
 Calendar Year 2015  
**Activity 4**

Year	Amount of Water Conserved (acre-feet)	Amount of Water Made Available to Metropolitan (acre-feet)	Amount of ICS Created (acre-feet)
2003	1,249		
2004	1,259		
2005	1,036		
2006	1,412		
2007	5,989	5,011	0
2008	7,350	6,300	0
2009	3,684	2,349	0
2010	5,104	3,872	0
2011	4,460	3,611	0
2012	4,616	3,253	0
2013	5,510	4,208	0

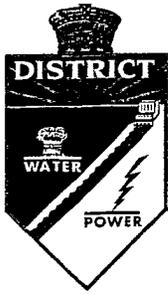
Time Remaining for the Program and/or the Volume of Water that Remains to be Conserved

The total volume of water to be conserved by the Project is estimated to be 310,000 acre-feet over the period January 1, 2015 to December 31, 2045 to 810,000 acre-feet over the period January 1, 2015 to December 31, 2095, if the Project contract is renewed and assuming that the third and fourth wells are operational in 2015.

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# IID

www.iid.com

*A century of service.*

June 27, 2014

Mr. Terry Fulp, Regional Director  
Bureau of Reclamation  
Lower Colorado Region  
P.O. Box 61470  
Boulder City, NV 89006-1470

Subject: IID's 2015 Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus

Dear Mr. Fulp:

Please review the enclosed copy of Imperial Irrigation District's (IID) *2015 Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus (ICS Plan)* in accordance with Section 2.5(A) of the *Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement (ICS Forbearance Agreement)* dated December 13, 2007.

IID's ICS Plan includes programs that span multiple calendar years (in particular its following program); however, IID acknowledges that the terms of the ICS Forbearance Agreement require annual approval of its ICS Plan by the Secretary in consultation with the Lower Division States. IID's following program term typically extends from July 1 of one year through June 30 of the following year to coincide with local cropping seasons. As such, it does not coincide with the calendar year as initially envisioned under the ICS program. IID continues to request that Reclamation consider approving its ICS Plans for multiple years when approved conservation projects are materially unchanged in order to facilitate following program contracting, a process that must begin many months in advance of the contract term.

While IID is submitting an ICS plan in 2014 to allow for the creation of up to 25,000 acre-feet of extraordinary conservation, this request will need to be revisited based on the actual implementation of extraordinary conservation measures in 2015 or if ongoing drought contingency planning efforts result in supplemental ICS opportunities for IID and other California Colorado River water users.

Mr. Terry Fulp  
June 27, 2014  
Page 2

Should you have any questions regarding the IID 2015 ICS Plan, please contact Autumn Plourd at (760) 339-9755.

Sincerely,

A handwritten signature in black ink that reads "Tina Shields". The signature is written in a cursive, flowing style.

Tina Anderholt Shields, PE  
Colorado River Resources Manager

Encl.: IID 2015 ICS Plan

cc: Ismael Gomez, Imperial Irrigation District  
Tanya Trujillo, Colorado River Board of California  
Michael J. Lacey/Tom Buschatzke, Arizona Department of Water Resources  
Jayne Harkins, Colorado River Commission of Nevada  
Bill Hasencamp, Metropolitan Water District of Southern California  
Jim Barrett/Robert Cheng, Coachella Valley Water District

**Imperial Irrigation District**  
**2015 Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus**

**Introduction**

This plan for the creation of Extraordinary Conservation Intentionally Created Surplus (ICS) has been prepared pursuant to the specifications outlined in Section 3.B.1 on page 40 of the *Record of Decision: Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead* signed by the Secretary of the Interior on December 13, 2007.

IID will implement two extraordinary conservation measures with the potential to create ICS in 2015, a fallowing program and a seepage interception program, which are described in this plan and are incorporated as Exhibits D and F to the December 13, 2007, *Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement* (ICS Forbearance Agreement) among the Arizona Department of Water Resources, the Palo Verde Irrigation District, the Imperial Irrigation District, the City of Needles, the Coachella Valley Water District, Metropolitan, the Southern Nevada Water Authority, and the Colorado River Commission of Nevada.

The projected annual yields of these extraordinary conservation measures for calendar year 2015 are as follows:

Conservation Measure	Annual Conservation Yield
IID On-Farm Fallowing Program	up to 25,000 acre-feet
IID Main Canal Seepage Interception System	up to 12,000 acre-feet
<b><i>Total Annual Extraordinary Conservation ICS</i></b>	<b><i>not to exceed 25,000 acre-feet</i></b>

Without implementing these Extraordinary Conservation measures for ICS purposes, this water would be diverted by IID for beneficial use within its water service area. The total annual conservation yield of these activities in 2015 is estimated to be up to 25,000 acre-feet, the maximum annual volume of Extraordinary Conservation ICS that IID may create (excluding Excess Extraordinary Conservation ICS) under the December 13, 2007, *California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus* (California ICS Agreement). Additionally, the accumulated volume of annual conservation created by IID will be equal to or less than the 50,000 acre-feet of Extraordinary Conservation ICS available to IID and similarly described in the California ICS Agreement. At this time, IID does not anticipate creating any Excess Extraordinary Conservation ICS to be delivered to the MWD system.

IID will submit to the United States Bureau of Reclamation (Reclamation) its annual Extraordinary Conservation ICS estimate each year as a line item in its yearly estimate of diversion and any ICS yield estimate decreases within the calendar year will be relayed to Reclamation as mid-year revisions to IID's estimate of diversion. Mid-year reductions to ICS conserved water estimates would generally be the result of (but not necessarily limited to) (1) the final 'truing up' of IID fallowing program provisional conservation yields based on actual monthly water use and savings, with minor adjustments to account for any contract breaches by

the following participants; (2) implementation/contracting for the IID following programs; (3) Reclamation finalization of provisional decree accounting records (in particular accounting changes and true-ups to IID's Inadvertent Overrun and Payback Policy (IOPP) obligations; and (4) operational and maintenance issues affecting the Main Canal Seepage Interception System.

**Imperial Irrigation District**  
**Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus**  
**On-Farm Fallowing Program**

**Project Description**

Extraordinary Water Conservation created by an IID fallowing program is described in Exhibit D of the ICS Forbearance Agreement.

IID's Fallowing Program is a voluntary program that allows willing landowners and lessees with landowner consent to contract with IID to receive payment for forgoing delivery of irrigation water throughout the term of the agreement, generally one to two years. The program creates conserved water for various purposes including:

- Transfer to the San Diego County Water Authority (SDCWA)
- Mitigation of environmental impacts resulting from reduced inflow to the Salton Sea
- Compliance with any inadvertent overrun obligations under the IOPP
- Limitation of IID's Priority 3 diversions to 3.1 million acre-feet annually
- Creation of Extraordinary Conservation Intentionally Created Surplus (ICS)

The price for conserved water by fallowing is determined annually by the IID Board of Directors. Applications are sent to solicit participants to conserve water by fallowing agricultural fields in exchange for payment. IID uses a farm unit based pro-rata share process to contract the necessary amount of fallowing acreage required to meet annual conservation goals. Eligibility criteria require that a field be at least 5 acres in size and have been irrigated for crop production during each of the previous three years (excluding the years contracted with IID for fallowing); each field's participation in an IID Fallowing Program is limited to approximately three out of every five years. Additionally, the fallowing participants must warrant that the fallowed lands would have been planted for agricultural production during the fallowing term, and designate the crops that would have been grown on the participating fields had those lands not participated in the IID Fallowing Program.

Initial program parameters were established in the Phase I On-Farm Fallowing Program Plan<sup>1</sup>. This document was updated in 2006<sup>2</sup> and has just been revised in 2014<sup>3</sup> for the upcoming 2014-2015 fallowing program. Minor program modifications have been incorporated into IID's contractual participant template on an annual basis as needed. Links to annual fallowing program summary information, including the annual participant agreement templates, can be accessed from IID's fallowing webpage<sup>4</sup>.

Since 2003, IID has conducted over a dozen separate fallowing programs yielding over 1.08 million acre-feet of conserved water by paying participants over \$90 million to fallow

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<sup>1</sup> [www.iid.com/fallowingprograms2004plan](http://www.iid.com/fallowingprograms2004plan)

<sup>2</sup> [www.iid.com/fallowingprograms2006plan](http://www.iid.com/fallowingprograms2006plan)

<sup>3</sup> [www.iid.com/Modules/ShowDocument.aspx?documentid=8978](http://www.iid.com/Modules/ShowDocument.aspx?documentid=8978)

<sup>4</sup> [www.iid.com/fallowingprograms](http://www.iid.com/fallowingprograms)

approximately 195,000 acres of agricultural lands. IID is currently administering its 2014-15 fallowing program.

### **Term of the Activity**

IID's fallowing program was initially designed with a 12-month term to coincide with field leases based on cropping seasons that generally run from July 1 of one year through June 30 of the following year. In 2009, IID offered these mid-year contracts with a 24-month term to accommodate local lease schedules and farm planning considerations, and IID has also implemented supplemental fallowing programs in more recent years with terms varying from nine to eighteen months, including calendar year programs. This additional flexibility was added to increase fallowing participation and ensure IID was able to meet its contractual transfer obligations and regulatory mitigation delivery and payback requirements. The 2014-2015 fallowing program offers the more general 12-month term with a start date of July 1, 2014, and an end date of June 30, 2015. Additionally, IID anticipates administering a midyear fallowing program in 2015 with a start date of July 1, and may add supplemental fallowing programs to increase fallowing participation if necessary. IID intends to manage fallowing programs through 2017 similar to past programs implemented for the QSA and related agreements.

### **Estimated Volume of Water to be Conserved**

Up to 25,000 acre-feet of conserved water is anticipated to be created annually for ICS purposes from IID on-farm fallowing programs. This amount will vary based on the number of contracted fields and the conservation yields associated. Conserved water yield estimates for fallowed fields are determined individually based on a ten-year running average of water delivery history (excluding high and low years), reviewed for material trend deviation in recent years taking into account crop history and compared to the annual apportionment calculated for that field under IID's Equitable Distribution Program to ensure IID's water balance is maintained and the fallowed field does not contribute to any overrun of IID's annual consumptive use entitlement.

Consumptive use reduction accounting occurs at IID's Imperial Dam (Station 60) diversion point to account for total losses from the field to Imperial Dam for participating fields in the IID fallowing programs. IID will utilize the transportation loss accounting methodology described in Reclamation's December 3, 2007 letter to IID for the IID Fallowing Programs.

### **Proposed Methodology for Verification of the Amount of Water Conserved**

IID monitors fields enrolled in the Fallowing Program to ensure that no irrigation water is delivered during the term of the contracts. For most participants, delivery gates are locked to prevent water delivery to fields participating in the Fallowing Program. For partial fields enrolled or instances where the same gate supplies a participating field and other water uses, physical obstructions such as berms or secondary gates/locks are employed. Additionally, IID's water order entry and delivery tracking software locks the accounts of fallowed fields and does not allow the placement of water orders on participating fields. This provides a verifiable record that irrigation water was not delivered to these fields.

IID will continue to cooperate with Reclamation in coordinating semiannual verification inspections of five percent of the total acreage enrolled in the Fallowing Program. When Reclamation schedules the visit, IID will provide a list of enrolled fields and acreages from

which Reclamation may randomly select a sample of fields representing five percent of total enrolled acreage. Data sets detailing baselines and conservation volumes for selected fields will be provided to Reclamation during the semiannual inspection visits.

**Regulatory Approvals**

IID has completed an environmental assessment of proposed water conservation and transfer activities and diversion limitations pursuant to the California Environmental Quality Act (CEQA), as set forth in a *Final EIR/EIS for the IID Water Conservation and Transfer Project* certified by IID in June 2003, as supplemented by an *Amended and Restated Addendum* thereto certified by IID in October 2003.

**Imperial Irrigation District**  
**Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus**  
**Main Canal Seepage Interception System**

**Project Description**

Extraordinary Water Conservation created by an IID seepage recovery program is described in Exhibit F of the ICS Forbearance Agreement.

IID's Main Canal Seepage Interception System is the first efficiency conservation program to be implemented to meet IID's water transfer obligations under the QSA and other related agreements. This project consists of the installation and operation of pump stations, collection sumps, and appurtenant structures in open drains that run parallel to certain reaches of main canals located in areas of highly permeable soils. These open drains were constructed along main canals decades ago to intercept and carry seepage to the Salton Sea to relieve adjacent agricultural lands of high water tables associated with canal seepage. The Main Canal Seepage Interception System is estimated to have the capacity to collect 30,000-40,000 acre feet of water from existing interceptor drains and pump seepage back into the main canals to supply downstream water users and reduce IID's delivery at Imperial Dam. In total, 22 pumping stations were constructed at the lower ends of interceptor drains and are operated to maintain drain water levels within six inches of historical levels to prevent interference with normal drainage and induction of additional seepage from the main canals.

This seepage recovery project was designed primarily to provide conserved water for transfer under the QSA; however, because the construction schedule for this project outpaced the conserved water delivery schedule required by the QSA, this extraordinary conservation project may produce conserved water in excess of the transfer requirements. As such, the excess conserved water is available for use by IID for other purposes including overrun payback and ICS until such time that the full conservation yield of this seepage recovery project is transferred under the QSA.

The first pump stations completed under the project began conserving water in 2008 and the final pump stations were completed in 2009. The total capital cost was \$7,290,000 and annual operation and maintenance costs average about \$500,000.

**Term of the Activity**

IID Main Canal Seepage Interception System was substantially built and operational in 2009. Excess conserved water from this seepage recovery project is estimated to be available for payback and ICS purposes in 2015 based on current extraordinary conservation yield estimates and water transfer and delivery schedules.

### **Estimated Volume of Water to be Conserved**

IID's Main Canal Seepage Interception System consists of 22 pump stations with total recovery capacity estimated at up to 40,000 acre-feet per year. However, Section 1 of the California ICS Agreement limits the annual creation of Extraordinary Conservation ICS by IID to not more than 12,000 acre-feet from seepage recovery projects.

Consumptive use reduction accounting occurs at IID's Imperial Dam (Station 60) diversion point to account for total losses from the Main Canal Seepage Interception Systems to Imperial Dam. IID will utilize a similar transportation loss accounting methodology, described in detail in Reclamation's December 3, 2007 letter to IID, as that used for its following programs.

### **Proposed Methodology for Verification of the Amount of Water Conserved**

Intercepted seepage water pumped to the main canal will be continuously metered and the data reported electronically to IID's Operations Center where it will be subject to quality control procedures and stored in a relational database. Electrical conductivity readings of the intercepted water will also be monitored for salinity to ensure there are no significant local water quality impacts from this project.

Seepage recovered through the Main Canal Seepage Interception System will be reported to Reclamation on a quarterly and annual basis. All measurements are subject to verification by Reclamation for accuracy and two of the project pumps are visited semi-annually by Reclamation staff to verify operational status and metering data. These verification site visits are documented in a Reclamation report entitled "IID Extraordinary Conservation Program Verification" that summarizes site conditions (including photographs of the pumping station) and documents water records and flow data to confirm implementation of this extraordinary conservation measure.

### **Regulatory Approvals**

IID has completed an environmental assessment of proposed water conservation and transfer activities and diversion limitations pursuant to the California Environmental Quality Act (CEQA), as set forth in a *Final EIR/EIS for the IID Water Conservation and Transfer Project* certified by IID in June 2003, as supplemented by an *Amended and Restated Addendum* thereto certified by IID in October 2003.

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# United States Department of the Interior

BUREAU OF RECLAMATION  
Lower Colorado Regional Office  
P.O. Box 61470  
Boulder City, NV 89006-1470

IN REPLY REFER TO:  
LC-4212  
WTR-4.03

JUN 27 2014

CERTIFIED – RETURN RECEIPT REQUESTED

Mr. David V. Modeer  
General Manager  
Central Arizona Water  
Conservation District  
P.O. Box 43020  
Phoenix, AZ 85080-3020

Subject: Approval of Revised Calendar Year (CY) 2014 Colorado River Diversion for the Central Arizona Water Conservation District (District)

Dear Mr. Modeer:

The Bureau of Reclamation has received the District's letter dated February 11, 2014, in which the District requests to revise its diversions for calendar year 2014 downward by up to 9,000 acre-feet (af). In accordance with Title 43, Code of Federal Regulations Part 417, this letter provides the District with notice of my determination regarding the District's revised diversion and beneficial use of Colorado River water for CY 2014.

By letter dated February 10, 2014, the District notified Reclamation that it had approved a Pilot Fallowing Program (Pilot Program) between the Yuma Mesa Irrigation and Drainage District and the District, acting in its capacity as the Central Arizona Groundwater Replenishment District. The District's letter outlined the Pilot Program, including the intent that the water conserved during the first 3-year term of the Pilot Program would remain in Lake Mead as system storage to help minimize or avoid shortage to Arizona and the Lower Basin. The conservation yield in 2014 is estimated to be up to 9,000 af.

Under Contract No. 14-06-W-245, as amended, the District is entitled to divert the balance of Arizona's 2,800,000 af basic apportionment not consumed by higher priority Arizona entitlement holders. To accommodate the District's revised diversion request, Arizona's 2,800,000 af basic apportionment will be adjusted downward by 9,000 af in 2014 and the District's approved water order reduced by an equal amount. Based upon a review of the revised diversion estimate provided by the District and the approved 2014 water orders of higher priority Arizona entitlement holders, I approve the revised diversion of up to 1,528,908 af of Colorado River water for use in the District's service area during CY 2014.

As in recent years, I also approve the diversion, by the District, of any Arizona adjusted apportionment unused by higher priority Arizona entitlement holders as projected on Reclamation's 2014 Forecasted Water Use website. Diversion of this water is subject to the following conditions:

- (1) The data on the website are provisional until final records are issued. Any diversions made as a result of the values on the website are at the District's own risk.

- (2) All available Colorado River water within Arizona has been approved for beneficial use within the state. The approved amounts remain available to the senior priority entitlement holders. In cases where approvals to senior entitlement holders are less than their diversion entitlement, the approvals may be increased to their full entitlement as defined in their contract.
- (3) Final accounting records published by Reclamation may differ from the provisional data on the website. Adjustments to the final records may result in an inadvertent overrun by the District.
- (4) The District will be required to pay back any overrun according to the Inadvertent Overrun and Payback Policy.
- (5) Reclamation may at any time rescind this approval to divert unused Arizona apportionment of Colorado River water.

Reclamation will continue to monitor and project diversions and consumptive use of Colorado River water during CY 2014 in an effort to ensure each entitlement holder's annual approval is not exceeded. These projections will be available to water users on a daily basis on Reclamation's website: [www.usbr.gov/lc/region/g4000/hourly/forecast14.pdf](http://www.usbr.gov/lc/region/g4000/hourly/forecast14.pdf). It is expected that Arizona entitlement holders will use this information to adjust diversions to remain within approved annual quantities or, as appropriate, seek modification of the approval.

Thank you for submitting the District's revised diversion estimate for 2014. If you have questions, please contact Mr. Paul Matuska, Water Accounting and Verification Group Manager, at 702-293-8164 or [pmataska@usbr.gov](mailto:pmataska@usbr.gov).

Sincerely,



Terrance J. Fulp, Ph.D.  
Regional Director

cc: Ms. Tanya M. Trujillo  
Executive Director  
Colorado River Board of  
California  
770 Fairmont Avenue, Suite 100  
Glendale, CA 91203-1068

Mr. Michael J. Lacey  
Director  
Arizona Department of Water Resources  
3550 North Central Avenue  
Phoenix, AZ 85012-2105

Jayne Harkins, P.E.  
Executive Director  
Colorado River Commission of  
Nevada  
555 East Washington Avenue, Suite 3100  
Las Vegas, NV 89101-1065

# NATURE'S VALUE IN THE COLORADO RIVER BASIN



# EXECUTIVE SUMMARY



**Economies need nature.** Economic development and quality of life depend upon “natural capital.” Natural capital, which includes forests, farms, grasslands, rangelands, rivers, lakes, and wetlands, is produced by ecosystems: plants, animals, and smaller living things that interact with air, water, and soil. Natural capital produces economically valuable tangible goods, such as food, water, timber and fish, as well as less tangible but still vitally important services, including flood risk reduction, drinking water filtration, recreation, and aesthetic value.

This is readily apparent in the spectacular Colorado River Basin (frequently referred to in this report as “the Basin”). If the natural capital of the Colorado River Basin were appraised like a business, based on the value of the goods and services it provides, how much would it be worth? This study is the first valuation of the many natural goods and services of the Colorado River Basin.

The data utilized for this valuation included studies on the value of ecosystem services for land cover types found in the basin. These land cover types, such as grasslands, wetlands, and riparian areas, were determined using Geological Information System (GIS) data from the US Geological Survey. The economic benefits provided by each land cover type were valued in dollars using a benefit transfer methodology. Like a house or business appraisal, this method utilized previous valuation studies in locations comparable to the Colorado River Basin. Dollar values for each natural benefit/land cover combination were estimated using one or more of nine valuation techniques, including market pricing, cost avoidance, travel cost, and

contingent valuation. Several new primary values for ecosystem services in the Colorado River Basin were also derived as part of this study.

The natural benefits (ecosystem services) examined in this study include potable water, irrigation water, carbon sequestration, flood risk reduction, water filtration, wildlife habitat, soil erosion reduction, soil formation, raw materials, food, recreation, air quality, and aesthetic value.

**Results show that ecosystems in the Colorado River Basin provide between \$69.2 billion and \$496.4 billion in economic benefits every year.**

These benefits extend well beyond the boundary of the basin, to the region and globe. For example, people in Denver and Los Angeles live outside the Basin but receive water from it.

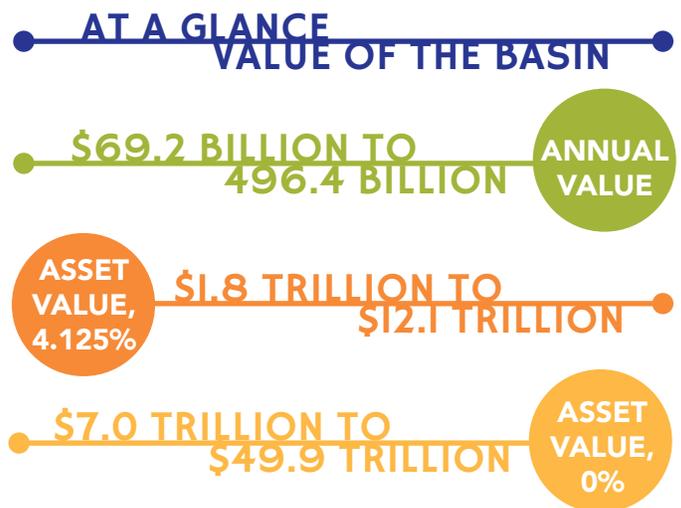
The range of values represents an appraisal of the Basin’s natural capital. The range is wide, and will narrow with more primary valuations and greater GIS data specificity, just as a closer inspection will improve the estimated value of a house. Currently, the low end of the range represents a baseline value and an underestimate of the true value. This is because, among 21 valuable ecosystem service categories identified as present in the Basin, only between 0 and 7 were valued for each land cover type. Snowpack is valuable for water storage, and desert crust has erosion control benefits, but neither has studies estimating that value. So, though they are important for drought reduction, water supply, habitat, recreation, and energy generation, some ecosystem service categories and land cover types have a zero value in this study.

Treating natural capital as an economic asset that provides a stream of benefits over time, similar to factories, apartment buildings, roads, and other built infrastructure, provides a method for estimating an asset value for natural capital. This is like using apartment rental payments (flow of value) to estimate the total value of an apartment building (asset value). However, natural systems are different from built capital because whole river basins are seldom bought or sold.

Based on the ecosystem services examined and treated like an asset with a lifespan of 100 years, **the Colorado River Basin has an asset value between \$1.8 trillion and \$12.1 trillion** at a 4.125 percent discount rate.<sup>i</sup> Unlike built capital, which is seldom productive for 100 years, natural systems can be self-maintaining and have far longer productive lifespans. The Colorado River Basin has provided food and water to people for thousands of years. Thus, these estimates are conservative. Using a 0 percent discount rate, which recognizes the renewable nature of natural capital and assumes that people in the future will receive the same level of benefits (a more likely scenario for natural capital), and considering this value over the next 100 years, **the asset value is between \$7.0 trillion and \$49.9 trillion.**

The analysis of natural capital is relatively new, but it is well accepted and increasingly used by large private companies, federal and state agencies, and policy makers at all levels of government. For example, the Federal Emergency Management Agency (FEMA) has applied ecosystem service values for all flood and hurricane mitigation in the United States, including Hurricane Sandy and the recent 2013 Colorado floods. FEMA is the first federal agency to incorporate annual ecosystem service value into benefit cost assessments.

In 1934, the new economic measures such as gross national product, inflation, unemployment, money supply, income, and asset reporting for private companies provided values that seemed astoundingly large, at the time. Better measures and better access to more accurate information allowed private investors and public officials to make more prudent investments and decisions based on established valuation methods. Today



6.4 million private companies in the United States all report their earnings and assets. Yet, the clear economic benefits and asset values provided by natural systems, such as the Colorado River Basin, have registered little or no value until now.

## HOW TO USE THIS REPORT

- Utilize these values in benefit/cost analysis and rate of return on investment calculations for small- and large-scale natural and built infrastructure projects. This helps avoid “infrastructure conflict” where storm water projects may exacerbate flooding or loss of groundwater recharge. This reduces overall costs and taxes.
- Incorporate estimates of value into federal, state, and local planning and decision making. This report provides these estimates, which enable understanding of the scale of value provided by natural and working lands. This is necessary for a successful Colorado River Basin approach to water, flood risk reduction, farming, and other economic drivers.
- Innovate on investment. For example, Los Angeles residents pay for the cost of pipes, but nothing on the bill is for the natural infrastructure in the Colorado River Basin that provisions the actual water. New financing mechanisms will benefit both urban consumers and rural producers of water supply and other ecosystem services.

<sup>i</sup> A discount rate of 4.125 percent is used by the Army Corps of Engineers and was adopted for this report. For more information on the use of this discount rate, see the section on Asset Value in Part 4.

## SUMMARY OF RECOMMENDATIONS

- **Invest in natural capital.** The Colorado River Basin's natural capital has a large asset value and high rate of return. Investments in natural capital deliver 21 categories of economic benefits to rural and urban communities including water supply, flood risk reduction, recreation, and healthier ecosystems.
- **Adapt to water realities.** Rising water scarcity in the Colorado River Basin and the fact that the Basin does not deliver a set amount of water requires flexibility and constant adaptation. There should be further work to refine understanding of the full stocks and flows. Continuing demand-side actions to better allocate water for maintaining healthy rivers, agriculture, municipal, and industrial uses are essential.
- **Bring ecosystem service valuation into standard accounting and decision-making tools.** This report can be used to inform accounting changes, rate of return on investment calculations, and benefit/cost analyses for private and public entities.
- **Improve incentives for investment.** Incentives that bring investment back to the Basin need to be advanced. For example, a natural capital charge on water bills in Los Angeles for the natural systems that produce water in the Colorado Basin.
- **Conduct a more detailed valuation, mapping, and modeling of key ecosystem services.** Better mapping and modeling of water supply, flood risk reduction, and more provides critical information to citizens and businesses. A more detailed analysis can be used to make more cost-effective investments across the landscape.
- **Improve the management of natural assets.** "Lose an ecosystem service, gain a tax district." A systems approach with economic incentives improves natural asset management. Floods can be reduced while groundwater is recharged. There are many opportunities that bring greater investment into rural areas and provide benefits throughout the Basin.

- **Apply the dollar values in this report.** This appraisal of value is legally defensible and applicable to decision-making at every jurisdictional level. For example, some values from this report can be used in FEMA's benefit/cost toolkit for pre- and post-disaster mitigation.

Economics is about understanding value, effectively deploying investment, raising prosperity, and securing economic and ecological resiliency. This report highlights the scale of value provided by the landscape in the Colorado River Basin. Whether land is in private or public ownership, that value, in the form of water supply, flood risk reduction, recreation, and other benefits, is distributed across the landscape. The economic vitality of communities depends upon it. Healthy natural systems provide vast economic value, and investing in natural capital provides a high rate of return. Understanding the scale of value provided in the Colorado River Basin provides incentive for investing in healthy landscapes, healthy rivers, and healthy communities.



**THE ECONOMIC VITALITY OF  
COMMUNITIES DEPENDS UPON  
THE VALUES DISTRIBUTED  
ACROSS LANDSCAPES.**

**ABOVE: BOULDER CITY  
AND LAKE MEAD.**

## CONCLUSIONS, RECOMMENDATIONS, AND FUTURE RESEARCH



This report provides an appraisal valuation of ecosystem services in the Colorado River Basin, quantifying the economic value supplied by nature in the watershed every year. By protecting against flooding, assuring a clean water supply, buffering climate instability, supporting fisheries, recreation, and food production, maintaining critical habitat, and providing water quality treatment and other benefits, **Basin ecosystems provide between \$69.2 billion and \$496.4 billion in economic value every year.** If treated like an asset, the asset value of the **Colorado River Basin ecosystems is between \$1.8 trillion and \$12.1 trillion at a 4.125 percent discount rate, and between \$7.0 trillion to \$49.9 trillion at a 0 percent discount rate.**

This initial estimate, which yet excludes many ecosystem services, demonstrates the enormous economic value provided by the Colorado River Basin. The Basin provides these goods and services across long time spans and to people well beyond its boundaries, at little or no cost. The loss of “free” services like flood risk reduction and drinking water quality has real local and regional economic costs. Protecting and restoring the Basin’s natural capital is critical to maintaining quality of life, sustainability, equity, and economic progress in the region. Though only a snapshot in time, these appraisal values are defensible and applicable to decision-making at every jurisdictional level. For example, the dollar values provided in this study can be used immediately in local, state, or federal benefit/cost analysis.

In allocating \$460 million in federal funding for mitigation after the 2013 Colorado floods, local dollar values derived in this study are better than the FEMA national average values used in the FEMA benefit/cost tool. FEMA recognizes Earth Economics data, and allows it to be substituted by county or state floodplain managers in the FEMA benefit/cost tool to arrive at more accurate flood mitigation values for flood affected businesses, households and local agencies. It also helps allocate mitigation funding more quickly and efficiently.

Because this is a meta-analysis, utilizing many valuation studies, the uncertainty associated with these results is not known. However, both the low and high values established are likely underestimates of the full value of ecosystem services provided within the Basin because values for most ecosystem services have not been estimated. In addition, for those ecosystem services for which value was estimated, most have not been estimated across all vegetation types. Sparse data and omission of existing value are still the greatest hurdles to studies such as this one, and likely the greatest source of uncertainty in this valuation.

While this report provides a valuation of ecosystem services in the Colorado River Basin, it is only a first step in the process of developing policies, measures, and indicators that support discussions about the tradeoffs in investments of public and private money that ultimately shape the regional economy.

## NATURAL CAPITAL: AVOIDING NEW TAX DISTRICTS

Policymakers in the Basin could initiate institutional improvements that coordinate ecosystem conservation and restoration to preserve and improve drinking water quality and supply, flood risk reduction, habitat, climate adaptation, recreation, stormwater conveyance and forest stewardship. Adopting an integrated approach saves money and provides greater benefits for Basin residents and regional communities. This approach also reduces “infrastructure conflict,”

where investments in one location create new costs for taxpayers. The replacement of certain ecosystem services with built infrastructure, such as wetlands with sewage treatment plants, costs money: “lose an ecosystem service, gain a tax district.” When an ecosystem service is lost, a tax district is often created to fund costly built capital replacements to the functions once served by natural ecosystems.

**Investment in natural capital is essential to the long-term health of the Basin’s economy and natural environment.** Consider the conservation of the Colorado River Basin ecosystems as a key investment opportunity to generate economic prosperity. This appraisal of value is defensible and applicable to decision-making at every jurisdictional level. For example, in the late 1990s, New York City invested in the nearby Catskill-Delaware watershed as a water supply, when a filtration plant would have cost the city from \$8 billion to \$10 billion over 10 years. In contrast, the cost of investing in its natural capital was only \$1.5 billion over the same amount of time. The watershed program saved the city money and also infused an annual \$100 million into the rural economy in the watershed.<sup>150</sup> Subsequently, during Hurricane Sandy, the area affected in New York, which used this gravity-fed, forest-filtered water supply, was completely resilient throughout the storm. People in New York City could turn on the tap and drink the water, though all other services may have failed. In New Jersey, filtration plants and pumps went down and water was either unavailable or it had been contaminated by sewage, which required boiling. The repair costs for the New Jersey water infrastructure will be around \$2.6 billion.<sup>151</sup>

A major investment to restore the riverine and other ecosystem processes of the Colorado River Basin is required to maintain and expand the vast value of this natural asset. The movement of water and sediment, and the maintenance and expansion of healthy natural systems underlies the production of many economic benefits, including

protection against drought and flood. Without this investment, and with increasing impacts from drought and flood alone, people will be forced to retreat from the Basin, and current economic assets will be degraded. Recommendations of this report are included below.

### RECOMMENDATIONS:

- **Invest in natural capital.** The conservation and restoration of natural systems in the Colorado River Basin should be considered investments in a key asset and an opportunity for promoting economic prosperity and sustainability. The Colorado River Basin’s natural capital has a large asset value and high rate of return. Investments in natural capital deliver 21 categories of economic benefits to rural and urban communities including water supply, flood risk reduction, recreation, and healthier ecosystems. This appraisal of value is legally defensible and applicable to decision-making at every jurisdictional level.
- **Conduct a more detailed valuation, mapping, and modeling of key ecosystem services.** This study provides a baseline valuation of ecosystem services and identifies key benefits. A more detailed analysis can be used to make more cost-effective investments across the landscape. Expanding on existing attempts to better map and model water supply, flood risk reduction, and more, and integrating economic valuation with those more detailed maps and models, will provide critical information to citizens and businesses.

- **Adapt to water realities.** Continue developing local, state, and federal processes that are flexible and open to adapting to the changing reality of water supply, and the likelihood of future scarcity, rather than assuming a set amount of water will be available. There should be a detailed study of the full stocks and flows of water within the Basin. This would include reservoirs, snowpack, and aquifers. Continuing demand-side actions to better allocate water for maintaining healthy rivers, agriculture, and municipal and industrial uses are essential.
- **Include ecosystem services to advance rural economic development.** By including agriculture, sustainable forestry, water provisioning, flood risk reduction, and access to quality outdoor recreation in economic development planning, long-term and sustainable jobs can be identified, quantified, and secured in the Colorado River Basin. Restoration projects can and should be linked to economic advancement, sustainability, and long-term job creation.
- **Bring ecosystem service valuation into standard accounting and decision-making tools.** Accounting rules currently recognize timber and fossil fuel natural capital values, but need to be improved to include water provisioning. Ecosystem service valuation can provide governments, businesses, and private landowners with a way to calculate the rate of return on conservation and restoration investments. Benefit/cost analysis is a widely used economic decision support tool. Strengthening benefit/cost analyses with ecosystem services will shift investment of public and private funds towards more productive and sustainable projects.
- **Improve incentives for investment.** Water users in Los Angeles pay a portion of the bill for the built capital pipes conveying water from the Colorado Basin. There is nothing on the bill for investing back into the watersheds that actually produce the water. In Denver, by contrast, water users pay a small premium (about \$1.65 per year) to support forest management practices that protect water supply and water quality.<sup>152</sup> This program and others like it can bring income into rural areas, reduce conflict, and improve water supply.
- **Improve the management of natural assets.** “Lose an ecosystem service, gain a tax district,” states Earth Economics Executive Director David Batker. If natural flood risk reduction is lost, flooding hits and a flood district is created. Pave a city, and the groundwater that used to recharge the aquifer must now be piped and paid for with a storm water district. An ecosystem services framework can solve multiple economic problems while minimizing trade-offs. A systems approach improves natural asset management. Floods can be reduced while groundwater is recharged. Adopting an integrated approach reduces “infrastructure conflict” where one investment destroys another, such as a stormwater system that pushes water more quickly into rivers, increasing flood risk. A systems approach with incentives for landowners saves money and provides greater benefits for Basin residents and regional communities.
- **Apply the dollar values in this report.** This appraisal of value is legally defensible and applicable to decision-making at every jurisdictional level. For example, some values from this report can be used in FEMA’s benefit/cost toolkit for post-disaster mitigation.

This study enables better actions, incentives and outcomes for long-term economic prosperity at the local and Basin scales. Understanding the natural capital asset value calculated for the Colorado River Basin shows the vast scale of benefits that it provides. The scale of the asset guides the scale of investment. Annual values provided can be included in microeconomic decisions, such as benefit/cost analysis or rate of return on investment. Integrated into local, county, state, and federal decisions, this analysis can provide long-term benefits to everyone who benefits from the natural capital of the Colorado River Basin.