

October 1, 2015

**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, October 14, 2015
Time: 10:00 am
Place: Vineyard Room
Holiday Inn Ontario Airport
2155 Convention Center Way
Ontario, CA 91764
Tel: (909) 212-8000

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.

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

attachment: Agenda

Tanya M. Trujillo
Executive Director

Regular Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, October 14, 2015
10:00 a.m.

Vineyard Room
Holiday Inn Ontario Airport
2155 Convention Center Way
Ontario, CA 91764

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 as required by Government Code, Section 54954.3(a) (limited to 5 minutes)
3. Administration
 - a. Consideration and approval of the Minutes of the meetings held on August 12, 2015 and September 9, 2015 **(Action)**
 - b. Consideration of application for an allocation of water from the Lower Colorado Water Supply Project **(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 California Drought
6. Staff Reports regarding the Colorado River Basin Programs
 - a. Review status of the Basin States Drought Contingency Programs
 - 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 and Management Plan EIS
 - f. Review Status of the Lower Colorado River Multi-Species Conservation Program
7. Announcements/Notices
8. Executive Session

An Executive Session may be held by the Board pursuant to 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 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.

9. Other Business

a. Next Board Meeting:

November 18, 2015

1:00 p.m.

William R. Condit Auditorium

1285 Broadway Ave.

El Centro, CA 92243

(760) 339-9477

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, August 12, 2015

A meeting of the Colorado River Board of California was held on Wednesday, August 12, 2015.

Board Members and Alternates Present

Stephen Benson	David Pettijohn
Brian Brady	Michael Touhey
Dana Bart Fisher, Jr., Chairman	David Vigil
Peter Nelson	Doug Wilson
Glen Peterson	Jeanine Jones

Board Members and Alternates Absent

James Hanks	Chris Hayes
John Powell Jr.	
Henry Kuiper	

Others Present

Steve Abbott	Angela Rashid
Brandon Alexander	Eric Ruckdhschel
Robert Cheng	Tom Ryan
Mark Cook	Jack Seiler
Karen Donovan	Tina Shields
Rich Eastland	Peter Silva
Christopher Harris	Gary Tavetian
Bill Hasencamp	Tanya Trujillo
Joanna Smith Hoff	Joe Vanderhorst
Michael Hughes	Meena Westford
Ned Hyduke	Suzanna Webb
Mark Johnson	Donnell Wilcox
Lori Jones	Jerry Zimmerman
Tom Levy	
Lindia Liu	
Kara Mathews	
Jan Matusak	
Doug McPherson	
Jessica Neuwerth	
Vic Nguyen	
Autumn Plourd	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:06 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

Consideration and Approval of the Minutes

Chairman Fisher asked for a motion to approve the June 10th meeting minutes. Mr. Pettijohn moved that the minutes be approved, seconded by Mr. Wilson. Chairman Fisher asked if there were any additions or corrections. Hearing none, and by unanimous support, the June 10th meeting minutes were approved.

Consideration of Application for an Allocation of Water from the Lower Colorado Water Supply Project

Ms. Trujillo reported that the CRB technical staff reviewed an application from an individual in San Bernardino County. The applicant is seeking to utilize up to one acre-foot of water for current use and up to two acre-feet of water for future use. The CRB technical staff recommended that the Board adopt a resolution in support of the application.

MOTION: Chairman Fisher asked for a motion to approve the resolution. Mr. Wilson moved that the resolution be approved, seconded by Mr. Pettijohn. Chairman Fisher asked if there was any discussion regarding the motion. Hearing none, and by unanimous support, the resolution was approved.

Presentation regarding Hoover Dam Hydropower Issues

Mr. Mark Cook, Hoover Dam Manager with the U.S. Bureau of Reclamation's Lower Colorado Regional Office, started his presentation to the Board by explaining the hydropower fundamentals associated with operations at Hoover Dam, explaining how water travels through the generators, spinning the turbines to generate energy. He explained that 56% of the power generated at Hoover Dam is currently allocated to contractors in California. Additional contractors will be receiving allocations when the next round of Hoover Power contracts are finalized in 2017. Mr. Cook also explained the direct correlation between declining lake elevations and power output from the powerplant. He stated that the current elevation, which hovers close to the first trigger elevation of 1,075 feet, produces an output of approximately 1,563 megawatts, instead of

the maximum output of 2,008 MW. Mr. Cook explained that the published minimum energy generation is at 1,050 feet, but Reclamation will be changing the minimum to an elevation of 950 feet, at which elevation the dam could produce approximately 700 MW of power. Mr. Cook further explained the effects of lower lake elevation and reduced power output, including maintenance issues such as cavitation and reduction of revenues to the Lower Colorado River Basin Development Fund.

Mr. Cook explained the various efficiency and modernization improvements that have been made to the Hoover powerplant to increase power output and improve operations. One major improvement to the powerplant includes the replacement of turbines to low-head turbines that can handle lower reservoir levels. Mr. Cook stated that the improvements have allowed the powerplant to increase the amount of megawatt hours even though the reservoir levels are declining. Chairman Fisher asked at what lake elevation will power generation cease. Mr. Cook stated that Hoover will be able to produce some energy all the way down to dead pool, albeit, the power generated will be significantly reduced. Board member Benson asked whether payments by current power contractors cover the cost of administration and maintenance of the plant and whether energy rates will change as reservoir elevations decline. Mr. Cook responded that those costs are budgeted into the powerplant's ten-year plan. Rates are set once it is known how much it will cost to operate Hoover Dam, by looking at the power-plant operating costs and how much power it is anticipated to generate. There is no profit generated. Mr. Cook added that the Western Area Power Administration (WAPA) sets the rates for contractors. Ms. Trujillo remarked about the close communication and coordination that Reclamation and WAPA maintain in order to meet energy and downstream water supply demands. Mr. Cook agreed and stated that Hoover powerplant operators receive feedback about the facility's energy output every 4 seconds, and that this allows the system to readily respond, for example, to California's energy market needs that are updated approximately every 15 minutes.

Colorado River Basin Water Reports

Ms. Trujillo reported that the hydrology has increased significantly since May 2015 and the water supply conditions have improved. As of August 4, 2015, the water level at Lake Powell was 3,612 feet with 12.98 million acre-feet of storage, or 53% of capacity, while the water level at Lake Mead was at 1,079 feet with 9.89 million acre-feet of storage, or 38% of capacity. The total system storage was 31.36 million acre-feet, or 53% of capacity, and about 920,000 acre-feet more than that of last year. The April-July 2015 unregulated inflows into Lake Powell were observed to be 94% of average, which is much greater than the 42% of average forecasted value reported back in May 2015. It was noted that the Upper Basin reservoirs (except Lake Powell) are generally at near full capacity and some of them have been spilling.

Ms. Trujillo reported that Reclamation is expected to release the August 24-Month Study report on August 17, 2015. The results of this study will be used to set the operational tiers for the coordinated operation of Lake Powell and Lake Mead during 2016 pursuant to the 2007 Interim Guidelines. Based on the hydrology and projected

elevation at Lake Mead on January 1, 2016, a shortage declaration in 2016 for the Lower Basin is not expected. However, the latest modeling runs indicated there is a 47% probability of a shortage in 2017.

The second consultation meeting regarding the 2016 Colorado River Annual Operating Plan (AOP) was held on July 28, 2015. Section 5 of the 2007 Interim Guidelines also requires that California report to the Secretary on its progress in implementing California's Colorado River Water Use Plan (also known as the "4.4 Plan"). During the meeting, Ms. Trujillo updated the group regarding the implementation of the Quantification Settlement Agreement and other water storage, sharing, and conservation activities in place over the past few years to ensure that California continues to be able to stay within its basic mainstream apportionment of 4.4 million acre-feet per year. The third consultation meeting for the 2016 AOP will be held on September 2, 2015, in Las Vegas, Nevada.

State and Local Water Reports

Ms. Jeanine Jones, of the California Department of Water Resources, reported that local events including monsoon rains have increased the percent of average precipitation in some regions in Southern California, but the overall percent of average is still below normal. The California Drought Task Force recently met and it was noted that planning for and responding to drought and flooding can occur simultaneously as noted by the failure of a bridge on Interstate 10 caused by recent flooding. Reservoir storage in California is generally below normal as expected during the summer and some levels are even approaching the lows seen during the 1977 drought period. Ms. Jones noted that extraordinary operations at Shasta, Folsom, and Oroville Dams were being implemented to provide for cold water releases for salmon. The temporary emergency salinity barrier installed in the Delta to repel salinity and lessen the need to release water from upstream reservoirs is expected to be removed in mid-November 2015 prior to the flood season.

Mr. Peterson reported that MWD's total reservoir capacity is at 45%, and that the water deliveries to member agencies have been reduced in the last couple of months due to conservation efforts in response to the State Water Resources Control Board's water restrictions.

Mr. Benson suggested that other Board agencies could provide reports to update the Board on activities such as transfers and the on-farm conservation program. He reported that the IID Fallowing Program kicked off again in July 2015, and next year will be the last year of a 15-year fallowing program to conserve water for delivery to the Salton Sea to meet mitigation requirements. IID is working on the Salton Sea Restoration and Renewable Energy Initiative to use renewable energy projects to provide base-load power and some peaking capacity, and is requesting comments on a recently issued Draft White Paper. Mr. Benson reported that IID's underrun is currently estimated at about 170,000 acre-feet due partly to recent significant rain events that had reduced

water sales for several days. Mr. Benson described how the shift in crops and cropping patterns could also affect water usage.

In response to a question about Brock Reservoir, it was noted that during the July 28, 2015 AOP consultation meeting, Reclamation provided an update that reported that both Brock and Senator Wash reservoirs have year-to-date accumulated a total of about 75,000 to 80,000 acre-feet of savings each, and excess flows to Mexico have been reduced to about 11,000 acre-feet. It was recommended that the status of Brock and Senator Wash storage and excess flows to Mexico be reported at future Board meetings. Ms. Jones mentioned that Senator Wash at one time had been under consideration for dam safety repairs and asked about the current status of those repairs. Ms. Trujillo noted that the Yuma Desalting Plant could also be utilized.

Mr. Wilson reported that within his local agency, the conservation target of 20% for June and July 2015 were exceeded with actual conservation at 28% and 39%, respectively. Mr. Wilson believed that conservation goal of 20% was also met across San Diego County. Mr. Nelson noted that within the Coachella Valley Water District, the conservation amount has been improving from 14% in May, to 21% in June, and finally to 41% in July. Mr. Benson added that the City of Brawley conservation was at 41%.

Update Regarding the California Drought

Ms. Trujillo reported that 46% of California remains in the Exceptional Drought category with no relief in sight. A Governor's state of emergency has been declared in response to the large number of wildfires that are occurring. On July 30, 2015, the SWRCB reported that the 25% conservation reduction required in the Governor's Executive Order was met on a statewide basis despite record high temperatures throughout the state in June 2015.

Ms. Jones stated that the U.S. Drought Monitor was not the only method to monitor drought conditions in California and cautioned about the adverse impact on conservation messages that could occur due to media coverage of El Nino, noting that El Nino years have historically been wet, dry, or average. She indicated that the driest year on record in 1977 was classified as an El Nino year. DWR continues to plan for the possibility of a dry 2016.

Review Status of the Basin States Drought Contingency Programs

Ms. Trujillo reported that the Central Arizona Project's Intentionally Created Surplus proposal is undergoing review and approval by various agencies. CVWD voted to support of CAP's proposal and it is expected that other agencies will be taking action in the September and October timeframes. The Colorado River System Conservation Pilot Program is also moving forward. Reclamation is finalizing some additional contracts for this Program and anticipates that it would fully allocate the available funds within the fiscal year.

Review status of the implementation of Minute 319 and Binational Discussions

Ms. Trujillo reported that there was little activity with respect to the implementation of Minute 319 during the past month. Initial discussions among a small negotiating team have started on the potential for a successor minute by evaluating potential expansion of components of Minute 319.

Review status of the Salinity Control Forum, Workgroup, and Advisory Council Revised Agenda

Last month's Executive Director's report provided detailed information on the July Salinity Work Group meeting held in Salt Lake City, Utah. One of the primary updates was on the status and progress of the Paradox Well Replacement EIS and are focusing on the technical analysis of the potential alternatives, including an additional well, a replacement well, evaporation ponds, and the no action alternative. The Work Group will meet in September in Colorado, and the Forum will meet in October in Arizona.

Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental and Management Plan EIS

Staff member Neuwerth reported on a Grand Canyon river trip attended by stakeholders of the Glen Canyon Dam Adaptive Management Program on July 17-27. The trip provided stakeholders of the program an opportunity to see and experience the resources in the canyon, particularly in light of the upcoming Long Term Experimental and Management Plan (LTEMP) EIS, which will change the operations at Glen Canyon Dam. Ms. Neuwerth described some of the issues explored on the trip, including cultural resources preservation, native fish management, sediment conservation, and aquatic ecology.

Ms. Neuwerth reported that a draft of the LTEMP EIS was released to cooperating agencies and that cooperating agencies had until September 30th to submit comments. The draft includes seven alternatives, including a "hybrid" alternative that is the presumed preferred alternative and contains aspects of alternatives proposed by the Basin States and the Department of the Interior. Ms. Neuwerth noted that the hybrid alternative has comparatively hydropower-friendly operational patterns while preserving flow experiments meant to benefit native fish, sediment, and the aquatic food base. Additionally, the hybrid alternative includes fixed October through December monthly volumes that will not affect the January 1 operating tier determinations at Lake Powell pursuant to the 2007 Interim Guidelines.

Lower Colorado River Multi-Species Conservation Program

Ms. Trujillo reported that the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) recently released its Final Implementation and Accomplishments

Report for Fiscal-Year 2014 and the proposed work-plan and budget for FY-2016, which details the past, current, and future activities for the program. Ms. Trujillo also noted that the acquisition of the Planet Ranch property for the Program had been subject to litigation and that the Supreme Court of Arizona was set to begin a review of the case in September.

Deputy Director Harris reported that a large fire in the Mojave Valley and on Havasu National Wildlife Refuge (HNWR) started on August 8 and was extinguished within several days. While the fire did not affect the LCR MSCP's Beal Lake Conservation Area on HNWR, the fire did destroy a number of occupied southwestern willow flycatcher nests in saltcedar habitat adjacent to Beal Lake. On a positive note, Mr. Harris noted that the burned areas might provide a good opportunity for future native vegetation habitat restoration activities.

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. Pettijohn, seconded by Ms. Jones, and unanimously carried, the meeting was adjourned at 12:00 p.m.

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, September 9, 2015.

A meeting of the Colorado River Board of California was held on Wednesday, September 9, 2015.

Board Members and Alternates Present

Stephen Benson	David Pettijohn
Brian Brady	Michael Touhey
Dana Bart Fisher, Jr., Chairman	David Vigil
Henry Kuiper	Doug Wilson
Peter Nelson	Jeanine Jones
Glen Peterson	

Board Members and Alternates Absent

James Hanks	Chris Hayes
John Powell Jr.	

Others Present

Steve Abbott	Mark Stuart
Tim Blair	Tanya Trujillo
Robert Cheng	Joe Vanderhorst
Dan Denham	Donnell Wilcox
Christopher Harris	
Ned Hyduke	
Lisa Johansen	
Lori Jones	
Tom Levy	
Kara Mathews	
Jan Matusak	
Jessica Neuwerth	
Vic Nguyen	
Autumn Plourd	
Angela Rashid	
Tom Ryan	
Jack Seiler	
John Simpson	
Joanna Smith	
Philip Southland	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:12 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

Executive Director Trujillo informed the Board that the August monthly meeting minutes were not ready for approval, but would be brought to the Board for approval at its regular October meeting.

Colorado River Basin Water Reports and State and Local Water Reports

Ms. Trujillo reported that the Bureau of Reclamation's August 24-month study to determine the 2016 operating tiers for Lakes Powell and Mead was released on August 17, 2015. Pursuant to the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, the Upper Elevation Balancing Tier will govern the operations of Lake Powell and will have an initial release of 8.23 million acre-feet from Lake Powell. However, the Guidelines also provide for a mid-year review in April that would determine if a release amount of up to 9 million acre-feet is allowed. For Lake Mead, the August 24-month study projected that the operating tier will be the Normal or ICS Surplus condition and there is no possibility of a shortage condition in the Lower Basin in 2016. The final consultation for the Annual Operating Plan was held in Las Vegas, NV, on September 3, 2015. The final approval process is ongoing at the Department of the Interior and the Secretary of the Interior is expected to finalize the AOP by December 31, 2015.

Ms. Trujillo described the 5-year outlook modeling results performed by Reclamation. As noted earlier, there is no chance for a shortage in 2016, but there is an 18% probability of a shortage in 2017. The probability increases to 52% in 2018, or 42% at the first tier and 10% at the second tier shortage level. In years further out such as 2019 and 2020, there is a higher probability of shortage, but also greater uncertainty in the hydrology.

Ms. Trujillo reported that as of August 31, 2015, the water level at Lake Powell was 3,609 feet with 12.65 million acre-feet of storage, or 52% of capacity, while the water level at Lake Mead was at 1,078 feet with 9.87 million acre-feet of storage, or 38% of capacity. The total system storage was 30.88 million acre-feet, or 52% of capacity, and about 650,000 acre-feet more than that of last year. The April-July 2015 unregulated

inflows into Lake Powell were observed at 6.71 million acre-feet, or 94% of average, and the forecasted inflow into Lake Powell for the Water Year 2015 is 10.34 million acre-feet, or 95% of average. It was noted that the Upper Basin reservoirs (except Lake Powell) are at full or near full capacity and some of them have been spilling for flood control requirements.

Beginning this month, additional information related to Lower Basin storage facilities will be presented at the Board meetings. Brock Reservoir has had a cumulative total of 99,700 acre-feet as of September 2, 2015. Senator Wash has stored a cumulative total of about 83,000 acre-feet. Ms. Trujillo also reported on the forecasted water use in the Lower Basin and noted that the agricultural uses in California and Arizona have been trending downward due to recent precipitation that has resulted in decreased water orders.

State and Local Water Reports

Mr. Mark Stuart reported that Los Angeles Civic Center cumulative precipitation, to date, is 8.85 inches, or 58% of average, while Blythe's precipitation is 3.06 inches, or 89% of average. Mr. Stuart reported that as of September 2, 2015, the Northern Sierra Precipitation Eight-Station Index was at 75% of average. The San Joaquin Precipitation Index was at 47% of average. The Southern Sierras Precipitation Index was at 47% of average.

Mr. Stuart reported on the status of storage in the State Water Project, with Lake Oroville at 1.1 million acre-feet, or 31% of capacity, which is slightly less than last year. The San Luis reservoir was at 361,789 acre-feet, or 31% of average. The total storage in the State Water Project was 1.9 million acre-feet, or 35% of capacity. Reservoir storage conditions across the State are below average.

Mr. Peterson reported that MWD's combined reservoir storage was at 45% of capacity. Vice Chairman Wilson reported that water use in the Padre Dam region has reduced on a cumulative basis by 33%, which is greater than the State mandated goal of 20%. Water use within the San Diego County Water Authority service area, was reduced by 26% in June and 32% in July. Mr. Wilson noted that about 40,000 acre-feet has been added to storage in San Vicente Dam. Mr. Wilson also reported that the San Diego County Water Authority's Carlsbad Desalination Plant will be coming online in a few months. The desalination plant will provide about 50,000 acre-feet of water per year.

Mr. Benson provided the Board with IID's 2015 Forecasted Water Use handout, which displays data such as IID's QSA water transfer schedule, water orders and fallowing schedule. Mr. Benson stated that IID will stop delivering mitigation water to the Salton Sea in 2017, noting that the mitigation fallowing program will cease in 2018. In 2015/2016, 17,000 acres were fallowed, at a cost of \$9 million, with 100,000 acre-feet of water conserved, noting that the conserved water will be transferred to San Diego. IID will transfer 34,000 acre-feet to Coachella and deliver 110,000 acre-feet to the Salton Sea. In 2016, water transfers to Coachella will ramp up to 41,000 acre-feet, while San Diego will receive 20,000 acre-feet and 130,000 acre-feet will be delivered to the Salton

Sea. Mr. Benson reported that IID's on-farm efficiency program is underway, with over 700 contracts executed with growers. It is anticipated that the program will conserve 60,000 acre-feet of water in 2015 and 2016. A final accounting of the water conserved by this program will be available at the end of the season. Mr. Benson also mentioned that that IID is monitoring the effects of recent summer storms, as they greatly affect how agricultural water users make crop choices.

Mr. Benson reported that IID is looking for additional storage options and reminded the Board of IID's action last year to store 50% of their unused water with MWD and 50% as ICS in Lake Mead. Mr. Benson also reported on recent investments IID has made to upgrade tracking of their canal system which will ensure that users are receiving adequate amounts of water. Mr. Benson also stated that IID will be working on a series of small reservoirs to catch unused water in their system. Executive Director Trujillo noted that the November CRB meeting will be held in IID, where we will learn more about IID's equitable apportionment system.

Board member Nelson reported that Coachella Valley Water District reduced its water use by 41% in July and 27% in August for an average of 34%, which is less than the State's mandated conservation goal of 36% for Coachella. Mr. Nelson stated that the CVWD Board approved \$1.9 million of additional conservation funding, noting that CVWD has also incorporated drought penalties on a tiered rate system. In July, CVWD brought in \$1.9 million in penalty fees and \$1.6 million in August. CVWD is also working on a program to convert flood irrigation to drip, which was funded through the system conservation program by Southern Nevada Water Authority, MWD, CAP, Denver Water and the Bureau of Reclamation. Mr. Nelson also reported that the Governor recently signed SB 385, which is follow-up legislation to the chromium-6 standard, which allows CVWD five years to implement their chromium-6 remediation program, which will cost \$250 million.

Vice Chairman Wilson asked about the impact to farmers from summer storms. Chairman Fisher stated that the storms affect the delicate growing cycle of newly planted vegetable seeds, such as broccoli, interfering with their ability to germinate. Mr. Nelson explained that when fields are irrigated with micro sprinklers and drip for a long time, salts in the soils are pushed to the perimeter of the root zone. However, big rain events push the salts back into the root zone, requiring additional irrigation to push the salts back out.

Mr. Pettijohn reported that LADWP is continuing to meet its conservation goals every month and in some cases slightly exceeded them. LADWP is continuing their turf removal program, providing customers with \$1.75 per square foot of turf. Mr. Pettijohn also noted that LADWP has recently added shade balls into one of their reservoirs to preserve the water quality but limiting the sun's rays from reacting with the chlorine in the water. LADWP is also in the process of moving from a two-tier rate structure to a more conservation based four-tier rate structure. LADWP is also implementing a WaterSmart pilot study that will provide about 10,000 customers with water user reports that were specifically designed for their home. By 2017, LADWP hopes to provide the

water use reports to all their residential customers. Studies have shown that water use reports help customers achieve a 5% overall reduction in their water use.

Chairman Fisher provided an update on Palo Verde Irrigation District, noting that PVID usually diverts nearly a million acre-feet of water a year, returning almost 600,000 acre-feet by way of drainage and deep-percolation back to the Colorado River. Chairman Fisher reported that PVID will not be diverting as much water because they are at a maximum following call to satisfy the following agreement with MWD. This will result in 29% of the PVID agricultural land being fallowed.

Update Regarding the California Drought

The California drought continues to persist with 46% of the state remaining in the Exceptional Drought category. Ms. Trujillo provided background information on the U.S. Drought Monitor Map and described its Drought Condition categories and their potential applications to respond to concerns raised at last month's Board meeting that the Drought Monitor Map may not be an accurate characterization of actual water supply conditions in California. The U.S. Drought Monitor Map was presented as one of many tools that could be included to provide a more complete picture of drought and water supply conditions in California.

The State Water Resources Control Board continues to track and implement the mandatory reductions pursuant to the Governor's April 1, 2015 Executive Order. Conservation was in excess of 31% on a statewide basis during July 2015. The Association of California Water Agencies had compiled a video of water conservation advertisements that featured member agencies. The Public Policy Institute of California also recently published a report entitled "What if California's Drought Continues?" that described what drought conditions and impacts may be if the drought continues. One of the key messages was that we have not only experienced record-low water and precipitation and snowpack levels, but also record-high temperatures. Ms. Trujillo noted the compilation of federal and state funding dedicated to drought mitigation efforts.

Ms. Jones noted that the majority of the state drought emergency response has been directed towards addressing the problems of small water systems in rural areas where supplies are often unreliable. Another area of interest has been in monitoring of land subsidence, particularly in the San Joaquin Valley where high groundwater extraction is occurring as a result of the drought.

Review Status of the Basin States Drought Contingency Programs

Ms. Trujillo reported on the status of Arizona's Intentionally Created Surplus proposal to create up to 95,000 acre-feet per year for 2015 and 2016. The ICS proposal is under consideration for approval by IID, City of Needles, and the Metropolitan Water District, while the Palo Verde Irrigation District and the Coachella Valley Water District have already taken action to approve the forbearance agreement for Arizona. In addition, Reclamation is continuing to implement the Pilot System Conservation Program.

Reclamation and the funding agencies have undertaken a process of selecting and funding applicants of water conservation projects through the Pilot Program, which is funded by Reclamation and various agencies. As a condition of the funding agreement, CVWD has agreed that conserved water would remain in the system for the benefit of the system. Reclamation will evaluate the success of the Pilot Program by the end of 2018. Initial reports indicate that the Pilot Program has been a success and that the demand has outpaced the existing funds. The Pilot Program may be expanded upon agreement by the funding agencies. One of the keys to making the program work is to have a forbearance agreement so that other users do not divert the stored water. The Upper Colorado River Commission (UCRC) is implementing the Pilot Program in the Upper Basin. The response from the Request for Proposals process has been positive, and UCRC is currently contracting with the selected applicants.

Ms. Trujillo noted recent congressional advocacy actions by Arizona's delegation including some draft amendments to the California drought bills currently pending in Congress. The initial feedback provided was that certain proposals were problematic because they would remove the Secretary's discretion to allocate unused water from one state to another—and California has historically relied on this unused apportionment. California will continue to monitor these amendments to assure there will be no adverse provisions added onto the drought bills, and advocacy either through the Board or from individual agencies may be necessary.

Review status of the implementation of Minute 319

Ms. Trujillo reported that, similar to the report at the last meeting, a successor minute may include provisions that extend portions of the current minute. A small group from U.S. will meet with a small team from Mexico on Thursday, September 10 to continue discussion of the potential for a subsequent minute. There will be workgroups relating to operational issues, conservation projects and environmental issues to help with the negotiations with Mexico.

Review status of the Salinity Control Forum, Workgroup, and Advisory Council Revised Agenda

The Work Group will meet in two weeks in Colorado and a detailed presentation on the outcome of that meeting will be given at the next Board meeting. A Salinity Economic Damages Model Work Group will update the damages associated with higher salinity levels for agricultural and municipal uses. Ms. Liu will be reaching out to the agencies for information for the Work Group to accurately describe the benefits of the Salinity Control Program and the risks of discontinuing some of those existing projects. The model is now being expanded to include water uses and users from Arizona and Nevada, as well as additional entities within California.

Ms. Trujillo reported that the Paradox Valley Unit EIS is ongoing and the cooperating agencies will meet on September 21 to receive reports on the latest status of

the EIS process. The Salinity Control Forum is scheduled to meet in late-October in Tucson, Arizona.

Review Status of the Yuma Bypass Flows Work Group Process

Mr. Harris provided an overview of the current status of the Yuma Area Bypass Flows Work Group process that has been underway since March 2015. Mr. Harris provided the Board with background and history related to bypass drain and the bypassing of approximately 125,000 to as much as 140,000 acre-feet of saline pumped drainage water from the Wellton-Mohawk Irrigation and Drainage District (WMIDD) and Yuma area to the large wetland in Mexico known as the Cienega de Santa Clara. Mr. Harris indicated that the original reason for constructing and operating the bypass drain was to ensure that the salinity differential could be met in the context of Treaty water deliveries to Mexico. The 1974 Colorado River Basin Salinity Control Act authorized the construction of the Yuma Desalting Plant (YDP) for the purposes of treating the bypassed WMIDD saline drainage water and then including the treated product water as part of the annual Treaty delivery to Mexico. The saline flows that are not treated at YDP and are bypassed to the Cienega de Santa Clara does not count toward the U.S. Treaty delivery obligation, and an equivalent amount of water must be released from Lake Mead annually to make up the difference.

Mr. Harris reported that the Yuma Area Bypass Flows Work Group, established by Arizona and Reclamation, has been charged with exploring and evaluating options for off-setting or replacing the bypass flows and thus reducing the amount of water that needs to be released from Lake Mead to make the annual Treaty delivery to Mexico. Currently the work group has developed a catalog of a number of options that fall into several broad categories, including (1) various permutations associated with operation of YDP; (2) utilization of local groundwater supplies; (2) increased or expanded pumping of the Minute 242 wellfield along the Southerly International Boundary; and (4) engagement with Mexico on a range of binational water supply and accounting options. Most, if not all, of the options will involve significant dialog and negotiation with IBWC and Mexico in the context of the broader binational process.

Mr. Harris indicated that the work group will be holding a conference call in late-September to refine the ranking criteria that will be utilized to evaluate the options that have been identified in the catalog. A meeting has been scheduled for October 26th, in Yuma, Arizona, to continue to refine the options and begin the development of recommendations and a report describing the process.

Review Status of the Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental and Management Plan EIS

Staff-member Neuwerth reported that the Adaptive Management Work Group met on August 26 and 27 in Tempe, Arizona and approved recommendations to the Secretary for the 2016 hydrograph and the 2016 budget and work plan. Ms. Neuwerth stated that the group also received updates from scientists on the status of resources in the

area. The Gold King Mine Spill, a spill of toxic water released in southwestern Colorado, had been so diluted by the time it reached the Utah border that it could not be detected. Researchers reported that the trout population was still in decline and that the humpback chub population showed poor condition in three of the last surveying trips, with humpback chub detections unusually low this year. Low detections could be the result of different patterns in movement or spawning this year, rather than an actual decrease in population. Researchers reported that humpback chub translocations seemed to be effective, with humpback chub successfully living and reproducing in the tributaries to which they had been moved.

Ms. Neuwerth reported that, as of late August, sediment deposition in Glen Canyon was insufficient to carry out a high flow experiment. However, sediment from fall storms was expected and could create the conditions that could trigger an HFE. Additionally, green sunfish, a high-risk predatory fish, were detected below Glen Canyon Dam in unusually large numbers. Managers removed about a thousand green sunfish during a nonnative fish removal trip in early August and were planning additional fish removal trips.

Finally, Ms. Neuwerth reported that a cooperating agency draft of the Long-Term Experimental and Management Plan (LTEMP) EIS for the management of Glen Canyon Dam was released in late-June, and that cooperating agency comments are due on September 30. The LTEMP EIS includes 7 alternatives, including several developed by the Department of the Interior (DOI), one developed by CREDA, and one developed by the Basin States. The “hybrid” alternative, which combines elements of a DOI alternative with elements of the Basin States’ alternative, is likely to be designated the “preferred alternative” in the public review draft of the LTEMP EIS slated to be released in mid-December. The final EIS and Record of Decision is expected to be issued in spring or summer 2016.

Review Status of the Lower Colorado River Multi-Species Conservation Program

Ms. Neuwerth also reported that the Planet Ranch property that the Lower Colorado River Multi-Species Conservation Program (MSCP) has been attempting to acquire is currently tied up in litigation in Arizona Superior Court and that the Arizona Supreme Court recently scheduled an expedited hearing on the appeal of the Superior Court’s decision. Oral arguments have been scheduled for some time in October. Finally, Ms. Neuwerth reported that the LCR MSCP work group is scheduled to meet in Las Vegas, Nevada on September 30.

Vice Chairman Wilson asked whether a recent fire at Havasu National Wildlife Refuge had damaged any of the LCR MSCP habitat restoration sites. Deputy Director Harris responded that the fire had not damaged any of the LCR MSCP habitat, but had burned some adjacent areas known to support nesting southwestern willow flycatchers. Mr. Harris reported that this may present an opportunity for the LCR MSCP to contribute to restoration of some of the burned habitat with native riparian plant species.

Board Member Nelson inquired what legal issues were affecting the Planet Ranch property acquisition. Ms. Trujillo responded that Mohave County, in which a portion of the property is located, has claimed that it could be adversely impacted by the purchase and that when the State of Arizona, through the Department of Water Resources, issued a sever and transfer of the Planet Ranch water rights, it was an improper administrative action that did not consider potential harm to the county. Mr. Harris added that Mohave County also had other significant issues associated with the larger Bill Williams River-Hualapai Indian Water Rights Settlement Act, and that the LCR MSCP and the potential Planet Ranch acquisition were entangled in these other issues.

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 Mr. Pettijohn, and unanimously carried, the meeting was adjourned at 11:40 A.M.

RESOLUTION
of the
COLORADO RIVER BOARD OF CALIFORNIA
Regarding
Potential Applicant to Receive
Lower Colorado Water Supply Project Water
2015-3

WHEREAS, the United States Congress, on November 14, 1986, enacted the Lower Colorado Water Supply Act (P.L. 99-655) (amended through P.L. 109-103), to authorize the construction and operation of the Lower Colorado Water Supply Project (Project) to provide a limited amount of Colorado River water to be made available on an exchange basis to entities in California, whose lands are located adjacent to the Colorado River, and who either do not have any, or do not have a sufficient, contractual entitlement to use Colorado River water; and

WHEREAS, the City of Needles has agreed to assume the administrative responsibility for Project beneficiaries in San Bernardino, Riverside, and Imperial Counties; and

WHEREAS, the Colorado River Board provides recommendations to the U.S. Bureau of Reclamation (Reclamation) regarding the eligibility of non-federal applicants to receive Project water; and

WHEREAS, the Colorado River Board on September 14, 2001, notified owners of property within the Colorado River flood plain and/or the accounting surface as delineated by the U.S. Geological Survey in California of the availability of Project water; and

WHEREAS, the staff of the Colorado River Board on October 14, 2015, submitted the eligible applicant to the Board for its recommendation;

NOW, THEREFORE, BE IT RESOLVED THAT the Colorado River Board hereby recommends a subcontract for Project water be offered to the applicant listed on the attachment and directs the Executive Director to forward the application to Reclamation with its recommendation with the following provisos:

- (1) The applicant appears to be eligible to receive Project water, as shown in the attached table and summarized below:

County	Numbers of Parcels	Current Use (AF/YR)	Future Use (AF/YR)	Total Use (AF/YR)
San Bernardino	1	1	0	1

- (2) At the time a subcontract is prepared, the annual quantity of water to be diverted, consumptively used, and returned will be refined to specify quantities of water to be reported in accordance with Article V in the Consolidated Decree in *Arizona v. California, et al.* entered March 27, 2006, (547 U.S. 150 (2006));

- (3) Reclamation should include provisions in the subcontract that the water to be put to reasonable beneficial use within a ten-year period of time, subject to renewal for another ten-year period.

THE FOREGOING RESOLUTION is approved and adopted by the Colorado River Board, this 14th day of October 2015.

Dana B. Fisher, Jr., Chairman

Oct 05, 2015

LOWER COLORADO WATER SUPPLY REPORT

River Operations
Bureau of Reclamation

Questions: 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	51%	12,304	3605.72	10,900
* LAKE MEAD	38%	9,877	1078.38	9,400
LAKE MOHAVE	87%	1,583	638.72	11,000
LAKE HAVASU	92%	571	447.54	8,400
 TOTAL SYSTEM CONTENTS **	51%	30,254		
As of 10/04/2015				
SYSTEM CONTENT LAST YEAR	50%	30,094		
* 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%	1,126		
Painted Rock Dam	0%	0	535.13	0
Alamo Dam	5%	53	1,088.08	15
Forecasted Water Use for Calendar Year 2015 (as of 10/05/2015) (values in kaf)				
NEVADA			240	
SOUTHERN NEVADA WATER SYSTEM				212
OTHERS				28
CALIFORNIA			4,306	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				927
IRRIGATION DISTRICTS				3,241
OTHERS				139
ARIZONA			2,609	
CENTRAL ARIZONA PROJECT				1,524
OTHERS				1,085
TOTAL LOWER BASIN USE				7,156
DELIVERY TO MEXICO - 2015 (Mexico Scheduled Delivery + Preliminary Yearly Excess ¹)				1,521
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - OCTOBER FINAL FORECAST DATED 10/01/2015				
		MILLION ACRE-FEET	% of Normal	
OBSERVED WATER YEAR 2015		10.174	94%	
OBSERVED APRIL-JULY 2015		6.713	94%	
SEPTEMBER OBSERVED INFLOW		0.276	68%	
OCTOBER INFLOW FORECAST		0.350	68%	
		Upper Colorado Basin	Salt/Verde Basin	
WATER YEAR 2016 PRECIP TO DATE ²		60% (0.2")	67% (0.2")	
CURRENT BASIN SNOWPACK		NA% (NA)	NA% (NA)	

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

² Precipitation values may vary significantly from week-to-week this early in the water year.

**U.S. BUREAU OF RECLAMATION
LOWER COLORADO REGION
CY 2015**

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

WATER USE SUMMARY

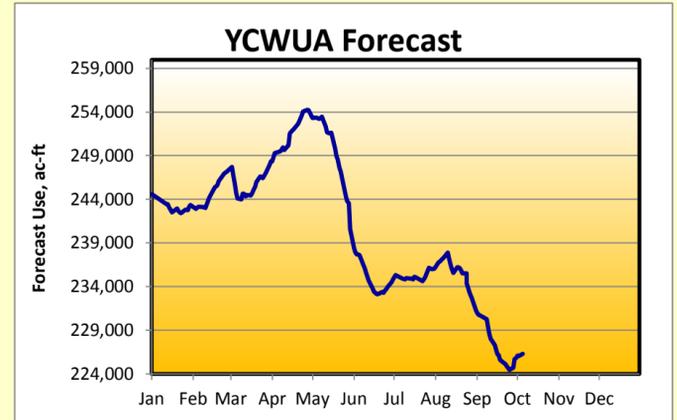
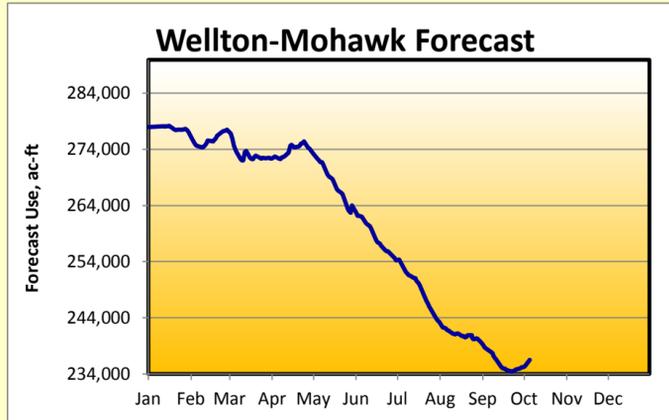
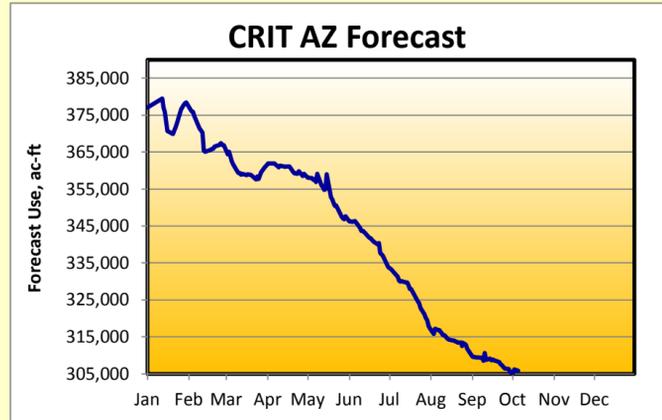
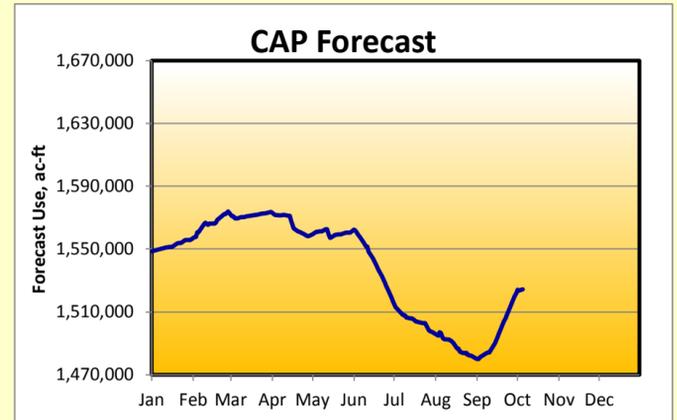
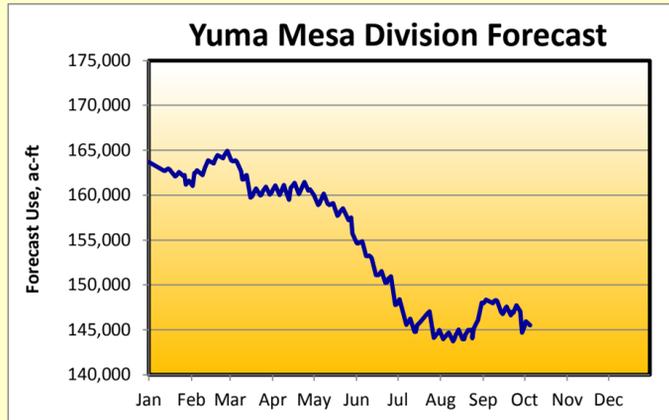
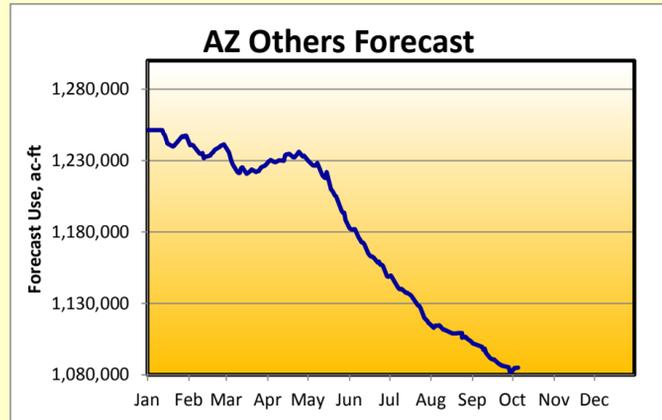
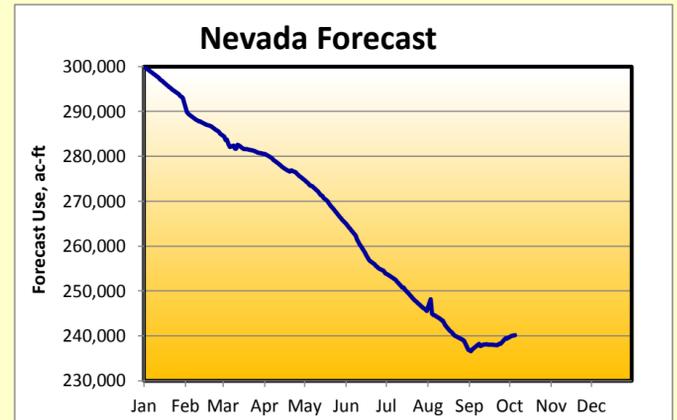
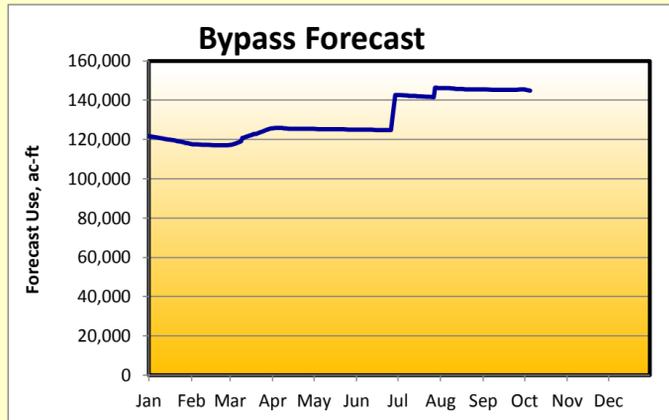
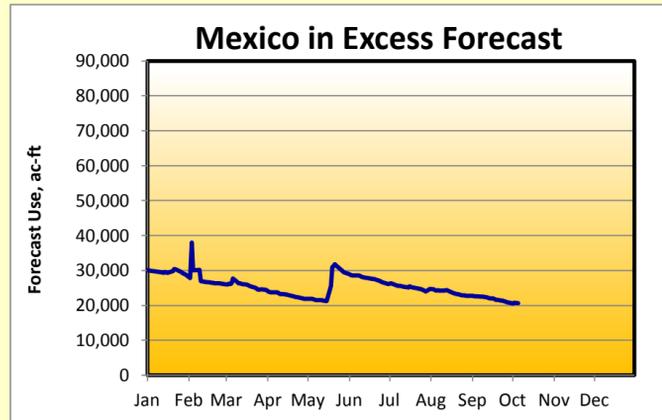
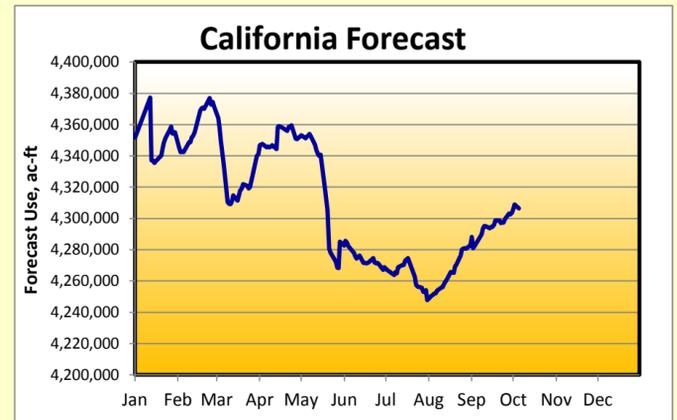
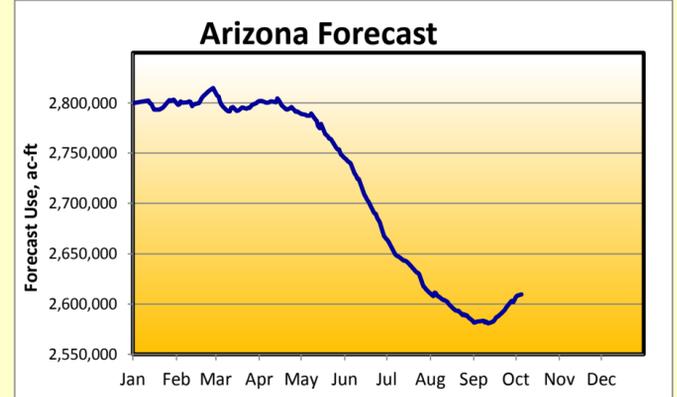
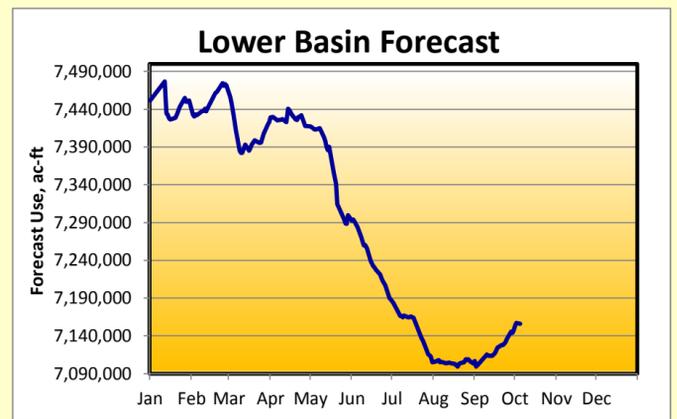
	Use To Date CY2015	Forecast Use CY2015	Approved Use ² CY2015	Excess to Approval CY2015
ARIZONA	2,078,763	2,609,367	2,792,835	-183,468
CALIFORNIA	3,647,151	4,306,369	4,351,727	-45,358
NEVADA	186,298	240,120	300,000	-59,880
STATES TOTAL ³	5,912,212	7,155,856	7,444,562	-288,706
MEXICO IN SATISFACTION OF TREATY (Including downward delivery) TO MEXICO AS SCHEDULED	1,259,811 1,246,368	1,520,621 1,500,000	1,500,000	20,621
MEXICO IN EXCESS OF TREATY BYPASS PURSUANT TO MINUTE 242	13,443 106,229	20,621 144,942		
TOTAL LOWER BASIN & MEXICO	7,278,252	8,821,419		

1/ Incorporates Jan-Aug 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.

NOTE: Use to date values have been updated with July USGS Provisional data as well as monthly reported data. [8-31-2015]



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
CY 2015**

NOTE:
 • Diversions and uses that are pending approval are noted in *red italics*.
 • Water users with a consumptive use entitlement - **Excess to Estimated Use** column indicates overrun/underrun of entitlement. Dash in this column indicates water user has a diversion entitlement.
 • Water user with a diversion entitlement - **Excess to Approved Diversion** column indicates overrun/underrun of entitlement. Dash in this column indicates water user has a consumptive use entitlement.

**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 \(Water Accounting Reports\)](#)

WATER USER	Use	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess to
	To Date	Use	Use	Estimated		To Date	Diversion	Diversion
	CY2015	CY2015	CY2015	Use	CY2015	CY2015	CY2015	Diversion
CALIFORNIA PUMPERS	1,414	1,680	1,680	---	2,564	3,047	3,047	0
FORT MOJAVE INDIAN RESERVATION, CA	7,700	8,752	8,996	---	14,313	16,268	16,720	-452
CITY OF NEEDLES (includes LCWSP use)	1,625	1,931	1,931	0	2,289	2,720	2,720	0
METROPOLITAN WATER DISTRICT	883,669	926,899	768,208	---	885,815	929,796	771,299	---
COLORADO RIVER INDIAN RESERVATION, CA	2,731	3,246	3,246	---	4,525	5,378	5,378	0
PALO VERDE IRRIGATION DISTRICT	357,823	394,187	395,806	---	718,775	865,872	874,000	-8,128
YUMA PROJECT RESERVATION DIVISION	38,408	47,374	48,586	---	73,908	96,327	104,200	-7,873
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	---	---	---	---	36,776	47,457	50,200	-2,743
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	---	---	---	---	37,132	48,871	54,000	-5,129
YUMA ISLAND PUMPERS	3,925	4,665	4,665	---	7,112	8,452	8,452	0
FORT YUMA INDIAN RESERVATION - RANCH 5	568	675	675	---	1,027	1,221	1,221	0
IMPERIAL IRRIGATION DISTRICT	1,989,380	2,450,698	2,602,481	-151,783	1,969,262	2,453,612	2,706,070	---
SALTON SEA SALINITY MANAGEMENT	86,802	121,636	121,636	0	90,567	126,826	126,826	---
COACHELLA VALLEY WATER DISTRICT	272,398	343,785	357,000	-13,215	283,383	358,346	371,671	---
OTHER LCWSP CONTRACTORS	565	671	671	---	897	1,066	1,066	0
CITY OF WINTERHAVEN	57	68	68	---	87	103	103	0
CHEMEHUEVI INDIAN RESERVATION	86	102	102	---	9,542	11,340	11,340	0
TOTAL CALIFORNIA	3,647,151	4,306,369			4,064,066	4,880,374	5,004,113	

CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION

California Basic Apportionment	4,400,000
Conservation for Salton Sea Restoration - 2010 ¹	-23,273
Creation of Extraordinary Conservation ICS (IID)	-25,000
Creation of Extraordinary Conservation ICS (MWD)	
Total State Adjusted Apportionment	4,351,727
Excess to Total State Adjusted Apportionment	-45,358

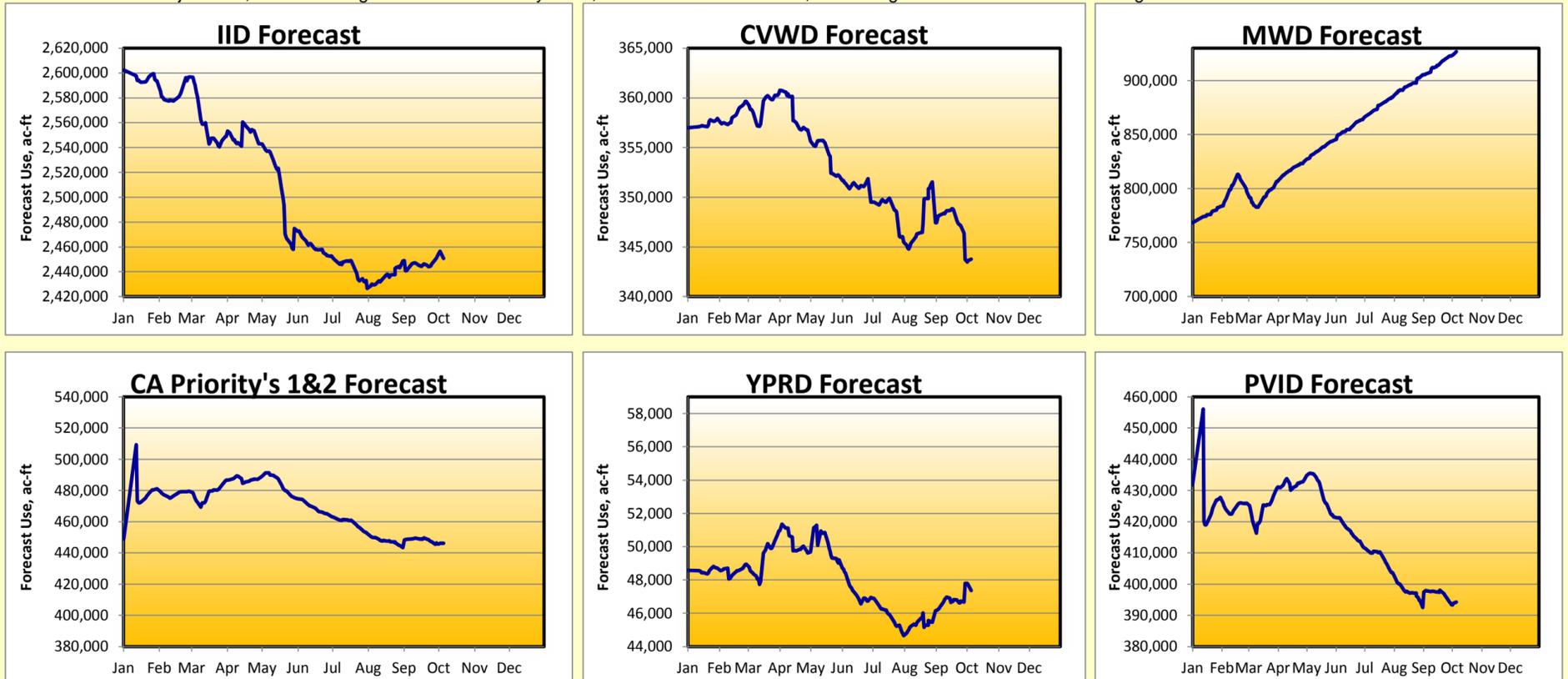
ISG ANNUAL TARGET COMPARISON CALCULATION

Priorities 1, 2, 3b Use (PVID+YPRD+Island+PVID Mesa)	446,226
MWD Adjustment	-26,226
Total California Agricultural Use (PVID+YPRD+Island+IID+CVWD)	3,240,709
California Agricultural Paybacks	23,273
Misc. PPRs Covered by IID and CVWD	14,500
California ICS Creation (IID ICS)	25,000
Total Use for Target Comparison ²	3,277,256
ISG Annual Target (Exhibit B)	3,448,000
Amount over/(under) ISG Annual Target	-170,744

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

1/ Pending approval by Imperial Irrigation District's Board of Directors.

2/ 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
CY 2015**

NOTE:
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 ● Water users with a consumptive use entitlement - **Excess to Estimated Use** column indicates overrun/underrun of entitlement. Dash in this column indicates water user has a diversion entitlement.
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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 \(Water Accounting Reports\)](#)

WATER USER	Use To Date CY2015	Forecast Use CY2015	Estimated Use CY2015	Excess to Estimated Use CY2015	Diversion To Date CY2015	Forecast Diversion CY2015	Approved Diversion CY2015	Excess to Approved Diversion CY2015
ARIZONA PUMPERS	14,738	17,515	17,515	---	22,816	27,115	27,115	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	122	156	156	---	122	156	156	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	146	185	185	---	146	185	185	0
DAVIS DAM PROJECT	2	2	2	---	63	75	75	0
BULLHEAD CITY	5,234	7,178	8,523	---	7,811	10,711	12,720	-2,009
MOHAVE WATER CONSERVATION	468	556	556	---	699	831	831	0
BROOKE WATER LLC	174	207	207	---	262	311	311	0
MOHAVE VALLEY IDD	14,488	19,069	22,260	---	26,831	35,313	41,220	-5,907
FORT MOJAVE INDIAN RESERVATION, AZ	33,706	38,287	42,390	---	62,419	70,903	78,500	-7,597
GOLDEN SHORES WATER CONSERVATION DISTRICT	266	316	316	---	398	473	473	0
HAVASU NATIONAL WILDLIFE REFUGE	3,419	3,790	3,563	---	28,491	32,832	41,820	-8,988
LAKE HAVASU CITY	5,843	7,669	8,928	---	9,425	12,371	14,400	-2,029
CENTRAL ARIZONA PROJECT	1,169,720	1,524,384	---	---	1,169,720	1,524,384	---	---
TOWN OF PARKER	302	356	352	---	671	859	920	-61
COLORADO RIVER INDIAN RESERVATION, AZ	266,512	305,896	376,964	---	501,552	598,760	662,402	-63,642
EHRENBURG IMPROVEMENT ASSOCIATION	215	256	256	---	304	361	361	0
CIBOLA VALLEY IRRIGATION DISTRICT	14,264	16,951	16,951	---	19,949	23,707	23,707	0
CIBOLA NATIONAL WILDLIFE REFUGE	10,721	12,741	12,741	0	17,292	20,550	20,550	0
IMPERIAL NATIONAL WILDLIFE REFUGE	2,201	2,616	2,616	0	3,554	4,224	4,224	0
YUMA PROVING GROUND	427	516	550	---	427	516	550	-34
GILA MONSTER FARMS	2,938	3,849	5,244	---	5,033	6,817	9,156	-2,339
WELLTON-MOHAWK IDD	201,208	236,494	278,000	-41,506	299,496	371,812	424,350	---
CITY OF YUMA	10,824	14,512	17,051	-2,539	18,484	25,045	27,318	-2,273
MARINE CORPS AIR STATION YUMA	1,108	1,416	1,500	---	1,108	1,416	1,500	-84
UNION PACIFIC RAILROAD	18	24	24	---	37	48	48	0
UNIVERSITY OF ARIZONA	564	705	764	---	564	705	764	-59
YUMA UNION HIGH SCHOOL DISTRICT	90	120	151	---	122	161	200	-39
DESERT LAWN MEMORIAL	77	91	91	---	109	129	129	0
NORTH GILA VALLEY IDD	10,381	11,472	10,099	---	34,806	43,351	41,000	2,351
YUMA IRRIGATION DISTRICT	31,467	38,122	42,581	---	56,012	70,086	75,900	-5,814
YUMA MESA IDD	81,188	95,910	111,022	---	146,744	183,528	204,904	-21,376
UNIT "B" IRRIGATION DISTRICT	15,764	17,974	17,330	---	23,026	27,729	28,050	-321
FORT YUMA INDIAN RESERVATION	1,175	1,396	1,396	---	1,808	2,149	2,149	0
YUMA COUNTY WATER USERS' ASSOCIATION	177,960	226,290	244,599	---	273,605	358,315	388,000	-29,685
COCOPAH INDIAN RESERVATION	935	2,230	6,457	---	1,046	3,036	9,840	-6,804
RECLAMATION-YUMA AREA OFFICE	98	116	116	---	98	116	116	0
RETURN FROM SOUTH GILA WELLS	---	---	---	---	---	---	---	---
TOTAL ARIZONA	2,078,763	2,609,367	2,792,851		2,735,050	3,459,080	3,685,339	
CAP	1,169,720	1,524,384	---	---	---	1,524,384	---	---
ALL OTHERS	909,043	1,084,983	1,251,456	---	---	1,934,696	2,143,944	---
YUMA MESA DIVISION, GILA PROJECT	123,036	145,504	350,000	-204,496	---	296,965	---	---

ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
Payback of IOPP overruns - (Cocopah and Beattie)	-165
CAWCD/YMIDD Pilot Conservation Program ¹	-7000
Total State Adjusted Apportionment	2,792,835
Excess to Total State Adjusted Apportionment	-183,468
Estimated Allowable Use for CAP	1,710,100

^{1/} in 2013 CAWCD and YMIDD entered into a Pilot Following Agreement. In 2015, it is estimated that 7,000 AF of water will be conserved by the program and that volume of water will remain in Lake Mead to benefit system storage.

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

**U.S. BUREAU OF RECLAMATION
LOWER COLORADO REGION
CY 2015**

NOTE:

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- Water user with a diversion entitlement - **Excess to Approved Diversion** column indicates overrun/underrun of entitlement. Dash in this column indicates water user has a consumptive use entitlement.

**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 \(Water Accounting Reports\)](#)

WATER USER	Use To Date CY2015	Forecast Use CY2015	Estimated Use CY2015	Excess to Estimated Use CY2015	Diversion To Date CY2015	Forecast Diversion CY2015	Approved Diversion CY2015	Excess to Approved Diversion CY2015
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	330,038	424,815	467,935	-43,120	330,038	424,815	467,935	-43,120
LAKE MEAD NRA, NV - Diversions from Lake Mead	317	401	422	---	317	401	422	-21
LAKE MEAD NRA, NV - Diversions from Lake Mohave	137	172	166	---	137	172	166	6
BASIC MANAGEMENT INC.	5,024	7,009	8,211	---	5,024	7,009	8,211	-1,202
CITY OF HENDERSON (BMI DELIVERY)	10,954	14,690	15,878	---	10,954	14,690	15,878	-1,188
NEVADA STATE DEPT. OF FISH & GAME	8	11	12	-1	388	474	363	---
PACIFIC COAST BUILDING PRODUCTS INC.	763	982	923	---	763	982	923	59
BOULDER CANYON PROJECT	146	174	174	---	254	302	302	0
BIG BEND WATER DISTRICT	1,502	2,551	4,061	---	3,608	5,646	10,000	-4,354
FORT MOJAVE INDIAN TRIBE	2,057	2,500	3,886	---	3,072	3,733	5,800	-2,067
LAS VEGAS WASH RETURN FLOWS	-164,648	-213,185	-201,668	---				
TOTAL NEVADA	186,298	240,120	300,000	-43,121	354,555	458,224	510,000	-51,887
SOUTHERN NEVADA WATER SYSTEM (SNWS)	165,390	211,630				424,815		
ALL OTHERS	20,908	28,490				33,409		
NEVADA USES ABOVE HOOVER	182,739	235,069				448,845		
NEVADA USES BELOW HOOVER	3,559	5,051				9,379		

Tributary Conservation & Imported Intentionally Created Surplus

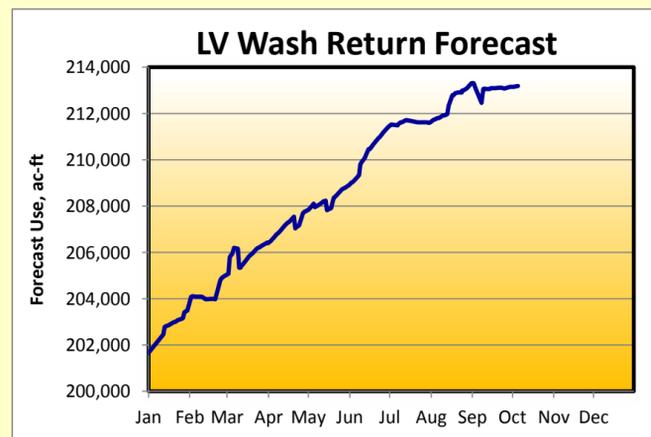
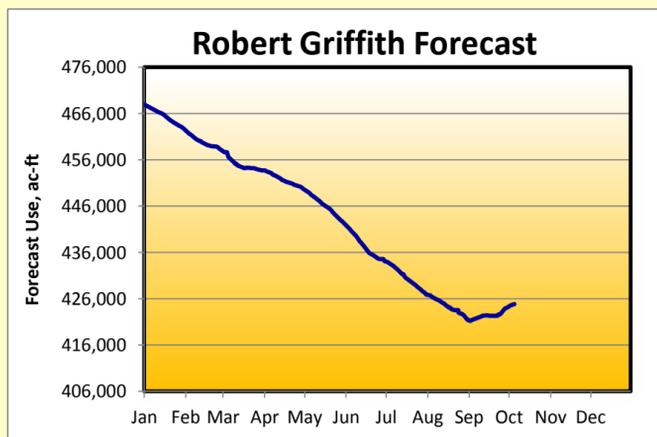
Total Requested Tributary Conservation Intentionally Created Surplus	29,500
Total Requested Imported Conservation Intentionally Created Surplus	9,000
5% System Cut for Creation of Intentionally Created Surplus	-1,925
Total Intentionally Created Surplus Left in Lake Mead	36,575

Pilot System Conservation Program

Tributary Conservation - Left in Lake Mead ¹	7,500
---	-------

NEVADA ADJUSTED APPORTIONMENT CALCULATION

Nevada Basic Apportionment	300,000
Excess to Total State Adjusted Apportionment	-59,880



1/ On June 4, 2015, Reclamation and SNWA entered into a System Conservation Implementation Agreement in which SNWA agreed to conserve 7.500 AF of Colorado River water from its Tributary Conservation projects to create System Conservation Water.

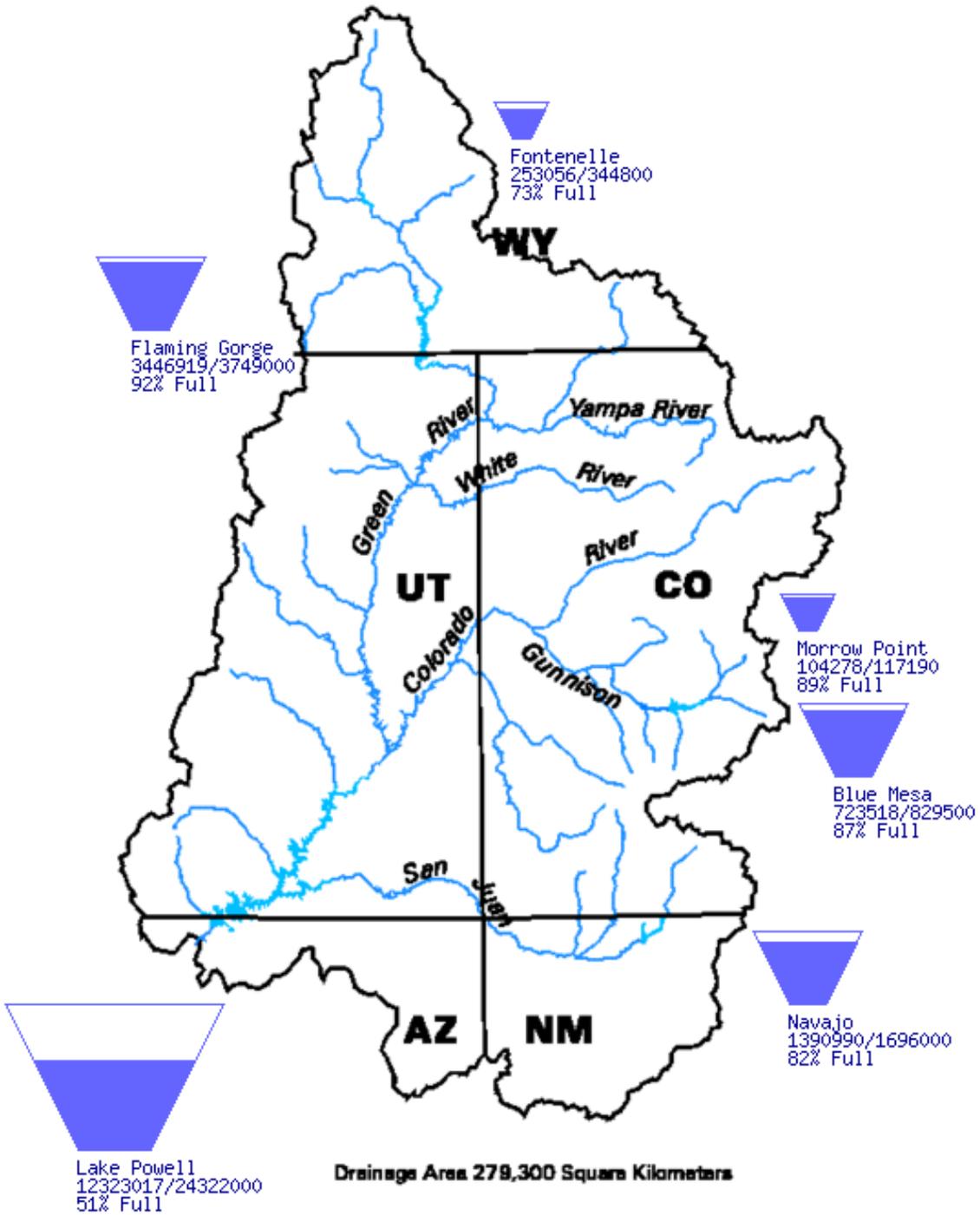
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

Upper Colorado Region Water Resources Group

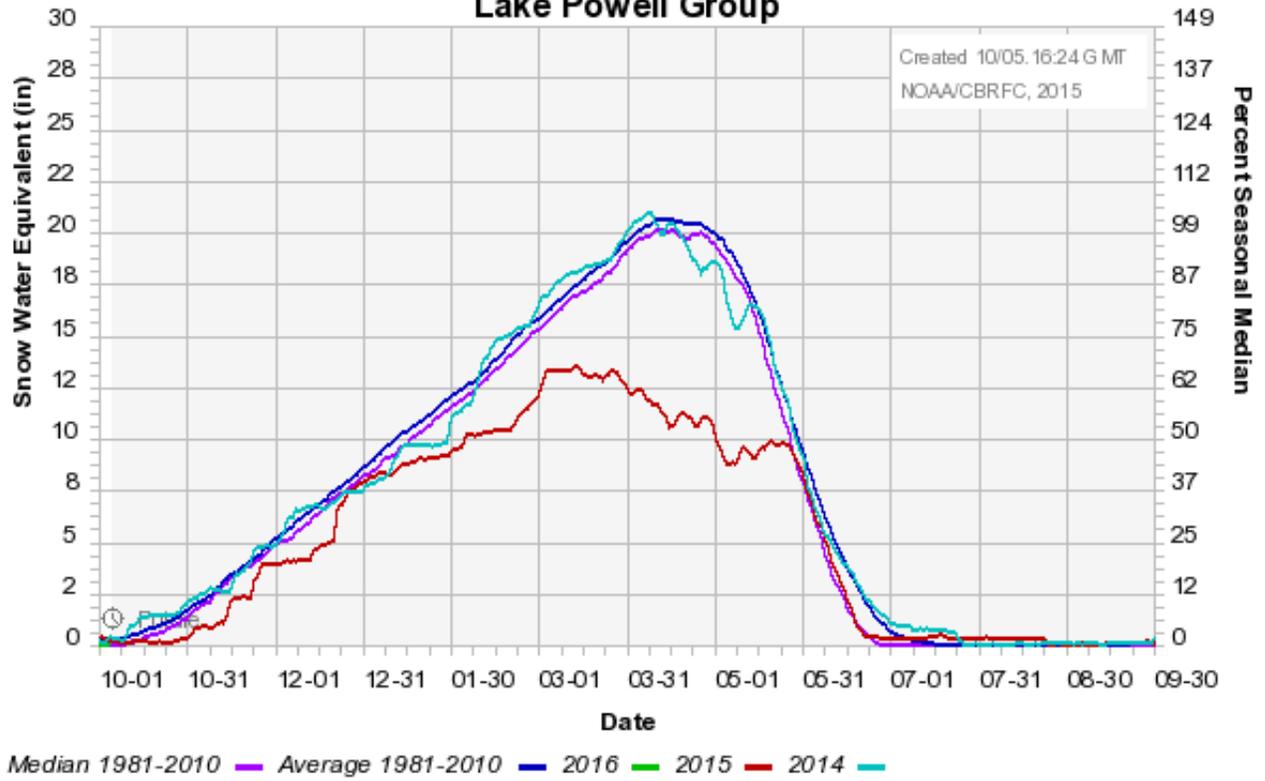
River Basin Tea-Cup Diagrams

Data Current as of:
10/01/2015

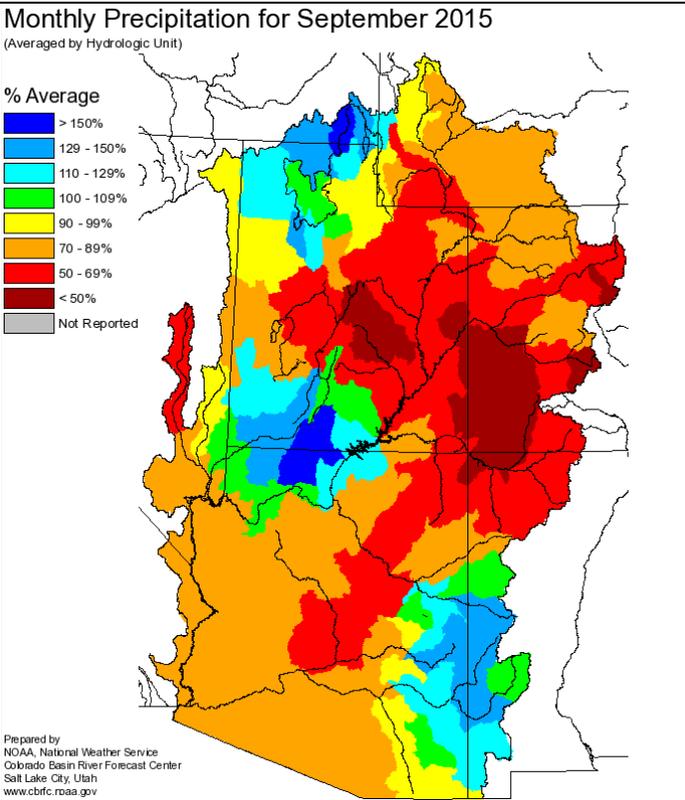
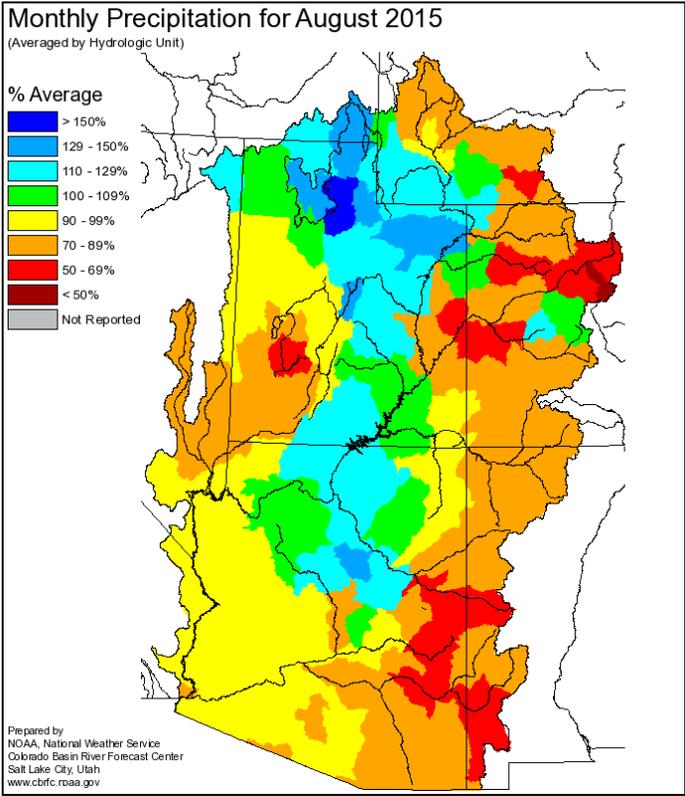
Upper Colorado River Drainage Basin



Colorado Basin River Forecast Center Lake Powell Group



NOAA National Weather Service Monthly Precipitation Maps for August and September 2015

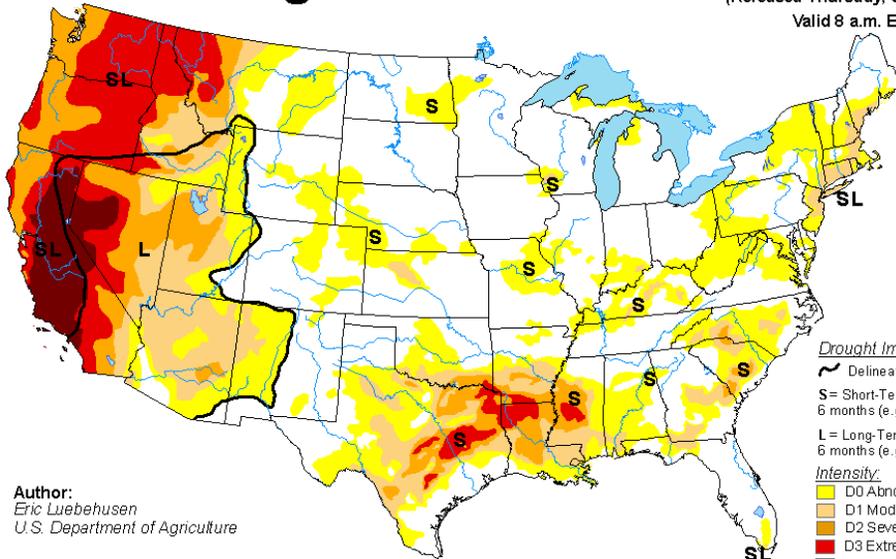


U.S. Drought Monitor

September 29, 2015

(Released Thursday, Oct. 1, 2015)

Valid 8 a.m. EDT



Author:
Eric Luebehusen
U.S. Department of Agriculture

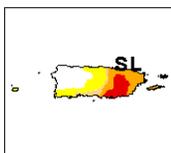
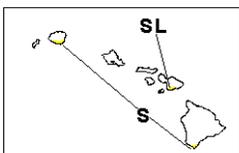
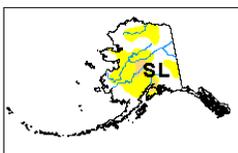
Drought Impact Types:

- ~ 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:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

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



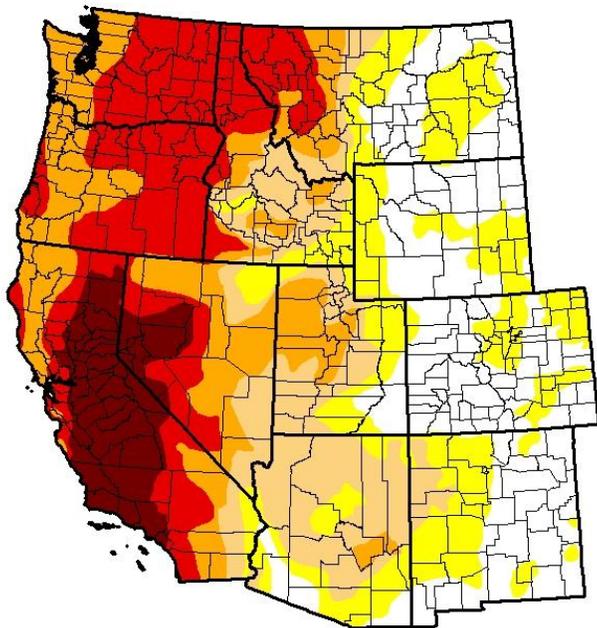
<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor West

September 29, 2015

(Released Thursday, Oct. 1, 2015)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	22.77	77.23	57.81	42.42	26.50	7.62
Last Week 9/22/2015	22.79	77.21	58.18	42.49	26.73	7.62
3 Months Ago 6/30/2015	23.90	76.10	60.38	39.01	17.13	7.26
Start of Calendar Year 12/31/2014	34.76	65.24	54.48	33.50	18.68	5.40
Start of Water Year 9/30/2014	31.48	68.52	55.57	35.65	19.95	8.90
One Year Ago 9/30/2014	31.48	68.52	55.57	35.65	19.95	8.90

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

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

Author:
Eric Luebehusen
U.S. Department of Agriculture



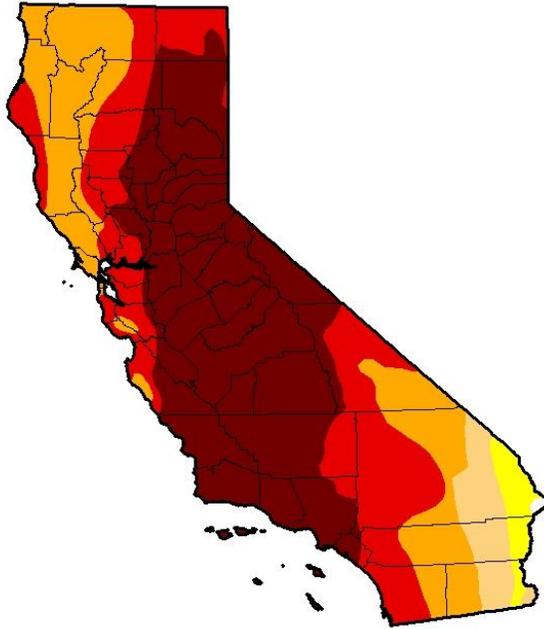
<http://droughtmonitor.unl.edu/>

**U.S. Drought Monitor
California**

September 29, 2015

(Released Thursday, Oct. 1, 2015)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	97.33	92.36	71.08	46.00
Last Week <i>9/22/2015</i>	0.14	99.86	97.33	92.36	71.08	46.00
3 Months Ago <i>6/30/2015</i>	0.14	99.86	98.71	94.59	71.08	46.73
Start of Calendar Year <i>12/31/2014</i>	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year <i>9/30/2014</i>	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago <i>9/30/2014</i>	0.00	100.00	100.00	95.04	81.92	58.41

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.

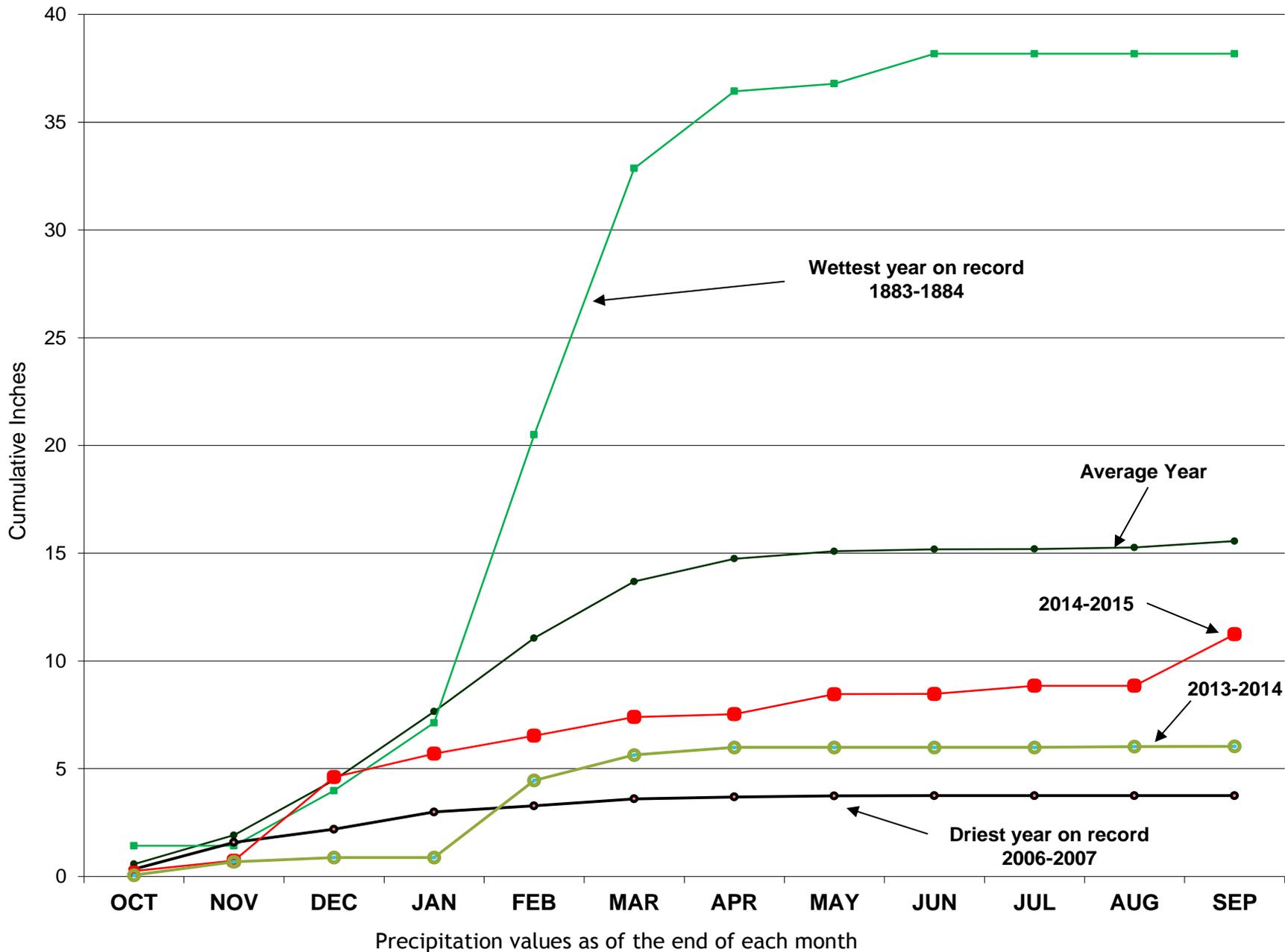
Author:

Eric Luebbehusen
U.S. Department of Agriculture



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

Los Angeles Civic Center Precipitation

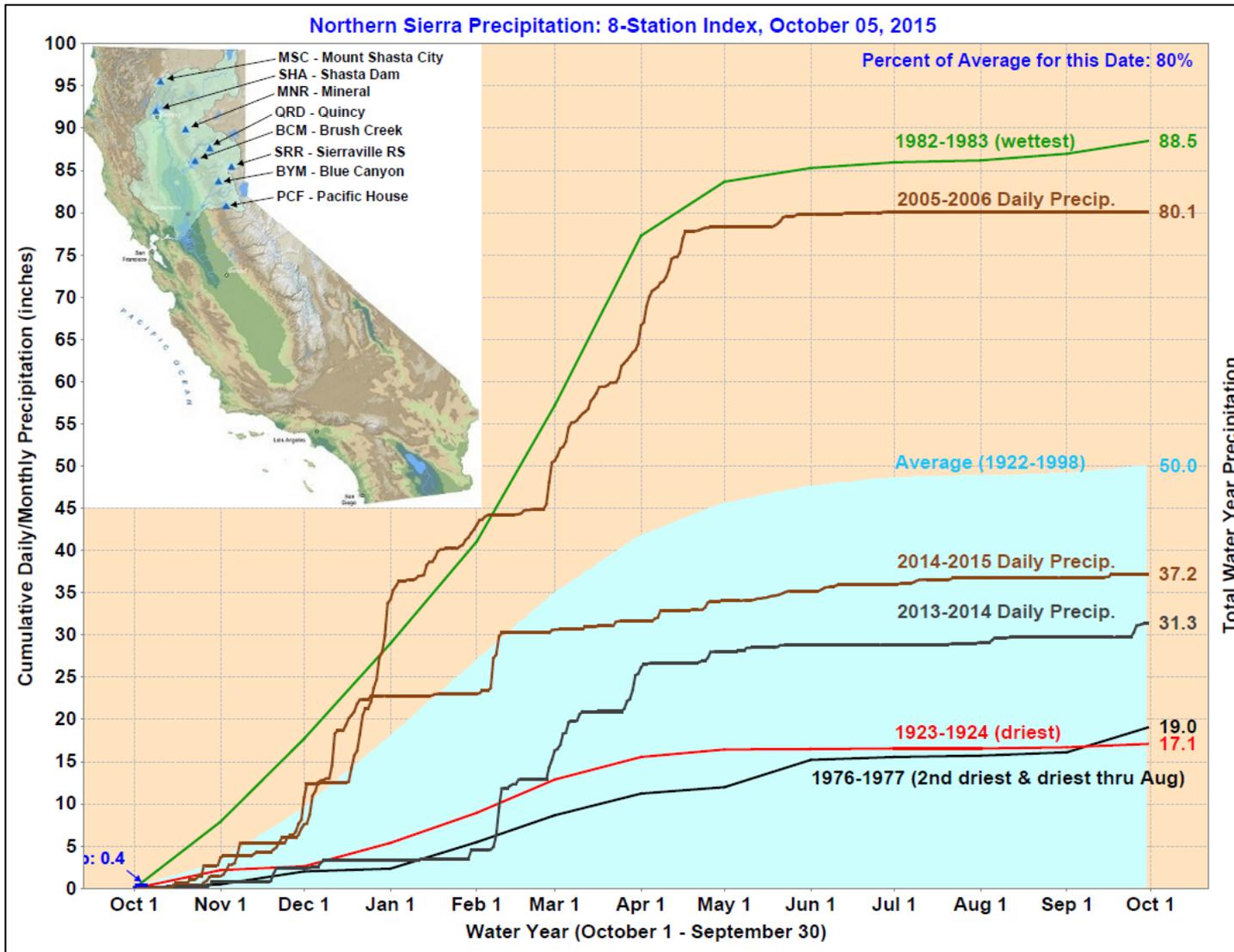


Precipitation at Six Major Stations in Southern California

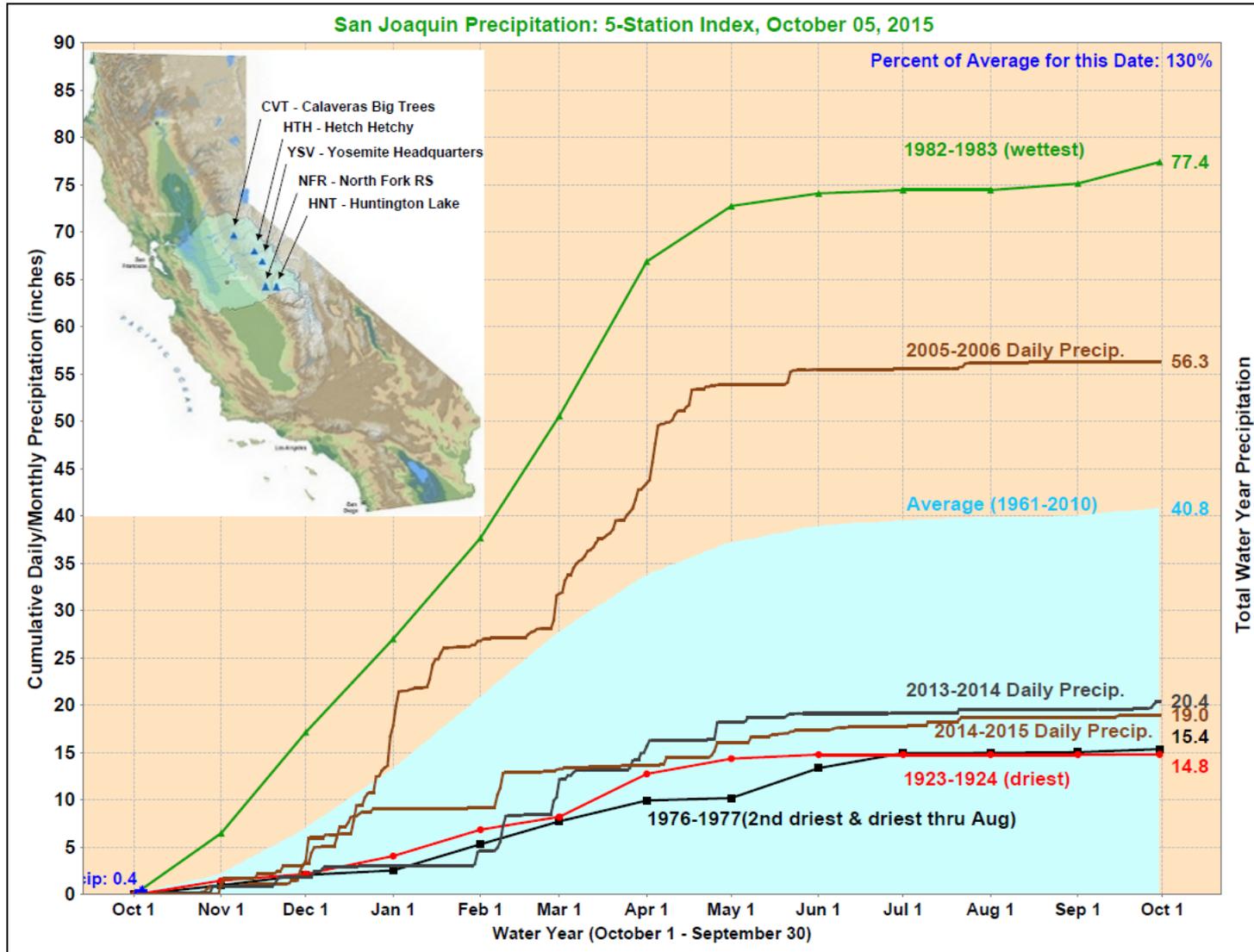
From October 1, 2014 to September 30, 2015

Station	Precipitation in inches		Average to Date	Percent of Average
	Aug	Oct 1 to Sep 30		
San Luis Obispo	0.02	8.84	22.44	39%
Santa Barbara	0.17	9.80	17.78	55%
Los Angeles	2.39	11.24	15.56	72%
San Diego	1.28	9.23	10.15	91%
Blythe	0.04	3.10	3.81	81%
Imperial	0.00	1.95	2.83	69%

Northern Sierra Precipitation-8 Station Index



San Joaquin Precipitation-5 Station Index



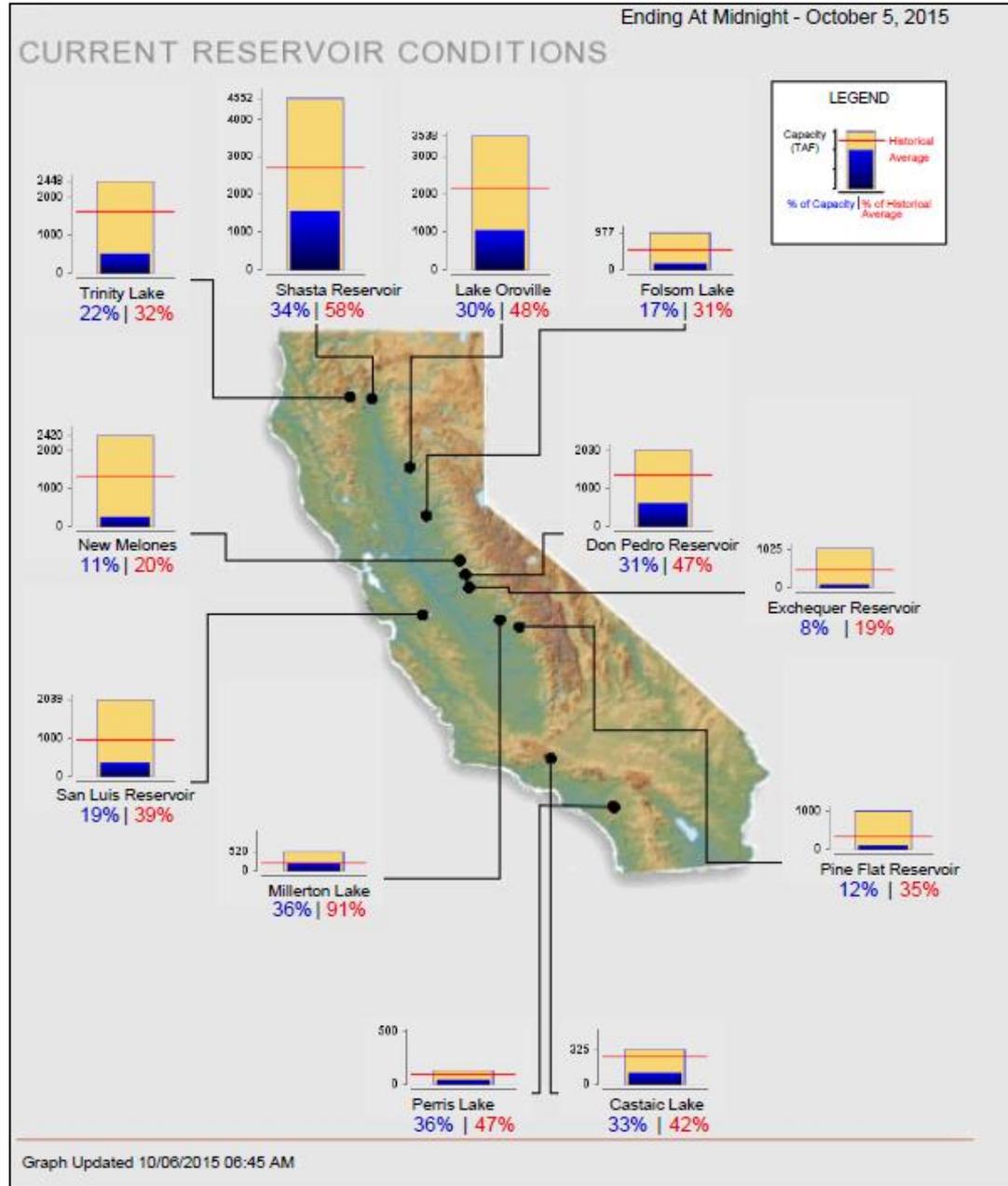
Comparison of SWP Water Storage

Reservoir	Capacity	2014 Storage (acre-feet)		2015 Storage (acre-feet)	
		As of Oct 1	% of Cap.	As of Oct 1	% of Cap.
Frenchman	55,475	19,661	35%	12,413	22%
Lake Davis	84,371	45,097	53%	37,778	45%
Antelope	22,564	16,701	74%	16,944	75%
Oroville	3,553,405	1,075,538	30%	1,057,837	30%
TOTAL North	3,715,815	1,156,997	31%	1,124,972	30%
Del Valle	39,914	34,374	86%	32,488	81%
San Luis (DWR)	1,062,180	216,308	20%	322,313	30%
Pyramid	169,901	167,933	99%	167,319	98%
Castaic	319,247	108,741	34%	114,314	36%
Silverwood	74,970	70,714	94%	67,789	90%
Perris	126,841	54,966	43%	46,851	37%
TOTAL South	1,793,053	653,036	36%	751,074	42%
TOTAL SWP	5,508,868	1,810,033	33%	1,876,046	34%

State Water Project Projected Deliveries:

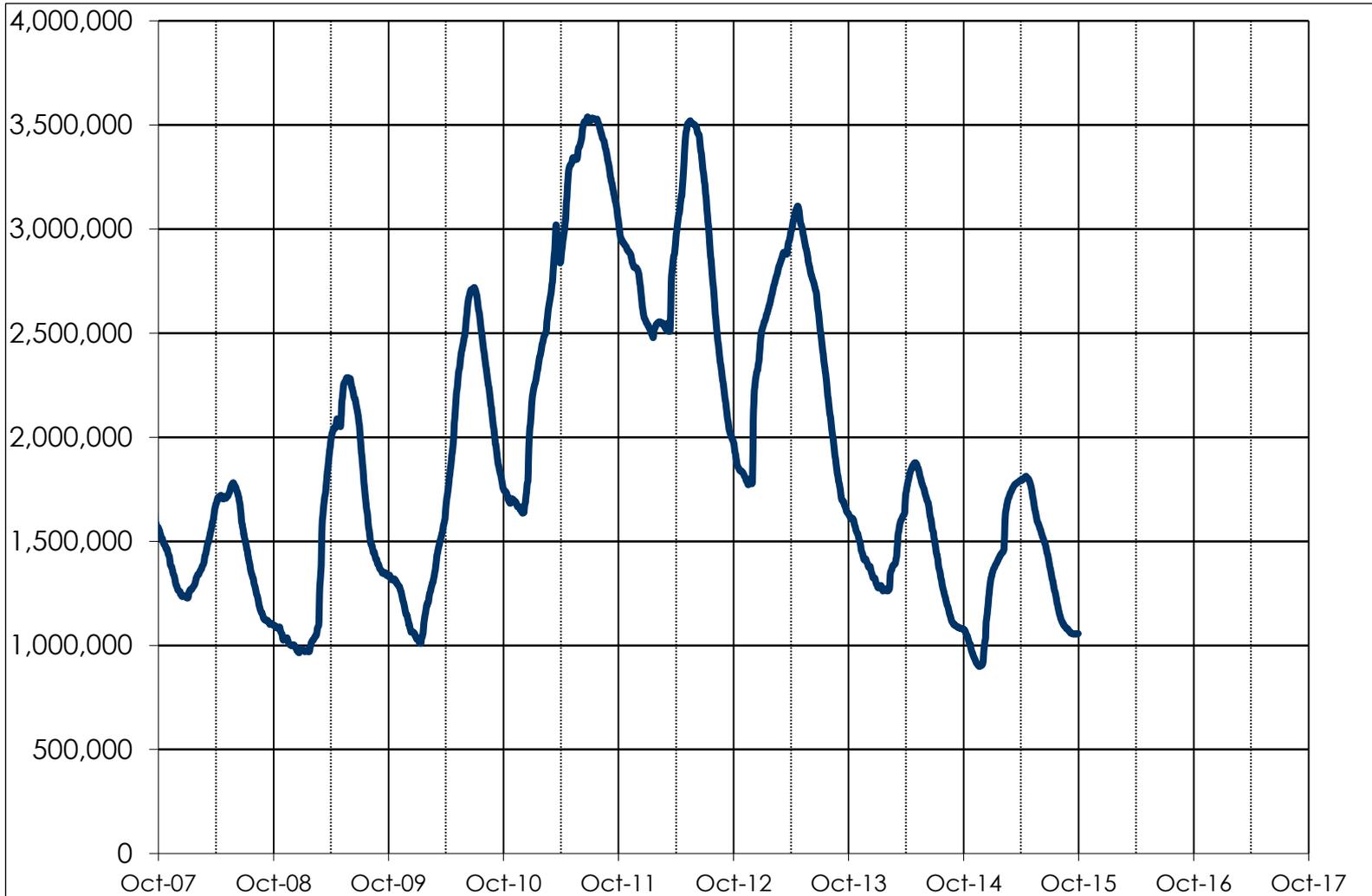
As of March 2, 2015, the Table-A allocations for 2015 is 20%

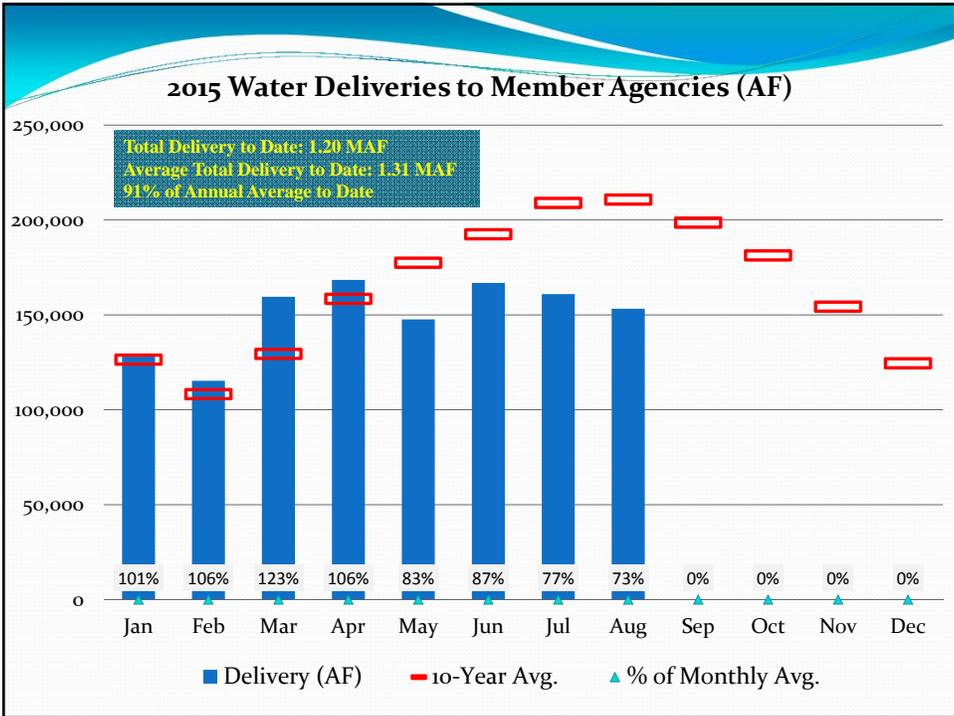
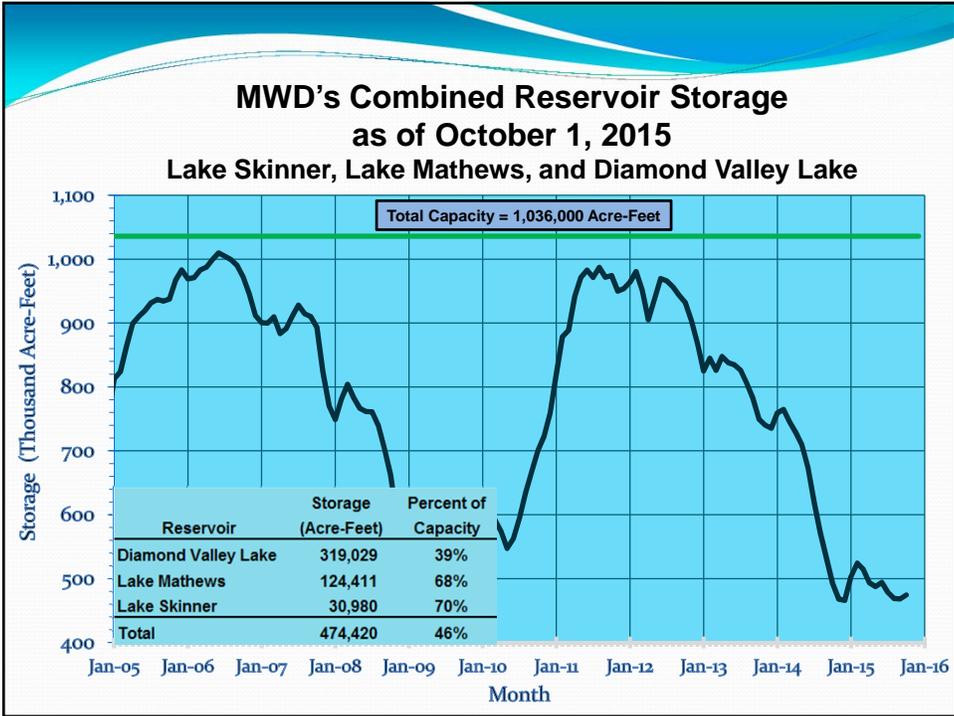
Current Reservoir Conditions



Oroville Storage (acre-feet)

October 1, 2007 - September 30, 2015







Drought Update

Wednesday, September 30, 2015

KEY ACTION ITEMS FROM THIS WEEK

- **CDFA Funds \$9.38 Million to Assist Farmers In Drought through SWEEP:** On September 28, the Department of Food and Agriculture (CDFA) has [selected](#) 100 projects totaling \$9.38 million from the State Water Efficiency and Enhancement Program ([SWEEP](#)) to implement on-farm water irrigation systems that reduce energy use resulting in greenhouse gas (GHGs) emission reductions and water savings.

The selected projects will leverage an additional \$4.6 million in private cost-share dollars. The funding will support GHG emission reductions through projects that include water-efficiency modifications like drip and microsprinkler systems, energy-efficient water pumps, soil moisture sensors, and irrigation scheduling programs that apply water based on crop needs.

- **Resources Agency Releases Fact Sheet on CA WaterFix's Benefits to Fish:** On September 23, the California Natural Resources Agency [released](#) a four-page [fact sheet](#) that outlines the benefits to native fish species from the proposed Delta improvement Project. California WaterFix seeks to modernize the way water is diverted from the Sacramento-San Joaquin Delta and would allow water project operators to avoid water diversions at locations in the Delta that would harm fish. For more information, visit [California WaterFix](#).
- **State Water Board and DWR to Hold Technical Sessions and Public Forums on SGMA Implementation:** On September 22, the State Water Board and the Department of Water Resource [announced](#) that a series of technical sessions will be offered for public agencies and public forums throughout the state during October and November to discuss the Sustainable Groundwater Management Act ([SGMA](#)) implementation. For more information, visit the State Water Board's [Local Assistance Program](#).
- **USBR Begins Installation of Temporary Emergency Floating Pump System in Folsom Lake:** On September 25, the US Bureau of Reclamation (USBR) [began](#) the installation of a temporary emergency floating pump system in Folsom Lake that will help ensure access to drinking water if the reservoir's water level continues to drop and existing intakes are no longer usable. Construction of the system began in August and installation is expected to be complete by early October.
- **California Native American Day Highlights Importance of Water:** On September 25, the Department of Water Resources (DWR), in partnership with other state and federal agencies, [held](#) the 48th annual Native American Day which honored the history, art and culture of Native Americans in California and promoted the theme of "Water: Protecting Our Natural Resources" at the State Capitol. In addition, DWR showcased a water conservation exhibit and featured a drought information booth.

- **California’s Water Conservation Education Program Campaign:** This past week, Save Our Water launched two commercials, “Helping Hands” and “Stepping Up”, on major network television which challenges Californians to face the drought together. Stepping Up will also be aired statewide on digital and Hulu. Over 100 bonus radio weather and traffic spots have been secured to promote the “Fix it for Good” campaign in drought impacted areas through November and will be featured on various digital billboards and transit boards in the Sacramento area. Digital ads can be viewed through Tapad, Hulu and IHeartMedia.

Save Our Water and the [California Native Plant Society](#) issued a [press release](#) highlighting the benefits and importance of native plants, as well as the new [native plant section](#) of the Save Our Water website. In addition, Save Our Water partner Scotts Miracle Gro recently launched a great new resource for Californians looking to rethink their approach to their yards: [ScottsMiracleGro.com/California](#). The goal is to provide information to help Californians dramatically reduce water usage and still make the most of the California’s natural beauty. For more tips and tools to help conserve water and keep trees healthy during the drought, please visit Save Our Water’s website, which is available in both [English](#) and [Spanish](#), or connect with the program on [Facebook](#), [Twitter](#) or [Instagram](#).

- **Governor’s Drought Task Force:** The Task Force continues to take actions that conserve water and coordinate state response to the drought. During the September 24 meeting, the State Water Board announced that the August conservation rate for more than 400 urban water suppliers throughout California will be released on October 1.

ONGOING DROUGHT SUPPORT

- **Emergency Food Aid, Utility and Employment Assistance:** The Department of Social Services (CDSS) Drought Food Assistance Program (DFAP) provides food assistance to affected communities that suffer high levels of unemployment from the drought. To date, over 897,604 boxes have been provided to community food banks in drought-impacted counties, with an average of approximately 13,250 food boxes per week since June 2014. Approximately 806,426 boxes of food have been picked up by 424,164 households.

Food boxes distributions vary by county and occur 1-4 times per month. Nearly 62% of the food distributions have occurred in the Tulare Basin (Fresno, Kern, Kings and Tulare). There are 10,800 boxes scheduled for delivery for the week ending October 2 to Fresno, Kern, Riverside, Santa Barbara, and Tulare counties.

The Department of Community Services and Development (CSD) allocated an additional \$600,000, under the federally-funded Community Services Block Grant (CSBG), to continue the [Drought Water Assistance Program \(DWAP\)](#) which provides financial assistance to help low-income families pay their water bills. As of September 18, CSD has reported that a total of \$459,777 has been issued to 2,279 households.

CSD is in the process of allocating \$400,000, under CSBG, to continue the Migrant and Seasonal Farmworker (MSFW) drought assistance program, which provides assistance in employment training and placement services to individuals impacted by the drought. This program provides employment training and placement services to migrant and seasonal farmworkers suffering job loss or reduced employment due to the drought. To date, CSD has reported that a total of \$77,814 has been issued to the Center for Employment Training, California Human Development, Central Valley Opportunity Center, and Proteus with 31 participants enrolled.

In response to California's historic drought, CSD has received \$7.5 million in General Fund to implement the Drought Emergency Assistance Program (DEAP) to provide emergency relief and support services to drought-impacted individuals and their families and households. As of September 18, CSD has reported that a total of \$846,242 has been issued to 777 households.

- **Drought Response Funding:** The \$687 million in state drought funding that was appropriated last March through emergency legislation, as well as \$142 million provided in the 2014 Budget Act, continues to advance toward meeting critical needs. To date, \$468 million has been committed, and nearly \$625 million of the emergency funds appropriated in March came from sources dedicated to capital improvements to water systems. Since March, the Department of Water Resources has expedited grant approvals, getting \$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 was awarded in October, and the remaining \$250 million will be granted by fall 2015. The 2014 Budget Act appropriated an additional \$53.8 million to CAL FIRE over its typical budget to enhance firefighter surge capacity and retain seasonal firefighters beyond the typical fire season.

As a result of continuing drought conditions, emergency legislation was enacted in March 2015 that appropriated over \$1 billion of additional funds for drought-related projects and activities. The Administration's May Revision proposal includes an additional \$2.2 billion for programs that protect and expand local water supplies, improve water conservation, and provide immediate relief to impacted communities.

CURRENT DROUGHT CONDITIONS

- **Fire Activity:** Since the beginning of the year, firefighters from CAL FIRE and the US Forest Service have responded to over 7,187 wildfires across the state, burning 766,974 acres. Fire activity across California remains high with nearly 145 combined wildfires in just the past week.

As of September 29, the Valley Fire in Lake, Napa, and Sonoma County remains the largest in the state burning more than 76,067 acres with 99% containment. The Butte Fire in Amador and Calaveras County is currently at 70,868 acres with 95% containment.

- **CAL FIRE Suspends Outdoor Residential Burning:** California's increased fire activity this year, coupled with record-setting drought conditions, has caused CAL FIRE to [suspend burn permits](#) in all counties in the State Responsibility Area.
- **Dry Well Reports:** With California in its fourth year of a severe, hot drought, the Governor's Drought Task Force continues to monitor and identify communities and local water systems in danger of running out of water. Recently, a cross-agency team, led by DWR, developed a new system that improves and streamlines data collection and reporting for [household water shortages](#) for California water systems with fewer than 15 household connections.

As of September 23, approximately 2,409 wells statewide have been identified as critical or dry, which affects an estimated 11,990 residents. Cal OES has reported that 2,262 of the 2,409 dry wells are concentrated in the inland regions within the Central Valley. If you are experiencing a water supply shortage, please [submit a report](#) on DWR's website.

- **Vulnerable Water Systems:** The State Water Board continues to provide technical and funding assistance to several communities facing drinking water shortages, and is monitoring water systems across the state. Since January 2014, 95 out of the 129 projects approved to receive emergency funding for interim replacement drinking water have been executed. On May 19, the State Water Board adopted Guidelines for administering the latest emergency drought appropriations of \$19 million announced this past March. To date, the State Water Board has received requests for \$5 million of those funds.
- **Projected Reservoir Management:** Shasta Reservoir recorded 1,635,261 acre-feet (AF) on September 24 with a 10-day average reduction in storage of 4,804 AF/day. Releases are being held lower than normal to keep cold water in the reservoir for Winter Run Chinook Salmon later in the fall. Shasta Reservoir is projected to reach 1,460,000 AF by the end of September. This is higher than the 1976-77 record low storage of 700,000 AF.

Oroville Reservoir recorded 1,054,726 AF on September 24 with a 10-day average reduction in storage of 426 AF/day. Releases are low for water supply conservation but are moderated to keep salt water from coming too far into the Delta and to meet other joint Federal-State obligations. Oroville Reservoir is projected to reach 900,000 AF by the end of September. This storage is about the same as the record low 1976-77 storage level.

Folsom Reservoir recorded 178,771 AF on September 24 with a 10-day average reduction in storage of 386 AF/day. Releases are low for water supply conservation but are moderated to keep salt water from coming too far into the Delta and to meet other joint Federal-State obligations. Folsom Reservoir is projected to reach 120,000 AF by the end of September. This is lower than the 1976-77 record low storage of 150,000 AF.

[Reservoir Levels](#) as of September 28 remain low, including: Castaic Lake 36% of capacity (45% of year to date average); Don Pedro 32% of capacity (47% of average); Exchequer 9% of capacity (19% of average); Folsom Lake 18% of capacity (32% of average); Lake Oroville 30% of capacity (48% of average); Lake Perris 36% (47% of average); Millerton Lake 37% of capacity (92% of average); New Melones 11% of capacity (20% of average); Pine Flat 12% of capacity (35% of average); San Luis 20% of capacity (42% of average); Lake Shasta 35% of capacity (59% of average); and Trinity Lake 23% of capacity (33% of average). An update of water levels at other [smaller reservoirs](#) is also available.

- **Weather Outlook:** Conditions are expected to remain dry throughout the state over the next week. Temperatures will be in the mid 90's in the Central Valley and Sierra lows will remain above freezing.

Local Government

- **Local Emergency Proclamations:** A total of 60 local Emergency Proclamations have been received to date from city, county, and tribal governments, as well as special districts:
 - **27 Counties:** Butte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Kern, Kings, Lake, Madera, Mariposa, Merced, Modoc, Plumas, San Bernardino, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Siskiyou, Sonoma, Stanislaus, Sutter, Trinity, Tulare, Tuolumne and Yuba.

- **12 Cities:** City of Live Oak (Sutter County), City of Lodi (San Joaquin County), City of Manteca (San Joaquin County), City of Montague (Siskiyou County), City of Porterville (Tulare County), City of Portola (Plumas County), City of Ripon (San Joaquin County), City of San Juan Bautista (San Benito County), City of Santa Barbara (Santa Barbara County), City of Rancho Cucamonga (San Bernardino County) and City of West Sacramento (Yolo County) and City of Willits (Mendocino County).
- **9 Tribes:** Cortina Indian Rancheria (Colusa County), Hoopa Valley Tribe (Humboldt County), Karuk Tribe (Siskiyou/Humboldt Counties), Kashia Band of Pomo Indians of the Stewarts Point Rancheria (Sonoma County), Picayune Rancheria of Chukchansi Indians (Madera County) Sherwood Valley Pomo Indian Tribe (Mendocino County), Tule River Indian Tribe (Tulare County), Yocha Dehe Wintun Nation (Yolo County) and Yurok Tribe (Humboldt County).
- **12 Special Districts:** Carpinteria Valley Water District (Santa Barbara County), Goleta Water District (Santa Barbara County), Groveland Community Services District (Tuolumne County), Lake Don Pedro Community Services District (Mariposa Stanislaus County), Mariposa Public Utility District (Mariposa County), Meiners Oaks Water District (Ventura County), Montecito Water District (Santa Barbara County), Mountain House Community Service District (San Joaquin County), Nevada Irrigation District (Nevada County), Placer County Water Agency (Placer County), Tuolumne Utilities District (Tuolumne County) and Twain Harte Community Services District (Tuolumne 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.

ACWA [released](#) a Drought Response Toolkit to assist water agencies as they take action to meet state-mandated water conservation target and communicate information about water use restrictions, enforcement and other issues with their customers, media and other audiences.

- **County Drought Taskforces:** A total of 33 counties have established drought task forces to coordinate local drought response. These counties include: Butte, Colusa, Glenn, Humboldt, Kern, Kings, Lake, Madera, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Orange, Placer, Plumas, Sacramento, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Siskiyou, Stanislaus, Solano, Sutter, Tehama, Trinity, Tulare, Tuolumne, and Yolo.
- **Tribal Taskforce:** A total of 7 tribes have established drought task forces to coordinate tribal drought response. These tribes include: Hoopa Valley Tribe (Humboldt County), Hopland Tribe (Mendocino County), Karuk Tribe (Siskiyou County), La Jolla Band of Luiseno Indians (San Diego County), Sherwood Valley Tribe (Mendocino County), Trinidad Tribe (Humboldt County), and Yurok Tribe (Humboldt and Del Norte 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

Oct. 2, 2015

Former Interior Department assistant secretary joins CU-Boulder's Getches-Wilkinson Center

BOULDER - Anne Castle, who served as assistant secretary for water and science in the U.S. Department of the Interior from 2009 to 2014, has joined the Getches-Wilkinson Center for Natural Resources, Energy and the Environment – part of the University of Colorado Boulder law school – as a senior fellow.

In the position, she will lead projects on water law and policy issues, drawing on her extensive experience engaging with community and governmental leadership to help construct creative and practical solutions to water challenges throughout the West.

"I'm delighted to continue to engage on the most critical natural resource issue of our time – water scarcity – and to work with recognized experts in the field," said Castle, who is a 1981 alumna of Colorado Law and who has worked on water law since the beginning of her career. "There is no more opportune time to make a meaningful difference in how we as a country confront and resolve our water management challenges."

While at the Interior Department, Castle oversaw the Bureau of Reclamation, the nation's largest water wholesaler, and the U.S. Geological Survey. She spearheaded the department's WaterSMART program and was the driving force behind the 2010 Memorandum of Understanding among the Interior Department, the Department of Energy and the U.S. Army Corps of Engineers, addressing the development of sustainable hydropower generation. She directed policy for the USGS Landsat Program, the nation's longest sequential moderate-resolution satellite imaging system.

Castle also provided hands-on leadership on Colorado River issues and was the Interior Department's designee to, and chair of, the Glen Canyon Dam Adaptive Management Work Group. She was a champion of Minute 319 – an amendment to a decades-old treaty between the United States and Mexico involving the Colorado River. She instituted the federal Open Water Data Initiative and chaired the interagency Federal Geographic Data Committee, the Advisory Committee on Water Information and the Alaska Mapping Executive Committee.

"We are very pleased to welcome Anne back to Colorado Law as a senior fellow with the [Getches-Wilkinson Center](#)," said Britt Banks, executive director of the center. "Her stature in the water community and extensive experience and knowledge will provide an elevated level of engagement on water issues and will be a tremendous resource for our faculty, contributors and students as well as a significant benefit to the water research projects we work on."

At the center, Castle will lead a project funded by the Walton Family Foundation and the Gates Family Foundation to explore and develop implementation actions on Colorado's Water Plan.

Prior to joining the Interior Department, Castle practiced water law with the Rocky Mountain regional law firm of Holland & Hart, where she was elected to chair the firm's management committee. She received her undergraduate degree from CU-Boulder's College of Engineering and Applied Sciences in applied mathematics in 1973.

After leaving the Interior Department, Castle hiked the 800-kilometer Camino de Santiago in Spain and spent the 2015 spring quarter at the Woods Institute for the Environment at Stanford University as the Landreth Visiting Fellow.

October 2, 2015

David Palumbo Named Bureau of Reclamation's Deputy Commissioner for Operations

WASHINGTON - Bureau of Reclamation Commissioner Estevan López announced today that David Palumbo is the new Deputy Commissioner for Operations. He will oversee operations in Reclamation's five regions, the Native American and International Affairs Office, the Technical Service Center, Hydropower Office and Dam Safety Officer/Design, Estimating, Construction office.

"Water delivery and power generation are fundamental to what the Bureau of Reclamation does," López said. "Dave's federal government and private industry experience working on water, power and environmental projects are great assets as we work to meet future water and power demands in the western United States."

Palumbo moves to Washington, D.C., from Reclamation's Lower Colorado Region, where he became the deputy regional director in 2012. In this position, he oversaw complex water and power programs in the region, including Hoover Dam operations. He also managed and led Native American activities, including those related to Navajo Generating Station and implementing Indian water rights settlements. He has built strong, collaborative relationships with customers and stakeholders throughout the Colorado River basin, including those in the country of Mexico.

He joined Reclamation in 2005 as a project manager where he led the construction project of the Brock Reservoir Project in Southern California's Imperial Valley. This \$172 million project was completed ahead of schedule and under budget. The facility provides enhanced storage capacity to improve management and conservation of Colorado River water.

In addition to his work for Reclamation in the Southwest, Palumbo worked in the private sector for Kerr-McGee Corporation for ten years. For four of those years he partnered with Canada's Hydro-Quebec, managing engineering and operations for manufacturing, water, energy, and research and development programs.

Palumbo holds a Bachelor of Science degree in Civil and Environmental Engineering from the University of Nevada, Las Vegas and a Bachelor of Arts degree in English Literature from Notre Dame. He also has master's degrees in both Civil Engineering and Engineering Mechanics from Columbia University and in English Literature from the University of Nevada, Las Vegas. He is a licensed civil engineer in California and certified project manager.

He was awarded the Superior Service Award in 2011 and Meritorious Service Award in 2014 from the Department of the Interior. Palumbo was also named Reclamation's Engineer of the Year in 2008.

Palumbo fills the spot vacated by Lowell Pimley, who retires this week after a 35-year career with the Bureau of Reclamation.