

February 26, 2016

**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, March 9, 2016
Time: 1:30 p.m.
Place:
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123
858-522-6600

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, March 9, 2016
1:30 p.m.

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

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. Welcome from the San Diego County Water Authority
4. Presentation(s) from the San Diego County Water Authority
5. Administration
 - a. Consideration and approval of the Minutes of the meetings held on February 10, 2016 (**Action**)
6. Request for approval of a Joint Funding Agreement with the USGS for stream-gaging work at specific locations along the Lower Colorado River (**Action**)
7. 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
8. Update regarding the California Drought
9. 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 and preparation for Minute 32x
 - 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
10. Announcements/Notices

11. 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.

12. Other Business

- a. Next Board Meeting: April 13, 2016
Palo Verde Irrigation District
180 W. 14th Ave.
Blythe, CA 92225
760-922-3144
(Time to be determined)

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, February 10, 2016.

A meeting of the Colorado River Board of California was held on Wednesday, February 10, 2016.

Board Members and Alternates Present

Brian Brady	John Powell Jr.
Dana Bart Fisher, Jr., Chairman	Jack Seiler
James Hanks	Michael Touhey
Henry Kuiper	David Vigil
Peter Nelson	Doug Wilson
David Pettijohn	Jeanine Jones

Board Members and Alternates Absent

Stephen Benson	Chris Hayes
Glen Peterson	

Others Present

Steve Abbott	Autumn Plourd
Martin Adams	Katie Ruark
Don Barioni	Tina Shields
Tim Blair	Joanna Smith Hoff
Steve Bigley	Philip Southard
John Carter	Mark Stuart
Robert Cheng	Tanya Trujillo
Dan Denham	Mark VanVlack
Heather Engel	Donnell Wilcox
Dan Farris	Jerry Zimmerman
Christopher Harris	
Bill Hasencamp	
Michael Hughes	
Ned Hyduke	
Lisa Johansen	
Mark Johnson	
Eric Katz	
Lindia Liu	
Kara Mathews	
Jan Matusak	
Jessica Neuwerth	
Vic Nguyen	
G. Patrick O'Dowd	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:09 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.

Welcome from the Coachella Valley Water District

Director Peter Nelson welcomed everyone to the Imperial Valley and shared a brief history on Coachella Valley Water District and how the district provides domestic and irrigation water including agricultural drainage, wastewater treatment and reclamation services, regional storm water protection, groundwater management and water conservation. Mr. Nelson stated a number of speakers from their staff were present to provide an overview of their district. The speakers included Mr. Johnson, Ms. York and Mr. Bixley.

Presentations from the Coachella Valley Water District regarding current water quality and supply management issues

Mr. Mark Johnson, Director of Engineering with Coachella Valley Water District (CVWD), noted that the water district supplies many different areas with water from multiple sources, including the Colorado River, State Water Project, and groundwater basins. Mr. Johnson reported that Whitewater River Basin aquifer that supplies water to CVWD contains naturally-occurring chromium that has leached out of surrounding rocks. Mr. Johnson noted that recharging areas of the aquifer with Colorado River water lowers the chromium concentration. He also noted that in July, 2014, the State of California adopted more stringent chromium standards of 10 parts per billion, which is problematic for the Coachella Valley, which has groundwater chromium levels ranging from 1 to 21 parts per billion. CVWD has until the end of 2019 to comply with this standard. After an aquatic treatment study, Mr. Johnson reported that CVWD plans to address the problem by carrying out ion exchange treatment at over twenty sites across the valley. Ion exchange treatment will require expensive catalyst regeneration treatment and hazardous waste management that could cost between \$200 and \$300 million and double the rates of CVWD customers. Mr. Johnson reported that a final maximum cost estimate would be available by May, CEQA compliance finalized by June, and construction beginning by July.

Ms. Katie York, the Conservation Manager at CVWD, reported on the mandatory conservation targets set by the State Water Resources Control Board. Ms. York addressed some of the difficulties facing CVWD in meeting their 36% conservation target, including a seasonal population and gallon per capita use that may not reflect the actual usage rates. Ms. York noted that CVWD was attempting to meet their conservation target through outreach and education, rebates and incentives, and drought penalties. Ms. York

reported that CVWD had devoted \$7 million toward conservation and rebates in 2015 in an attempt to reduce water use. Ms. York described the tiered usage system CVWD has put in place, which is used to incentivize those overusing water to cut back. Ms. York reported that the average conservation in the district is at 26%. Ms. York also noted that on February 2nd, the State Water Resources Control Board revised their regulations, allowing for adjustments to conservation targets for things such as population growth, drought resilient supply, and climate. Given that evapotranspiration in the Coachella Valley is 27% higher than the state average, Ms. York reported that CVWD had received the maximum 4% climate reduction, and is having their conservation target adjusted from 36% to 32%.

Mr. Steve Bixley, CVWD's Director of Water Quality, spoke next, describing CVWD's water management plans, which include developing a sustainable groundwater supply. Mr. Bixley noted that groundwater replenishment in the valley began in 1918, using stormwater coming from the Whitewater River, and by 2015, the cumulative amount of groundwater recharge at the Whitewater Basin reached 2.9 maf. Mr. Bixley reported that the Whitewater Groundwater Replenishment Facility had undergone a \$10 million improvement in 2013. Groundwater replenishment also began at the Mission Creek Subbasin in 2002, which has now received over 150,000 af. Another 270,000 af has been delivered to the Thomas E. Levy Groundwater Replenishment Facility, with deliveries to the completed facility beginning in 2009. Mr. Bixley reported on groundwater levels at multiple locations across the Coachella Valley, many of which have stabilized or improved with the expansion of groundwater replenishment efforts.

Finally, Mr. Dan Ferris, CVWD's Director of Operations, reported on indirect aquifer recharge, which aims to provide surface water in lieu of groundwater to improve groundwater resources. Mr. Ferris noted that the Coachella Valley has 127 golf courses, over 30 of which receive water from the canal distribution system. Many also receive part or of all of their water from recycled sources, and an additional 26 golf courses plan to receive canal water through new connections. Mr. Ferris reported that 81% of Coachella Valley golf courses will use surface water sources once the non-potable water delivery system is complete, which is equivalent to 60,000 af of groundwater recharge per year.

Board Member Kuiper asked whether the State Water Resources Control Board had considered the source of water when making its conservation mandates, and Ms. York replied that the State Board has jurisdiction over all potable water in California and had therefore placed restrictions on all water districts, even those who did not get water from the State Water Project. In response to a question from Vice Chairman Wilson, Board Member Nelson addressed the potential impact to water customers from chromium reduction measures. Mr. Nelson reported that the cost increases would be phased in, although some customers might respond to the increased prices with reductions in water usage, as they had responded to the drought penalty rates.

ADMINISTRATION

Consideration and Approval of the Minutes

Chairman Fisher asked for a motion to approve the February 10, 2016 meeting minutes. Mr. Kuiper moved that the minutes be approved, seconded by Mr. Pettijohn, and by unanimous support, the February 10, 2015 meeting minutes were approved. Ms. Trujillo stated that a few minor corrections were made.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Water Reports and State and Local Water Reports

Ms. Trujillo reported that as of February 1, 2016, the Colorado River system storage was 49% of capacity, similar to where it was last month and around this time last year. The Lake Mead storage was 40% of capacity, and is at its lowest elevation since the reservoir first began to fill. The water storage in Lake Powell was 47% of capacity. The Water Year 2016 precipitation to date is 106% of average, and the current Basin snowpack is at 111% of average. Earlier in the season, there was an inflow forecast into Lake Powell of 87% for Water Year 2016, with an April – July 2016 inflow forecast of also 87%. As of February 1, 2016, the Upper Basin reservoirs, other than Lake Powell, were 49% of capacity at Fontenelle and 84% of capacity at Flaming Gorge in Wyoming, 71% of capacity at Blue Mesa and 94% of capacity at Morrow Point in Colorado, and 82% of capacity at Navajo in New Mexico.

Ms. Trujillo reported that the snowpack has been tracking better than at this time last year, and is between 120% and 150% of normal in the lower areas of the Upper Colorado Region. The precipitation for January 2016 was near average, and the temperatures were below average, which helped with retaining the snow and turning precipitation into snow. The U.S. Drought Monitor Map shows that most areas in the Colorado River Basin have improved. Colorado and New Mexico have virtually no indications of drought conditions; Wyoming, Utah, and Arizona have some indications of drought conditions; and Nevada and California still have significant indications of drought conditions.

Ms. Trujillo reported that, as of February 4, Brock Reservoir has captured about 11,000 acre-feet, and Senator Wash saved about 6,900 acre-feet. Excess flows to Mexico, as of February 8th, were about 15 acre-feet, and the bypass flows per Minute 242, as of February 1, were about 2,800 acre-feet.

Ms. Trujillo noted that we are in the process of finalizing the accounting through the official Decree Accounting Report process for 2015. She reported that Secretary Jewell issued the official 2016 Annual Operating Plan on January 8. Projected releases from Lake Powell are expected to be 9.0 million acre-feet unless there is a tremendous shift in the hydrology between now and April 2016, and there will be no Lower Basin shortage for 2016.

Ms. Trujillo reported that on February 8, Reclamation presented new projections of the potential for shortages in the Lower Basin over the next 5 years. In 2017, there is between a 17% and 37% chance of a first tier Lower Basin shortage. The chance for shortage is projected to increase to 59% in 2018, 60% in 2019, and 59% in 2020, and is subject to modification as each year's hydrology develops. Similarly, the modeling effort also considers the chances of a surplus, which would occur if Lake Mead's elevation is projected to be at 1,145 feet.

Ms. Trujillo reported that on February 2, the State Water Resources Control Board (State Water Board) extended the mandatory conservation requirements through October 2016. Statewide, as of December 2015, a water reduction level of 18.3% was achieved, less than the 25% requested. On January 19, the California Department of Water Resources (DWR) and U.S. Bureau of Reclamation released their 2016 Drought Contingency Plan for the Central Valley Project and the State Water Project (SWP) to look at ways to save water through coordinated operations. Ms. Trujillo reported that the SWP water allocation was increased slightly to 15 percent. Ms. Jones, of the California Department of Water Resources, added that DWR released its first snowmelt runoff forecast of the season. The forecast currently classifies this year as a "dry water year", a step up from last year's designation as "completely dry".

Mr. Mark Stuart, of the California Department of Water Resources, reported that accumulated precipitation for Water Year 2016 at the Los Angeles Civic Center is about 4 inches. Of the six major stations in Southern California, the precipitation to date for the Water Year has been below normal, with the San Diego station tracking the highest at 79% of normal. The Los Angeles station received 3.2 inches in January and 4.2 inches for Water Year 2016 to date. For the Northern Sierra Precipitation 8-Station Index, the total received is 32.8 inches. As of February 2, 2016, the Snow Water Equivalent for the Northern, Central, and Southern Sierras are 120%, 116%, and 106% of normal, respectively, with a statewide total of 114% of normal. The water storage in Lake Oroville is at about 1.5 million acre-feet, or 44% of capacity. Lake Shasta has increased by about 1 million acre-feet. The total water storage in the State Water Project system is slightly less than 1.9 MAF, or 34% of capacity.

Board Member Pettijohn, representing the L.A Department of Water and Power (DWP), reported above normal precipitation in the Eastern Sierra, and that an additional ten inches of precipitation would be needed in order to be normal by April 1. He added that the City of Los Angeles has met its State Water Board's conservation goal of 16%, and is slightly exceeding it when considering cumulative numbers. The Mayor of Los Angeles had placed mandates on the DWP to achieve additional conservation goals, and the DWP has been successful in reducing the water demand of the City. He added that the last few years have been dry, and even with additional snow, there could be some reduction in runoff due to dry conditions.

Board Member Wilson reported that San Diego had also met its State Water Board conservation mandate of 20% by conserving 23% on a cumulative basis, but cautioned that this number was preliminary.

STAFF REPORTS REGARDING THE COLORADO RIVER BASIN PROGRAMS

Review status of the Basin States Drought Contingency Programs

Ms. Trujillo stated she had provided detailed background regarding the drought contingency planning efforts during the last meeting and reiterated that the goals of the drought contingency planning efforts were to avoid low reservoir levels at Lake Mead and develop additional tools beyond those specified by the 2007 Interim Guidelines. Ms. Trujillo stated that there were no new developments at this time.

Review Status of the Implementation of Minute 319 and Preparation for Minute 32X

Ms. Trujillo reported that the Bi-national Negotiating Group continues to meet on a monthly basis, with the next round of meetings in Las Vegas, Nevada. Bi-national workgroups are focused on developing proposals to bring forward to the negotiating group on potential new provisions that may be included with the next round of agreements with Mexico. An initial discussion has begun regarding the domestic agreements that may be necessary to implement the next Minute.

Review Status of the Salinity Control Forum, Workgroup, and Advisory Council

Ms. Trujillo stated that Board staff will provide a report following the next Salinity Control Work Group meeting. Board staff has been involved in working on improvements to the salinity economic impact model that is utilized to advocate for the Salinity Control Program. The improvements will have some updated numbers for agricultural and municipal water use areas in California. The next Forum meeting will take place in June in Colorado.

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

Board Staff Neuwerth reported on the recently released public draft of the Long-Term Experimental and Management Plan (LTEMP) EIS for the management of Glen Canyon Dam. The draft has a 90 day comment period which closes on April 7. Ms. Neuwerth noted that a series of public meetings are planned, including webinars on February 16 and March 1. In-person meetings are scheduled for February 22 in Flagstaff, AZ and February 25 in Tempe, AZ.

Ms. Neuwerth reported that the Technical Work Group (TWG) of the Glen Canyon Dam Adaptive Management Work Group (AMWG) met January 26-28 in Phoenix, AZ for a TWG and Annual Science Reporting Meeting, at which stakeholders were updated on the latest research and monitoring results. Ms. Neuwerth reported that

this spring, a High Flow Experiment (HFE) is possible, although the sediment required to trigger one is currently not available. The decision to carry out the HFE would need to be made by mid-March. Ms. Neuwerth reported on the invasive green sunfish population which had established below Glen Canyon Dam and was treated with rotenone in November. Although the population concentrated in a backwater was eradicated, future monitoring will be done to ensure the fish did not successfully establish elsewhere. Ms. Neuwerth also reported on a new recovery plan underway for the endangered humpback chub, which is expected to be complete in spring 2017.

Ms. Neuwerth stated that at the Annual Science Reporting meeting, stakeholders received updates on the status of sediment, humpback chub, and rainbow trout. The rainbow trout population has been declining for several years, although 2015 shows a little rebound in the population. Ms. Neuwerth noted that the humpback chub population looked stable. Ms. Neuwerth noted that the AMWG would meet February 24-25 in Tempe, AZ and the TWG would meet April 19-20 in Phoenix.

Review Status of Lower Colorado River Multi-Species Conservation Program

Deputy Director Harris reported on the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) Colorado River Terrestrial and Riparian (CRTR) meeting held January 26-28 in Laughlin, NV, where stakeholders were given an update on the most recent science and monitoring for the program. Mr. Harris noted that, for the first time, endangered southwestern willow flycatchers have been found in habitats south of the Bill Williams River, including on the LCR MSCP restoration area in the Palo Verde Valley. The Palo Verde Ecological Reserve also contains one of the largest populations of threatened yellow-billed cuckoos on the Lower Colorado River. Mr. Harris noted that GPS tracking studies of yellow-billed cuckoos had shown the birds traveling to their wintering grounds in Venezuela and Colombia before returning to the Lower Colorado River. Researchers studying bird populations in Mexico presented to stakeholders on the large populations of endangered Yuma clapper rail, California black rail, and least bittern in Mexico's Cienega de Santa Clara. Mr. Harris reported that about 75% of the Yuma clapper rail population resides in the Cienega, which acts as a source population for LCR MSCP restoration areas. Mr. Harris reported that the LCR MSCP bat monitoring program has detected increasing numbers of bats using LCR MSCP properties for roosting and foraging.

Mr. Harris also noted that the Bureau of Reclamation is finalizing restoration designs for the recently acquired Planet Ranch property and is working to ensure that the water rights are secured against forfeiture and abandonment under Arizona state law.

Finally, Mr. Harris reported that the LCR MSCP would hold a Financial Workgroup call on February 25 and a Steering Committee meeting April 27 in Las Vegas, NV.

ANNOUNCEMENTS

Ms. Trujillo reported that the Department of Energy's Moab Uranium Clean-Up Project has removed eight million tons of uranium from the project site and the total remediation is expected to be completed by 2025. The total project cost is anticipated to be \$1 billion.

Ms. Trujillo reported that the December 2015 the Consolidated Appropriations Act appropriated \$100 million to the Bureau of Reclamation for drought relief and other water-related programs. The Lower Colorado River region received \$11 million of these funds. Five million dollars will be allocated towards the System Conservation Pilot Program and \$3 million will be allocated towards the Salton Sea research program. Twenty two million dollars was appropriated to the WaterSMART program.

Ms. Trujillo announced that the recently released President's budget contained some new provisions with a new emphasis on water technology. The Commissioner of Reclamation will go before one of the Appropriations Committees outlining the budget. The budget contains new water-related funding for WaterSMART programs, USGS monitoring, research and development to the Bureau of Reclamation, a new allocation of \$25 million to the Department of Energy, \$15 million to the U.S. Department of Agriculture conservation program, and \$88 million for the National Science Foundation's research programs.

Ms. Trujillo reported that the White House Office of Science and Technology will be hosting a water summit on World Water Day, March 22, 2016.

Ms. Trujillo reported that a Strategic Vision and Action Plan meeting on Salton Sea activities was held at the Imperial Irrigation District on January 20, 2016. A significant amount of work is underway with respect to modeling and construction permitting associated with some of the Federal and State funding that has been allocated toward Salton Sea activities.

Ms. Trujillo presented information to the Board regarding the potential to become a cost share partner with the USGS for stream gauging activities in the Lower Colorado Region. The proposal would be to contribute approximately \$20,000, between the dates October 1, 2015 through October 1, 2016, and continuing on an annual basis. This funding agreement would contribute funding towards six of the existing Colorado River gauges. Ms. Trujillo reported that the Metropolitan Water District of Southern California had been the contracting entity and that this proposal would be to shift it over to more of a shared expense. Ms. Trujillo identified some of the uses regarding stream gages and stated she would present more details regarding the proposal at the next Board meeting.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Fisher adjourned the meeting at 11:50 A.M.



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Arizona Water Science Center
520 North Park Avenue, Suite 221
Tucson, Arizona 85719

DUNS: 137882127 TIN: 53-0196958 ALC: 14-08-0001 CC: GGCMZF
(520) 670-6671 FAX (520) 670-5592
<http://az.water.usgs.gov/>

February 25, 2016

(3000019452/CA426)
Tanya M. Trujillo, Executive Director
Colorado River Board of California
770 N. Fairmont Avenue, Suite 100
Glendale, CA 91202

Dear Ms. Trujillo:

Enclosed are two copies of a Joint Funding Agreement (JFA) between the Colorado River Board of California and the U.S. Geological Survey (USGS) for the period October 1, 2015 to September 30, 2016 for the continued stream-gaging work along the Lower Colorado River, as described in the attached workplan. This work had been funded by the Metropolitan Water District of Southern California. The USGS will continue to contribute \$13,510 in National Streamflow Information Program (NSIP) funds.

Billing will be on an annual basis and the invoice will be mailed in June. Work performed with funds from this agreement will be conducted on a fixed-price basis. The results of all work under this agreement will be available for publication by the USGS. Please return one signed copy of the JFA to this office. If you have any questions, please contact Hugh Darling in our Yuma office at (928) 782-6024, ext. 21.

Sincerely,

James M. Leenhouts
Acting Director

Enclosures (2)

**U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Customer #: 3000019452/CA426
Agreement #: 16CMCA02401
Project #: ZF009DQ
TIN #: 95-4435918
Fixed Cost Agreement YES

JOINT FUNDING AGREEMENT

FOR
WATER RESOURCES INVESTIGATIONS

THIS AGREEMENT is entered into as of the, 25th day of February, 2016 by the U.S. GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the COLORADO RIVER BOARD OF CALIFORNIA, party of the second part.

1. The parties hereto agree that subject to availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation an investigation of water resources of the Colorado River at six gaging stations as described in the attached workplan, herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50; and 43 USC 50b.

 2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) includes In-Kind Services in the amount of \$0.00
 - (a) by the party of the first part during the period

Amount	Date	to	Date
\$0.00	October 1, 2015		September 30, 2016

 - (b) by the party of the second part during the period

Amount	Date	to	Date
\$20,290.00	October 1, 2015		September 30, 2016

Total = \$20,290.00

 - (c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$13,510.00

Description of the USGS regional/national program:
NSIP

 - (d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

 - (e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.
3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

 4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

 5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

 6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

- 7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.
- 8. The maps, records, or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records, or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program and, if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at costs, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records, or reports published by either party shall contain a statement of the cooperative relations between the parties.
- 9. USGS will issue billings utilizing Department of the Interior Bill for Collection (form DI-1040). Billing documents are to be rendered annually. Payments of bills are due within 60 days after the billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30 day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983).

**U.S. Geological Survey
United States
Department of the Interior
USGS Point of Contact**

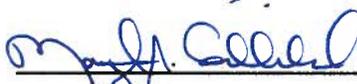
Colorado River Board of California

Customer Point of Contact

Name: James M. Leenhouts
 Address: 520 N. Park Ave., Suite 221
 Tucson, AZ 85719
 Telephone: 520-670-6671 x278
 Email: leenhout@usgs.gov

Name: Tanya M Trujillo
 Address: 770 Fairmont Avenue, Suite 100
 Glendale, CA 91202
 Telephone: 818-500-1625 x 308
 Email: tttrujillo@crb.ca.gov

Signatures and Date

Signature:  Date: 2/25/16
 Name: James M. Leenhouts
 Title:  Director

Signature: _____ Date: _____
 Name: _____
 Title: _____

**The Colorado River Board of California and the U.S. Geological Survey
Surface-Water Gaging Network and Publication of Hydrologic Data**

**Work Plan and Budget
Fiscal Year 2016**

<u>Station Number</u>	<u>Station Name</u>	<u>Estimated Cost</u>
09423000	Colorado River below Davis Dam	1,170
09423500	Colorado River @ Needles, CA	11,820
09424150	Colorado River Aqueduct near Parker Dam	620
09426000	Bill Williams R. below Alamo Dam	7,210
09427500	Lake Havasu near Parker Dam	11,810
09427520	Colorado River below Parker Dam	<u>1,170</u>
Total Program		\$33,800

Program Funding Summary:

Colorado River Board of California	\$20,290
USGS NSIP funds	\$13,510
<hr/>	
Total	\$33,800

Feb 29, 2016

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	46%	11,231	3594.48	12,600
* LAKE MEAD	40%	10,363	1084.21	14,300
LAKE MOHAVE	91%	1,649	641.18	13,800
LAKE HAVASU	90%	556	446.71	10,500
TOTAL SYSTEM CONTENTS **	49%	29,163		
As of 02/28/2016				
SYSTEM CONTENT LAST YEAR	49%	29,203		
* 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	57%	1,313		
Painted Rock Dam	0%	0	535.13	0
Alamo Dam	5%	52	1,087.83	25
Forecasted Water Use for Calendar Year 2015 (as of 02/29/2016) (values in kaf)				
NEVADA			277	
SOUTHERN NEVADA WATER SYSTEM				243
OTHERS				35
CALIFORNIA			4,150	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				590
IRRIGATION DISTRICTS				3,414
OTHERS				147
ARIZONA			2,679	
CENTRAL ARIZONA PROJECT				1,457
OTHERS				1,221
TOTAL LOWER BASIN USE				7,106
DELIVERY TO MEXICO - 2015 (Mexico Scheduled Delivery + Preliminary Yearly Excess ¹)				1,525
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - FEBRUARY MID MONTH FORECAST DATED 02/16/2016				
		MILLION ACRE-FEET	% of Normal	
FORECASTED WATER YEAR 2016		9.792	90%	
FORECASTED APRIL-JULY 2016		6.500	91%	
JANURARY OBSERVED INFLOW		0.300	83%	
FEBRUARY INFLOW FORECAST		0.380	97%	
		Upper Colorado Basin	Salt/Verde Basin	
WATER YEAR 2016 PRECIP TO DATE		94% (13.9")	99% (13.4")	
CURRENT BASIN SNOWPACK		96% (12.4")	22% (1.3")	

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

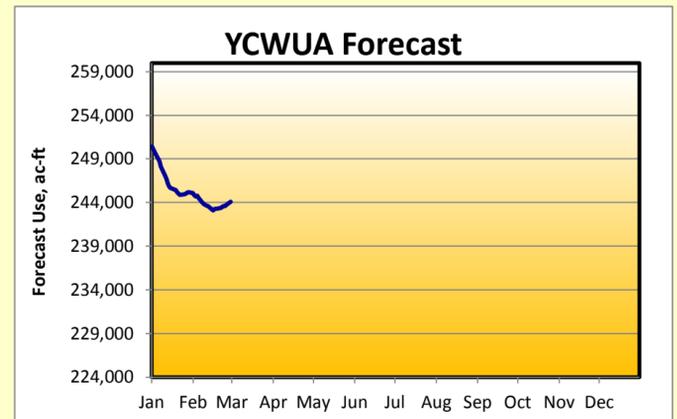
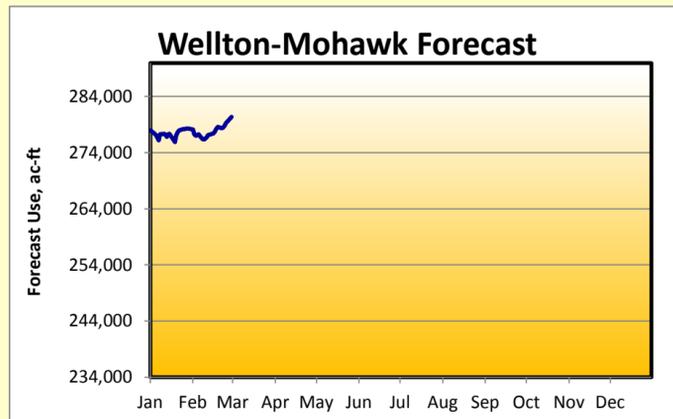
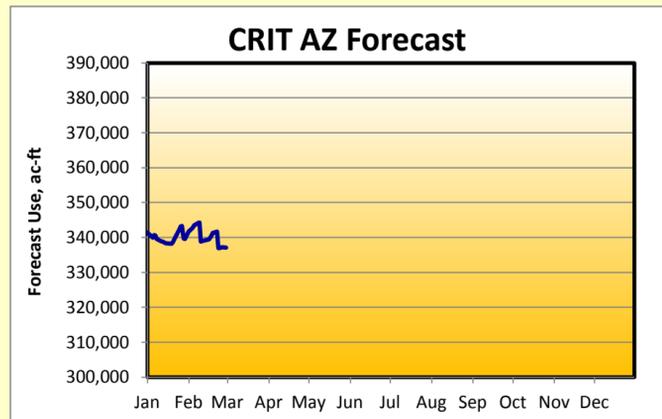
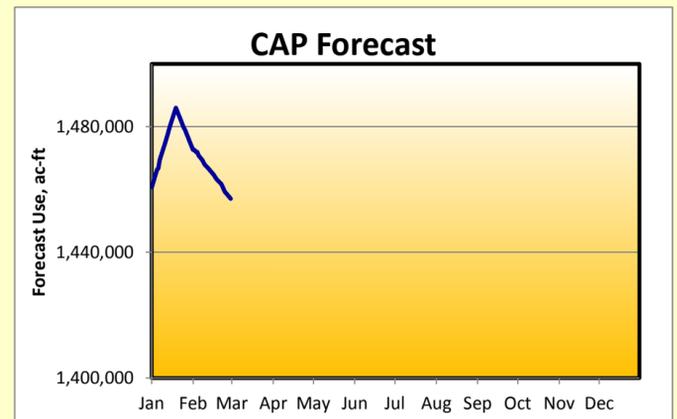
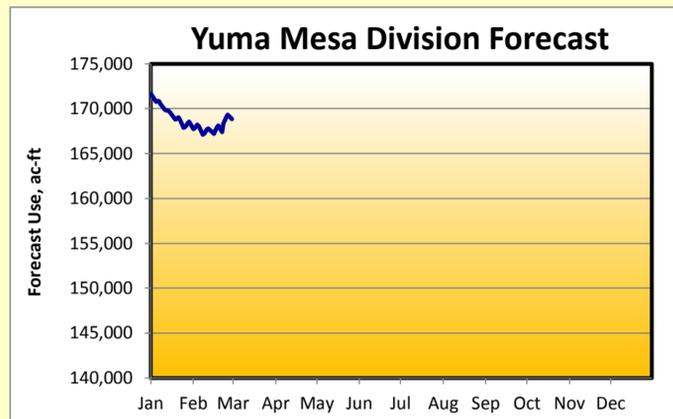
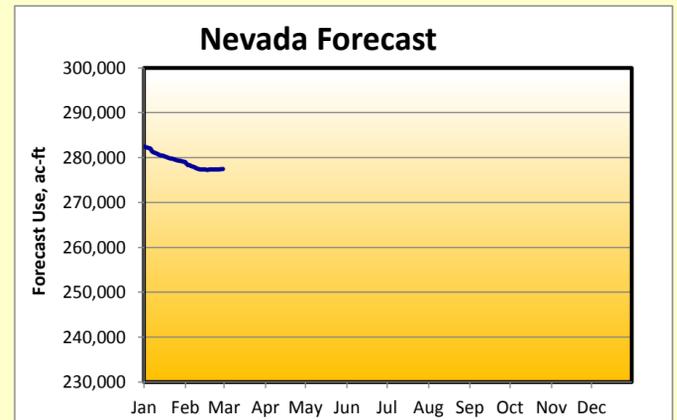
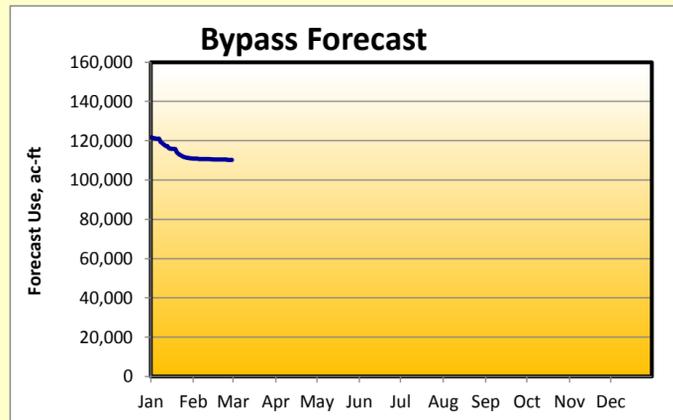
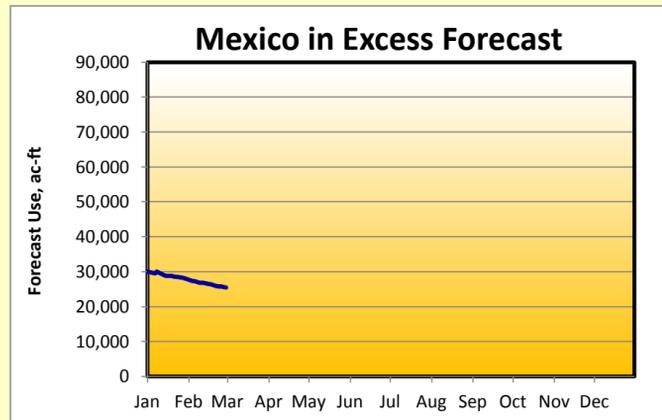
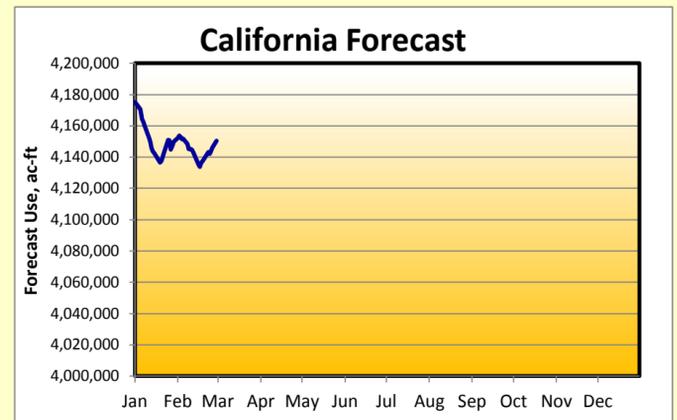
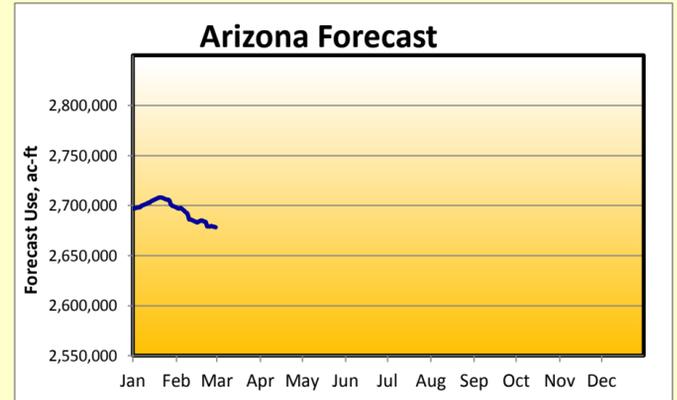
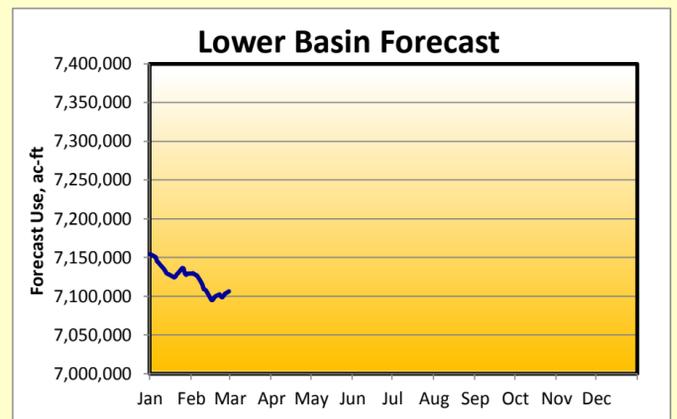
**U.S. BUREAU OF RECLAMATION
LOWER COLORADO REGION
CY 2016**

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 CY2016	Forecast Use CY2016	Approved Use ² CY2016	Excess to Approval CY2016
ARIZONA	362,475	2,678,520	2,697,000	-18,480
CALIFORNIA	452,544	4,150,419	4,175,000	-24,581
NEVADA	18,871	277,490	282,500	-5,010
STATES TOTAL ³	833,890	7,106,429	7,154,500	-48,071
MEXICO IN SATISFACTION OF TREATY (Including downward delivery)	327,736	1,525,462	1,500,000	25,462
TO MEXICO AS SCHEDULED	327,360	1,500,000		
MEXICO IN EXCESS OF TREATY	376	25,462		
BYPASS PURSUANT TO MINUTE 242	11,235	110,252		
TOTAL LOWER BASIN & MEXICO	1,172,861	8,742,143		

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



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

**U.S. BUREAU OF RECLAMATION
LOWER COLORADO REGION
CY 2016**

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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**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
	CY2016	CY2016	CY2016	CY2016	CY2016	CY2016	CY2016	CY2016
CALIFORNIA PUMPERS	222	1,761	1,761	---	401	3,191	3,191	0
FORT MOJAVE INDIAN RESERVATION, CA	240	8,241	8,995	---	446	15,318	16,720	-1,402
CITY OF NEEDLES (includes LCWSP use)	243	1,931	1,931	0	342	2,720	2,720	0
METROPOLITAN WATER DISTRICT	99,695	589,749	591,360	---	100,127	592,751	594,451	---
COLORADO RIVER INDIAN RESERVATION, CA	407	3,237	3,237	---	675	5,362	5,362	0
PALO VERDE IRRIGATION DISTRICT	7,801	388,748	400,192	---	65,818	850,577	868,000	-17,423
YUMA PROJECT RESERVATION DIVISION	3,745	55,552	57,009	---	8,981	105,552	107,359	-1,807
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	---	---	---	---	4,294	51,368	52,359	-991
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	---	---	---	---	4,687	54,184	55,000	-816
YUMA ISLAND PUMPERS	571	4,540	4,540	---	1,033	8,215	8,215	0
FORT YUMA INDIAN RESERVATION - RANCH 5	83	663	663	---	151	1,201	1,201	0
IMPERIAL IRRIGATION DISTRICT	268,373	2,605,680	<i>2,612,400</i>	-6,720	277,213	2,719,781	<i>2,727,875</i>	---
SALTON SEA SALINITY MANAGEMENT	33,367	130,000	130,000	0	34,450	136,420	136,420	---
COACHELLA VALLEY WATER DISTRICT	37,682	359,406	362,000	-2,594	38,955	375,996	378,869	---
OTHER LCWSP CONTRACTORS	92	728	728	---	145	1,152	1,152	0
CITY OF WINTERHAVEN	9	68	68	---	12	98	98	0
CHEMEHUEVI INDIAN RESERVATION	14	115	115	---	1,427	11,340	11,340	0
TOTAL CALIFORNIA	452,544	4,150,419			530,176	4,829,674	4,862,973	

CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION

California Basic Apportionment	4,400,000
Conservation for Salton Sea Restoration - 2010 ¹	
Creation of Extraordinary Conservation ICS (IID)	-25,000
Creation of Extraordinary Conservation ICS (MWD)	-200,000
Total State Adjusted Apportionment	4,175,000
Excess to Total State Adjusted Apportionment	-24,581

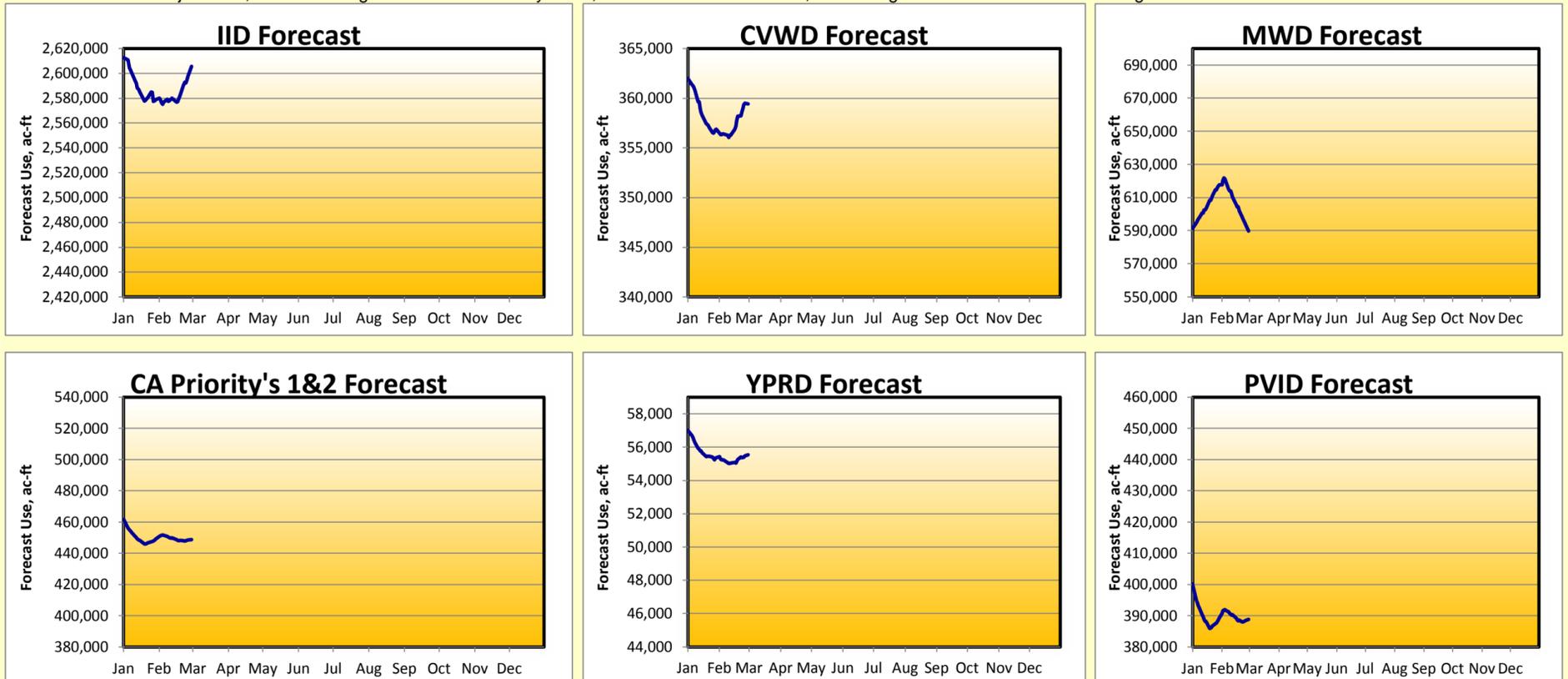
ISG ANNUAL TARGET COMPARISON CALCULATION

Priorities 1, 2, 3b Use (PVID+YPRD+Island+PVID Mesa)	448,840
MWD Adjustment	-28,840
Total California Agricultural Use (PVID+YPRD+Island+IID+CVWD)	3,413,926
California Agricultural Paybacks	0
Misc. PPRs Covered by IID and CVWD	14,500
California ICS Creation (IID ICS)	25,000
Total Use for Target Comparison ²	3,424,586
ISG Annual Target (Exhibit B)	3,440,000
Amount over/(under) ISG Annual Target	-15,414

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 2016**

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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 CY2016	Forecast Use CY2016	Estimated Use CY2016	Excess to Estimated Use CY2016	Diversion To Date CY2016	Forecast Diversion CY2016	Approved Diversion CY2016	Excess to Approved Diversion CY2016
ARIZONA PUMPERS	2,074	16,484	16,484	---	3,211	25,525	25,525	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	11	157	157	---	11	157	157	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	23	182	182	---	23	182	182	0
DAVIS DAM PROJECT	0	2	2	---	7	56	56	0
BULLHEAD CITY	1,096	8,523	8,523	---	1,637	12,720	12,720	0
MOHAVE WATER CONSERVATION	74	592	592	---	111	881	881	0
BROOKE WATER LLC	26	210	210	---	39	314	314	0
MOHAVE VALLEY IDD	2,733	21,549	21,549	---	5,061	39,905	39,905	0
FORT MOJAVE INDIAN RESERVATION, AZ	3,739	46,269	47,790	---	6,924	85,683	88,500	-2,817
GOLDEN SHORES WATER CONSERVATION DISTRICT	40	316	316	---	59	472	472	0
HAVASU NATIONAL WILDLIFE REFUGE	76	3,399	3,563	---	632	39,645	41,820	-2,175
LAKE HAVASU CITY	1,062	8,370	8,370	---	1,713	13,500	13,500	0
CENTRAL ARIZONA PROJECT	269,326	1,457,111		---	269,326	1,457,111		
TOWN OF PARKER	34	392	392	---	107	916	916	0
COLORADO RIVER INDIAN RESERVATION, AZ	16,377	337,125	341,393	---	53,736	650,955	662,402	-11,447
EHRENBURG IMPROVEMENT ASSOCIATION	28	226	226	---	40	318	318	0
CIBOLA VALLEY IRRIGATION DISTRICT	2,166	17,218	17,218	---	3,028	24,074	24,074	0
CIBOLA NATIONAL WILDLIFE REFUGE	1,603	12,741	12,741	0	2,585	20,550	20,550	0
IMPERIAL NATIONAL WILDLIFE REFUGE	380	3,019	3,019	0	612	4,868	4,868	0
BLM PERMITEES (PARKER DAM to IMPERIAL DAM)	97	984	984		148	1,516	1,516	
YUMA PROVING GROUND	48	550	550	---	48	550	550	0
GILA MONSTER FARMS	496	5,111	5,271	---	942	8,925	9,156	-231
WELLTON-MOHAWK IDD	25,818	280,356	278,000	2,356	38,603	415,181	424,350	-9,169
BLM PERMITEES (BELOW IMPERIAL DAM)	8	86	86	0	13	132	132	0
CITY OF YUMA	362	14,050	16,036	-1,986	2,310	25,596	27,583	-1,987
MARINE CORPS AIR STATION YUMA	195	1,436	1,385	---	195	1,436	1,385	51
UNION PACIFIC RAILROAD	4	24	24	---	8	48	48	0
UNIVERSITY OF ARIZONA	91	690	690	---	91	690	690	0
YUMA UNION HIGH SCHOOL DISTRICT	10	151	151	---	13	200	200	0
DESERT LAWN MEMORIAL	11	87	87	---	15	123	123	0
NORTH GILA VALLEY IDD	767	10,910	10,929	---	3,827	42,924	44,000	-1,076
YUMA IRRIGATION DISTRICT	4,390	40,608	40,822	---	7,207	73,383	75,100	-1,717
YUMA MESA IDD	6,902	117,339	119,859	---	16,192	196,220	202,464	-6,244
UNIT "B" IRRIGATION DISTRICT	1,245	20,957	21,037	---	2,427	29,432	29,800	-368
FORT YUMA INDIAN RESERVATION	175	1,392	1,392	---	269	2,140	2,140	0
YUMA COUNTY WATER USERS' ASSOCIATION	20,549	244,091	250,443	---	41,344	379,310	386,000	-6,690
COCOPA INDIAN RESERVATION	436	5,787	5,778	---	547	8,850	8,960	-110
RECLAMATION-YUMA AREA OFFICE	3	26	26	---	3	26	26	0
RETURN FROM SOUTH GILA WELLS								
TOTAL ARIZONA	362,475	2,678,520	2,697,000		463,064	3,564,514	3,612,106	
CAP	269,326	1,457,111				1,457,111		
ALL OTHERS	93,149	1,221,409	1,236,277			2,107,403	2,151,383	
YUMA MESA DIVISION, GILA PROJECT	12,059	168,857	171,610	-2,753		312,527		

ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
Creation of Protection Volume ¹	-103,000
Total State Adjusted Apportionment	2,697,000
Excess to Total State Adjusted Apportionment	-18,480
 Estimated Allowable Use for CAP	 1,478,007

^{1/} In 2016, CAWCD intends to conserve no less than 103,000 AF of Colorado River water as part of its commitment under the 2014 Memorandum of Understanding for Pilot Drought Response Actions.

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

**U.S. BUREAU OF RECLAMATION
LOWER COLORADO REGION
CY 2016**

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

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

<u>WATER USER</u>	<u>Use To Date CY2016</u>	<u>Forecast Use CY2016</u>	<u>Estimated Use CY2016</u>	<u>Excess to Estimated Use CY2016</u>	<u>Diversion To Date CY2016</u>	<u>Forecast Diversion CY2016</u>	<u>Approved Diversion CY2016</u>	<u>Excess to Approved Diversion CY2016</u>
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	51,326	438,622	438,176	446	51,326	438,622	438,176	446
LAKE MEAD NRA, NV - Diversions from Lake Mead	63	403	403	---	63	403	403	0
LAKE MEAD NRA, NV - Diversions from Lake Mohave	21	152	152	---	21	152	152	0
BASIC MANAGEMENT INC.	1,176	8,208	8,208	---	1,176	8,208	8,208	0
CITY OF HENDERSON (BMI DELIVERY)	2,206	15,878	15,878	---	2,206	15,878	15,878	0
NEVADA STATE DEPT. OF FISH & GAME	2	12	12	0	57	405	405	---
PACIFIC COAST BUILDING PRODUCTS INC.	185	928	928	---	185	928	928	0
BOULDER CANYON PROJECT	22	173	173	---	38	300	300	0
BIG BEND WATER DISTRICT	594	5,355	5,355	---	1,218	10,000	10,000	0
FORT MOJAVE INDIAN TRIBE	143	3,636	3,886	---	214	5,428	5,800	-372
LAS VEGAS WASH RETURN FLOWS	-36,867	-195,877	-190,671	---				
TOTAL NEVADA	18,871	277,490	282,500	446	56,504	480,324	480,250	74
SOUTHERN NEVADA WATER SYSTEM (SNWS)	14,459	242,745				438,622		
ALL OTHERS	4,412	34,745				41,702		
NEVADA USES ABOVE HOOVER	18,134	268,499				464,896		
NEVADA USES BELOW HOOVER	737	8,991				15,428		

Tributary Conservation & Imported Intentionally Created Surplus

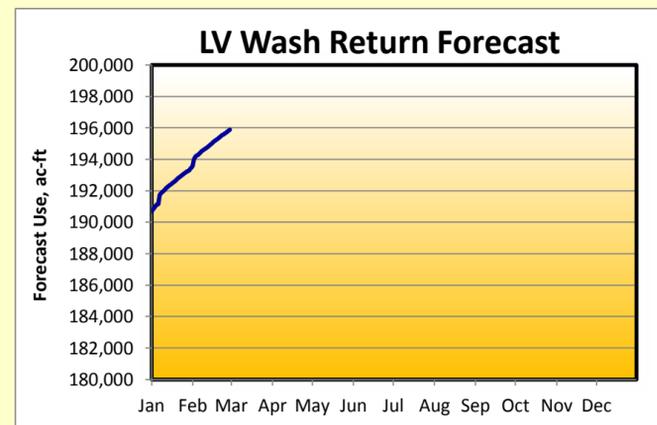
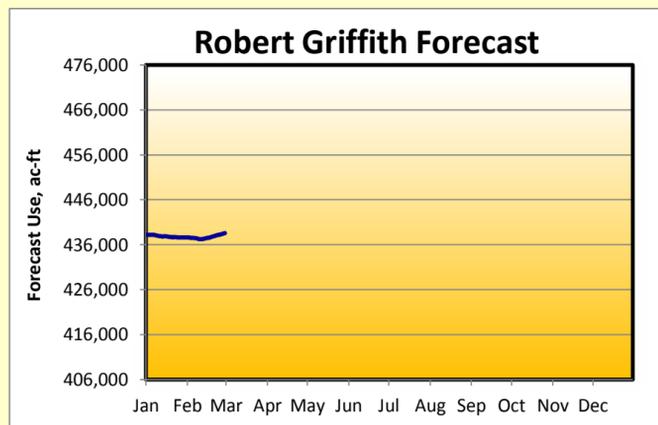
Total Requested Tributary Conservation Intentionally Created Surplus	29,500
Total Requested Imported Conservation Intentionally Created Surplus	9,000
5% System Cut for Creation of Intentionally Created Surplus	-1,925
Total Intentionally Created Surplus Left in Lake Mead	36,575

Pilot System Conservation Program

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

NEVADA ADJUSTED APPORTIONMENT CALCULATION

Nevada Basic Apportionment	300,000
Creation of Protection Volume ²	-17,500
Total State Adjusted Apportionment	282,500
Excess to Total State Adjusted Apportionment	-5,010



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.

2/ In 2016, Nevada anticipates leaving 17,500 AF of its basic apportionment in Lake Mead by forgoing off-stream storage as part of SNWA's commitment under the 2014 Memorandum of Understanding for Pilot Drought Response Actions.

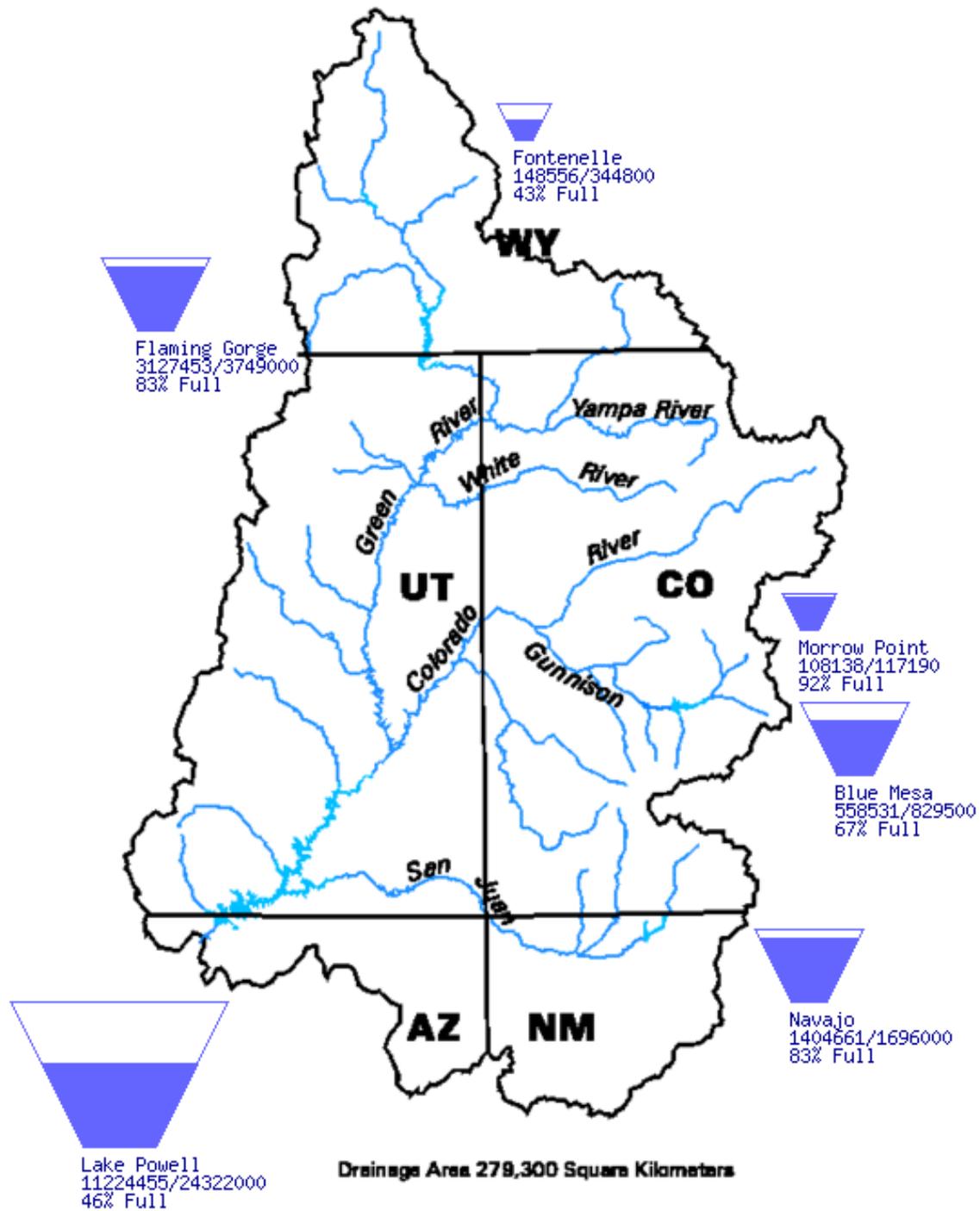
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

Upper Colorado Region Water Resources Group

River Basin Tea-Cup Diagrams

Data Current as of:
02/29/2016

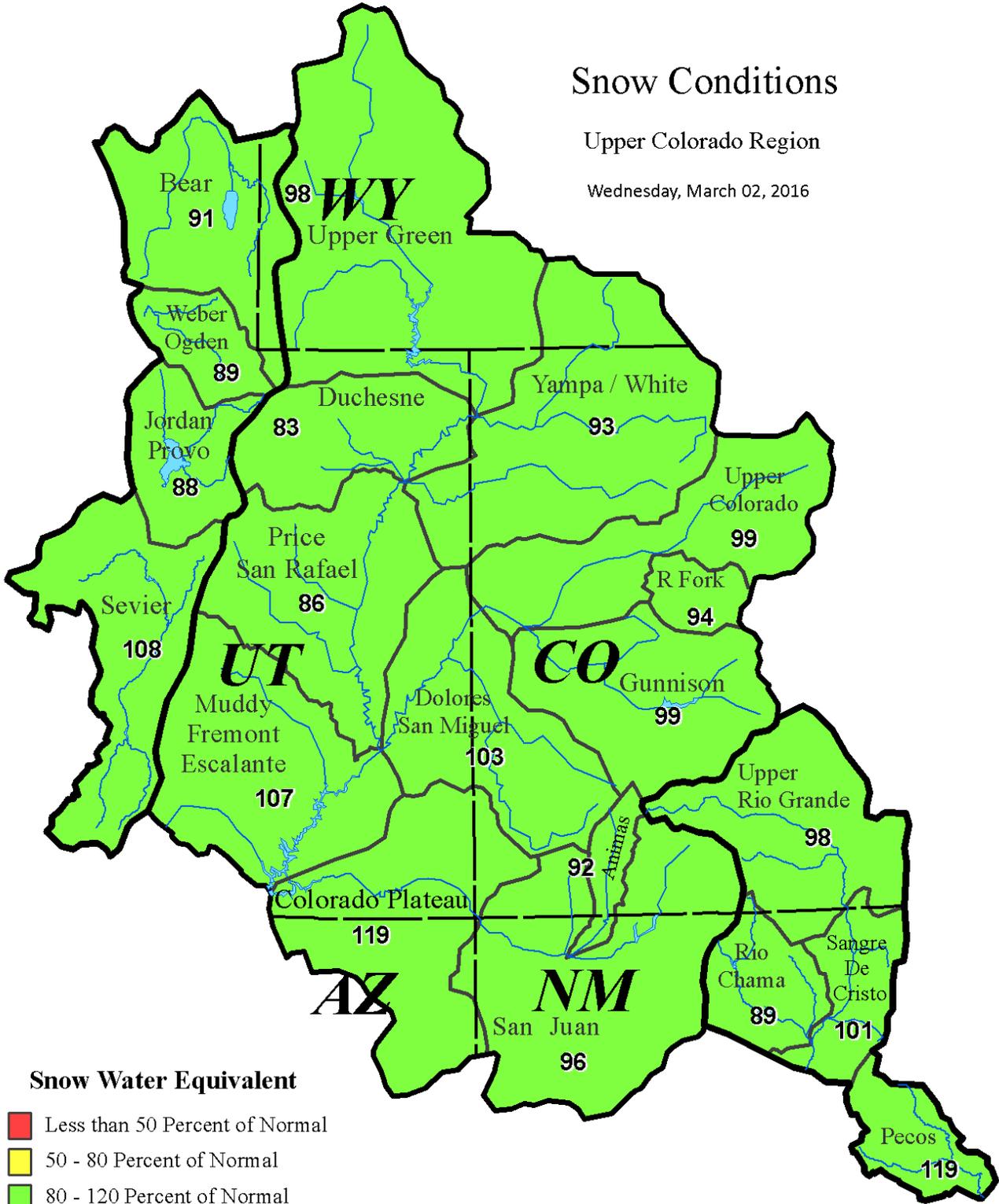
Upper Colorado River Drainage Basin



Snow Conditions

Upper Colorado Region

Wednesday, March 02, 2016



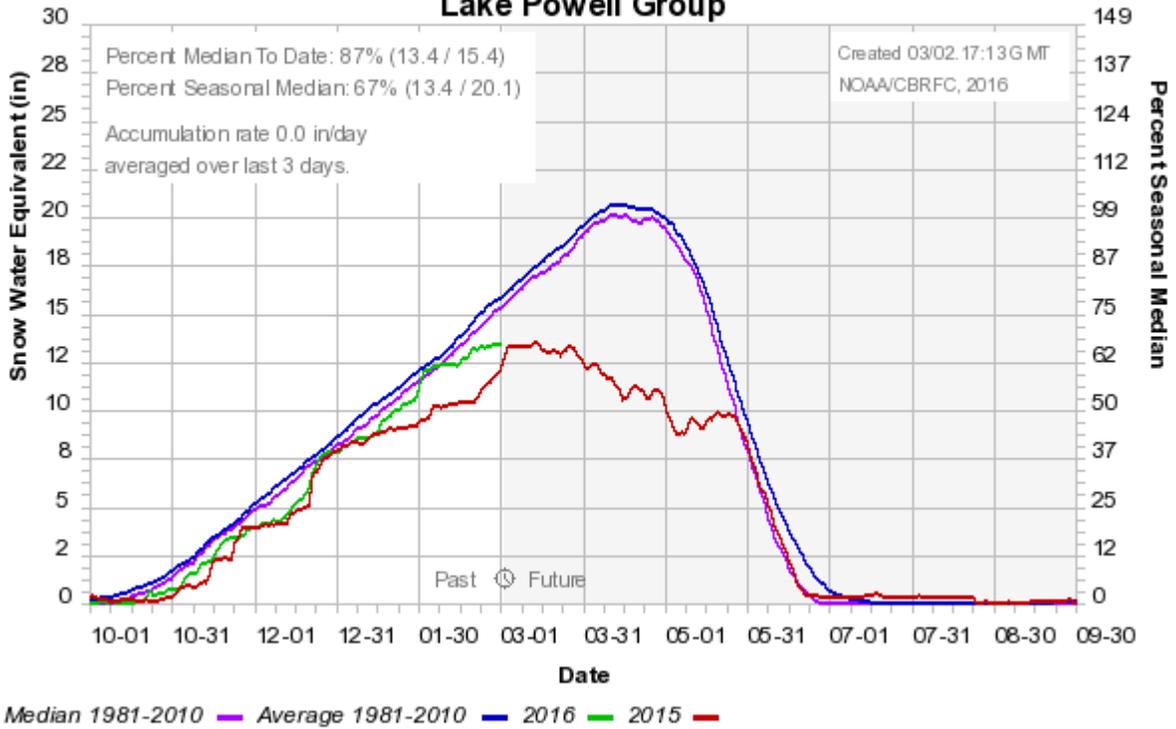
Snow Water Equivalent

- Less than 50 Percent of Normal
- 50 - 80 Percent of Normal
- 80 - 120 Percent of Normal
- 120 - 150 Percent of Normal
- Greater than 150 Percent of Normal

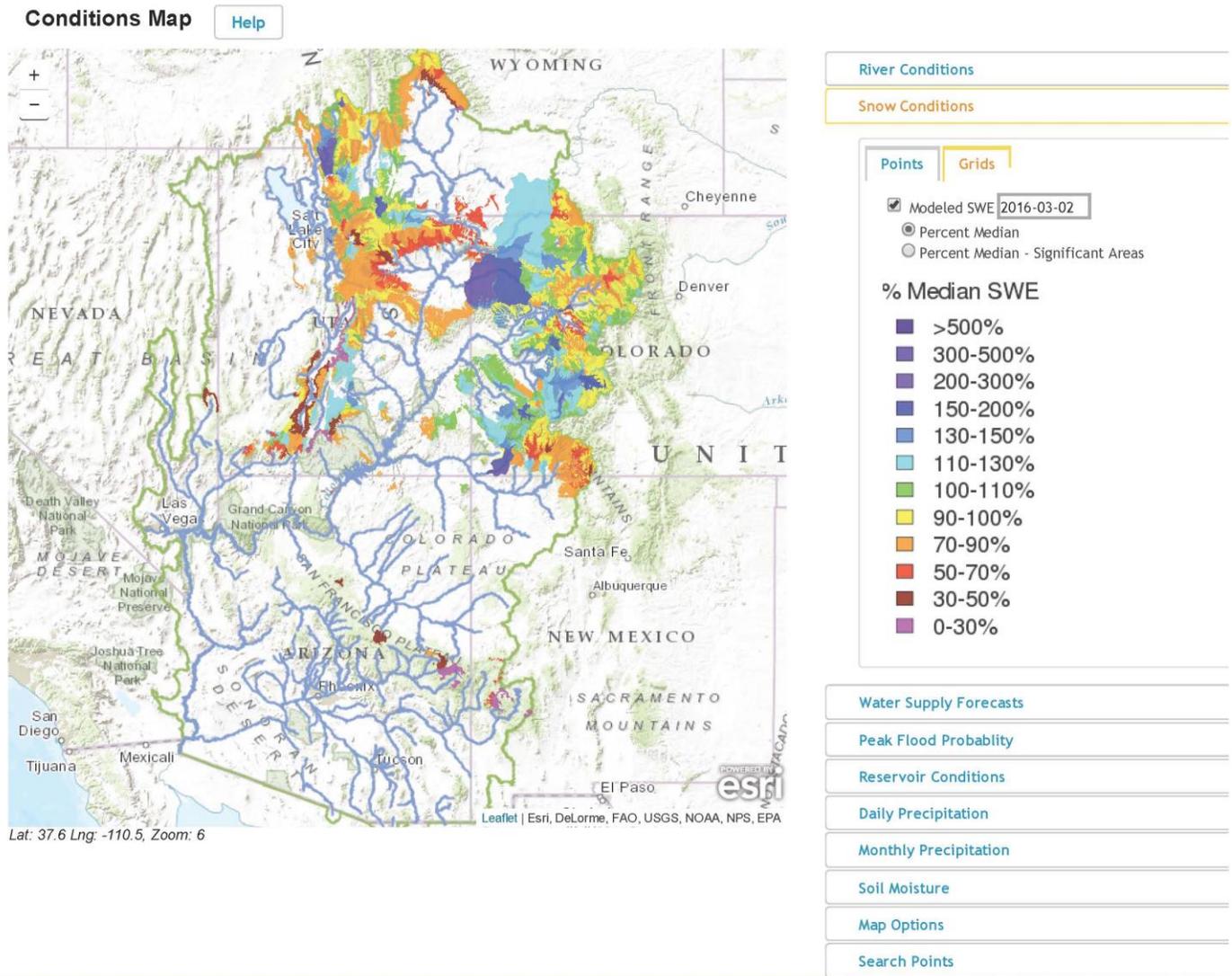
Data Provided by the Natural Resource Conservation Service

Upper Colorado
GIS
Region

Colorado Basin River Forecast Center Lake Powell Group



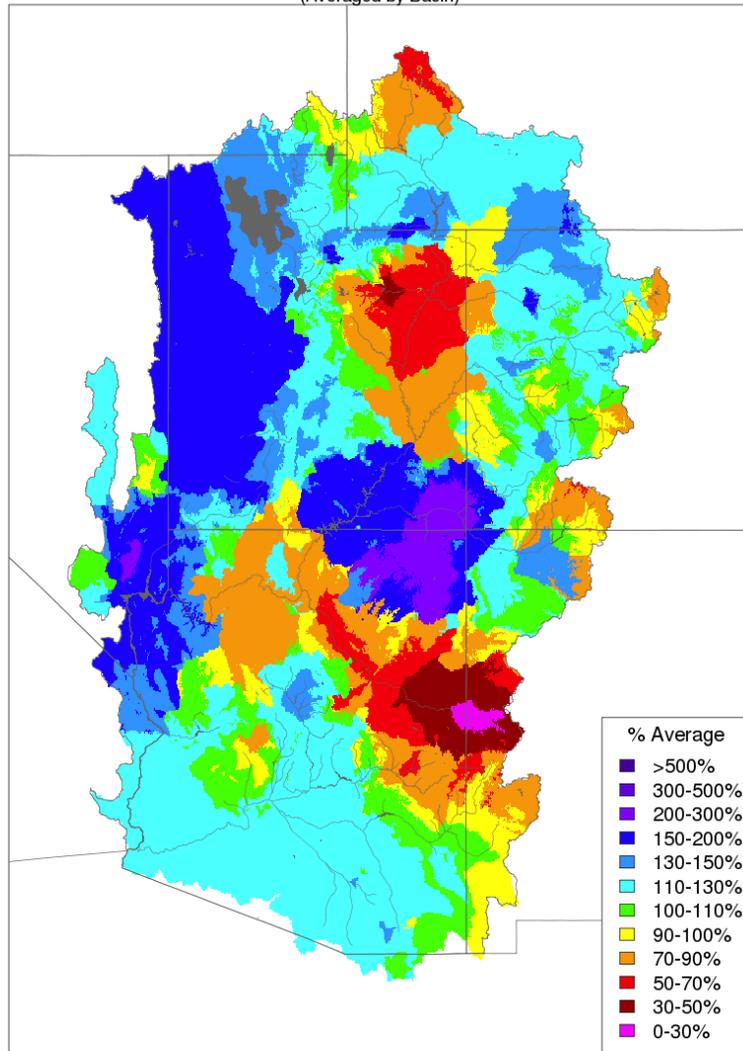
NOAA Colorado Basin River Forecast Center – Snow Conditions Map



NOAA National Weather Service Monthly Precipitation Maps for January and February 2016

Monthly Precipitation - January 2016

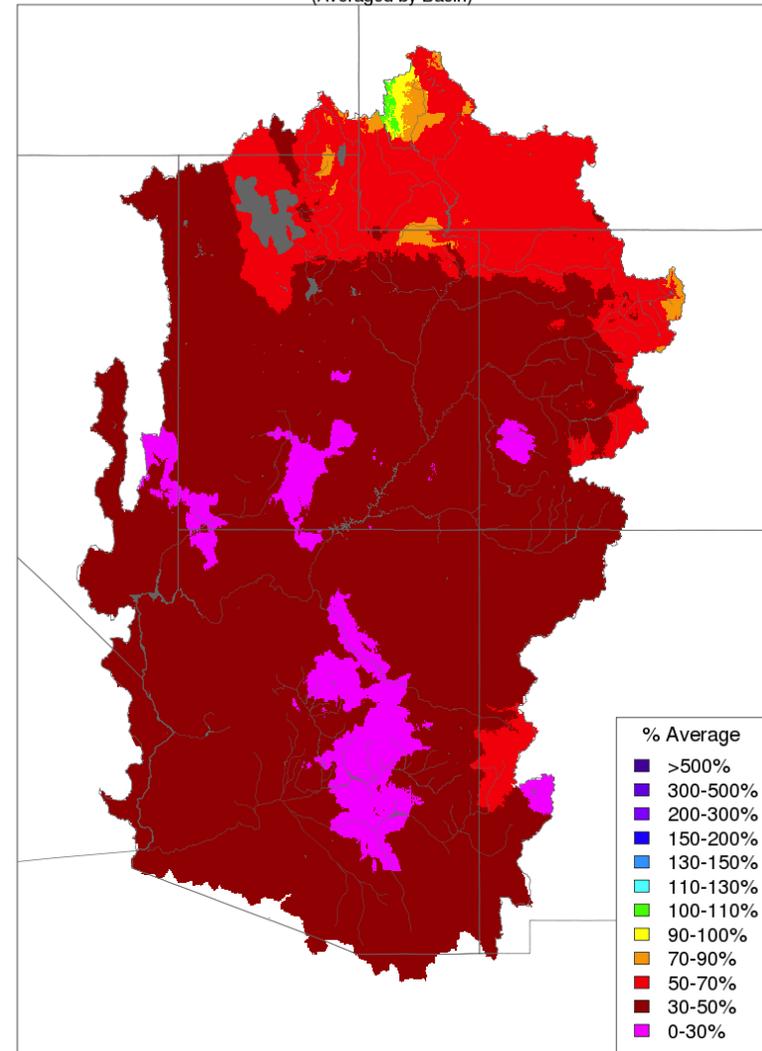
(Averaged by Basin)



Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

Monthly Precipitation - February 2016

(Averaged by Basin)

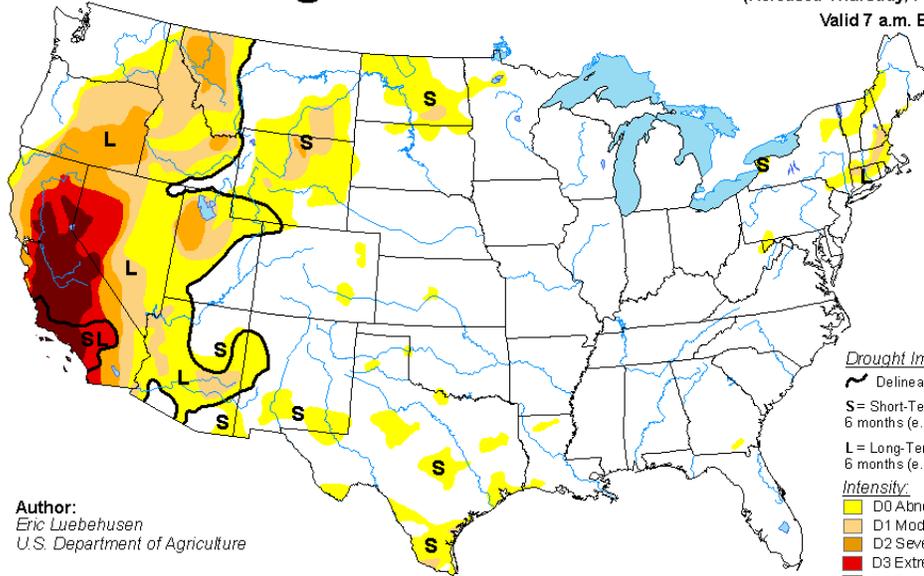


Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

USDA United States Drought Monitor Map

U.S. Drought Monitor

February 23, 2016
 (Released Thursday, Feb. 25, 2016)
 Valid 7 a.m. EST

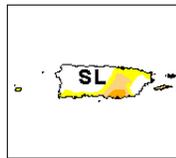
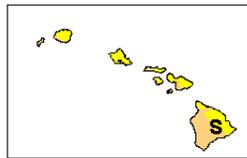
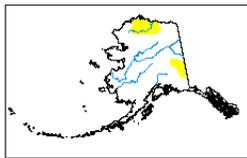


Author:
 Eric Luebehusen
 U.S. Department of Agriculture

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

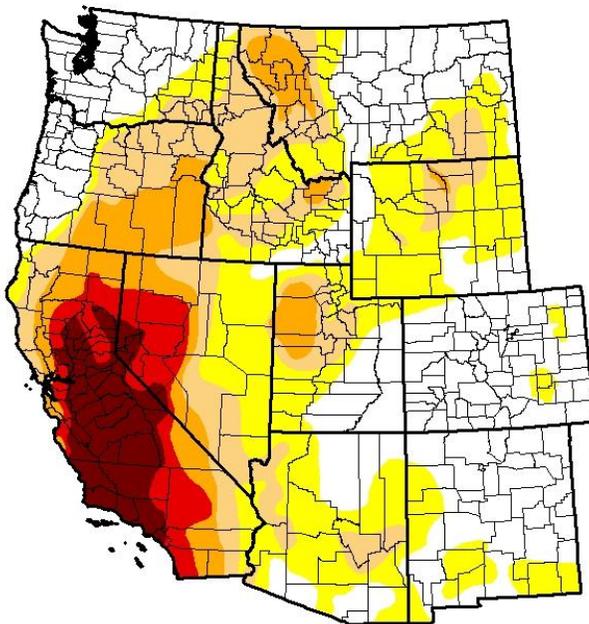
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



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

U.S. Drought Monitor West

February 23, 2016
 (Released Thursday, Feb. 25, 2016)
 Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	37.06	62.94	36.25	19.70	10.28	5.55
Last Week 2/16/2016	38.68	61.32	36.57	19.60	10.35	5.55
3 Months Ago 11/24/2015	28.26	71.74	50.57	37.61	21.35	6.85
Start of Calendar Year 12/29/2015	33.17	66.83	45.07	29.30	15.92	6.85
Start of Water Year 9/29/2015	22.77	77.23	57.81	42.42	26.50	7.62
One Year Ago 2/24/2015	30.07	69.93	59.91	31.06	17.38	7.04

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:
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 U.S. Department of Agriculture



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

U.S. Drought Monitor California

February 23, 2016

(Released Thursday, Feb. 25, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.43	99.57	94.38	81.82	60.86	38.48
Last Week <i>2/16/2016</i>	0.29	99.71	94.69	81.82	61.40	38.48
3 Months Ago <i>11/24/2015</i>	0.14	99.86	97.33	92.26	70.55	44.84
Start of Calendar Year <i>12/29/2015</i>	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year <i>9/29/2015</i>	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago <i>2/24/2015</i>	0.16	99.84	98.10	93.44	67.46	39.92

Intensity:

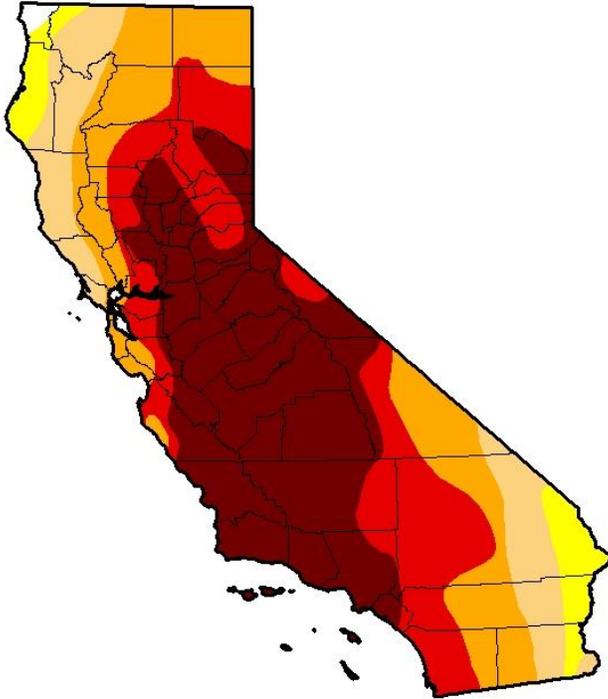
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

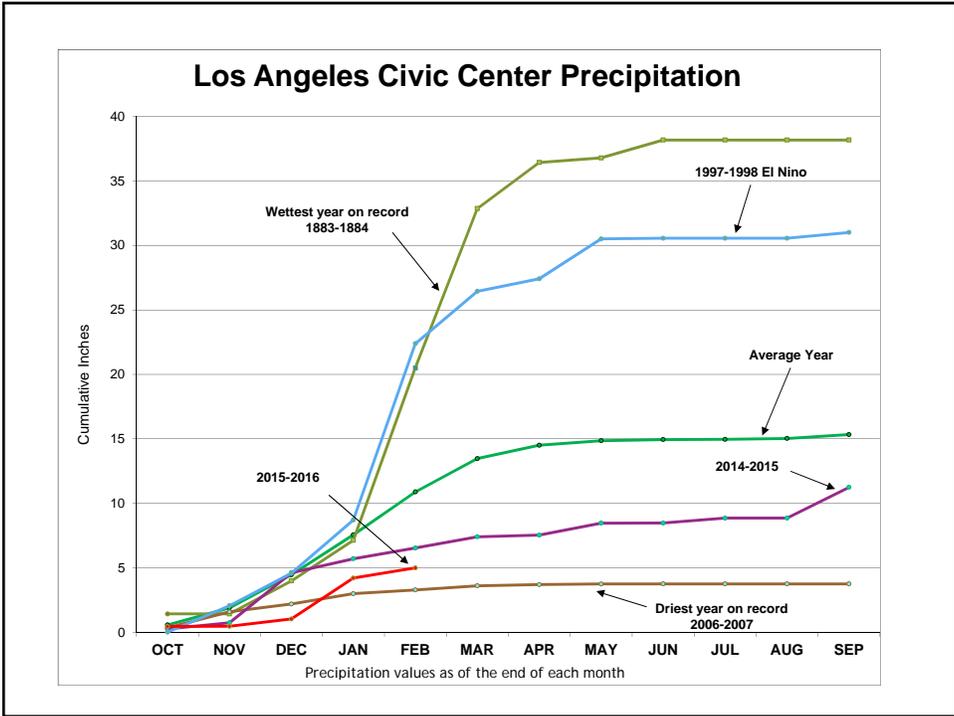
Author:

Eric Luebehusen

U.S. Department of Agriculture



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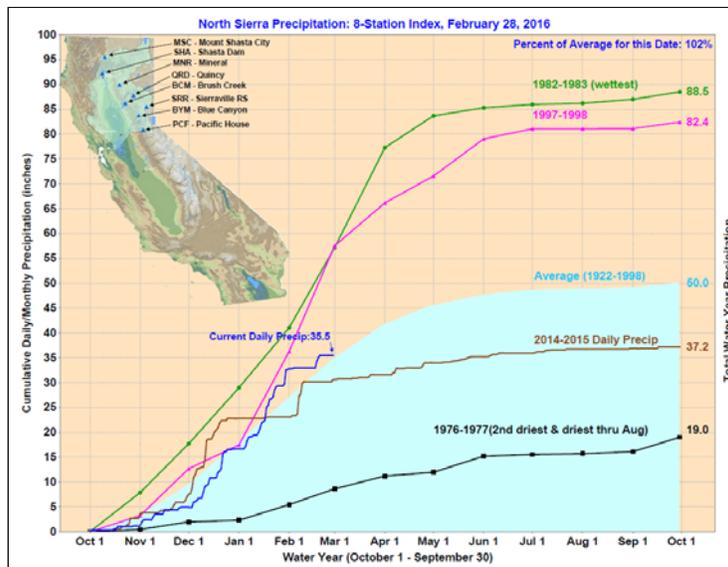


Precipitation at Six Major Stations in Southern California

From October 1, 2015 to March 1, 2016

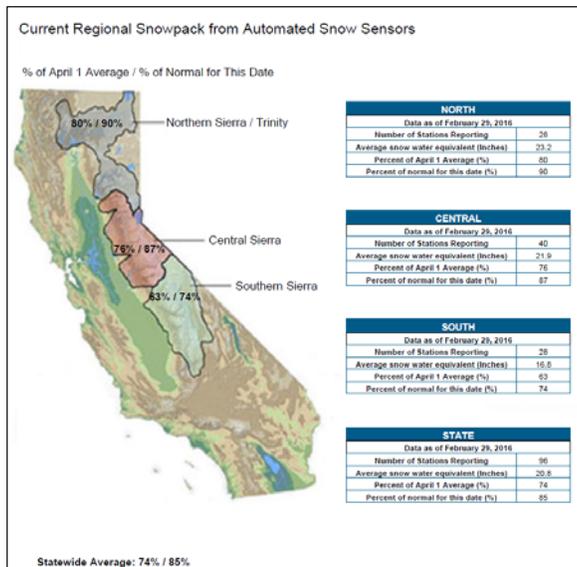
Station	Precipitation in inches		Average to Date	Percent of Average
	Feb	Oct 1 to Mar 1		
San Luis Obispo	0.67	8.37	16.69	50%
Santa Barbara	0.47	7.14	12.91	55%
Los Angeles	0.79	4.99	10.88	46%
San Diego	0.05	5.75	7.24	79%
Blythe	0.00	1.45	2.08	70%
Imperial	0.00	0.67	1.81	37%

Northern Sierra Precipitation-8 Station Index



California Data Exchange Center
http://cdec.water.ca.gov/cgi-progs/products/PLOT_ESI.pdf

Snow Water Equivalents (inches)



<http://cdec.water.ca.gov/cdecapp/snowapp/sweq.action>

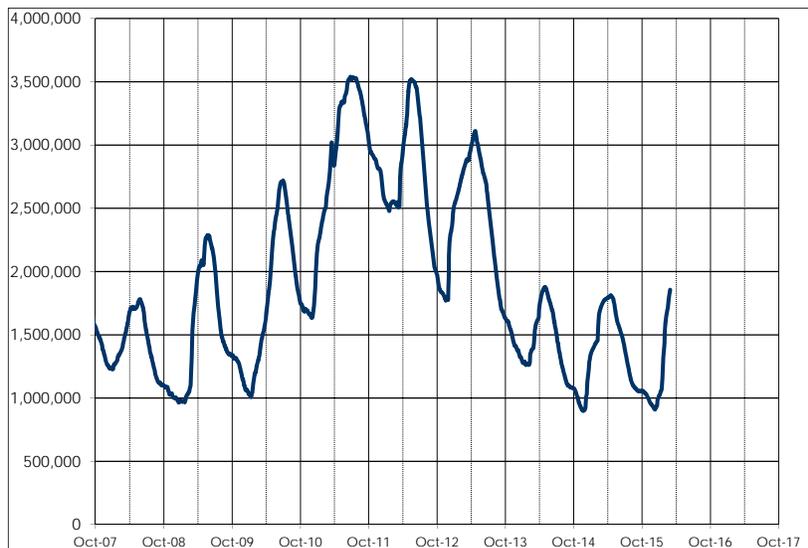
Comparison of SWP Water Storage

Reservoir	Capacity	2015 Storage (acre-feet)		2016 Storage (acre-feet)	
		As of Mar 1	% of Cap.	As of Mar 1	% of Cap.
Frenchman	55,475	20,127	36%	15,615	28%
Lake Davis	84,371	48,218	57%	42,781	51%
Antelope	22,564	22,667	100%	22,994	102%
Oroville	3,553,405	1,735,431	49%	1,855,739	52%
TOTAL North	3,715,815	1,826,443	49%	1,937,129	52%
Del Valle	39,914	36,434	91%	30,438	76%
San Luis (DWR)	1,062,180	935,859	88%	576,890	54%
Pyramid	169,901	167,972	99%	167,447	99%
Castaic	319,247	98,394	31%	83,209	26%
Silverwood	74,970	70,063	93%	57,749	77%
Perris	126,841	45,181	36%	45,076	36%
TOTAL South	1,793,053	1,353,903	76%	960,809	54%
TOTAL SWP	5,508,868	3,180,346	58%	2,897,938	53%

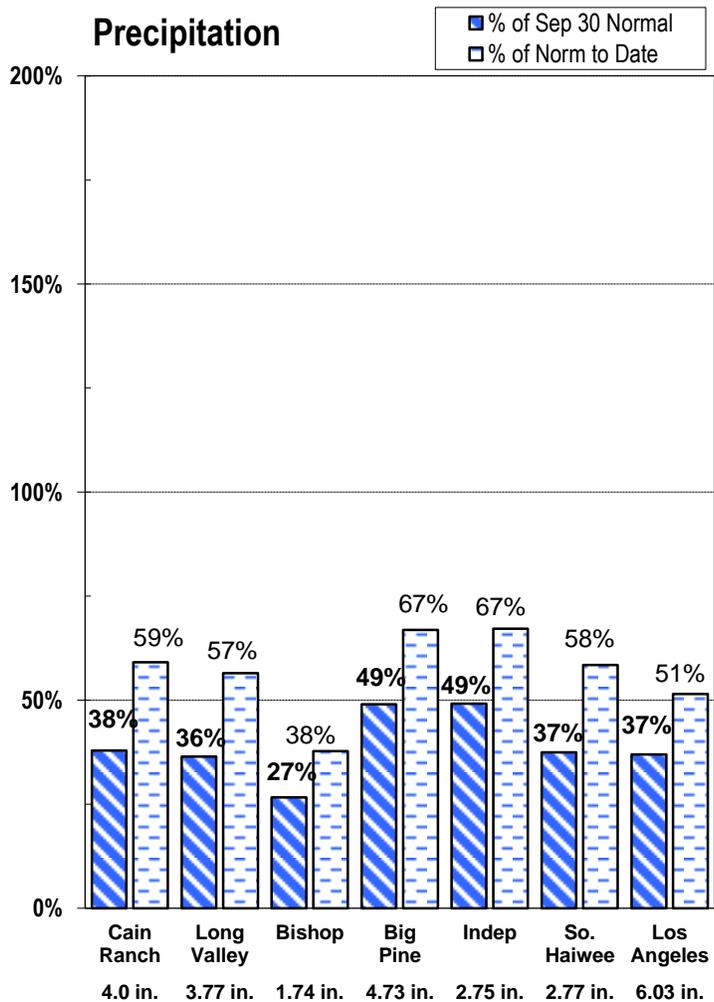
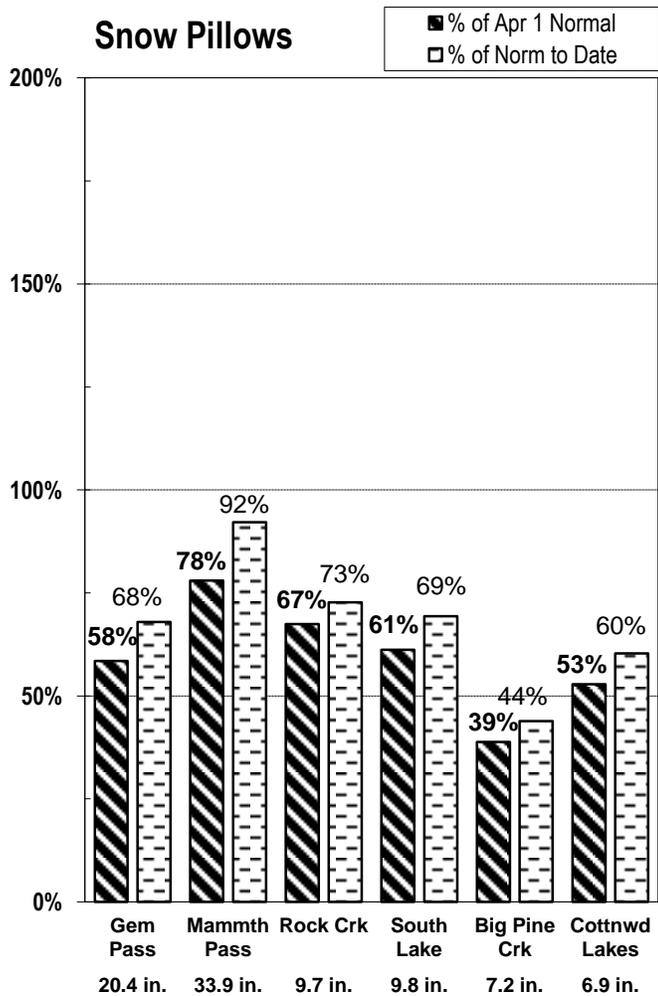
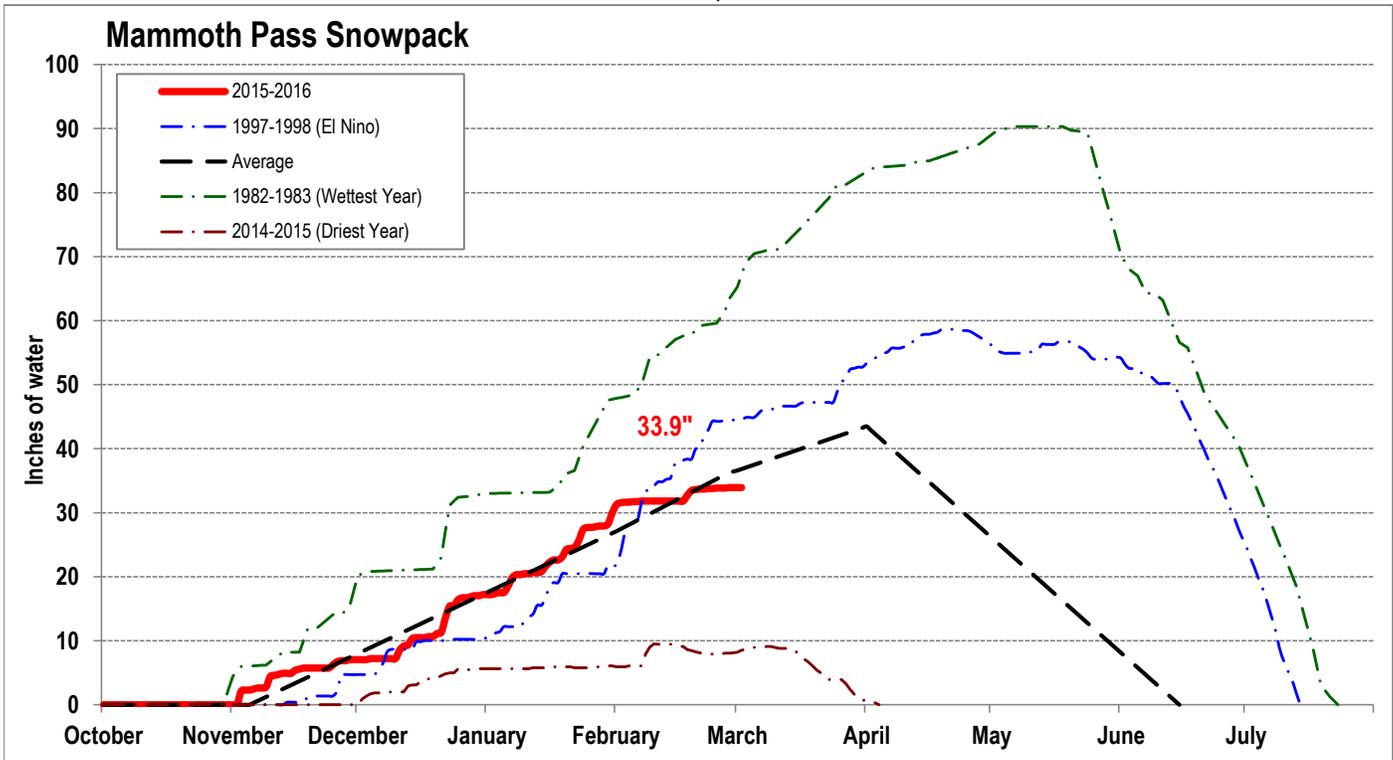
State Water Project Projected Deliveries:
As of February 24, 2016, the Table-A allocations for 2016 is 30%

Oroville Storage (acre-feet)

October 1, 2007 - March 1, 2016



EASTERN SIERRA CURRENT PRECIPITATION CONDITIONS March 1, 2016



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