

December 4, 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, December 16, 2015
Time: 3:00 p.m.
Place: Emperor II – 4 th Floor Caesar's Palace 3570 Las Vegas Boulevard South Las Vegas, NV 89109 Tel: (866) 227-5938; FAX: (702) 731-7172

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

Tanya M. Trujillo
Executive Director

attachment: Agenda

Regular Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, December 16, 2015
3:00 p.m.

Emperor II – 4th Floor
Caesar’s Palace
3570 Las Vegas Boulevard South
Las Vegas, NV 89109

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

1. Call to Order
2. Opportunity for the Public to Address the Board (Limited to 5 minutes)
In accordance with California Government Code, Section 54954.3(a)
3. Administration
 - a. Consideration and Approval of the Minutes of the Meeting held November 18, 2015 (**Action**)
 - b. Adoption of the 2016 Colorado River Board meeting schedule (**Action**)
4. Colorado River Basin “Year in Review” Water Reports
 - a. Reports on current reservoir storage, reservoir releases, projected water use, and forecasted river flows
 - b. State and Local Water Reports
5. “Year in Review” update regarding the 2015 California Drought
6. “Year in Review” updates regarding Colorado River Basin Programs
 - a. Review status of Basin States drought contingency planning
 - b. Review status of the Colorado River Basin Water Supply and Demand Study
 - c. Review status of the implementation of Minute 319
 - d. Review status of the Salinity Control Forum, Workgroup, and Advisory Council
 - e. Review status of the Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental Management Plan EIS
 - f. Review status of the Lower Colorado River Multi-Species Conservation Program
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: Regular Meeting
January 13, 2016
10:00 a.m.
Vineyard Room
Holiday Inn Ontario Airport
2155 East Convention Center Way
Ontario, CA 91764-4452
Tel: (909) 212-8000, Fax: (909) 418-6703

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, November 18, 2015.

A meeting of the Colorado River Board of California was held on Wednesday, November 18, 2015.

Board Members and Alternates Present

Stephen Benson	Glen Peterson
Brian Brady	David Pettijohn
Dana Bart Fisher, Jr., Chairman	Jack Seiler
James Hanks	David Vigil
Henry Kuiper	Jeanine Jones, Designee
Peter Nelson	Department of Water Resources

Board Members and Alternates Absent

Michael Touhey	Chris Hayes, Designee
Doug Wilson	Department of Fish and Wildlife
John Powell Jr.	

Others Present

Steve Abbott	Mike Pacheco
Tim Blair	Paula McConnell Pangle
John Carter	Angela Rashid
Lawrence Cox	Jack Safely
Linsey Dale	Suzanna Sexton
Edwin Delgado	Tina Shields
Dan Denham	Peter Silva
Ron Derma	Darren Simon
Graeme Donaldson	Ed Smith
Karen Donovan	Joanna Smith Hoff
Craig Elmore	Philip Southern
Larry Fleming	Mark Stuart
Bill Hasencamp	Gary Tavetian
Tom Havens	Tanya Trujillo
Kevin Kelly	Mark VanVlack
Michael Hughes	Harold Walk
Lisa Johansen	Cherie Watte
Laura Lamdin	Donnell Wilcox
Lindia Liu	Michael Yu
Kara Mathews	
Jan Matusak	
Vic Nguyen	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 1:05 P.M.

Chairman Fisher asked whether anyone in the audience 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.

Mr. Fisher took a moment to thank the Directors and staff of IID for the tour and extended a special thanks to Mr. Jack Vessey, who hosted the farm visit.

Mr. Steve Benson, IID Board President, thanked everyone who was in attendance and expressed his gratitude to those who attended the tour. Mr. Benson noted Mr. Jim Hanks' contributions to the Colorado River Board.

ADMINISTRATION

Consideration and Approval of the Minutes

Chairman Fisher asked for a motion to approve the October 14, 2015 meeting minutes. Mr. Pettijohn moved that the minutes be approved, seconded by Ms. Jones. After receiving a correction in regarding the water report, by unanimous support, the October 14, 2015 meeting minutes were approved.

Colorado River Basin Water Reports and State and Local Water Reports

Ms. Trujillo reported that as of November 9, 2015, the system storage was 51% of capacity. Lake Mead water level was at 1,079 feet, with 9.94 million acre-feet (MAF), or 38% of capacity. The water level at Lake Powell was at 3,606 feet with 12.3 million acre-feet, or 51% of capacity. In the Upper Basin, reservoirs continue to show the benefits of the "Miracle May" precipitation. Upper Basin reservoirs other than Lake Powell remain between 70-90% full.

Ms. Trujillo reported that as of November 17, 2015, the water year has been tracking close to an average year. Observed inflow was 104% of average and the forecast for November inflow is about 85% of average.

Ms. Trujillo reported that in the Lower Basin, Brock Reservoir storage was 125,690 acre-feet through November 10, Senator Wash storage was 99,930 acre-feet through November 12, and excess flows to Mexico were 14,282 acre-feet through November 15. The Bypass flows were 121,721 acre-feet as of November 6, 2015.

Ms. Trujillo reported that precipitation during the month of September, in most of the Basin, was below 89% and in some areas below 50%. Precipitation in October was

above average, particularly in the lower Basin as a result of several large storms. Ms. Trujillo reported that the Drought Monitor map showed increased favorable conditions in Wyoming, Colorado, New Mexico, Utah, and Arizona.

The California drought continues to persist with 45% of the State remaining in the Exceptional Drought category. Ms. Trujillo noted that in addition to the Drought Monitor Map, reservoir levels are also an important indicator of the severity of the drought. On November 13, Governor Brown issued an additional Executive Order extending the existing drought proclamation and April mandatory water use reductions. On a statewide basis, California municipalities have continued to exceed the 25% conservation mandate and since June 1, the cumulative statewide savings has been 28%. Governor Brown issued a state of emergency for the removal of dead forest trees impacted by the drought and bark beetles, which are susceptible to forest fires. Ms. Trujillo reminded the Board that there have been a large number of forest fires that have occurred across the State this year.

In addition to dealing with drought issues, the State is also preparing for storms and possible flooding related to the strong El Nino that is anticipated. The state has a setup a new website, www.storms.ca.gov, to provide information on the State's storm preparation activities. Mr. Stuart, of the California Department of Water Resources, reported on the seasonal precipitation as recorded at the Los Angeles Civic Center. Precipitation last year was well below normal, and October of this year was just above zero. Mr. Stuart reported that as preliminary reporting indicated that the snow accumulation as of early November is about 75% for California and he was hopeful that El Nino would bring a wet year. Precipitation at selected southern California stations for October were a mix of below ten percent in Imperial to over 300% in Blythe, although the amount of precipitation received in Blythe was only 0.84 inches, where the normal for October was 0.27 inches.

Mr. Stuart reported that water storage in Lake Oroville, as of November 1, was about 1 million acre-feet, or 28% of capacity, and is approaching an all-time low. Water storage in the San Luis reservoir was about 287,000 acre-feet, or 27% of capacity. Total water storage in the State Water Project system is 1.76 million acre-feet, or 32% of capacity.

Mr. Glen Peterson, of the Metropolitan Water Agency of Southern California, reported that MWD's combined reservoir storage, as of November 1, was 47% of capacity. Total deliveries were 87% of average and MWD intends to increase system storage in the coming year.

Mr. David Pettijohn, of the Los Angeles Department of Water and Power, reported that the water year as of November 17 was about normal for this time of year. He pointed out that current precipitation conditions in the Eastern Sierra also showed the precipitation pattern of the last El Nino event for water year 1997-1998, and that most of the rain occurred after February and continued through March. Water Year 2015 was the new lowest year on record.

Mr. Peter Nelson, of the Coachella Valley Water District (CVWD), reported that the urban water users have conserved 27.6 percent of their water use, the State Water Resources Control Board required CVWD conserve 36 percent of its urban water use and the State Board has fined CVWD \$61,000 but CVWD is appealing the fine. Mr. Nelson added that the CVWD has conserved the seventh largest amount of water in the State.

Mr. Brian Brady, of the San Diego County Water Authority, reported that for San Diego County, the conservation is at 27 percent. He noted that the Water Authority has asked the State Board to account for water agencies that introduce new water supplies. Mr. Brady mentioned that some agencies in the county that have agriculture use have conserved up to 35 percent but there has been no acknowledgment of those efforts.

Imperial Irrigation District Water Conservation and Management Status Report

Ms. Tina Shields, of the Imperial Irrigation District, covered the status of Quantification Settlement Agreement (QSA) conservation and transfer programs, and the IID apportionment program. IID supplies about 500,000 acres of Imperial Valley farmland with Colorado River water that is transported about 82 miles via the All-American Canal. In 2010, the Canal Lining Project, one of the Capital Improvement Projects funded by the State of California and the San Diego County Water Authority, was completed and provides an annual conservation yield of almost 70,000 acre-feet. The IID irrigation and drainage system is an extensive, largely gravity flow, closed system, with more than 1,500 miles of canals and drains. IID's primary business is farming, and includes permanent, garden, and field crops. The top 13 crops grown within the IID service area are mainly forage crops.

Ms. Shields presented an overview of the IID water conservation and transfer programs, which include the 1988 MWD-IID agreement that predated the QSA agreement. The total conservation volumes are close to 500,000 acre-feet at full implementation, representing almost 15% of IID's Colorado River entitlement. IID has significant agricultural conservation commitments that it has been fulfilling for decades, particularly since 2003. Salton Sea mitigation fallowing has been implemented since 2003 to address environmental issues. There has been a lot of progress made on the Salton Sea since last year. The State has appointed a task force and a high-level policy person to address Salton Sea issues. Discussions have been initiated to move forward with restoration activities.

With respect to the transfer schedules, the volumes of conservation for Salton Sea mitigation ramps up through 2017 when mitigation deliveries end. For this year, the Salton Sea mitigation delivery is 110,000 acre-feet. Next year it ramps up to 130,000 acre-feet, and in the final year, it increases to 150,000 acre-feet. After 2017, IID will end its large-scale fallowing program for mitigation, and transition to efficiency-based programs. IID plans to implement on-farm conservation projects that have been refined based on experience to allow maximum flexibility to benefit growers who participate in the program. On the IID tour, participants saw an inter-tie that can be used to move

water to locations with higher demand. IID is also looking at a new reservoir (2,000 to 3,000 acre-feet in storage capacity) that will be added into its system in the coming months to help manage on-farm programs, particularly, the 12-hour run program to help growers order water in smaller time increments rather than take water for the full 24-hour period that they may not need. With on-farm programs already in use and a wider use of pumps, drip systems, and sprinklers, farmers are provided more flexibility to be able to manage their water. Given the IID apportionment system that is in place, the use of the 12-hour run program has skyrocketed. IID is also commencing a pilot project to look at metering all of the farm deliveries. Other conservation projects could include additional canal lining, performing reservoir upgrades, performing SCADA upgrades to automate the facilities, and providing zanjeros computers with real-time information and decision support features. IID's on-farm conservation program began in 2013, and was scheduled to ramp up 20,000 acre-feet each year. IID's goal this year is to conserve 60,000 acre-feet. When the Salton Sea mitigation deliveries cease in 2017, the water transfer to SDCWA will ramp up again at 30,000 acre-feet increments a year.

IID's water apportionment program was developed to provide a water budget for the growers, and a clearinghouse was established to build in flexibility to transfer (buy and sell) water between farm units. In 2013, IID implemented a straight-line method of agricultural apportionment. Now, IID uses a hybrid method so that one-half of a farm unit apportionment is based on historical use, and the other half is based on an equal version of what every other acre has on a per acre basis. Apportionments are now in place on January 1 of each year, and apportionments for next year have just been mailed out to farmers, and they average about 3 to 8 acre-feet per acre. Ms. Shields explained that trading done outside of a farm unit would have to go through the clearinghouse so that IID may be able to track the water and help facilitate the movement of the water within the valley. IID also has a payback program at the grower level. These tools help growers manage their apportionments to plan and make cropping choices in advance and to help IID manage its 3.1 million acre-feet water budget from the river. Over the past decade, IID's QSA conservation has totaled about 3.4 million acre-feet.

Director Hanks commented that farmers in the valley and the IID have made tremendous efforts and investments to help California live within its 4.4 million acre-feet requirement, and noted that the QSA implementing statute requires the IID Board to pass a resolution in support of any future Colorado River water transfers.

Updates From California Department Of Water Resources

Ms. Jeanine Jones, of the California Department of Water Resources, reported on developments to improve seasonal precipitation forecasting. Ms. Jones reported that seasonal precipitation forecasting is difficult scientifically to predict. She noted that the National Weather Service forecasts typically extend out ten days. The National Oceanic Atmospheric Administration's Climate Prediction Center's outlooks for temperature and precipitation extend out for three months. Climate model predictions can extend out for decades. Ms. Jones mentioned that weather forecasting is used for managing reservoirs, for example controlling when to schedule flood control releases. Snowmelt runoff

forecasts, as made by the Colorado Basin River Forecast Center, are used to estimate runoff later in the year after the snow has already fallen. However, for water project management and for managing demands during drought, it would be good to know how much it is going to rain this winter.

Ms. Jones reported that although short-term weather forecasting has improved significantly over the decades, seasonal forecasting remains an emerging science. The skill level of these forecasts is only about two to three percentage points above equal chance. The effects of El Nino Southern Oscillation typically extend about three months out or so, but they are poorly understood. Nonetheless, the media is having a feeding frenzy about how the coming Godzilla El Nino will flood us all out, especially in Southern California. There is still a possibility that next year could be dry and that is why Governor Brown's Executive Order is continuing with conservation efforts in California. Ms. Jones stated that meetings with NOAA were held in May and October and that there will be a meeting at CRWUA to ask NOAA to identify a programmatic approach to improve skill in long-term weather forecasting.

Ms. Jones also reported on DWR's California Irrigation Management Information System (CIMIS). The CIMIS has been in operation for about 30 years. It's a network of agricultural weather stations used for irrigation scheduling and to increase water use efficiency. In recent years DWR has partnered with U.C. Davis, NASA and other researchers to develop a satellite-based effort that compliments the CIMIS system. Ms. Jones added that there are close to 50,000 users of the CIMIS system, including water districts or private weather service companies that repackage the CIMIS data and deliver it to their service area either for water use efficiency programs, homes, large turf areas, or for agricultural purposes. Ms. Jones added that DWR is exploring opportunities to include interstate river basins, such as the Klamath, the Colorado, and the Truckee-Carson-Walker complex to improve the irrigation efficiency and that the first meetings are scheduled for February 2016.

Review status of the Basin States Drought Contingency Programs

Ms. Laura Lamdin, with the Metropolitan Water District of Southern California, provided an overview of the current status of the Pilot System Conservation Program. Ms. Lamdin stated that the program provides funding for Colorado River water users to voluntarily reduce their water use. The reductions can be through fallowing or conservation in the agricultural, industrial or municipal sectors. Ms. Lamdin noted that the extra water created would benefit reservoir elevations and have water supply, power generation, and water quality benefits. Five agencies contributed funding for the program, which included \$2 million each from Southern Nevada Water Authority, Metropolitan Water District of Southern California, Denver Water and Central Arizona Water Conservation District and \$3 million from Reclamation. Ms. Lamdin reported that a Request for Proposals was issued to Lower Basin entities in October 2014 and a Request for Proposals for the Upper Basin was issued in May 2015.

Ms. Lamdin reported that a committee was formed to review the proposals, which varied by project type, scale, and geographical location. To date, there are 11 contracted pilot projects --five projects in Wyoming, three in Colorado, two in Arizona, and one in Nevada. The project types include seven following projects, one deficit irrigation project, one tributary conservation project, one wastewater recovery project and one project is a reduction of groundwater storage. There are five additional projects under contract negotiation. Ms. Lamdin stated that the Basin States are planning to issue a second round of Requests for Proposals with potential additional funding of \$500,000 dollars from the Six Agency Committee and \$1 million from the Central Arizona Project. Ms. Lamdin noted that Southern Nevada Water Authority has also contemplated providing additional funding.

Ms. Trujillo reminded the Board that Chris Harris, Deputy Director at the Colorado River Board, provided a detailed overview of the Bypass Flows Work Group during a prior meeting. The purpose of the Work Group is to evaluate options to address the high level of over-delivery to Mexico due to Minute 242 salinity operations. Ms. Trujillo stated that the best two options to address this issue may include some level of operation of the Yuma Desalting Plant and increasing Reclamation's pumping from the Minute 242 well field. Both options will require a lengthy budgeting and funding process and will also involve discussions with Mexico because of the potential impacts to the Cienga de Santa Clara and Minute 242. Ms. Trujillo noted that the Work Group met in Yuma, AZ at the end of October and is in the process of drafting a report highlighting the recommended options.

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

At the Salinity Control Forum and Advisory Council meetings on October 28-29 in Tucson, Arizona, Reclamation reported on the current operations for the Paradox Valley Unit Well replacement project. Reclamation anticipates completing the EIS within the estimated timeframe and within budget. Reclamation also has a contingency plan mapped out if the existing well were to fail prior to the conclusion of the EIS process. Board staff will continue to monitor the progress of the EIS. Ms. Trujillo reported that the Board is involved in establishing potentially new policies relating to the NPDES permitting process and has a representative of California's Water Quality Control Board involved from a state regulatory perspective. At the meeting, the members reviewed and approved funding recommendations that will be formally submitted to the Appropriations Committee for next year's budgets for Reclamation, the Bureau of Land Management, and the Department of Agriculture's NRCS EQIP program, whose Upper Basin programs provide salinity control benefits throughout the system. The funding requests for the program remain similar to what they have been in the past several years.

The next Work Group meeting will be in February 2016 in Phoenix, Arizona and the Forum will meet in June 2016 in Colorado. Ms. Trujillo highlighted a photograph in the presentation of a potential project area called the Pah Tempe Springs in Utah. This

area is potentially a project that is similar in scale in terms of salinity control to what is currently underway at the Paradox Valley Unit. Ms. Trujillo added that this would be an opportunity to shift from the smaller Upper Basin on-farm type projects to another large-scale project. There is on-going discussion with local entities that may be able to cost-share and co-develop the project.

Review status of the implementation of Minute 319

Ms. Trujillo reported that a meeting of the bi-national negotiating group occurred on November 12-13 in Mexicali, Mexico to continue to try to establish the initial framework for a possible successor minute to Minute 319. The primary focus of the group so far has been to provide guidance to work groups to evaluate what additional programs may be put in place for the next minute. The three work groups that are being contemplated are a Projects Work Group, a Salinity Work Group, and an Environmental Flows Work Group. On November 5, the environmental work group toured the Colorado River Delta, including the limitrophe area along the border then down into Mexico. The tour was a good opportunity to see some of the habitat restoration work that resulted from last year's pulse flow event and the on-going base flow deliveries that are being scheduled through the term of the minute.

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

Ms. Trujillo reported that a determination had been made not to carry out a high flow experiment at Glen Canyon Dam this fall. The determination was the result of biological concerns over a newly established population of nonnative green sunfish, which could expand downstream due to high flows. Ms. Trujillo noted that efforts to eradicate the sunfish had been recently undertaken, with the latest survey failing to detect any remaining fish.

Ms. Trujillo reported that work on the Long-Term Experimental and Management Plan (LTEMP) EIS is ongoing, with a public draft of the document expected in December. Ms. Trujillo stated that the next meeting of the Technical Work Group would be January 26-28, 2015.

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

Ms. Trujillo reported that the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) steering committee met on October 28. The LCR MSCP budget for fiscal year 2016 has been set at \$30.7 million, with an additional \$8 million earmarked for the purchase of the Planet Ranch property in Arizona. The purchase of the Planet Ranch property had been in jeopardy due to a lower court ruling against the Arizona Department of Water Resources' sever and transfer of water rights at the property. However, Ms. Trujillo reported that in November, the Arizona Supreme Court ruled in favor of the Department, clearing the way for the purchase of the property as a conservation area for the LCR MSCP.

Ms. Trujillo reported that conservation measures for the flannelmouth sucker and relict leopard frog had been recently completed, finalizing the program's obligations for those species. Additionally, Reclamation received coverage for the recently listed yellow-billed cuckoo and has entered formal consultation with the U.S. Fish and Wildlife Service on the northern Mexican gartersnake.

Ms. Trujillo noted that the LCR MSCP would hold two technical meetings in January in Laughlin, NV.

Announcements/Notices

Ms. Trujillo reported that in October, the Governor signed legislation relating to the Salton Sea which directed the creation of 12,000 acres of habitat over the next five years, increasing to 25,000 acres by 2020. On November 5, a "playa breaking" ceremony was held at the Red Hill Bay area to commemorate the kickoff of the Fish and Wildlife Service's project in the area. Jennifer Gimbel was the lead participant for the Federal government and several local agencies, including IID, were present for the event. On November 4, a follow-up meeting was held in Coachella as a result of the Governor's task force and was chaired by Bruce Wilcox, the Assistant Secretary for actions relating to the Salton Sea. .

Ms. Trujillo reported that a hearing was held in Washington, D.C. in early October at the Senate Energy and Natural Resources Committee regarding drought legislation introduced by several states, including California-specific legislation introduced by Senators Feinstein and Boxer and that a committee mark-up of the bills may be scheduled for early December. Ms. Trujillo noted that Arizona's Senator Flake had stated an interest in introducing a series of amendments to the bill, one of which was of concern because it would limit the Secretary's discretion to allocate unused apportionment from one state to another state. Ms. Trujillo stated that California's agencies have been opposing the proposed amendment and have emphasized to other Basin States that the proposal is inconsistent with the negotiation and collaboration typically undertaken by the Basin States to resolve issues.

Ms. Trujillo reported that the Colorado River Basin Forecast Center held a stakeholder forum and verification webinar in October. Some of the information presented in those meetings will be used for the December Board meeting's year-end hydrology review.

Ms. Trujillo reported that the Department of the Interior and the California Natural Resources Agency released a final EIS for the Desert Renewable Energy Conservation Plan, which covers the development of wind, solar, and geothermal projects. The EIS requires projects to offset impacts to the Colorado River Basin. Ms. Trujillo noted that this phase of the EIS covers only projects on federal lands, with future phases dealing with other lands.

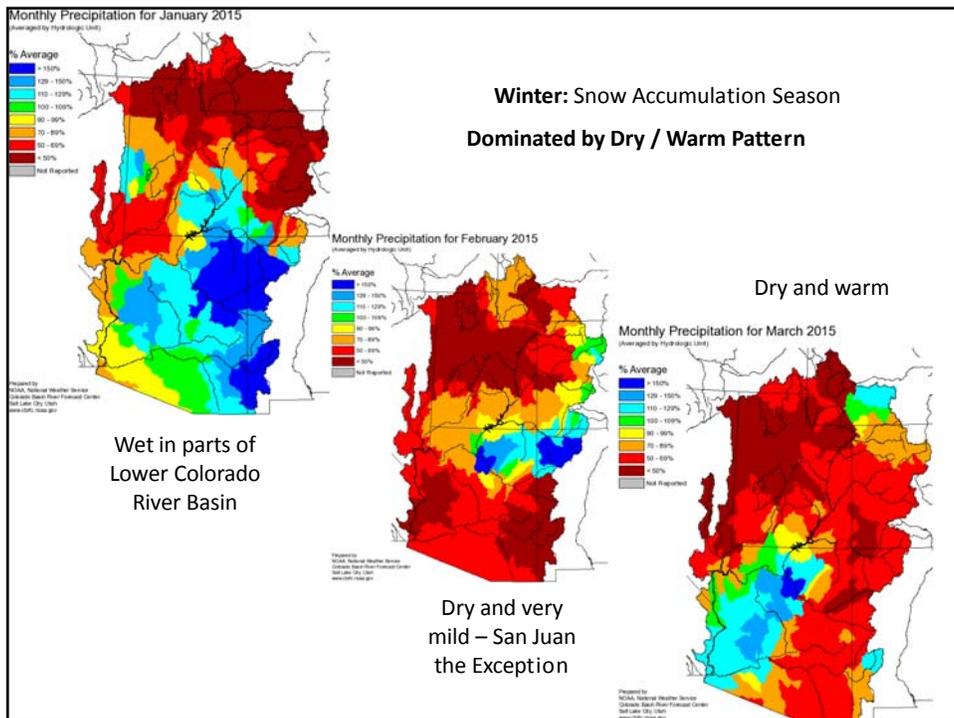
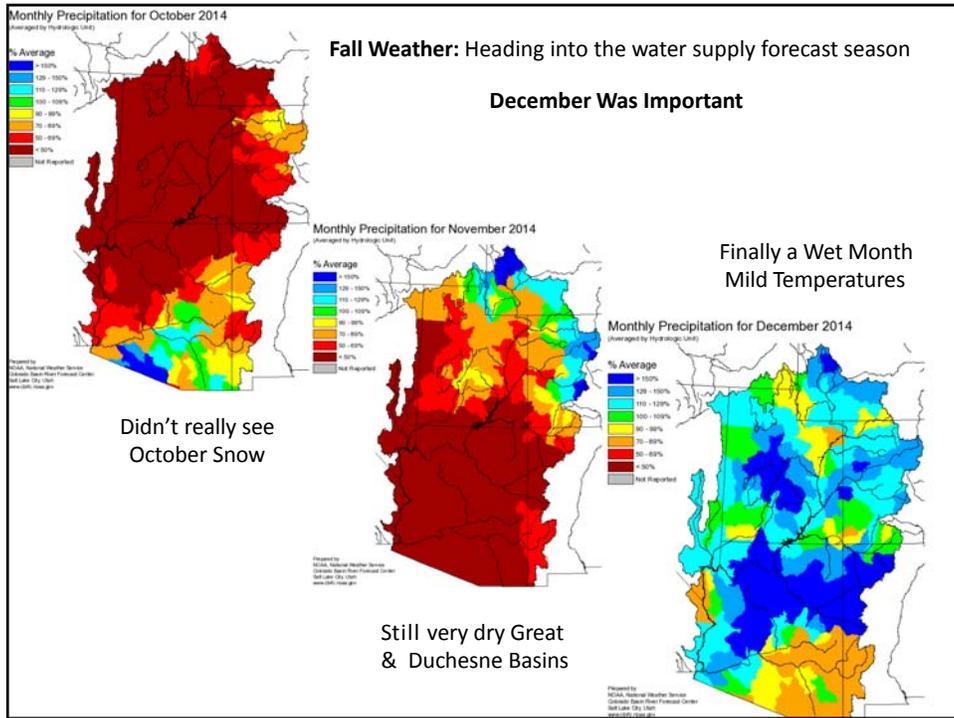
Ms. Trujillo reported that the Southern Nevada Water Authority is leading an effort to put together a traveling museum exhibit to highlight Colorado River Basin issues at a national level. The Basin States would be involved in the exhibit's development and would be asked to contribute small amounts of funding toward the planning and initial development of the project.

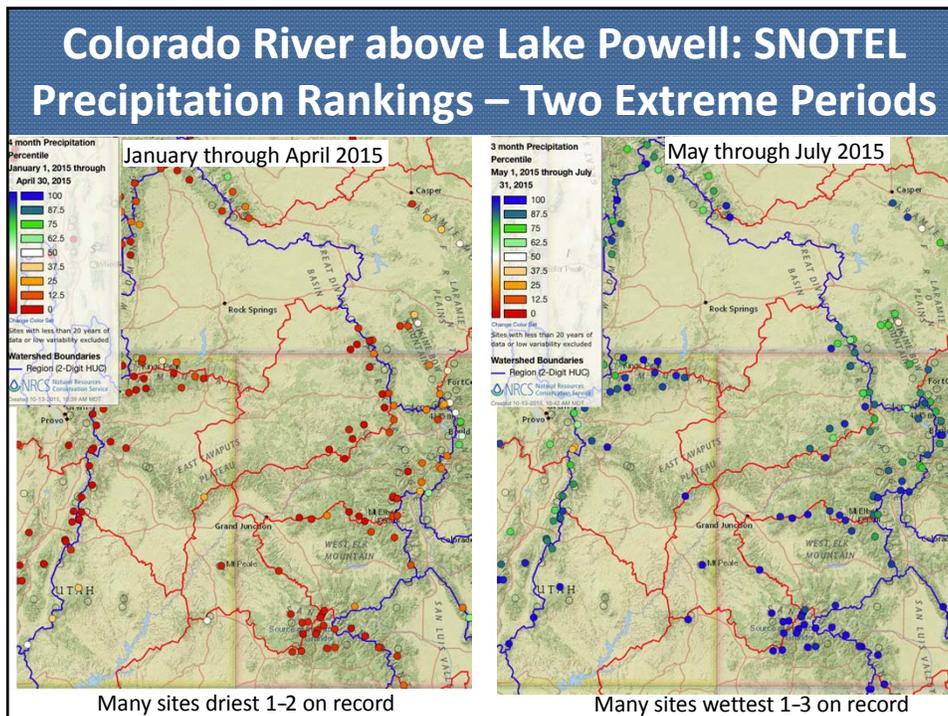
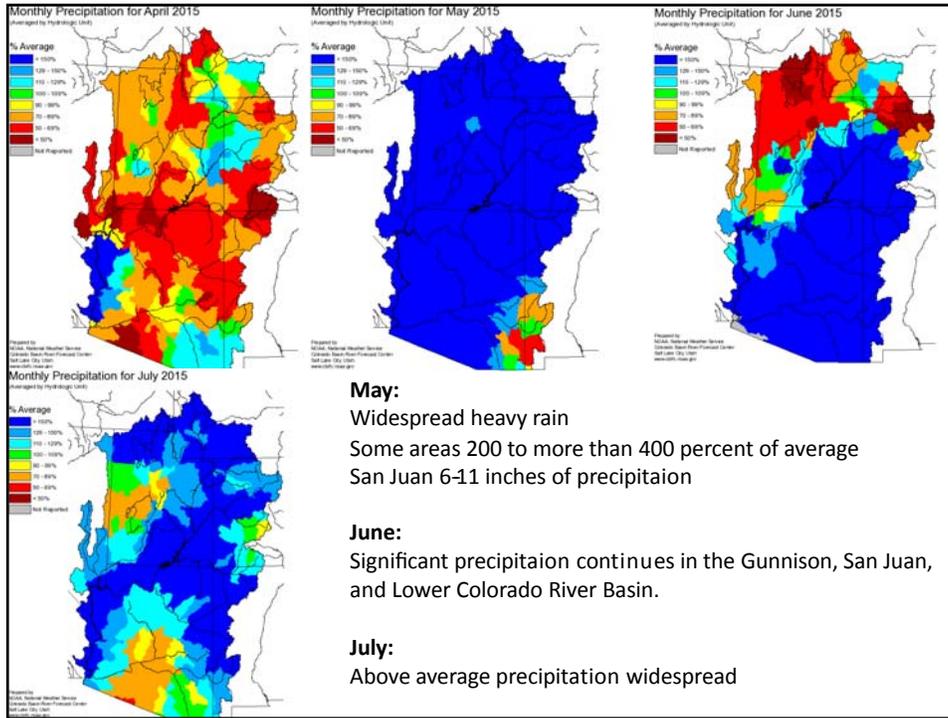
Ms. Trujillo reported that Board staff member Angela Rashid was a member of a panel at a Colorado River Water Forum in Grand Junction, Colorado at the end of October. Several Upper Basin programs were highlighted during the forum.

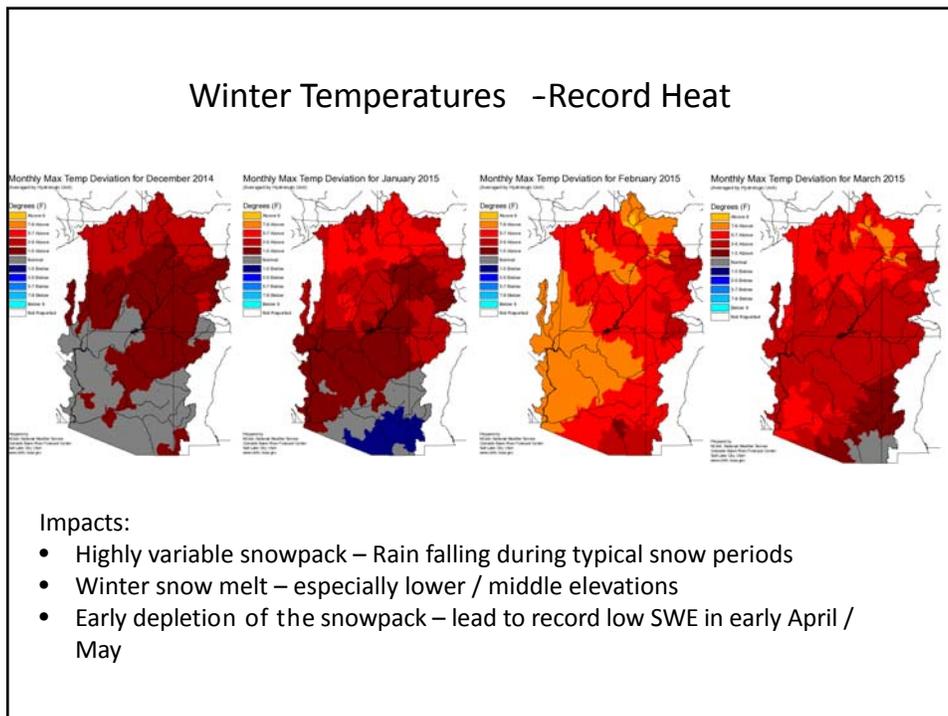
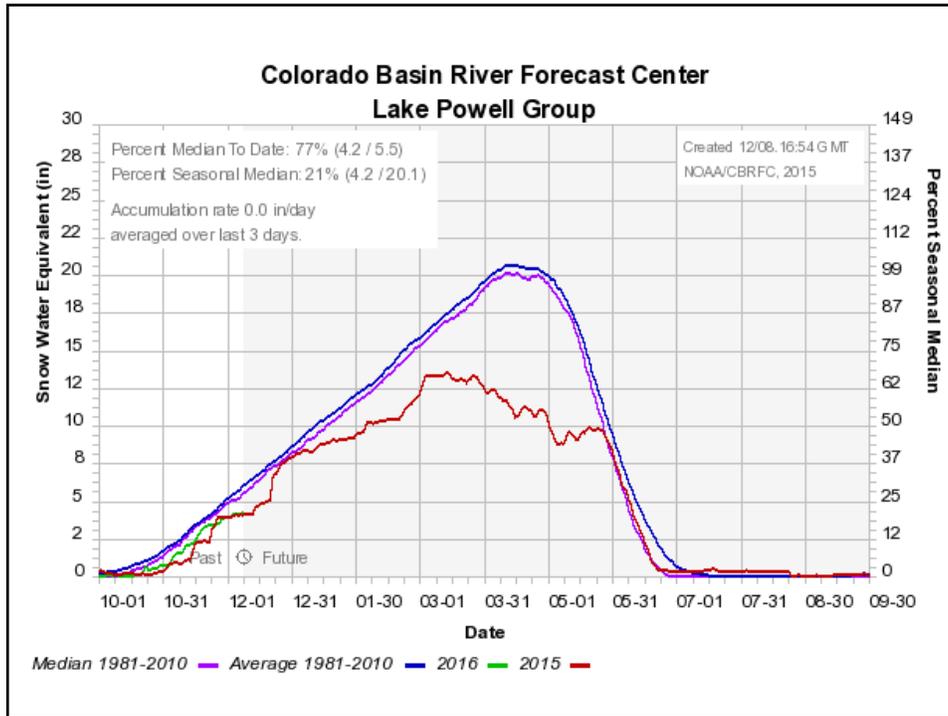
Ms. Trujillo reported that ACWA would be holding its fall conference December 2-5 in Palm Desert, featuring at least one panel on Colorado River issues, to be moderated by Jim Barrett. Additionally, the Colorado River Water Users' Association plans to meet in Las Vegas in December. Chairman Fisher noted that the next meeting of the Colorado River Board is scheduled in coordination with that meeting and will be held at 3:00 pm on December 16th.

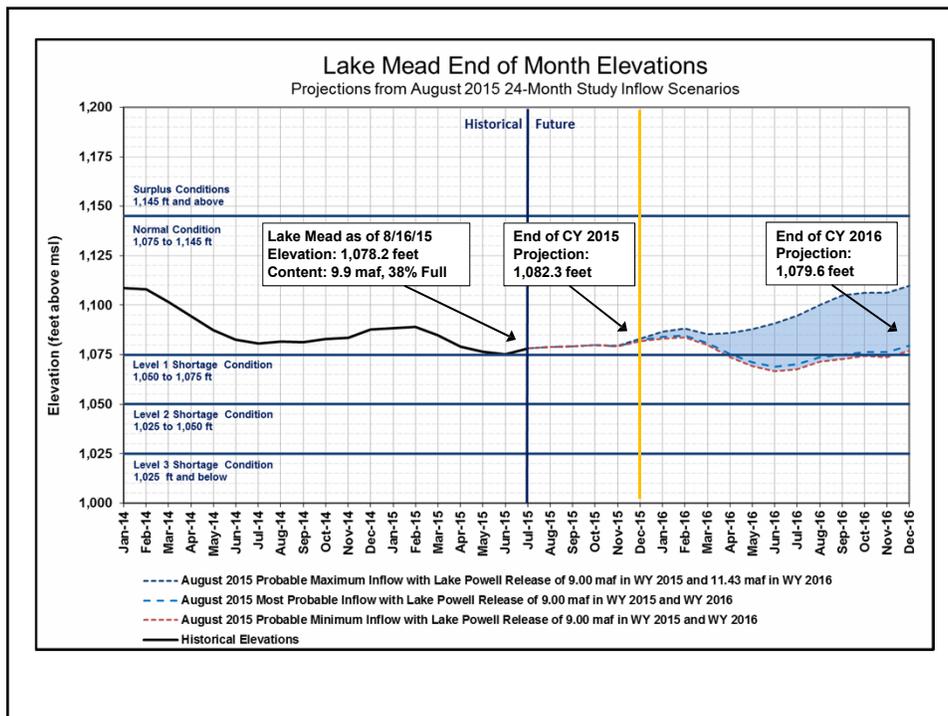
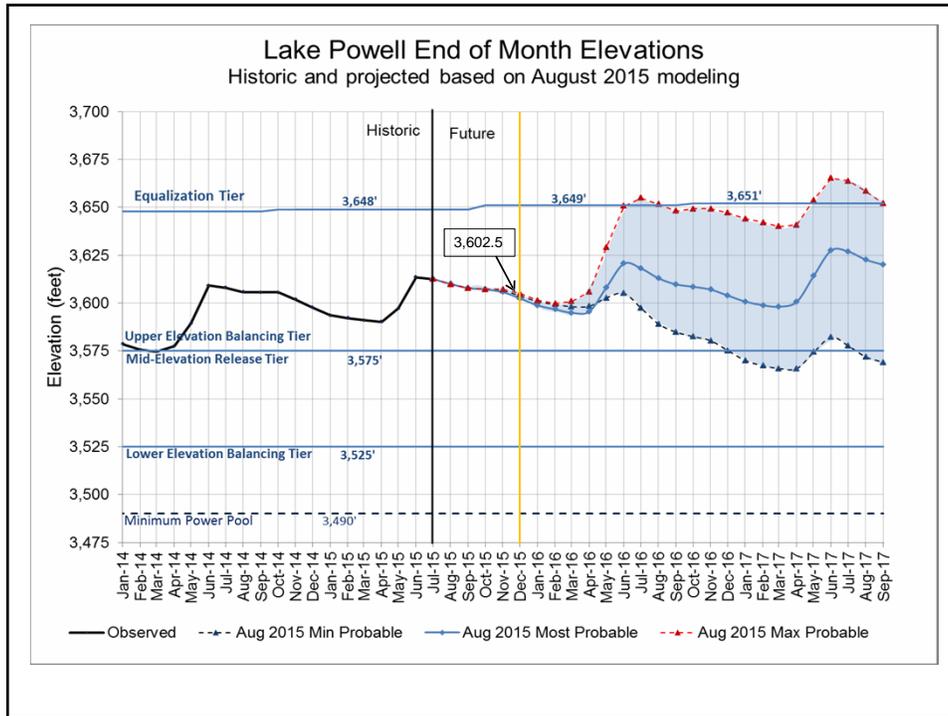
ADJOURNMENT

With no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn the meeting. Upon the motion of Ms. Jones, seconded Mr. Peterson, and unanimously carried, the meeting was adjourned at 2:38 P.M.









Percent of Futures with Event or System Condition Results from August 2015 CRSS^{1,2,3} (values in percent)

Event or System Condition		2016	2017	2018	2019	2020
Upper Basin - Lake Powell	Equalization Tier	8	24	23	27	29
	Equalization – annual release > 8.23 maf	8	23	23	27	28
	Equalization – annual release = 8.23 maf	0	0	0	0	1
	Upper Elevation Balancing Tier	92	52	55	54	47
	Upper Elevation Balancing – annual release > 8.23 maf	82	39	43	42	36
	Upper Elevation Balancing – annual release = 8.23 maf	10	13	11	10	11
	Upper Elevation Balancing – annual release < 8.23 maf	0	0	1	2	0
	Mid-Elevation Release Tier	0	24	19	10	17
	Mid-Elevation Release – annual release = 8.23 maf	0	0	0	1	1
Mid-Elevation Release – annual release = 7.48 maf	0	24	19	9	16	
Lower Elevation Balancing Tier	0	0	3	9	7	
Lower Basin - Lake Mead	Shortage Condition – any amount (Mead ≤ 1,075 ft)	0	18	52	65	59
	Shortage – 1 st level (Mead ≤ 1,075 and ≥ 1,050)	0	18	42	47	35
	Shortage – 2 nd level (Mead < 1,050 and ≥ 1,025)	0	0	10	14	18
	Shortage – 3 rd level (Mead < 1,025)	0	0	0	4	7
	Surplus Condition – any amount (Mead ≥ 1,145 ft)	0	0	6	7	15
	Surplus – Flood Control	0	0	0	2	2
	Normal or ICS Surplus Condition	100	82	42	28	26

¹ Reservoir initial conditions based on December 31, 2015 conditions projected using the most probable August 2015 24-Month Study.

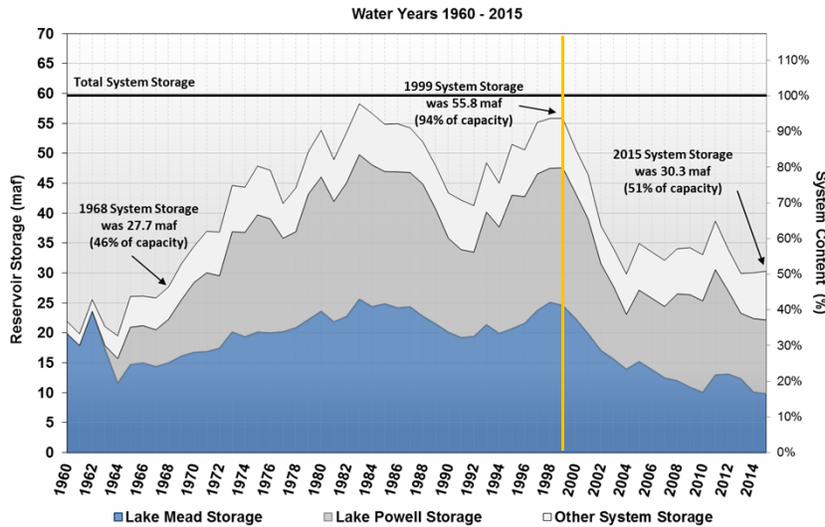
² Results are based on 107 hydrologic inflow sequences developed by resampling the observed natural flow record from 1906-2012.

³ Percentages shown may not be representative of the full range of future possibilities that could occur with different modeling assumptions.

RECLAMATION

9

System Storage - End of Water Year Total Volumes



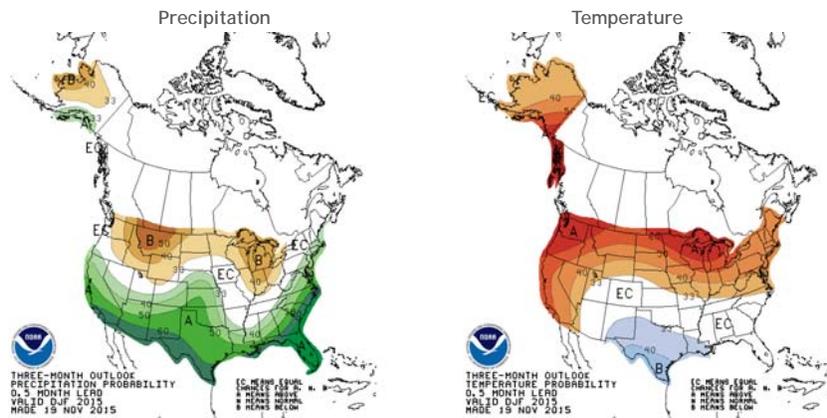
RECLAMATION

4

U. S. Seasonal Outlooks

December 2015 - February 2016

The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.



Dec 07, 2015

LOWER COLORADO WATER SUPPLY REPORT

River Operations
Bureau of Reclamation

Questions: BCOOWaterops@usbr.gov

(702) 293-8373

<http://www.usbr.gov/lc/region/q4000/weekly.pdf>

	PERCENT	Content 1000 ac-ft (kaf)	Elev. (Feet above mean sea level)	7-Day Release (CFS)
CURRENT STORAGE	FULL			
LAKE POWELL	50%	12,201	3604.67	14,100
* LAKE MEAD	38%	9,918	1078.87	8,700
LAKE MOHAVE	84%	1,513	636.07	8,300
LAKE HAVASU	90%	559	446.86	5,600
TOTAL SYSTEM CONTENTS **	50%	29,860		
As of 12/06/2015				
SYSTEM CONTENT LAST YEAR	50%	29,718		
* 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	50%	1,136		
Painted Rock Dam	0%	0	535.14	0
Alamo Dam	5%	52	1,087.85	10
Forecasted Water Use for Calendar Year 2015 (as of 12/07/2015) (values in kaf)				
NEVADA			220	
SOUTHERN NEVADA WATER SYSTEM				196
OTHERS				24
CALIFORNIA			4,509	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				1,107
IRRIGATION DISTRICTS				3,264
OTHERS				138
ARIZONA			2,601	
CENTRAL ARIZONA PROJECT				1,514
OTHERS				1,087
TOTAL LOWER BASIN USE				7,331
DELIVERY TO MEXICO - 2015 (Mexico Scheduled Delivery + Preliminary Yearly Excess ¹)				1,516
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - DECEMBER FINAL FORECAST DATED 12/01/2015				
		MILLION ACRE-FEET	% of Normal	
OBSERVED WATER YEAR 2015		10.174	94%	
OBSERVED APRIL-JULY 2015		6.713	94%	
NOVEMBER OBSERVED INFLOW		0.445	94%	
DECEMBER INFLOW FORECAST		0.320	88%	
		Upper Colorado Basin	Salt/Verde Basin	
WATER YEAR 2016 PRECIP TO DATE ²		90% (5.3")	139% (6.5")	
CURRENT BASIN SNOWPACK ²		89% (3.2")	71% (0.6")	

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

² Precipitation and snowpack 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

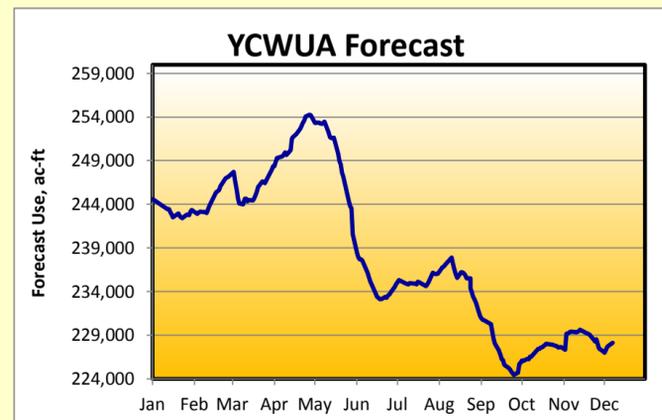
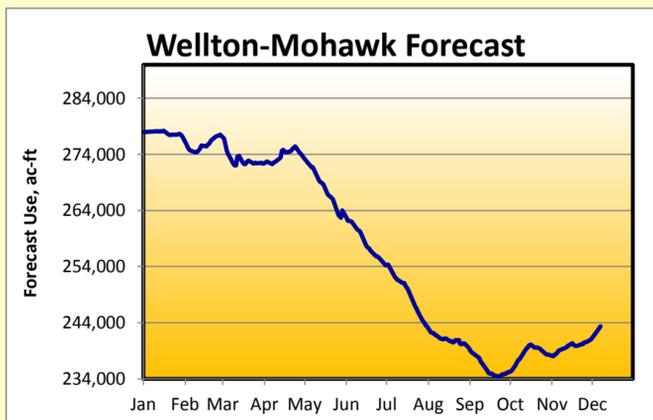
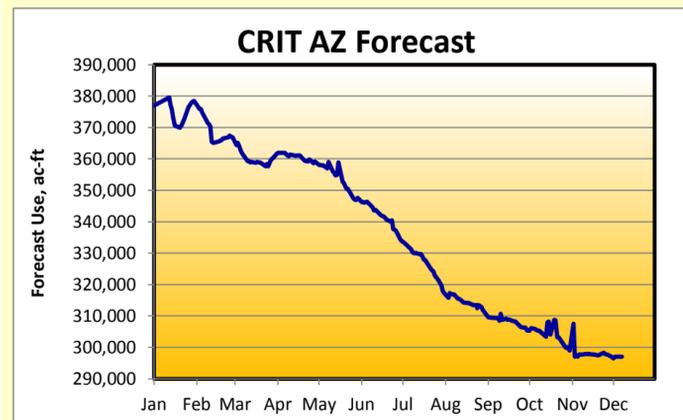
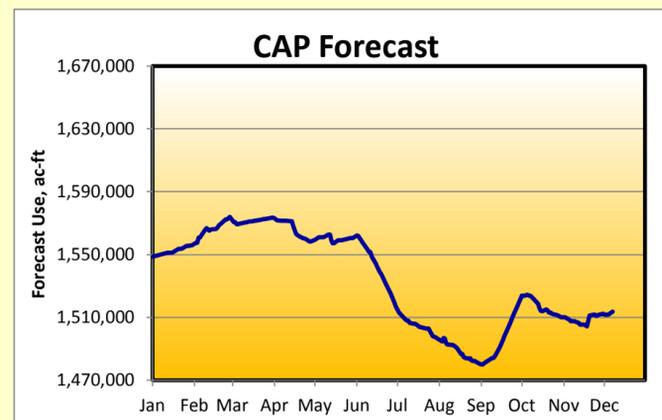
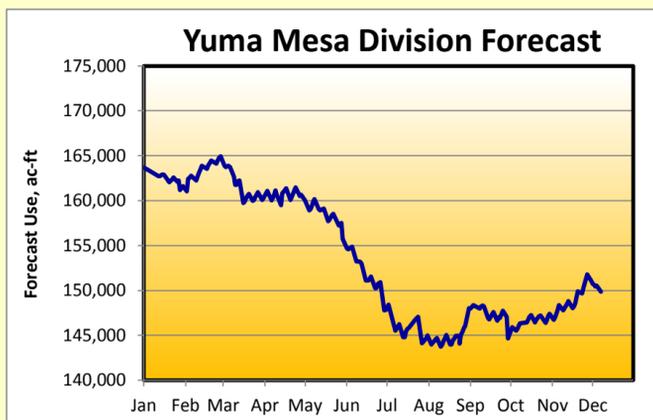
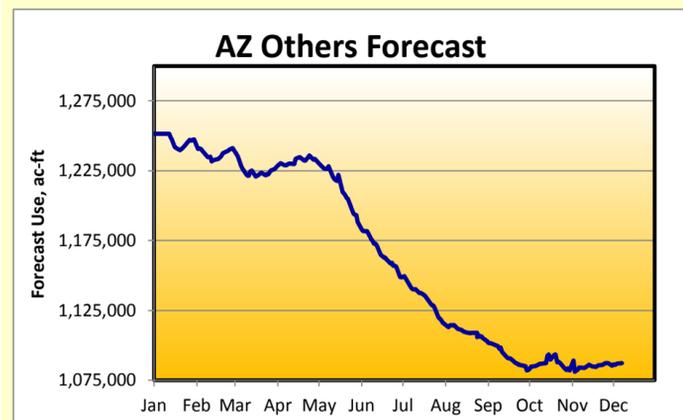
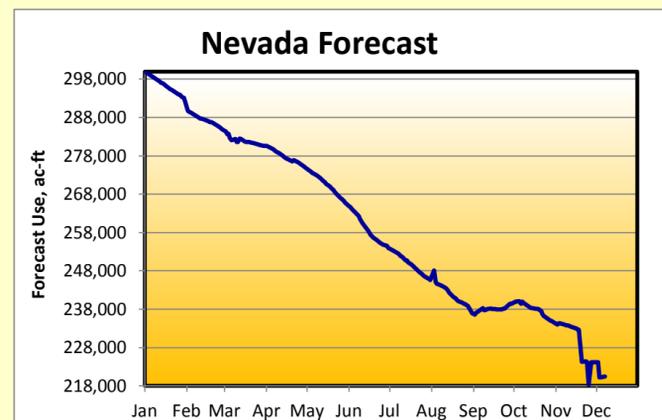
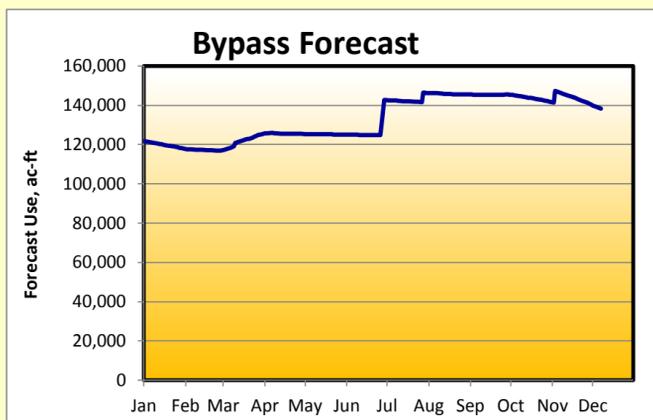
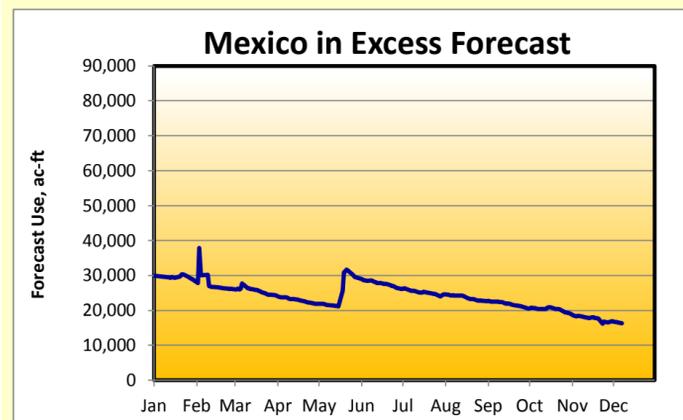
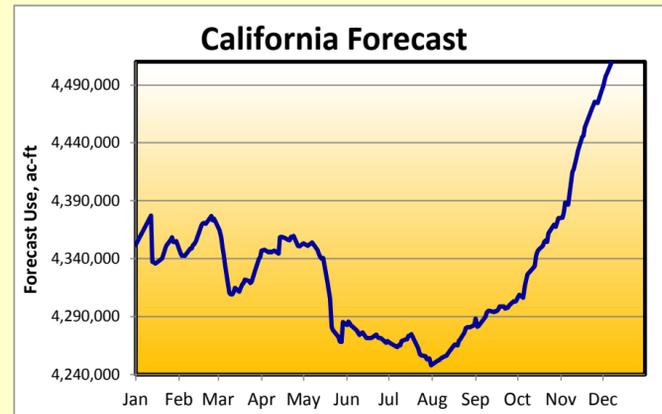
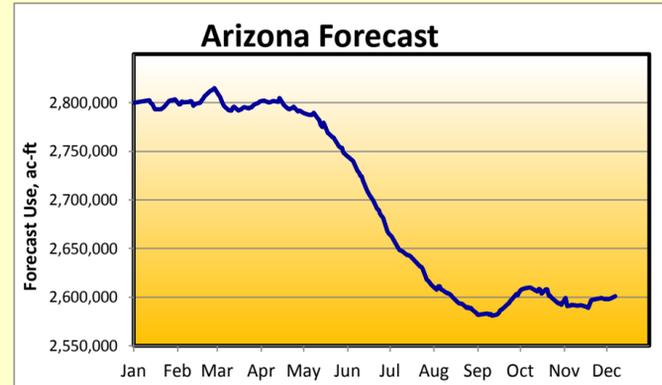
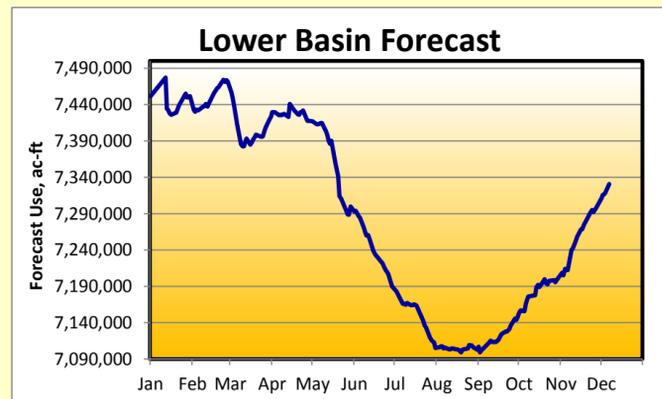
	Use To Date CY2015	Forecast Use CY2015	Approved Use ² CY2015	Excess to Approval CY2015
ARIZONA	2,474,038	2,600,977	2,782,755	-181,778
CALIFORNIA	4,387,625	4,509,186	4,351,727	157,459
NEVADA	216,012	220,481	300,000	-79,519
STATES TOTAL ³	7,077,675	7,330,644	7,434,482	-103,838
MEXICO IN SATISFACTION OF TREATY (Including downward delivery) TO MEXICO AS SCHEDULED	1,432,369 1,418,050	1,516,335 1,500,000	1,500,000	16,335
MEXICO IN EXCESS OF TREATY BYPASS PURSUANT TO MINUTE 242	14,319 128,041	16,335 138,232		
TOTAL LOWER BASIN & MEXICO	8,638,085	8,985,211		

1/ Incorporates Jan-Sep 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 September USGS Provisional data as well as monthly reported data. [11-02-2015]



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.

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	16,917	17,515	17,515	---	26,189	27,115	27,115	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	146	156	156	---	146	156	156	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	173	184	184	---	173	184	184	0
DAVIS DAM PROJECT	2	2	2	---	72	75	75	0
BULLHEAD CITY	6,433	6,979	8,523	---	9,600	10,414	12,720	-2,306
MOHAVE WATER CONSERVATION	537	556	556	---	803	831	831	0
BROOKE WATER LLC	200	207	207	---	300	311	311	0
MOHAVE VALLEY IDD	18,012	19,142	22,260	---	33,354	35,448	41,220	-5,772
FORT MOJAVE INDIAN RESERVATION, AZ	36,409	37,280	42,390	---	67,424	69,037	78,500	-9,463
GOLDEN SHORES WATER CONSERVATION DISTRICT	305	316	316	---	457	473	473	0
HAVASU NATIONAL WILDLIFE REFUGE	4,130	4,191	3,563	---	29,850	30,568	41,820	-11,252
LAKE HAVASU CITY	6,999	7,449	8,928	---	11,292	12,017	14,400	-2,383
CENTRAL ARIZONA PROJECT	1,413,563	1,513,563		---	1,413,563	1,513,563		
TOWN OF PARKER	340	348	352	---	799	843	920	-77
COLORADO RIVER INDIAN RESERVATION, AZ	290,814	296,986	376,964	---	569,247	591,643	662,402	-70,759
EHRENBURG IMPROVEMENT ASSOCIATION	247	256	256	---	349	361	361	0
CIBOLA VALLEY IRRIGATION DISTRICT	16,372	16,951	16,951	---	22,898	23,707	23,707	0
CIBOLA NATIONAL WILDLIFE REFUGE	12,306	12,741	12,741	0	19,848	20,550	20,550	0
IMPERIAL NATIONAL WILDLIFE REFUGE	2,527	2,616	2,616	0	4,080	4,224	4,224	0
YUMA PROVING GROUND	505	521	550	---	505	521	550	-29
GILA MONSTER FARMS	3,114	3,285	5,244	---	5,403	5,797	9,156	-3,359
WELLTON-MOHAWK IDD	237,971	243,327	278,000	-34,673	354,183	370,877	424,350	
CITY OF YUMA	12,554	13,518	17,051	-3,533	21,902	23,766	27,318	-3,552
MARINE CORPS AIR STATION YUMA	1,274	1,339	1,500	---	1,274	1,339	1,500	-161
UNION PACIFIC RAILROAD	22	24	24	---	45	48	48	0
UNIVERSITY OF ARIZONA	741	764	764	---	741	764	764	0
YUMA UNION HIGH SCHOOL DISTRICT	113	119	151	---	150	159	200	-41
DESERT LAWN MEMORIAL	88	91	91	---	125	129	129	0
NORTH GILA VALLEY IDD	11,795	11,659	10,790	---	41,739	43,594	44,000	-406
YUMA IRRIGATION DISTRICT	37,267	38,310	42,581	---	66,042	68,945	75,900	-6,955
YUMA MESA IDD	97,785	99,895	111,022	---	171,240	180,447	204,904	-24,457
UNIT "B" IRRIGATION DISTRICT	18,739	19,048	17,330	---	26,676	27,563	28,050	-487
FORT YUMA INDIAN RESERVATION	1,348	1,396	1,396	---	2,076	2,149	2,149	0
YUMA COUNTY WATER USERS' ASSOCIATION	222,458	228,126	244,599	---	343,417	359,546	388,000	-28,454
COCOPAH INDIAN RESERVATION	1,720	2,001	6,457	---	1,846	2,290	9,840	-7,550
RECLAMATION-YUMA AREA OFFICE	112	116	116	---	112	116	116	0
RETURN FROM SOUTH GILA WELLS								
TOTAL ARIZONA	2,474,038	2,600,977	2,797,699		3,247,920	3,429,570	3,692,496	
CAP	1,413,563	1,513,563				1,513,563		
ALL OTHERS	1,060,475	1,087,414	1,252,146			1,916,007	2,146,943	
YUMA MESA DIVISION, GILA PROJECT	146,847	149,864	350,000	-200,136		292,986		

ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
Payback of IOPP overruns - (Cocopah and Beattie)	-165
CAWCD/YMIDD Pilot Conservation Program ¹	-7,000
System Conservation Water - Left in Lake Mead ²	-10,080
Total State Adjusted Apportionment	2,782,755
Excess to Total State Adjusted Apportionment	-181,778
Estimated Allowable Use for CAP	1,698,556

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.

2/ On September 15, 2015, Reclamation and the Tohono O'Odham Nation (Nation) entered into a System Conservation Implementation Agreement under the Pilot System Conservation Program in which the Nation agreed to reduce its delivery of its CAP water entitlement by 10,080 AF to create System Conservation Water.

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 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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**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 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
CALIFORNIA PUMPERS	1,623	1,680	1,680	---	2,943	3,047	3,047	0
FORT MOJAVE INDIAN RESERVATION, CA	8,066	8,291	8,996	---	14,994	15,413	16,720	-1,307
CITY OF NEEDLES (includes LCWSP use)	1,865	1,931	1,931	0	2,627	2,720	2,720	0
METROPOLITAN WATER DISTRICT	1,095,117	1,107,245	768,208	---	1,097,856	1,110,211	771,299	---
COLORADO RIVER INDIAN RESERVATION, CA	3,135	3,246	3,246	---	5,194	5,378	5,378	0
PALO VERDE IRRIGATION DISTRICT	391,793	395,228	395,806	---	830,355	862,613	874,000	-11,387
YUMA PROJECT RESERVATION DIVISION	44,591	46,086	48,586	---	90,593	95,190	104,200	-9,010
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	---	---	---	---	43,849	46,349	50,200	-3,851
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	---	---	---	---	46,744	48,841	54,000	-5,159
YUMA ISLAND PUMPERS	4,506	4,665	4,665	---	8,163	8,452	8,452	0
FORT YUMA INDIAN RESERVATION - RANCH 5	652	675	675	---	1,179	1,221	1,221	0
IMPERIAL IRRIGATION DISTRICT	2,376,178	2,473,771	2,602,481	-128,710	2,367,537	2,469,354	2,706,070	---
SALTON SEA SALINITY MANAGEMENT	131,524	121,636	121,636	0	137,597	126,826	126,826	---
COACHELLA VALLEY WATER DISTRICT	327,762	343,891	357,000	-13,109	342,545	359,387	371,671	---
OTHER LCWSP CONTRACTORS	648	671	671	---	1,030	1,066	1,066	0
CITY OF WINTERHAVEN	66	68	68	---	99	103	103	0
CHEMEHUEVI INDIAN RESERVATION	99	102	102	---	10,953	11,340	11,340	0
TOTAL CALIFORNIA	4,387,625	4,509,186			4,913,665	5,072,321	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	157,459

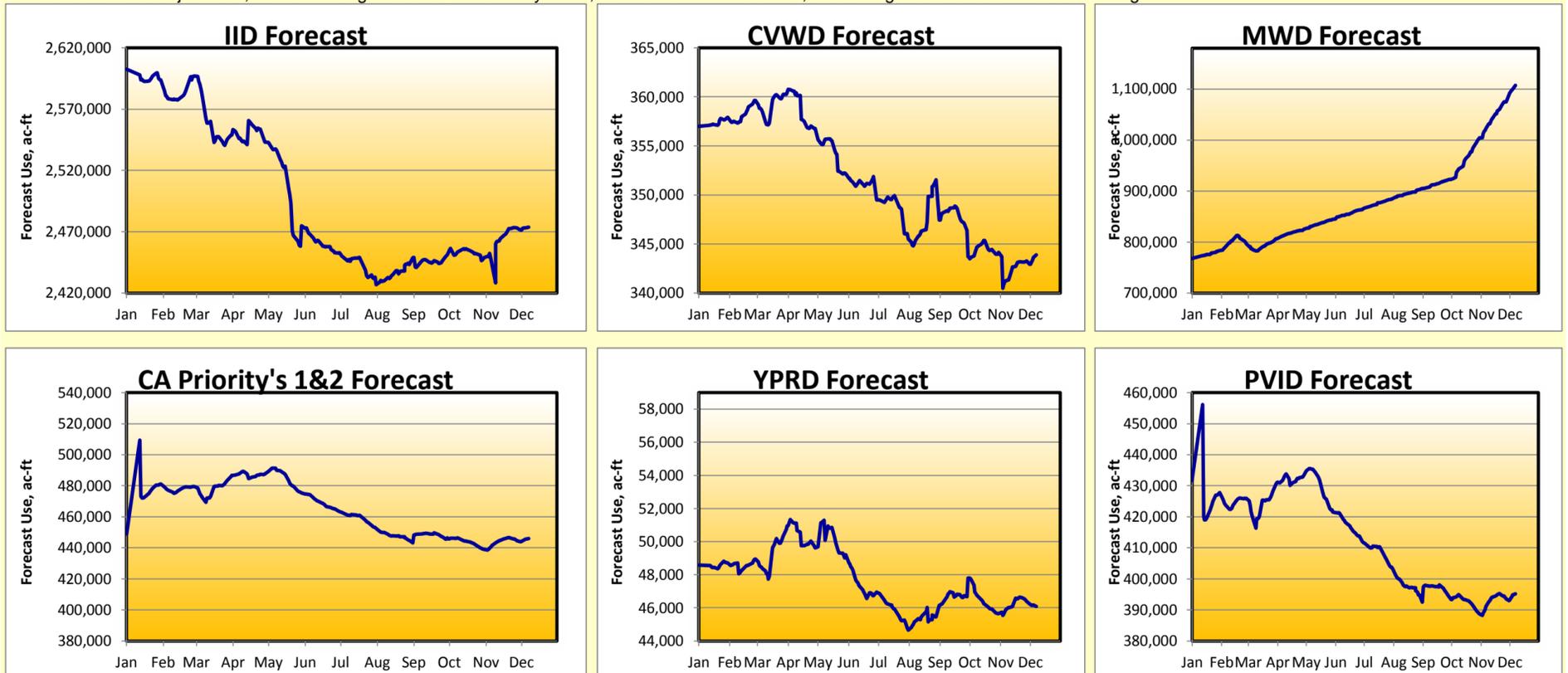
ISG ANNUAL TARGET COMPARISON CALCULATION

Priorities 1, 2, 3b Use (PVID+YPRD+Island+PVID Mesa)	445,979
MWD Adjustment	-25,979
Total California Agricultural Use (PVID+YPRD+Island+IID+CVWD)	3,263,641
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	3,300,435
ISG Annual Target (Exhibit B)	3,448,000
Amount over/(under) ISG Annual Target	-147,565

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:
 ● 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.
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**NEVADA WATER USERS
FORECAST OF END OF YEAR CONSUMPTIVE USE
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS**

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

WATER USER	Use	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess to
	To Date	Use	Use	Estimated		To Date	Diversion	Diversion
	CY2015	CY2015	CY2015	CY2015	CY2015	CY2015	CY2015	CY2015
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	395,174	412,432	409,184	3,248	395,174	412,432	409,184	3,248
LAKE MEAD NRA, NV - Diversions from Lake Mead	365	393	422	---	365	393	422	-29
LAKE MEAD NRA, NV - Diversions from Lake Mohave	166	176	166	---	166	176	166	10
BASIC MANAGEMENT INC.	5,247	5,132	8,211	---	5,247	5,122	8,211	-3,089
CITY OF HENDERSON (BMI DELIVERY)	12,920	12,725	15,878	---	12,920	12,715	15,878	-3,163
NEVADA STATE DEPT. OF FISH & GAME	10	20	12	8	485	479	363	---
PACIFIC COAST BUILDING PRODUCTS INC.	873	872	923	---	873	862	923	-61
BOULDER CANYON PROJECT	168	174	174	---	292	302	302	0
BIG BEND WATER DISTRICT	2,065	2,328	4,061	---	4,621	5,117	10,000	-4,883
FORT MOJAVE INDIAN TRIBE	2,131	2,239	3,886	---	3,183	3,344	5,800	-2,456
LAS VEGAS WASH RETURN FLOWS	-203,107	-216,010	-213,145	---				
TOTAL NEVADA	216,012	220,481	229,772	3,256	423,326	440,942	451,249	-10,423
SOUTHERN NEVADA WATER SYSTEM (SNWS)	192,067	196,422				412,432		
ALL OTHERS	23,945	24,059				28,510		
NEVADA USES ABOVE HOOVER	211,816	215,914				432,481		
NEVADA USES BELOW HOOVER	4,196	4,567				8,461		

Tributary Conservation & Imported Intentionally Created Surplus

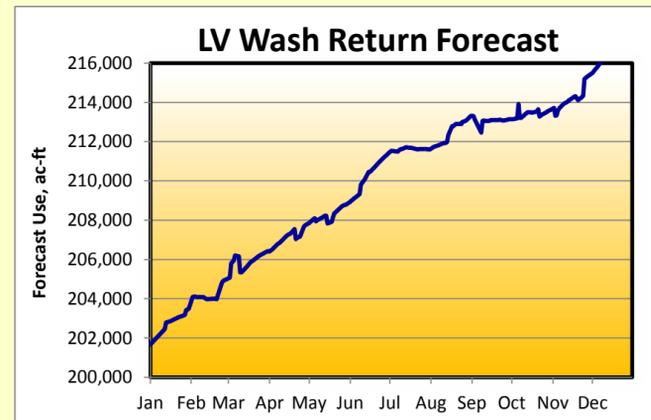
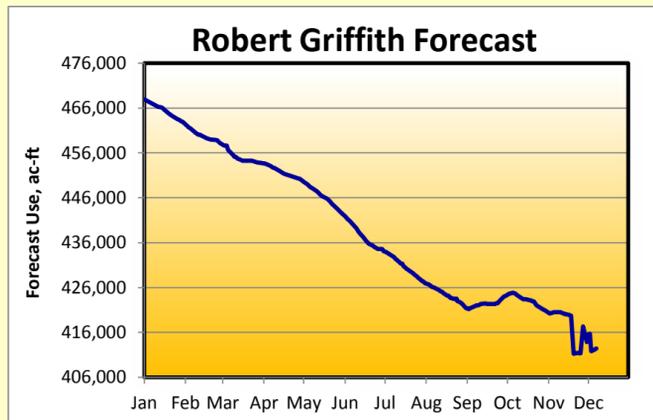
Total Requested Tributary Conservation Intentionally Created Surplus	29,500
Total Requested Imported Conservation Intentionally Created Surplus	9,000
5% System Cut for Creation of Intentionally Created Surplus	-1,925
Total Intentionally Created Surplus Left in Lake Mead	36,575

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	-79,519



^{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.

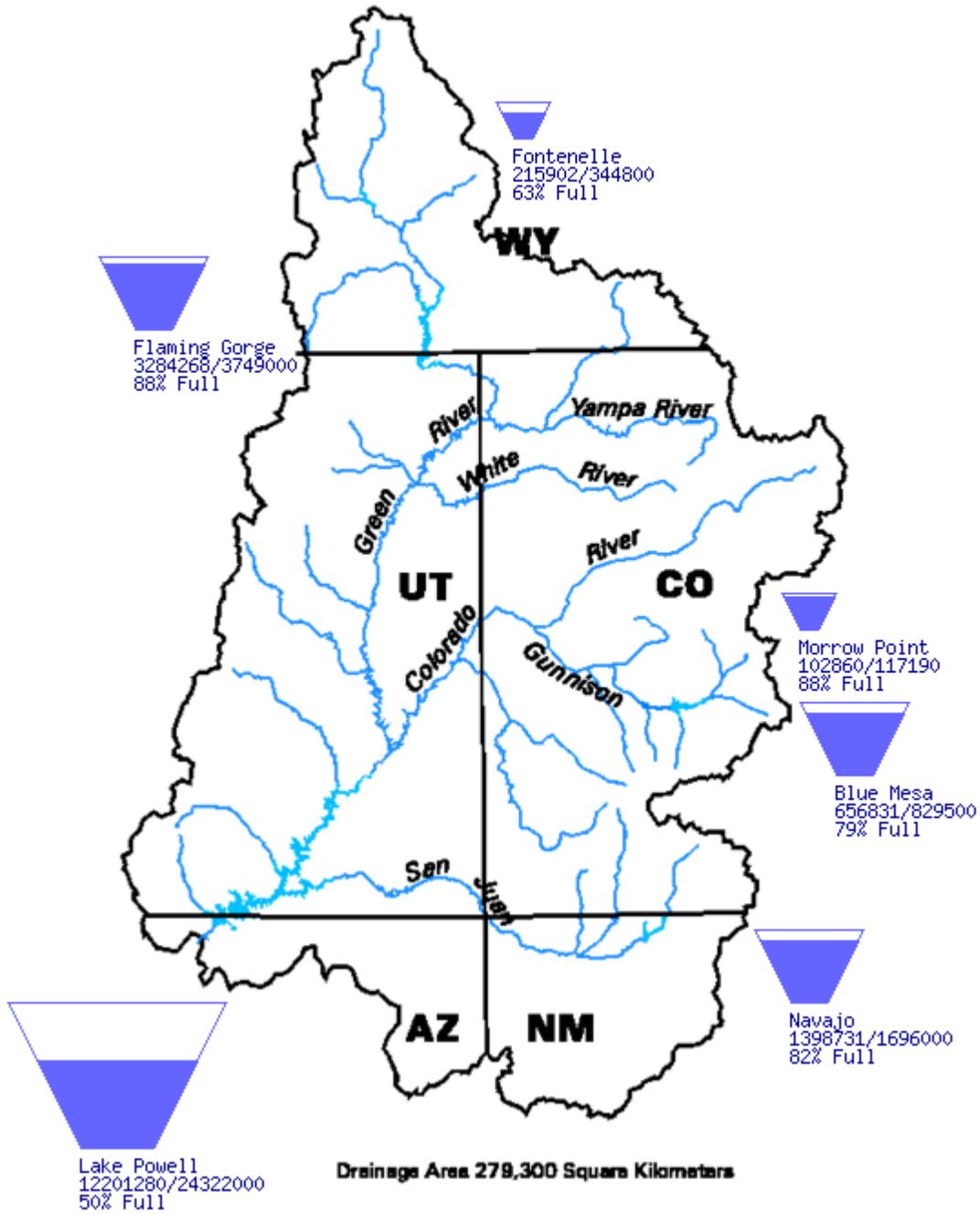
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

Upper Colorado Region Water Resources Group

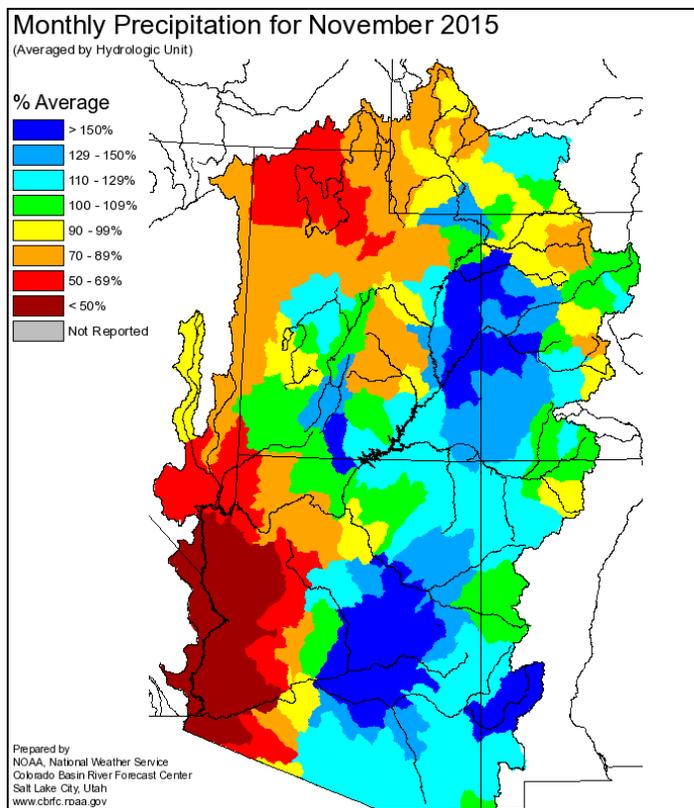
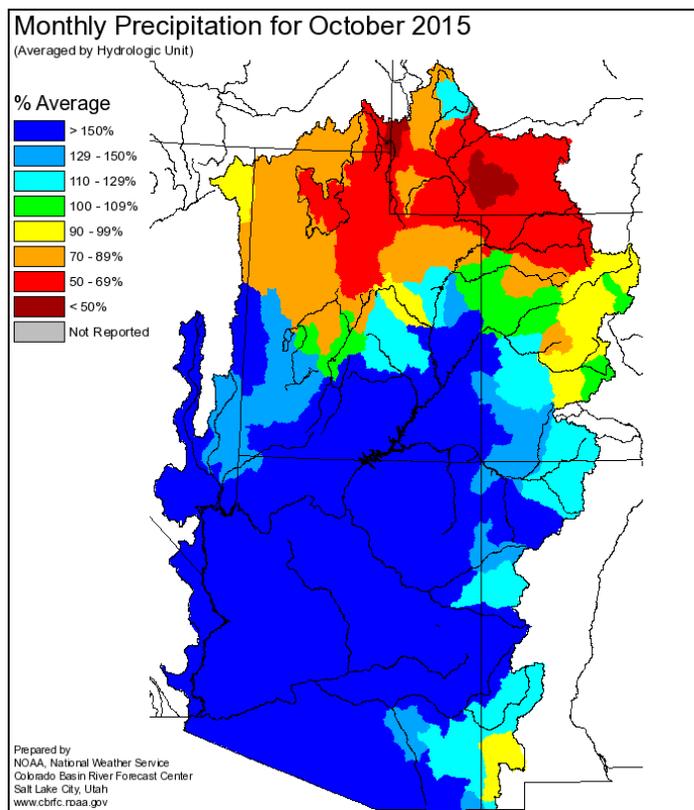
River Basin Tea-Cup Diagrams

Data Current as of:
12/06/2015

Upper Colorado River Drainage Basin



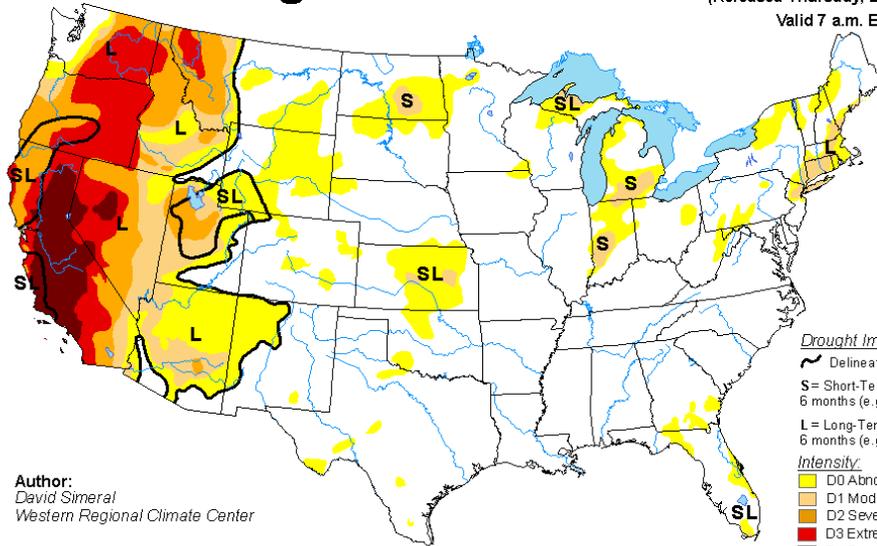
NOAA National Weather Service Monthly Precipitation Maps for October and November 2015



USDA United States Drought Monitor Map

U.S. Drought Monitor

December 1, 2015
 (Released Thursday, Dec. 3, 2015)
 Valid 7 a.m. EST

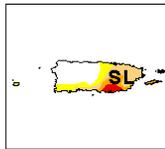
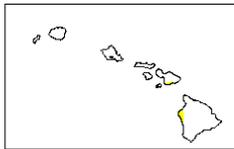
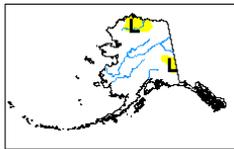


Author:
 David Simeral
 Western Regional Climate Center

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

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

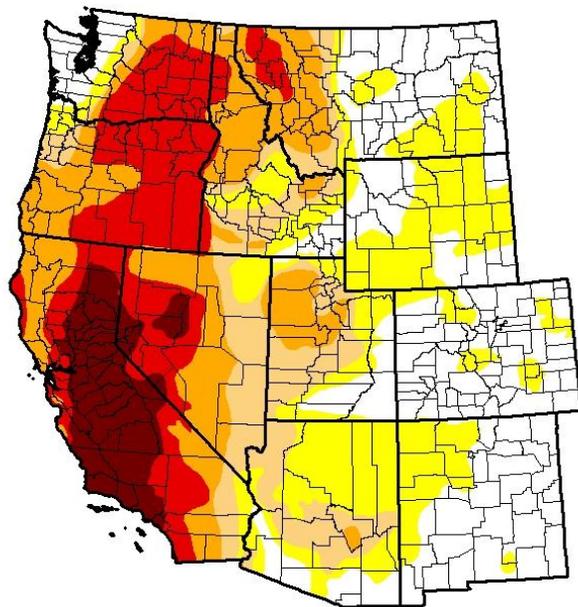
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



USDA National Drought Mitigation Center
<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor West

December 1, 2015
 (Released Thursday, Dec. 3, 2015)
 Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	28.98	71.02	48.88	37.23	21.16	6.85
Last Week 11/24/2015	28.26	71.74	50.57	37.61	21.35	6.85
3 Months Ago 8/1/2015	25.33	74.67	59.67	42.69	26.73	7.62
Start of Calendar Year 12/2/2014	34.76	65.24	54.48	33.50	18.68	5.40
Start of Water Year 9/29/2015	22.77	77.23	57.81	42.42	26.50	7.62
One Year Ago 12/2/2014	34.32	65.68	55.16	34.01	18.98	8.45

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

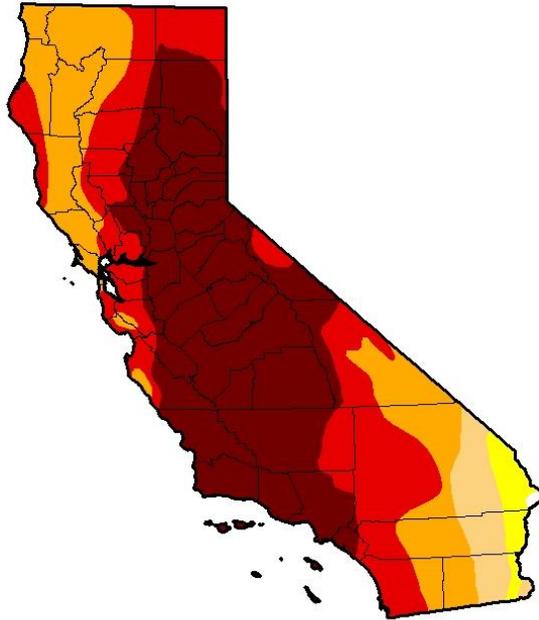
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Author:
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 Western Regional Climate Center

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U.S. Drought Monitor California

December 1, 2015
(Released Thursday, Dec. 3, 2015)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	97.33	92.26	70.55	44.84
Last Week 11/24/2015	0.14	99.86	97.33	92.26	70.55	44.84
3 Months Ago 9/1/2015	0.14	99.86	97.35	92.36	71.08	46.00
Start of Calendar Year 12/02/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/29/2015	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago 12/2/2014	0.00	100.00	99.72	94.42	79.69	55.08

Intensity

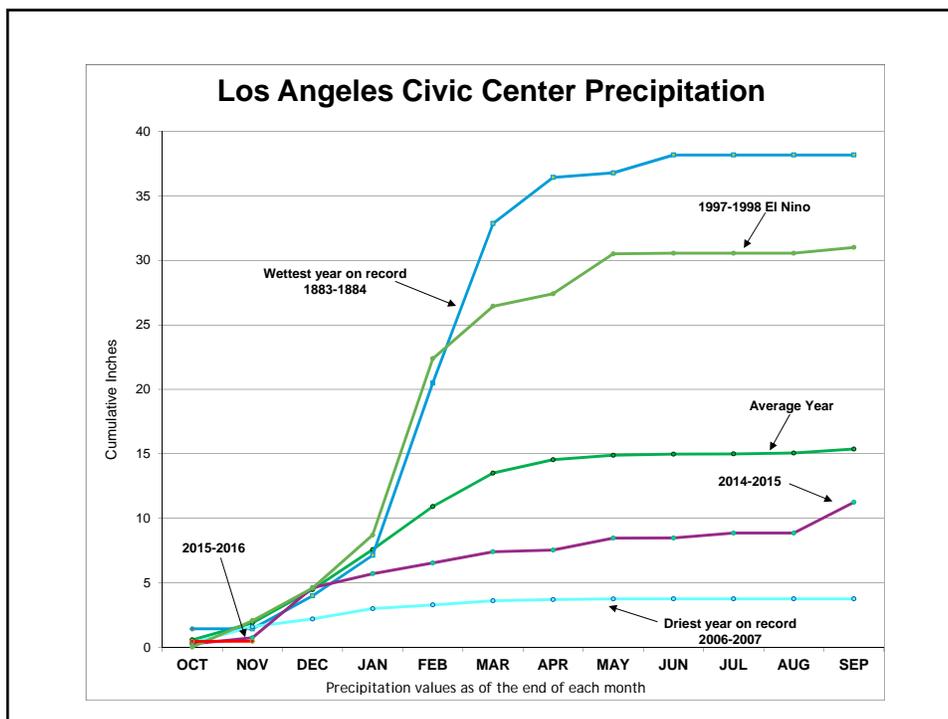
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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Western Regional Climate Center



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Precipitation at Six Major Stations in Southern California

From October 1, 2015 to December 1, 2015

Station	Precipitation in inches		Average to Date	Percent of Average
	Nov	Oct 1 to Dec 1		
San Luis Obispo	0.82	0.85	3.05	28%
Santa Barbara	0.10	0.58	2.19	26%
Los Angeles	0.01	0.46	1.88	24%
San Diego	0.13	0.56	1.48	38%
Blythe	0.05	0.89	0.54	165%
Imperial	0.03	0.05	0.45	11%

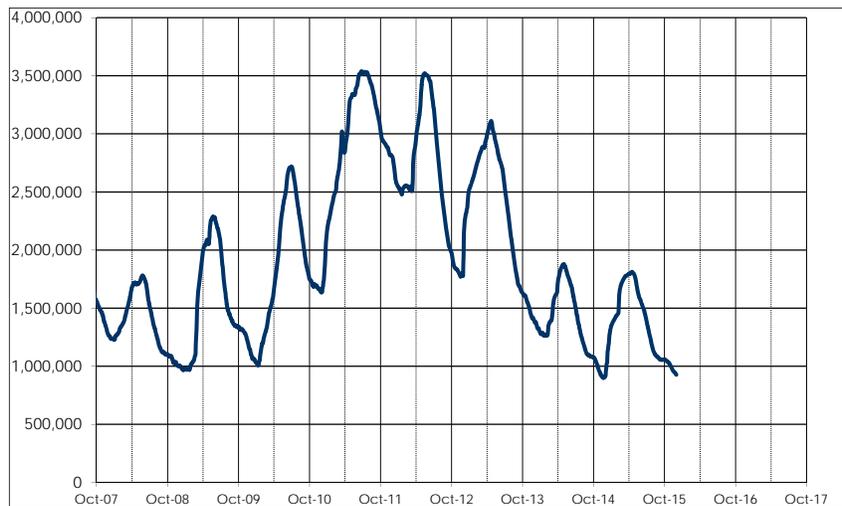
Comparison of SWP Water Storage

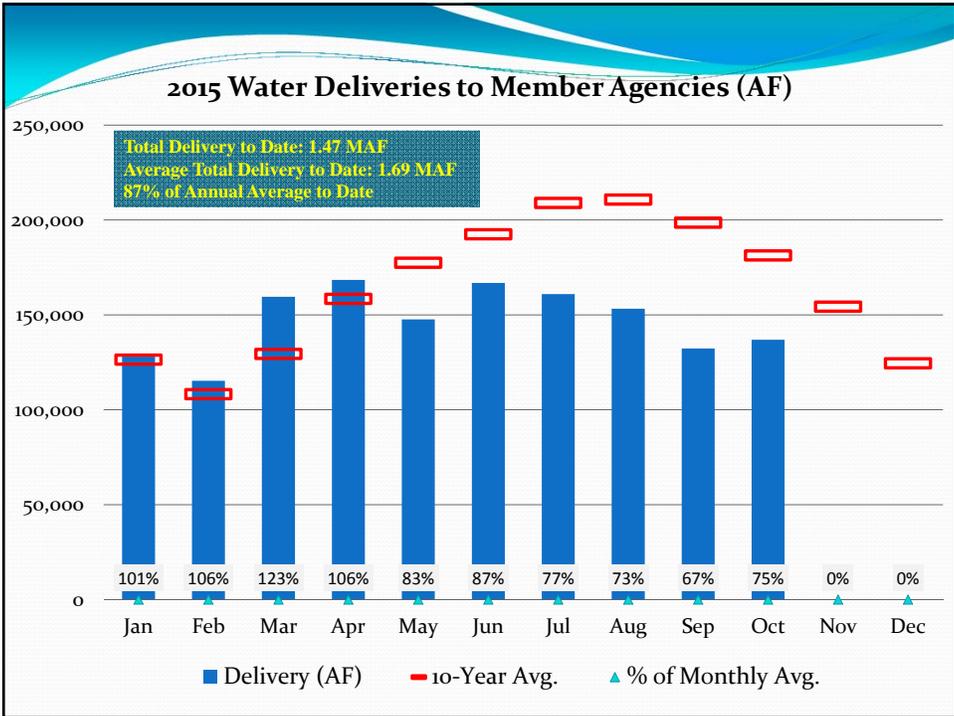
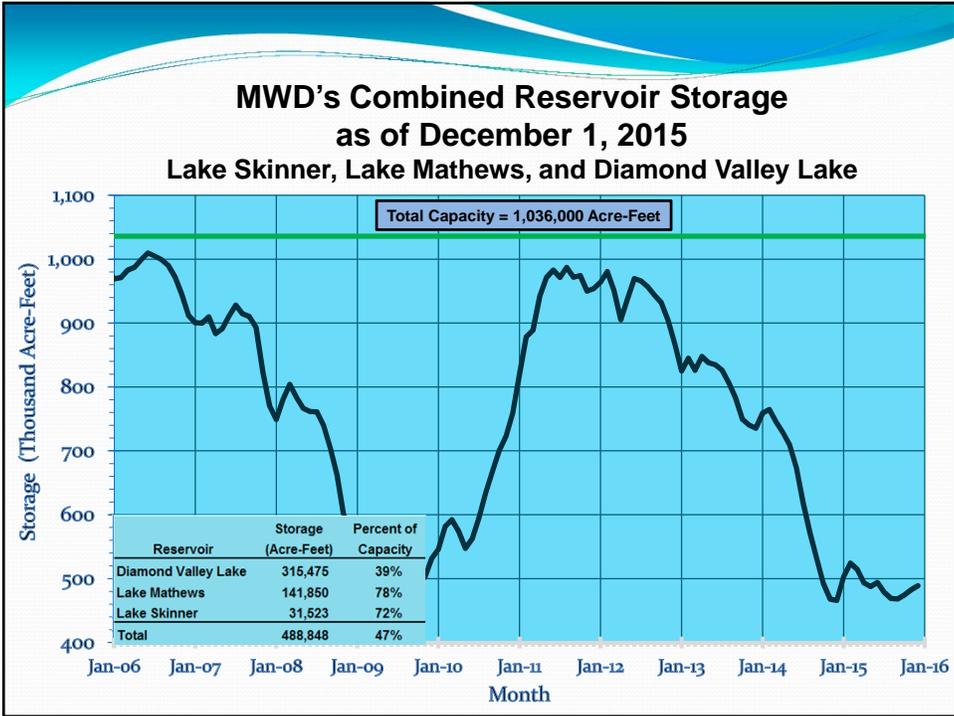
Reservoir	Capacity	2014 Storage (acre-feet)		2015 Storage (acre-feet)	
		As of Dec 1	% of Cap.	As of Dec 1	% of Cap.
Frenchman	55,475	19,090	34%	11,415	21%
Lake Davis	84,371	42,974	51%	36,145	43%
Antelope	22,564	16,000	71%	16,267	72%
Oroville	3,553,405	909,468	26%	927,231	26%
TOTAL North	3,715,815	987,532	27%	991,058	27%
Del Valle	39,914	29,840	75%	27,123	68%
San Luis (DWR)	1,062,180	310,847	29%	306,482	29%
Pyramid	169,901	167,396	99%	168,100	99%
Castaic	319,247	98,394	31%	111,509	35%
Silverwood	74,970	70,733	94%	58,379	78%
Perris	126,841	45,649	36%	46,423	37%
TOTAL South	1,793,053	722,859	40%	718,016	40%
TOTAL SWP	5,508,868	1,710,391	31%	1,709,074	31%

State Water Project Projected Deliveries:
As of December 1, 2015, the Table-A allocations for 2016 is 10%

Oroville Storage (acre-feet)

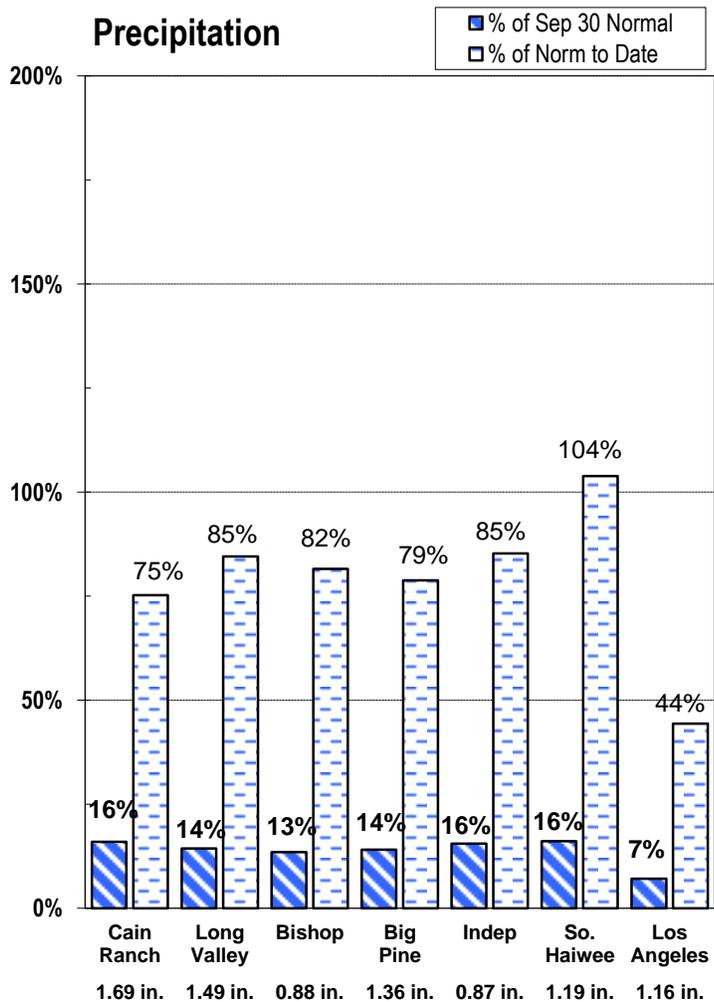
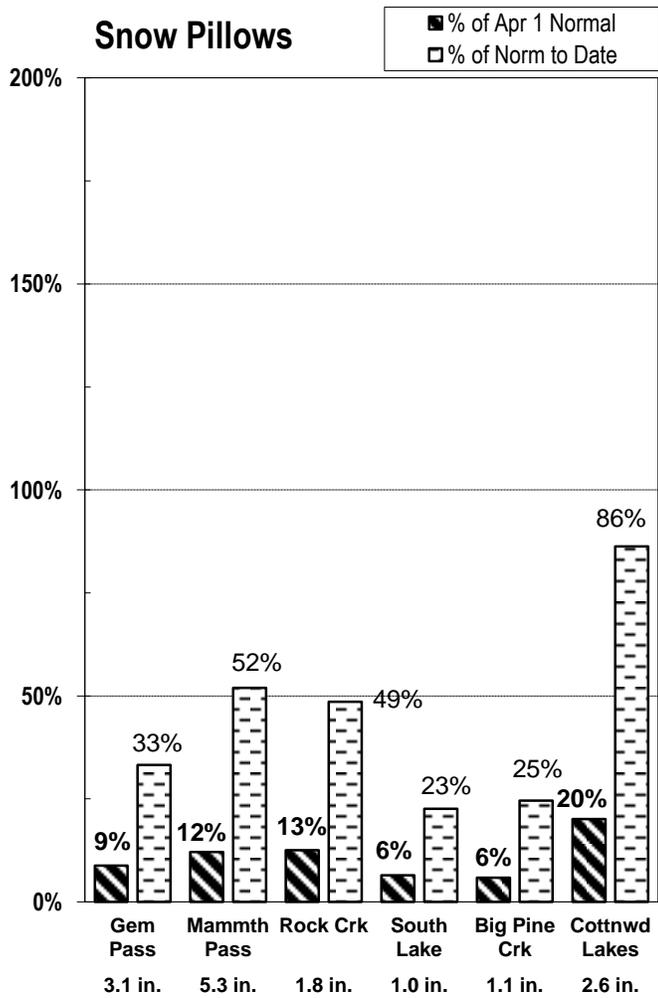
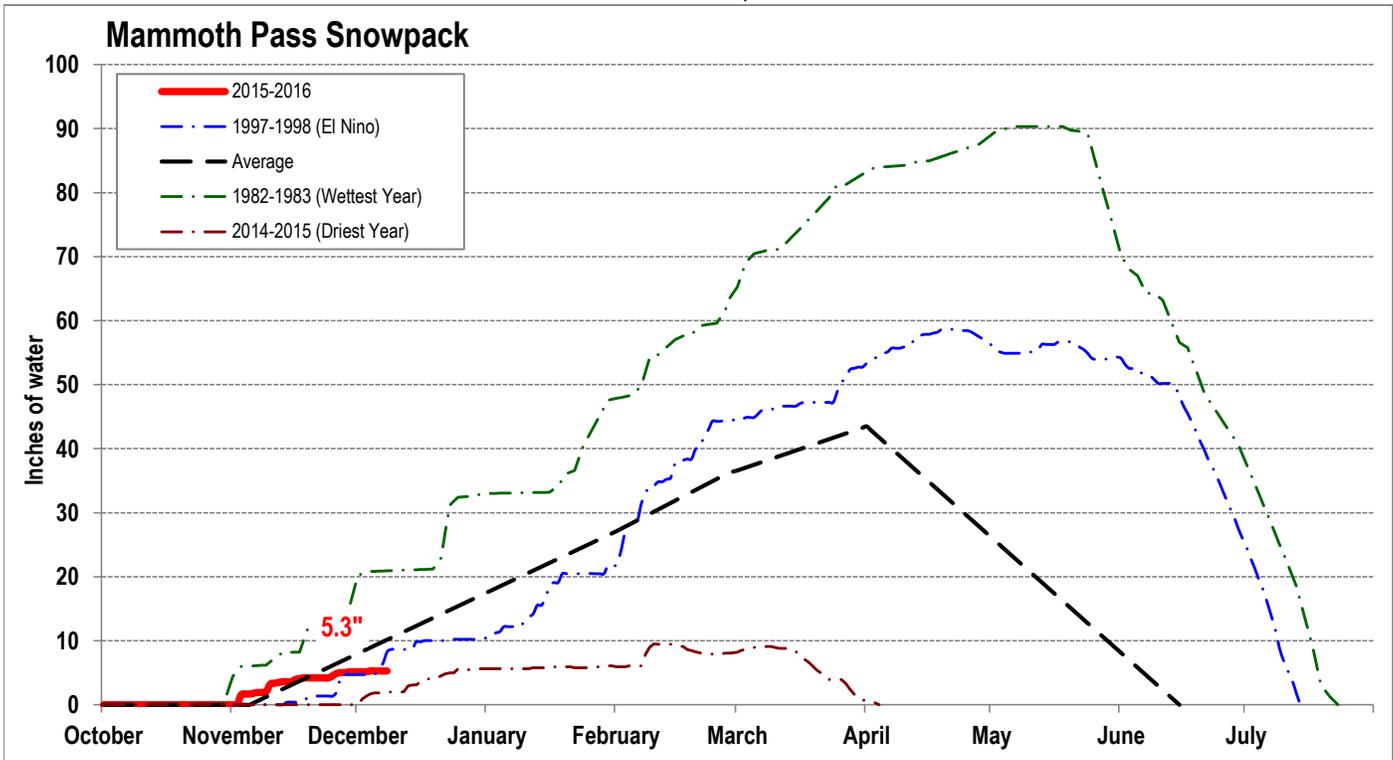
October 1, 2007 - December 1, 2015





EASTERN SIERRA CURRENT PRECIPITATION CONDITIONS

December 8, 2015



Measurement as Inches Water Content; Precipitation totals are cumulative for water year beginning Oct 1