

COLORADO RIVER BOARD OF CALIFORNIA

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April 30, 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, May 13, 2015
Time: 10:00 a.m.
Place: Board Room San Diego County Water Authority 4677 Overland Avenue, San Diego, CA 92123 Tel: (858) 522-6733; FAX: (858) 522-6565

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

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

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

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, May 13, 2015
10:00 a.m.

Board Room
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 and welcome by the San Diego County Water Authority
2. Opportunity for the Public to Address the Board as required by Government Code, Section 54954.3(a) (limited to 5 minutes)
3. Administration
 - a. Consideration and Approval of the Minutes of the Meeting held April 15, 2015
(Action)
4. Presentations by the San Diego County Water Authority regarding an Overview of the San Diego County Water Authority, a Carlsbad Desalination Project Update and East County Advanced Purification
5. Presentation from the City of San Diego regarding the Water Purification Demonstration Project
6. Presentation by Eric Larson, Executive Director of the San Diego County Farm Bureau
7. Colorado River Basin Water Reports
 - a. Presentation regarding the 2014 AZ v. CA Decree Accounting Report
 - b. Reports on current reservoir storage, reservoir releases, projected water use, and forecasted river flows
 - c. 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
 - 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: Regular Meeting
June 10, 2015
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, April 15, 2015

A meeting of the Colorado River Board of California was held on Wednesday, April 15, 2015.

Board Members and Alternates Present

Brian Brady	David Pettijohn
Dana Bart Fisher, Jr., Chairman	Jack Seiler
Henry Kuiper	Michael Touhey
Peter Nelson	Doug Wilson
Glen Peterson	

Board Members and Alternates Absent

Stephen Benson	Chris Hayes, Designee
James Hanks	Department of Fish and Wildlife
John Powell Jr.	Jeanine Jones, Designee
David Vigil	Department of Water Resources

Others Present

Steve Abbott	Tom Ryan
Robert Cheng	Peter Silva
Chuck Cullen	Mark Stuart
Dan Denham	Gary Tavetian
Christopher Harris	Tanya Trujillo
Bill Hasencamp	Mark Van Vlack
Denise Hosler	Suzanna Webb
Michael Hughes	Meena Westford
Lisa Johansen	Jerry Zimmerman
Lori Jones	
Nicole Klobas	
Kathy Kunysz	
Laura Lamdin	
Tom Levy	
Lindia Liu	
Kara Mathews	
Jan Matusak	
Jessica Neuwerth	
Thang (Vic) Nguyen	
Ned Hyduke	
Autumn Plourd	
Angela Rashid	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:11 A.M.

OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD

Chairman Fisher welcomed Mr. Peter Nelson, the newly appointed Board Member representing Coachella Valley Water District.

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

ADMINISTRATION

Consideration and Approval of the Minutes

Chairman Fisher asked for a motion to approve the March 11 minutes. Mr. Pettijohn moved that the minutes be approved, seconded by Mr. Wilson. Chairman Fisher asked if there were any additions or corrections. Hearing none and by unanimous support, the March 11 meeting minutes were approved.

Review and Approval of a Revised Budget for the Colorado River Board of California and Request for Authorization of the Executive Director to Execute the Standard Agreement Amendment

Ms. Trujillo reviewed the revised budget and stated that the Board's operating expenses will be higher than anticipated from the initial budget and the funding agreement with the Six Agency Committee. Ms. Trujillo presented an amended reimbursement agreement with the Six Agency Committee to allow the Committee to fully reimburse the State for anticipated expenses that would incur during fiscal year 2014-15. Historically, the Board has relied on vacancy savings to cover the discrepancy between actual operating expenses and projected operating expenses. Ms. Trujillo reported that this fiscal year the Board is fully staffed; therefore, the Board cannot rely on vacancy savings. Board staff received a cost of living increase of two percent in fiscal year 2014-15 and pay-out expenses for a long-term employee with 35 years of state service contributed to higher expenses this year.

Ms. Trujillo requested that the Board authorize the Executive Director of the Colorado River Board, to enter into the standard agreement amendment with the Six Agency Committee that increases the reimbursement authority for the Six Agency Committee and allows the State to accept the additional reimbursement funds. Ms. Trujillo stated that at the end of the fiscal year any extra money unspent would be

refunded to the Six Agency Committee. The Standard Agreement Amendment is approximately \$220,000 higher than the original agreement. No additional assessments will be required from the Six Agency Committee members because the increased payments to the State are still within the original Six Agency Committee's total budget authority.

In response to Mr. Peterson's question whether there is a state policy for reserves that would be available to fund retirement and vacation payouts, Mr. Zimmerman responded that he is unaware of such policy. Mr. Zimmerman stated that the Six Agency Committee does have a reserve that can be drawn upon to make unexpected contributions for support of the Colorado River Board. In response to Mr. Peterson's question, Ms. Trujillo stated that the Board is audited on an annual basis and that no issues have been raised in the past.

MOTION: Upon the motion of Mr. Kuiper, seconded by Mr. Wilson, and unanimously carried, the Board approved the Standard Agreement Amendment and authorized Ms. Trujillo to execute the Standard Agreement Amendment.

Review Status of Selection of Colorado River Board Vice-Chairman

Ms. Trujillo noted that the Board has not had a Vice-Chairman in place since December. She also explained that if the Chairman died or was not able to serve as Chairman, the Board could take an emergency action to elect a new Chairman.

MOTION: Upon the motion of Mr. Peterson, Doug Wilson was nominated as Vice Chairman, seconded by Mr. Kuiper. Mr. Nelson moved that the nominations be closed, seconded by Mr. Kuiper. Upon a vote, the Board unanimously voted to select Doug Wilson as the Board's Vice Chairman.

PRESENTATION BY DENISE HOSLER, WITH THE BUREAU OF RECLAMATION'S ENVIRONMENTAL AND APPLICATIONS GROUP, ON QUAGGA MUSSELS

Ms. Hosler provided an overview of the invasive quagga mussel that is spreading across waterways in the Western United States. Zebra mussels have moved rapidly across the Eastern United States since the late 1980's, and the closely related quagga mussels were first detected in Lake Mead in 2007. Quaggas are found in 14 of the 17 western states that Reclamation operates within.

Ms. Hosler explained the life cycle of the mussel, including how quickly they spread and reproduce, the broad range of surfaces to which they can attach, and how their filter feeding alters the nutrients in the water column. Quaggas have the ability to damage, coat, or plug important structures, including drains, grates, pipes, siphons, and fire protection systems. The shells of dead quaggas are also difficult to manage, and

quagga impacts on water nutrients lead to the proliferation of aquatic weeds that cause further problems for drains, racks, and water delivery systems.

Ms. Hosler reported that testing to determine the presence of young mussels, or veligers, has improved, and that water testing for veligers and mussel DNA can now be done more accurately. Reclamation regularly tests over 300 water bodies across the west to determine whether mussels are present. 76% of first time quagga mussel detections occur at boat launches, indicating that the mussels were transferred via boats, so preventing the spread of mussels through inspections and boat cleaning is critical.

Board Member Kuiper asked whether warmer temperatures could be limiting the spread of quaggas in the southwest. Ms. Hosler replied that temperature is believed to be a factor, as well as the general inhospitality of the western water systems, with shifts in dissolved oxygen and low dissolved solids.

In response to an inquiry from Board Chairman Fisher, Ms. Hosler noted that quagga mussels could lower the pH of water near them, creating more acidic water, which has the ability to damage pipes and structures.

Board Vice Chairman Wilson asked about methods for controlling the quagga mussels. Ms. Hosler explained that chlorine is one of the most commonly used mussel control agents, although its uses were limited by its cost, the defense mechanisms of adult mussels, and water quality issues. The Metropolitan Water District of Southern California (MWD) has used chlorine with good success, but Reclamation is unable to use it and has instead been focusing on UV light and turbulence treatments. Reclamation has also been exploring coatings that discourage the settlement of mussels and makes removing them easier. Ms. Hosler noted that CAP had been using the redear sunfish, which can eat the mussels, to control mussel populations. The mussels also occasionally undergo poorly understood reductions in population, perhaps due to falling levels of nutrients or dissolved oxygen.

**PRESENTATION FROM THE CENTRAL ARIZONA WATER
CONSERVATION DISTRICT REGARDING PROPOSED PLAN FOR
CREATION OF INTENTIONALLY CREATED**

Chairman Fisher introduced Chuck Cullom from the Central Arizona Project (CAP) and Nicole Klobas from the Arizona Department of Water Resources (ADWR). Mr. Cullom previously made a presentation to the Board in November 2014 on CAP's proposal to create ICS. The proposal has since been refined and an update of the proposal is presented.

Mr. Cullom thanked the Board for the opportunity to provide additional information on CAP's strategy and management approach to reduce to risk of shortage in the Lower Colorado River system, and to preview the CAP request for approval to Colorado River contractors for forbearance pursuant to the 2007 Interim Guidelines. The

signatories to the forbearance agreements in California include the Imperial Irrigation District, MWD, Palo Verde Irrigation District, Coachella Valley Water District (CVWD), and City of Needles. Additionally, CAP will make the same request to Southern Nevada Water Authority (SNWA) and the Colorado River Commission of Nevada (CRCN) who are also signatories of the forbearance agreements in the 2007 Guidelines.

Mr. Cullom gave an overview of CAP's management programs and how the efforts by CAP, in concert with ADWR, help reduce the risk of shortage in the Lower Colorado River system. One of the shortage mitigation approaches is by storing excess Arizona entitlement underground within Arizona. To date, CAP and the Arizona Water Banking Authority (AWBA) have stored about 3.4 million acre-feet (MAF) of CAP water underground for future recovery to reduce the impact of shortages to CAP municipal contractors and CAP tribal contractors who have entered into water rights settlement agreements. Mr. Cullom explained that although Arizona has stored about 9 MAF underground, only about 3.4 MAF is reserved to protect CAP contractors from the impact of shortage. CAP, ADWR, and AWBA have been preparing plans to recover the water for the sole purpose of insulating CAP municipal and tribal contractors from shortage impacts.

The next effort that has been undertaken with the Colorado River Board of California, MWD, SNWA, CRCN, and ADWR, is in conjunction with the Lower Basin Drought Contingency Plan Memorandum of Understanding (MOU) of December 10, 2014, which targets conservation and storage of 740,000 acre-feet (AF) in Lake Mead to reduce the risk of shortage. CAP has committed in the MOU to store 345,000 AF of Arizona water in Lake Mead between 2014 and 2017.

CAP is also participating in a pilot system conservation program with SNWA, MWD, Denver Water, and Reclamation to generate 75,000 AF of conservation for the benefit of the system in Lakes Powell and Mead. CAP has also funded innovative conservation research and efforts to improve municipal and agricultural conservation in the Lower Basin. Finally, CAP continues to support weather modification (cloud-seeding) programs in the Upper Basin, and to develop local and bi-national desalinization projects.

Mr. Cullom then provided the details of the MOU. The goal of the MOU is to create 740,000 AF of new storage in Lake Mead between 2014 and 2017. CAP committed to creating 345,000 AF, of which 145,000 AF would be system water that would remain in the Colorado River system and 200,000 AF would be created through Extraordinary Conservation Intentionally Created Surplus (EC ICS) per the 2007 Interim Guidelines. MWD and SNWA have committed to creating 300,000 AF and 45,000 AF, respectively, and Reclamation has committed to creating 50,000 AF by conserving or reducing system losses over the 4-year period of the MOU.

Mr. Cullom explained the four components required in CAP's plan to create the 345,000 AF of reservoir protection volume. The first component is an agreement on land fallowing of about 1,200 acres with the Yuma-Mesa Irrigation and Drainage District in

the Yuma area between 2014 and 2016. This would be system water and CAP hopes that this effort to create 7,000 AF would be reflected in the 2014 Decree Accounting report. The next effort is to partner with nine irrigation districts within the CAP service area to reduce water delivery and create EC ICS. CAP will fund these districts to conserve and the districts have agreed to reduce their water use by 81,000 AF in 2015 and 80,000 AF in 2016. The next component involves a supply replacement to the City of Phoenix for 15,000 AF in 2015, and for the same volume with other CAP contractors in 2016, for a total volume of 30,000 AF of supply replacement EC ICS. Finally, CAP has an unquantified Colorado River contract that allows CAP to meet its long-term delivery requirements of 1.415 MAF of diversions, plus any unused water within Arizona's 2.8 MAF entitlement. Typically CAP diverts 1.6 MAF annually, but in 2014, CAP intentionally left 30,000 AF of "ILB.6" water in the system. CAP plans to leave almost 60,000 AF of this unused apportionment of water in 2015 and 44,000 AF in 2016. Mr. Cullom said that the loss is an opportunity cost because CAP could have diverted and sold the water to its customers.

Mr. Cullom described CAP's proposal to create ICS through two demand reduction programs – by reducing deliveries to the agricultural customers and by using local supplies. CAP is targeting a 2-year pilot project in 2015 and 2016. Agricultural users would be paid to reduce their CAP consumption, and 9 districts have already expressed interest in the new program which has the potential to generate approximately 81,000 AF of savings in 2015 and 80,000 AF in 2016. For the replacement supply component, municipal customers would be paid to replace a portion of their CAP supply with some other local supply for an estimated savings of 15,000 AF in both 2015 and 2016. ICS credits in Lake Mead are produced when CAP reduces its diversions from the Colorado River pursuant to the contracts with its customers to reduce delivery. Agricultural users have said they intend to fallow, deficit irrigate, or switch to local supplies (mainly groundwater) as a result of the reduced CAP delivery. The accounting in the Colorado River system is determined by CAP's reduction in diversion.

Mr. Cullom provided an example of CAP demand reduction in year 2015. In December 2014, Reclamation approved the CAP order of 1.6 MAF out of Arizona's total entitlement of 2.8 MAF. CAP has amended its order downward to 1.505 MAF to reflect the reductions of 80,000 AF in the Ag Pool and 15,000 AF in the municipal pool. CAP may divert more than 1.505 MAF if additional unused water becomes available, but would keep Arizona's total entitlement down to about 2.7 MAF in order to create the EC ICS. The total amount of ICS that Arizona may have at any time is 300,000 AF pursuant to the 2007 Interim Guidelines and CAP would be targeting a total volume of 200,000 AF over the 2-year pilot period.

Mr. Cullom showed a map of the nine irrigation districts that are participating with CAP to create ICS. Some districts such as the Maricopa-Stanfield and Central Arizona were recently visited by staff representing California agencies and others on the March CAP tour. Each of the irrigation districts has signed up to forgo 20,000 AF of its Ag pool, which is slightly more than 20% of normal allocation. The districts were required to commit a minimum of 20% reduction, not to exceed a maximum of 75%

reduction. One district (Roosevelt Water Conservation District) committed to the maximum reduction but most districts committed to reducing about 20% of its allocation.

Mr. Cullom reviewed the administrative steps required to approve CAP's proposal. Initial discussions began in November 2014 and CAP has held additional discussions with agencies including MWD and SNWA to refine the proposal. CAP also consulted with Reclamation on the ICS creation plan and Exhibit. CAP plans to submit a formal letter to forbearance signatory agencies on April 22. Mr. Cullom mentioned the benefits to all lower Colorado River contractors in assisting CAP to meet its commitments in the MOU. CAP's refined proposal would include keeping ICS in Lake Mead through 2019. This is consistent with other CAP commitments made such as when CAP would receive ICS from the pilot operation of the Yuma Desalting Plant, as well as when CAP would take ICS credits for funding Brock Reservoir. Mr. Cullom acknowledged CAP would suffer evaporation losses and would only request release for domestic purposes such as municipal and urban uses. Most importantly, the additional storage created in Lake Mead could help avoid a shortage declaration. Mr. Cullom reminded everyone that from Reclamation's April 24-month study webinar held this morning, the hydrology in the Lower Colorado River is at a tipping point, and relatively modest amount of storage or uses could trigger a shortage. The 24-month study did not take into account CAP's ICS program because it has not yet been approved, but CAP would continue to push hard for approval to help avoid a shortage declaration in August. Mr. Cullom concluded by saying that flexibility in the Lower Colorado River system would be impacted in a shortage and the additional water in Lake Mead would only benefit users.

Chairman Fisher asked where the replacement source for the 15,000 AF would come from. Mr. Cullom explained that water is diverted from Lake Havasu into the CAP canal that goes through Maricopa County and traverses under a siphon across the Salt River. There is an interconnection between the CAP canal and the Salt River Project (SRP) system, which serves 250,000 acres in the Central Salt River Valley. Around year 2000 to 2002 timeframe, the SRP system, which is principally served by Roosevelt Lake, was in a severe drought. Because CAP had excess water at that time, it delivered water to the SRP system. In exchange, SRP provided credit to CAP in the Roosevelt Lake when it had recovered from the drought. Now, the City of Phoenix has ordered 15,000 AF, but would take delivery from the SRP side of its service area. Instead of pumping water out of Lake Havasu and delivering it to Phoenix, CAP would now replace the supply with credits from Roosevelt Lake. This replacement supply water doesn't spill and isn't charged for evaporation losses.

Chairman Fisher asked whether the water stored underground is available for drought mitigation and asked about ownership of the stored water. Ms. Klobas replied that many entities own the 9 MAF amount of water that is stored underground. The ABWA stores about 3.4 MAF in cooperation with CAP, and the remaining volume is stored by CAP contractors. The City of Tucson is a good example of water that is stored and recovered annually by contractors. Other agencies are storing water in the SRP system. Some junior water users within the CAP service area will take the first reduction

and will not be protected by the AWBA under a shortage. Ms. Klobas said that the water that is stored underground is not a large buffer against shortage when considering it is intended to last more than 100 years.

In a response to a question from Mr. Cheng, Mr. Cullom explained that as districts reduce their allocations, they would make their own decisions whether to order more groundwater or cut back on farming operations. CAP will verify the reductions in water delivery and will provide the water budgets to each district at the end of the year. From this information, CAP is able to determine if districts used more groundwater or reduced acreage.

In response to a question from Board member Peterson, Mr. Cullom said that the the City of Phoenix reported it is using about two-thirds of its normal CAP contract amount of 100,000 AF. Of the 100,000 AF, 85,000 AF would be from the Colorado River and 15,000 AF would be replaced with a local resource. The proposed ICS that would be created from both a reduction in agricultural use and local resource replacement is almost 100,000 AF and would only be used for direct domestic delivery. Ms. Plourd asked if CAP was incentivizing growers to fallow and Mr. Cullom said that CAP does pay districts that voluntarily participate in the program. Board member Nelson asked about the incentives and Mr. Cullom replied that CAP pays a total of \$106/AF including incentives.

Executive Director Trujillo asked about the upcoming Arizona drought preparedness workshop. Ms. Klobas said that ADWR has worked closely with CAP on the proposed ICS plan and exhibit to ensure the overall program is consistent with Arizona law, the Law of the River, and the 2007 Interim Guidelines and forbearance agreements. Ms. Klobas encouraged California agencies to approve the program. The drought workshop will be held on April 22 at ADWR's office and will be available by webinar. The workshop would be primarily directed at CAP's customers.

Mr. Abbott asked if there was any documentation related to the nine districts that are reducing their allocations. Mr. Cullom explained that CAP has contracts with the districts that outline the plan for reduction in CAP water deliveries. But each district has its own method for implementing the reduction with its growers, and will reduce its use per the water budget in the CAP contracts that is provided at the end of December.

Chairman Fisher asked if the districts would be substituting the water reduction with local groundwater, and Mr. Cullom said that would depend on the district. Various districts have different situations and will take different approaches.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Water Report

Ms. Trujillo reported that Board staff participated in the April 24-month Study webinar to get an update on water supply conditions. Reclamation reported that under the April most probable scenario, Lake Powell would release up to 9.0 MAF this year, up from the current release level of 8.23 MAF. There is a slight probability that release from Lake Powell may be less than 9.0 MAF this year as the inflow projections continue to decline.

Ms. Trujillo reported that the snowpack in the Basin peaked on March 9. As of April 5, Lake Powell is about 10.91 MAF, or 45 percent of capacity, and Lake Mead is about 10.35 MAF, elevation of 1,084 feet, or 40 percent of capacity. But as of April 14, water storage in Lake Mead is at elevation 1,082 feet, or 39 percent of capacity. Forecasted April through July runoff, as of April 2, is expected to be about 52 percent of average and forecasted unregulated inflow into Lake Powell for water year 2015 is 7.2 MAF, or about 66 percent of average.

State Water Report

Mr. Stuart reported that the location Governor Brown chose to announce the mandatory 25 percent reduction is typically under 5 or 6 feet of snow during an average year, but had virtually none exists this year. Since that announcement, about a foot of snow has fallen in the northern region of the Sierra but not enough to make much of an impact on the drought.

Mr. Stuart reported that precipitation at the L.A. Civic center was about 7.4 inches or about 50 percent of average. Other precipitation stations in southern California reported between 30 and 60 percent of average, with the exception of Blythe where precipitation is currently 101 percent of normal. Precipitation in the Northern Sierra was 31.7 inches out of a normal of 50 inches. Precipitation in the Central Sierra is about 13.7 inches where the average is 40.8 inches and the Southern Sierra is 10.9 inches where the average is 29.3 inches. The current snowpack is around 5 percent for the Sierra Mountain Range.

Mr. Stuart reported that storage in Lake Oroville is about 1.8 MAF, or about 51 percent of capacity. Some good news is that San Luis Reservoir, south of the Delta, is at about 960,000 acre-feet, or 90 percent of capacity. Most of the State Water Project reservoirs are considerably below capacity. The current projection for Lake Oroville is that it will finish the water year with about 1.7 MAF in storage.

Local Reports

Board Member Peterson commented that delivery of MWD's ICS water under shortage conditions should be negotiable. The Central Valley Project for the past two years has allocated zero percent for most of the contractors in the Central Valley. In addition, MWD went to 15 percent allocation (the most in over 20 years) and several water agencies are expected to face a shortage this year. MWD will be importing about 1.1 MAF from the Colorado River, but much of that is going for replenishment, not

consumptive use. Mr. Peterson added that a blanket mandate for 25 percent conservation does not make sense for areas such as Humboldt County where the reservoirs are full. He hopes that comment letters that many water agencies have sent to the State Water Board are read and considered.

Board Member Pettijohn reported that the Mammoth Pass snow level has never been lower than ten inches of water content around this time of the year. But it is now at about one inch of water equivalent, and sets a new historic low. The City of Los Angeles has been in Phase 2 mandatory water use restrictions since 2009, long before the current mandate of 25 percent. There is a long list of water use restrictions: currently residents can only water landscape for 8 minutes three times per week, and this is expected to be reduced to two times per week. That means that for a large part of the service area during the heat of summer, the homeowner's lawn is going to die. Los Angeles has been incentivizing the removal of turf for a few years and has removed about 15 million square feet. The City of Los Angeles currently offers \$3.75 per square foot of lawn removed, and has spent about \$300 million dollars in the last decade for water conservation efforts. The water conservation hardware purchased by the city (low-flow toilets, showerheads, aerators, low-flow sprinklers) has reduced water use by about 110,000 acre-feet per year. In 1970, the City of Los Angeles used 600,000 acre-feet of water. Today, about 45 years later and with an additional 1.1 million people living in Los Angeles, the water use is about 20,000 acre-feet less than it was in 1970. Being asked to conserve an additional 20 percent is going to be very difficult. The City of Los Angeles supported MWD's 15 percent water allocation, but it may be hard to meet.

UPDATE REGARDING THE CALIFORNIA DROUGHT

Ms. Trujillo reported that over 40% of the State is in the most severe exceptional drought category. Governor Brown announced the State's first statewide mandatory water restriction, imposing a 25% average reduction in potable use through 2016. Ms. Trujillo stated that agencies across the State are trying to determine how to respond to the Governor's Order, including cities like Brawley within IID's service area. The Order also includes language about emergency barriers in the Delta, turf replacement requirements and incentives. Ms. Trujillo noted that several agencies have already successfully implemented turf replacement incentives programs, with MWD budgeting \$100 million for water conservation programs. Ms. Trujillo added that preceding the Governor's Order, the State approved \$1 billion in drought relief and infrastructure projects. Ms. Trujillo also reported that the Department of Water Resources released a report comparing the current drought to prior droughts.

Regarding the Governor's Order, Chairman Fisher asked Mr. Stuart if all cities were subject to mandatory reductions regardless of their water sources such as cities like Needles and Brawley. Mr. Stuart responded he believed that the State Water Board is trying to figure how to implement the mandate given its broad approach. Further, Mr. Stuart stated that interpretation of the Order may be applied to communities and agencies on individual basis, noting that some agencies have already invested a lot of money and

accomplished major reductions in their water use, while other agencies have not. Board member Nelson added that there is a tiered reduction target, with some district required to reduce water use by 10%, 20% and 35%, with an overall reduction of 25%, regardless of source of the water. Mr. Nelson added that outdoor landscape is the big target of the reduction order.

STAFF REPORTS REGARDING COLORADO RIVER BASIN PROGRAMS

Basin States Drought Contingency Program

Ms. Trujillo reported on the latest updates of the Lower Basin State's drought contingency planning process, stating that the CAP has presented an update of their ICS proposal. In addition, evaluation and selection of awards for Reclamation's pilot system conservation program is still underway.

Colorado River Basin Water Supply and Demand Study

Ms. Trujillo reported that it is anticipated that Reclamation will release the Phase 1 report in late April or in May 2015. The report highlights opportunities and strategies for additional conservation for both the municipal and agricultural sectors, as well as provides opportunities to improve ecological and recreational resources in the Basin.

Implementation of Minute 319

Ms. Trujillo reported that a bi-national meeting is scheduled on May 14. Ms. Trujillo reminded the Board that the May Board meeting will be held on May 13 in San Diego to accommodate the bi-national meeting. The Basin States Principals meeting will be held during the afternoon of May 13, with a reception for the Mexican delegation and other Basin States representatives during the evening. Ms. Trujillo stated that goals of the bi-national meeting would be to provide an update on the implementation of Minute 319, which is half way through its implementation timeline, and to discuss the scope of future negotiations with Mexico.

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

Deputy Director Harris reported that DOI is getting closer to issuing a draft the Long-Term Experimental and Management Plan (LTEMP) EIS, with only three areas of continued negotiation. The Western Area Power Administration is still interested in increased flexibility to move water between months to optimize the generation of power. The Basin States are concerned about how to stay involved in the new adaptive management decision-making process and whether a decision-making body can be integrated into the existing program structure. Additionally, interest in generating robust science through the EIS process has led to recommendations that a science plan be included in the draft EIS.

Mr. Harris reported that a draft EIS for cooperating agencies is planned for release in June, and a public draft EIS is anticipated in July. The Department of the Interior hopes to have a final EIS and a Record of Decision by the end of the year.

Mr. Harris noted that the Technical Workgroup will meet on April 21-22 in Phoenix, AZ.

Lower Colorado River Multi-Species Conservation Program

Mr. Harris reported that the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) held its ten-year anniversary tour April 7-9, starting in Yuma and concluding in the Laughlin area. The tour included a trip to limitrophe and a boat ride into Topock Gorge. Mr. Harris thanked the Colorado River Authority for sponsoring the dinner on April 7 at Mayflower Park.

Ms. Trujillo thanked Mr. Harris for his work on the LCR MSCP, representing California as the Chair of the program, and for his efforts with the tour.

ANNOUNCEMENTS / NOTICES

Ms. Trujillo announced that Brent Rhees has been selected as the new Upper Basin Regional Director for Reclamation. The Basin States Technical Committee meeting is scheduled on April 28 in Las Vegas. Updates on the most recent hydrologic conditions and other technical updates will be reported at the meeting. An Arizona shortage preparedness workshop is scheduled on April 22. The next Board meeting will be hosted by the San Diego County Water Authority on May 13.

Adjournment

With no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn the meeting. Upon the motion of Mr. Kuiper seconded by Mr. Pettijohn, and unanimously carried, the meeting was adjourned at 12:25 p.m.

May 04, 2015

LOWER COLORADO WATER SUPPLY REPORT

River Operations
Bureau of Reclamation

Questions: BCOOWaterops@usbr.gov

(702) 293-8373

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

	PERCENT	Content 1000 ac-ft (kaf)	Elev. (Feet above mean sea level)	7-Day Release (CFS)
CURRENT STORAGE	FULL			
LAKE POWELL	44%	10,823	3590.03	10,700
* LAKE MEAD	38%	9,924	1078.95	17,900
LAKE MOHAVE	93%	1,689	642.65	16,500
LAKE HAVASU	94%	582	448.11	10,800
TOTAL SYSTEM CONTENTS **	47%	28,319		
As of 05/03/2015				
SYSTEM CONTENT LAST YEAR	47%	28,086		
* 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%	1,311		
Painted Rock Dam	0%	0	530.00	0
Alamo Dam	7%	65	1093.72	25
Forecasted Water Use for Calendar Year 2015 (as of 05/04/2015) (values in kaf)				
NEVADA			274	
SOUTHERN NEVADA WATER SYSTEM				241
OTHERS				33
CALIFORNIA			4,351	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				828
IRRIGATION DISTRICTS				3,385
OTHERS				138
ARIZONA			2,788	
CENTRAL ARIZONA PROJECT				1,561
OTHERS				1,227
TOTAL LOWER BASIN USE				7,413
DELIVERY TO MEXICO - 2015 (Mexico Scheduled Delivery + Preliminary Yearly Excess ¹)				1,522
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - MAY FINAL FORECAST DATED 05/04/2015				
		MILLION ACRE-FEET	% of Normal	
FORECASTED WATER YEAR 2015		6.401	59%	
FORECASTED APRIL-JULY 2015		3.000	42%	
APRIL OBSERVED INFLOW		0.639	61%	
MAY INFLOW FORECAST		1.000	43%	
		Upper Colorado Basin	Salt/Verde Basin	
WATER YEAR 2015 PRECIP TO DATE		73% (15.8")	71% (12.7")	
CURRENT BASIN SNOWPACK		45% (5.9")	NA% (NA)	

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 2015**

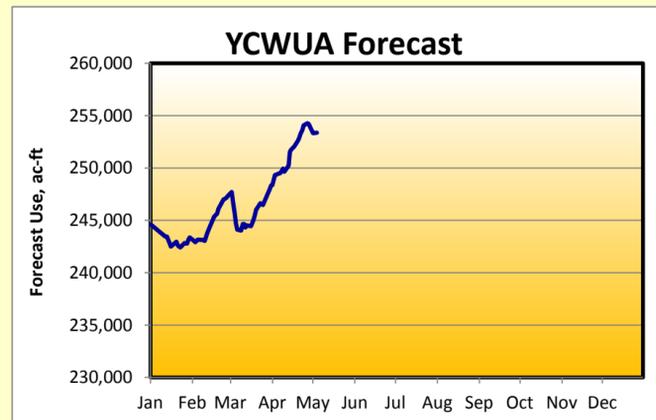
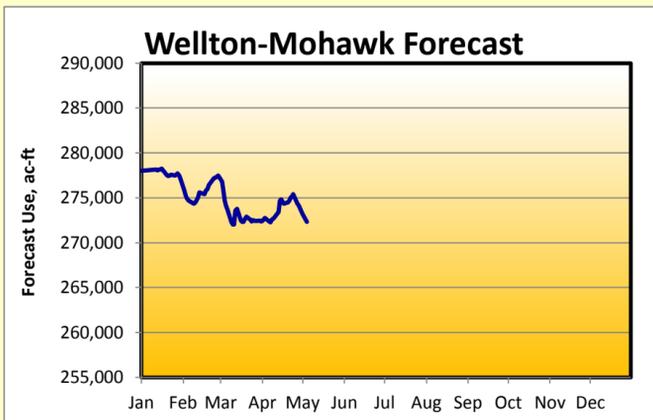
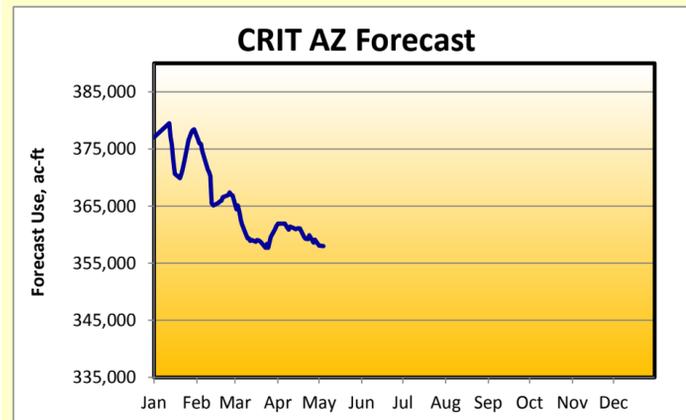
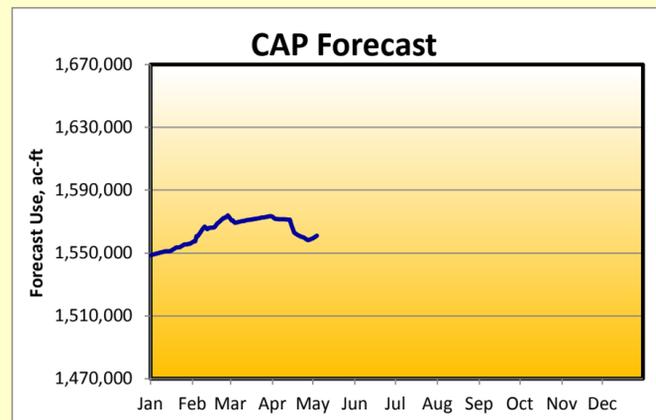
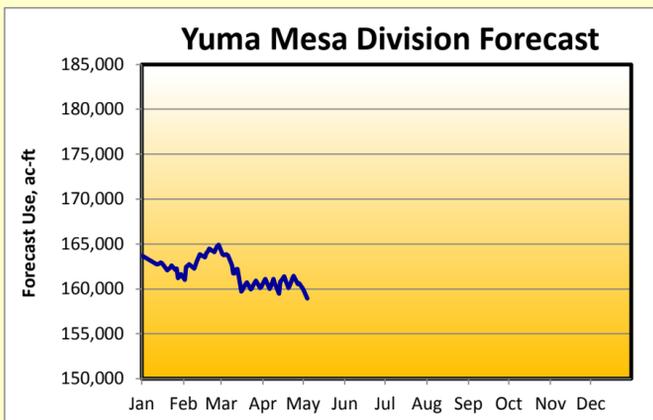
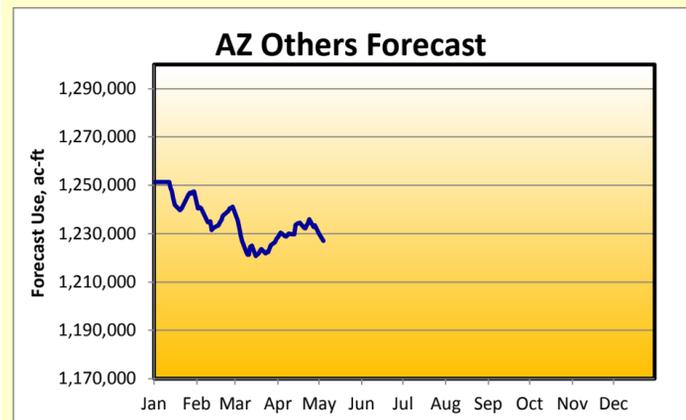
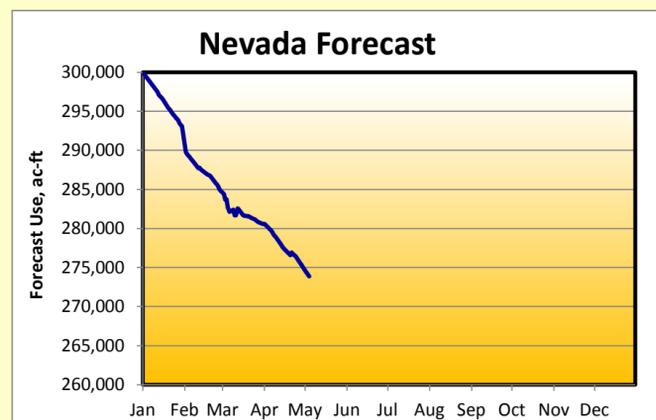
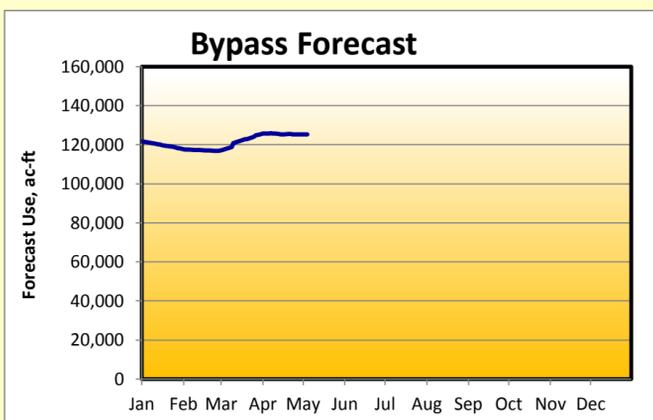
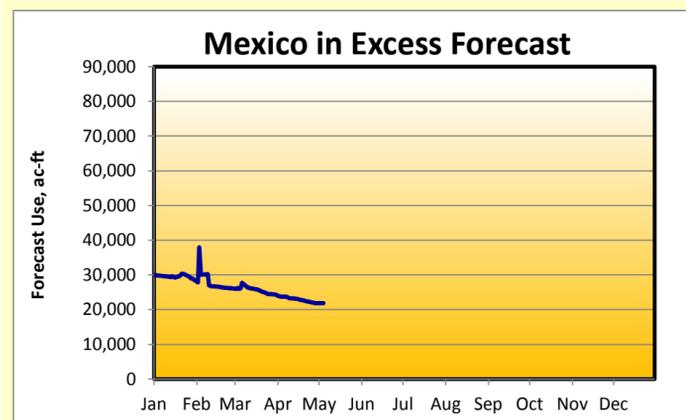
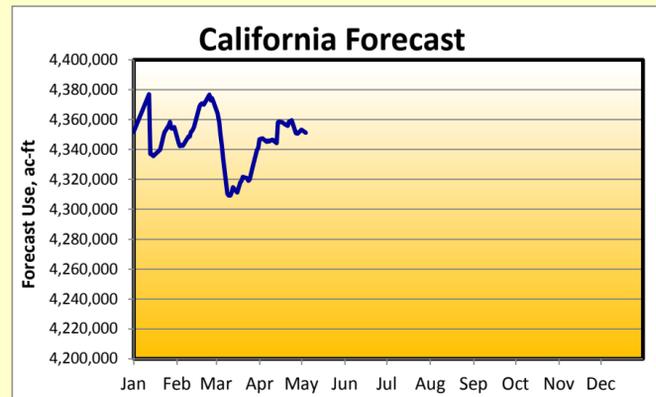
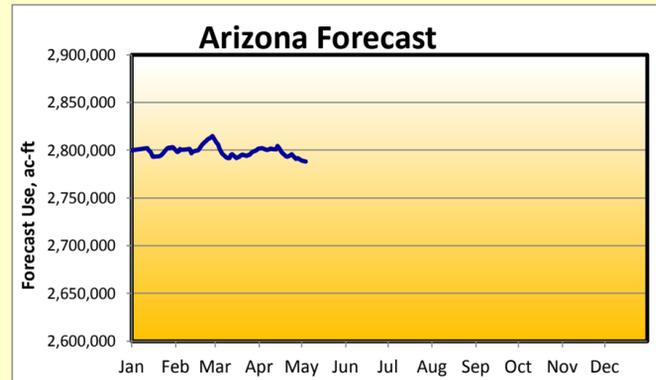
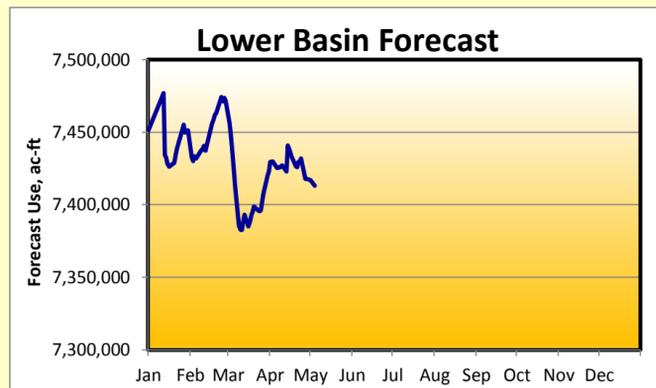
ARIZONA, CALIFORNIA, NEVADA, MEXICO
FORECAST OF END OF YEAR CONSUMPTIVE USE
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS ¹
(ACRE-FEET)

WATER USE SUMMARY

	Use To Date CY2015	Forecast Use CY2015	Approved Use ² CY2015	Excess to Approval CY2015
ARIZONA	980,074	2,788,024	2,799,878	-11,854
CALIFORNIA	1,435,612	4,351,186	4,351,727	-541
NEVADA	52,610	273,872	300,000	-26,128
STATES TOTAL ³	2,468,296	7,413,082	7,451,605	-38,523
MEXICO IN SATISFACTION OF TREATY (Including downward delivery) TO MEXICO AS SCHEDULED	758,009 755,937	1,521,830 1,500,000	1,500,000	21,830
MEXICO IN EXCESS OF TREATY BYPASS PURSUANT TO MINUTE 242	2,072 38,539	21,830 125,321		
TOTAL LOWER BASIN & MEXICO	3,264,844	9,060,233		

1/ Incorporates Jan-Mar 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: Changes from the April 30, 2015 forecast to May 1, 2015 forecast are due to the update of the March provisional USGS data.



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

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	5,959	17,561	17,561	---	9,224	27,181	27,181	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	45	159	159	---	45	159	159	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	52	183	183	---	52	183	183	0
DAVIS DAM PROJECT	1	2	2	---	25	75	75	0
BULLHEAD CITY	2,007	8,113	8,523	---	2,994	12,107	12,720	-613
MOHAVE WATER CONSERVATION	189	556	556	---	282	831	831	0
BROOKE WATER LLC	70	207	207	---	106	311	311	0
MOHAVE VALLEY IDD	5,201	20,556	22,260	---	9,630	38,064	41,220	-3,156
FORT MOJAVE INDIAN RESERVATION, AZ	10,771	42,108	42,390	---	19,946	77,978	78,500	-522
GOLDEN SHORES WATER CONSERVATION DISTRICT	107	316	316	---	161	473	473	0
HAVASU NATIONAL WILDLIFE REFUGE	1,481	3,866	3,563	---	12,356	40,347	41,820	-1,473
LAKE HAVASU CITY	2,261	8,510	8,928	---	3,648	13,727	14,400	-673
CENTRAL ARIZONA PROJECT	609,269	1,560,985	1,548,550	---	609,269	1,560,985	1,548,550	---
TOWN OF PARKER	90	360	352	---	246	908	920	-12
COLORADO RIVER INDIAN RESERVATION, AZ	89,341	357,948	376,964	---	191,245	664,664	662,402	2,262
EHRENBURG IMPROVEMENT ASSOCIATION	87	256	256	---	123	361	361	0
CIBOLA VALLEY IRRIGATION DISTRICT	5,752	16,951	16,951	---	8,045	23,707	23,707	0
CIBOLA NATIONAL WILDLIFE REFUGE	4,324	12,741	12,741	0	6,973	20,550	20,550	0
IMPERIAL NATIONAL WILDLIFE REFUGE	888	2,616	2,616	0	1,433	4,224	4,224	0
YUMA PROVING GROUND	67	495	550	---	67	495	550	-55
GILA MONSTER FARMS	1,460	4,715	5,244	---	2,511	8,326	9,156	-830
WELLTON-MOHAWK IDD	82,544	272,292	278,000	-5,708	126,676	418,079	424,350	---
CITY OF YUMA	4,649	16,285	17,051	-766	8,496	26,749	27,318	-569
MARINE CORPS AIR STATION YUMA	424	1,388	1,305	---	424	1,388	1,305	83
UNION PACIFIC RAILROAD	8	24	24	---	16	48	48	0
UNIVERSITY OF ARIZONA	142	673	764	---	142	673	764	-91
YUMA UNION HIGH SCHOOL DISTRICT	20	176	193	---	27	232	253	-21
DESERT LAWN MEMORIAL	31	91	91	---	44	129	129	0
NORTH GILA VALLEY IDD	4,552	10,518	10,099	---	16,148	43,664	41,000	2,664
YUMA IRRIGATION DISTRICT	15,083	41,672	42,581	---	25,753	74,411	75,900	-1,489
YUMA MESA IDD	27,768	106,741	111,022	---	49,997	192,654	204,904	-12,250
UNIT "B" IRRIGATION DISTRICT	5,095	18,083	17,330	---	7,526	27,961	28,050	-89
FORT YUMA INDIAN RESERVATION	474	1,396	1,396	---	729	2,149	2,149	0
YUMA COUNTY WATER USERS' ASSOCIATION	98,841	253,362	244,599	---	145,242	396,081	388,000	8,081
COCOPAH INDIAN RESERVATION	982	6,003	6,457	---	1,093	8,750	9,840	-1,090
RECLAMATION-YUMA AREA OFFICE	39	116	116	---	39	116	116	0
RETURN FROM SOUTH GILA WELLS								
TOTAL ARIZONA	980,074	2,788,024	2,799,900		1,260,733	3,688,740	3,692,419	
CAP	609,269	1,560,985				1,560,985		
ALL OTHERS	370,805	1,227,039	1,251,350			2,127,755	2,143,869	
YUMA MESA DIVISION, GILA PROJECT	47,403	158,931	350,000	-191,069		310,729		

ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
Payback of IOPP overruns - (Cocopah and Beattie)	-122
CAGR/YMIDD Pilot Conservation Program ¹	
Total State Adjusted Apportionment	2,799,878
Excess to Total State Adjusted Apportionment	-11,854
Estimated Allowable Use for CAP	1,583,168

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

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

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

NOTE:
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**CALIFORNIA WATER USERS
FORECAST OF END OF YEAR CONSUMPTIVE USE
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS**

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

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	570	1,680	1,680	---	1,034	3,047	3,047	0
FORT MOJAVE INDIAN RESERVATION, CA	3,210	8,471	8,996	---	5,969	15,747	16,720	-973
CITY OF NEEDLES (includes LCWSP use)	655	1,931	1,931	0	923	2,720	2,720	0
METROPOLITAN WATER DISTRICT	357,422	828,047	768,208	---	358,416	831,046	771,299	---
COLORADO RIVER INDIAN RESERVATION, CA	1,101	3,246	3,246	---	1,825	5,378	5,378	0
PALO VERDE IRRIGATION DISTRICT	113,889	435,547	431,782	---	260,112	928,467	946,750	-18,283
YUMA PROJECT RESERVATION DIVISION	22,455	51,134	48,586	---	36,585	102,795	104,200	-1,405
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	---	---	---	---	16,380	47,612	50,200	-2,588
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	---	---	---	---	20,205	55,182	54,000	1,182
YUMA ISLAND PUMPERS	1,583	4,665	4,665	---	2,868	8,452	8,452	0
FORT YUMA INDIAN RESERVATION - RANCH 5	229	675	675	---	414	1,221	1,221	0
IMPERIAL IRRIGATION DISTRICT	808,203	2,538,090	2,602,481	-64,391	796,347	2,604,013	2,706,070	---
SALTON SEA SALINITY MANAGEMENT	22,302	121,636	121,636	0	23,520	126,826	126,826	---
COACHELLA VALLEY WATER DISTRICT	103,707	355,223	357,000	-1,777	107,570	370,590	371,671	---
OTHER LCWSP CONTRACTORS	228	671	671	---	362	1,066	1,066	0
CITY OF WINTERHAVEN	23	68	68	---	35	103	103	0
CHEMEHUEVI INDIAN RESERVATION	35	102	102	---	3,848	11,340	11,340	0
TOTAL CALIFORNIA	1,435,612	4,351,186			1,599,828	5,012,811	5,076,863	

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	-541

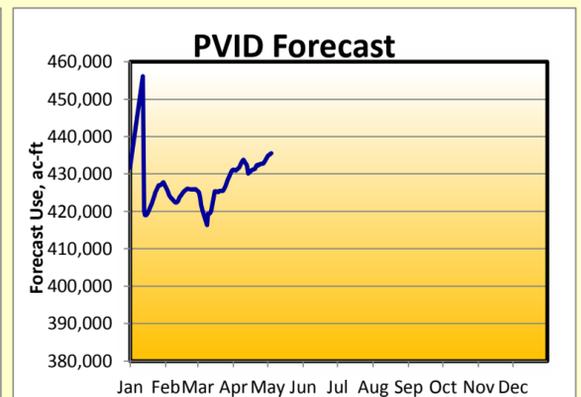
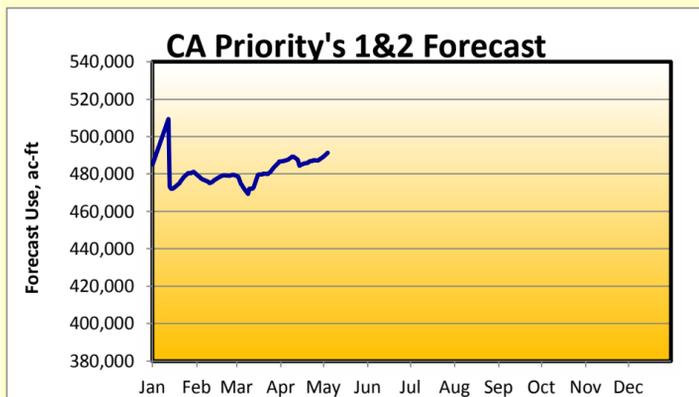
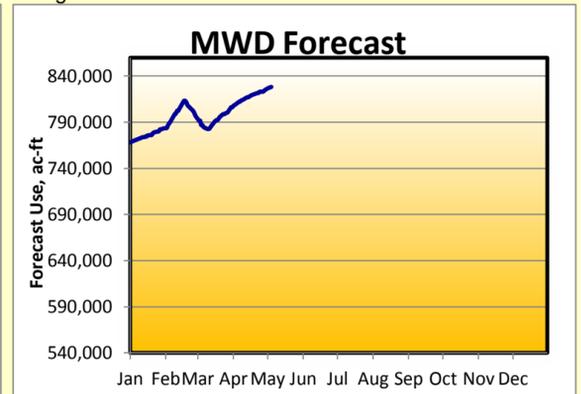
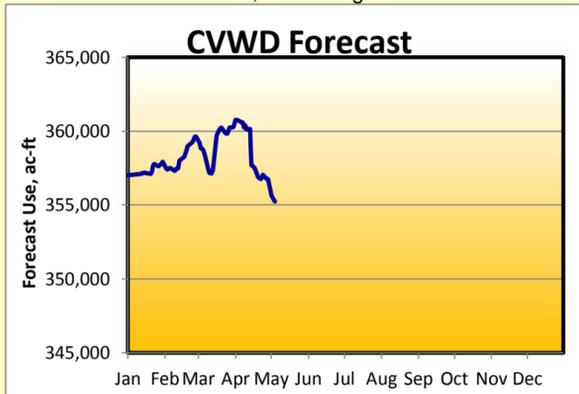
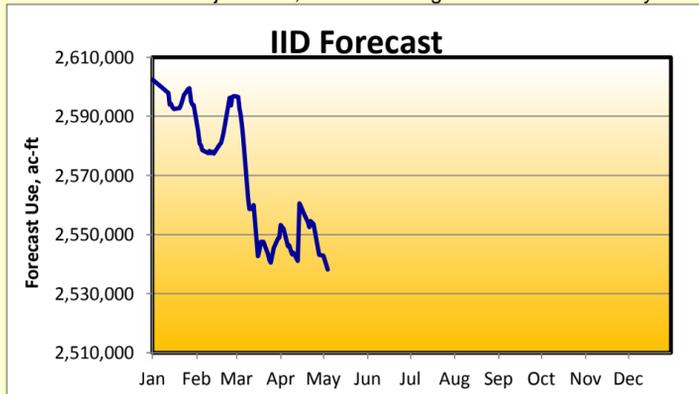
ISG ANNUAL TARGET COMPARISON CALCULATION

Priorities 1, 2, 3b Use (PVID+YPRD+Island+PVID Mesa)	491,346
MWD Adjustment	-71,346
Total California Agricultural Use (PVID+YPRD+Island+IID+CVWD)	3,384,659
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	3,376,086
ISG Annual Target (Exhibit B)	3,448,000
Amount over/(under) ISG Annual Target	-71,914

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**

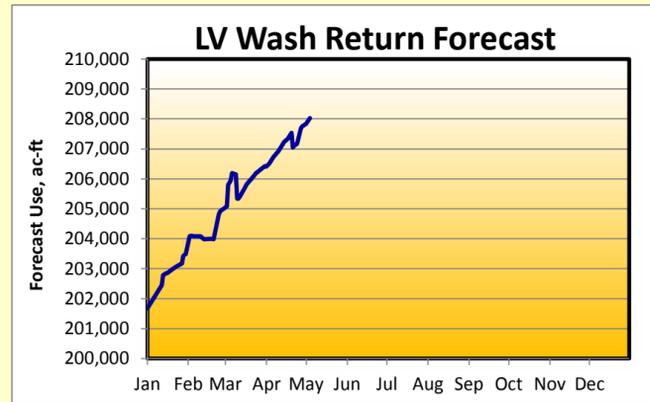
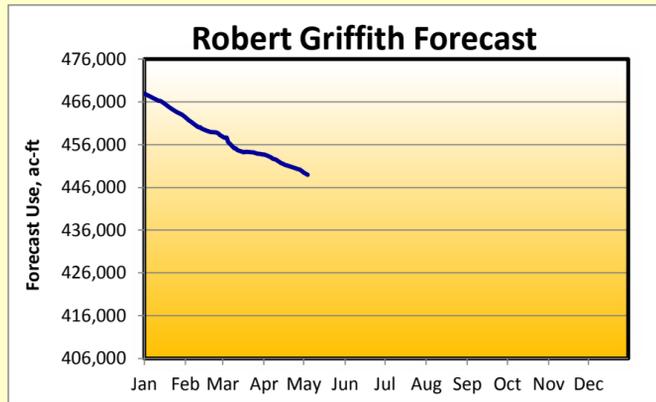
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NEVADA WATER USERS
 FORECAST OF END OF YEAR CONSUMPTIVE USE
 FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS
[Nevada Schedules and Approvals](#)
[Historic Use Records \(Water Accounting Reports\)](#)

<u>WATER USER</u>	<u>Use To Date CY2015</u>	<u>Forecast Use CY2015</u>	<u>Estimated Use CY2015</u>	<u>Excess to Estimated Use CY2015</u>	<u>Diversion To Date CY2015</u>	<u>Forecast Diversion CY2015</u>	<u>Approved Diversion CY2015</u>	<u>Excess to Approved Diversion CY2015</u>
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	119,010	448,912	467,935	-19,023	119,010	448,912	467,935	-19,023
LAKE MEAD NRA, NV - Diversions from Lake Mead	105	417	422	---	105	417	422	-5
LAKE MEAD NRA, NV - Diversions from Lake Mohave	53	176	166	---	53	176	166	10
BASIC MANAGEMENT INC.	1,718	8,016	8,211	---	1,718	8,016	8,211	-195
CITY OF HENDERSON (BMI DELIVERY)	5,210	15,904	15,878	---	5,210	15,904	15,878	26
NEVADA STATE DEPT. OF FISH & GAME	4	12	12	0	145	397	363	---
PACIFIC COAST BUILDING PRODUCTS INC.	297	916	923	---	297	916	923	-7
BOULDER CANYON PROJECT	59	174	174	---	102	302	302	0
BIG BEND WATER DISTRICT	500	3,709	4,061	---	1,653	8,686	10,000	-1,314
FORT MOJAVE INDIAN TRIBE	972	3,667	3,886	---	1,452	5,475	5,800	-325
LAS VEGAS WASH RETURN FLOWS	-75,318	-208,031	-201,668	---				
TOTAL NEVADA	52,610	273,872	300,000	-19,023	129,745	489,201	510,000	-20,833
SOUTHERN NEVADA WATER SYSTEM (SNWS)	43,692	240,881				448,912		
ALL OTHERS	8,918	32,991				40,289		
NEVADA USES ABOVE HOOVER	51,138	266,496				475,040		
NEVADA USES BELOW HOOVER	1,472	7,376				14,161		

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

NEVADA ADJUSTED APPORTIONMENT CALCULATION	
Nevada Basic Apportionment	300,000
Excess to Total State Adjusted Apportionment	-26,128



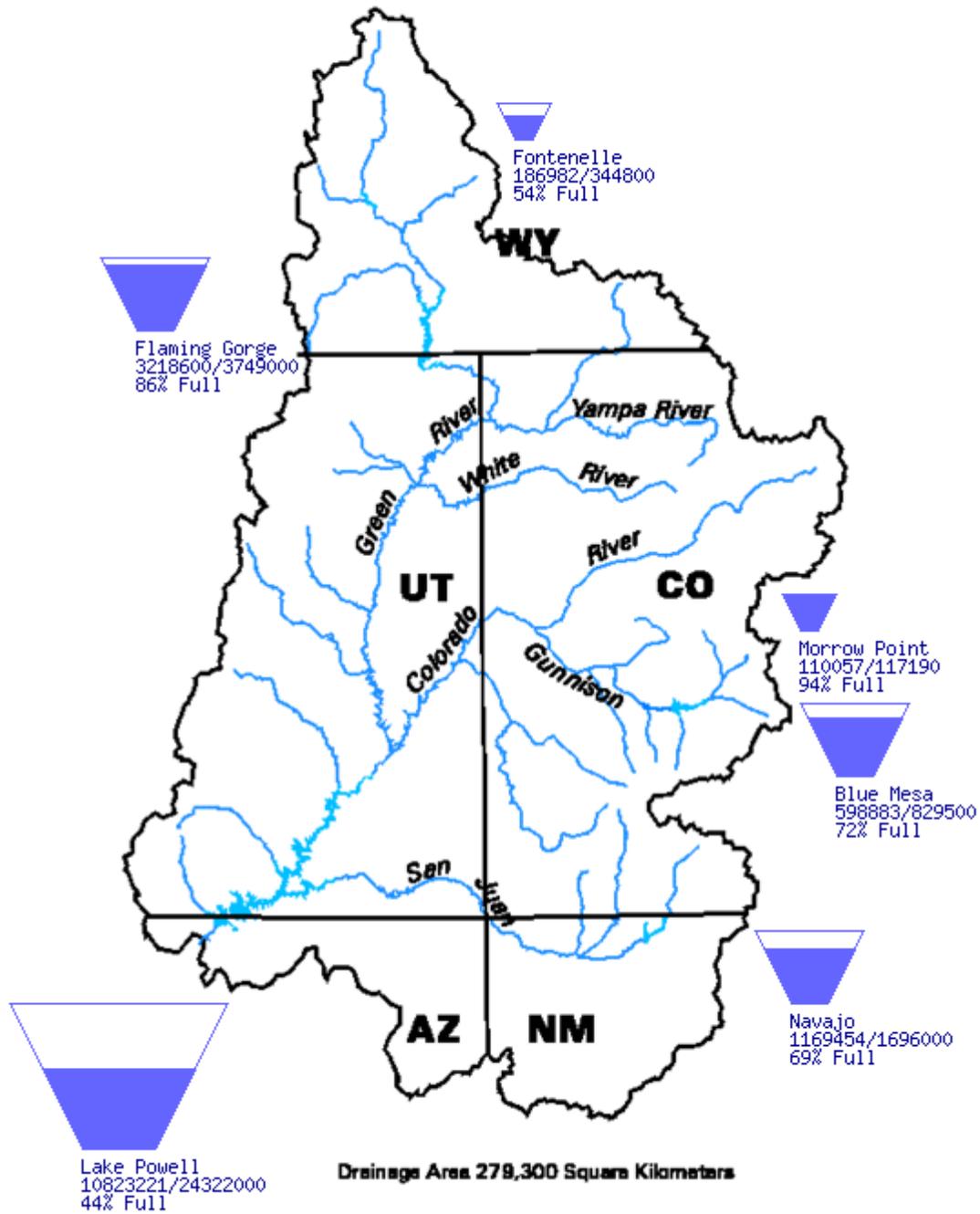
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

Upper Colorado Region Water Resources Group

River Basin Tea-Cup Diagrams

Data Current as of:
05/03/2015

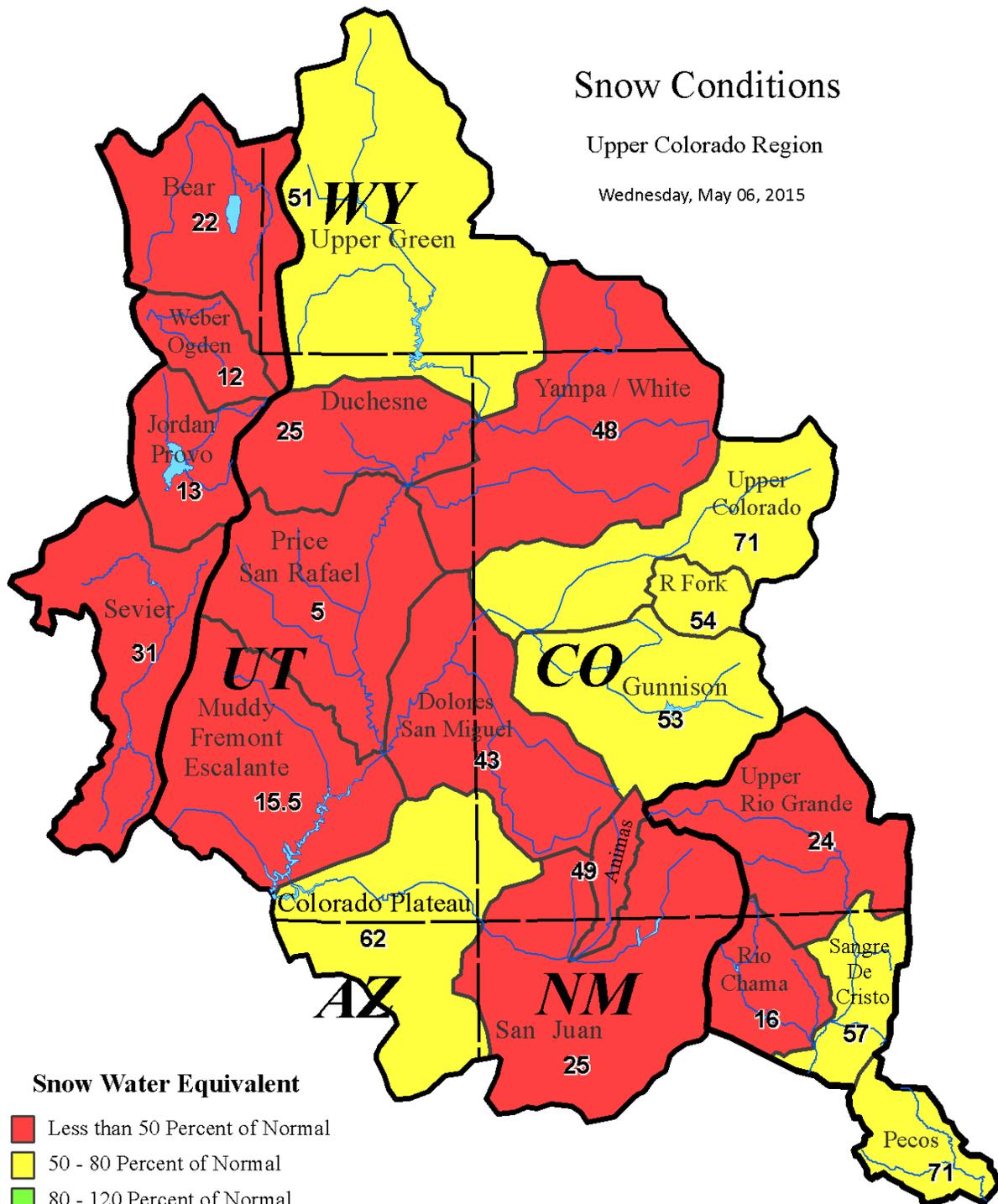
Upper Colorado River Drainage Basin



Snow Conditions

Upper Colorado Region

Wednesday, May 06, 2015



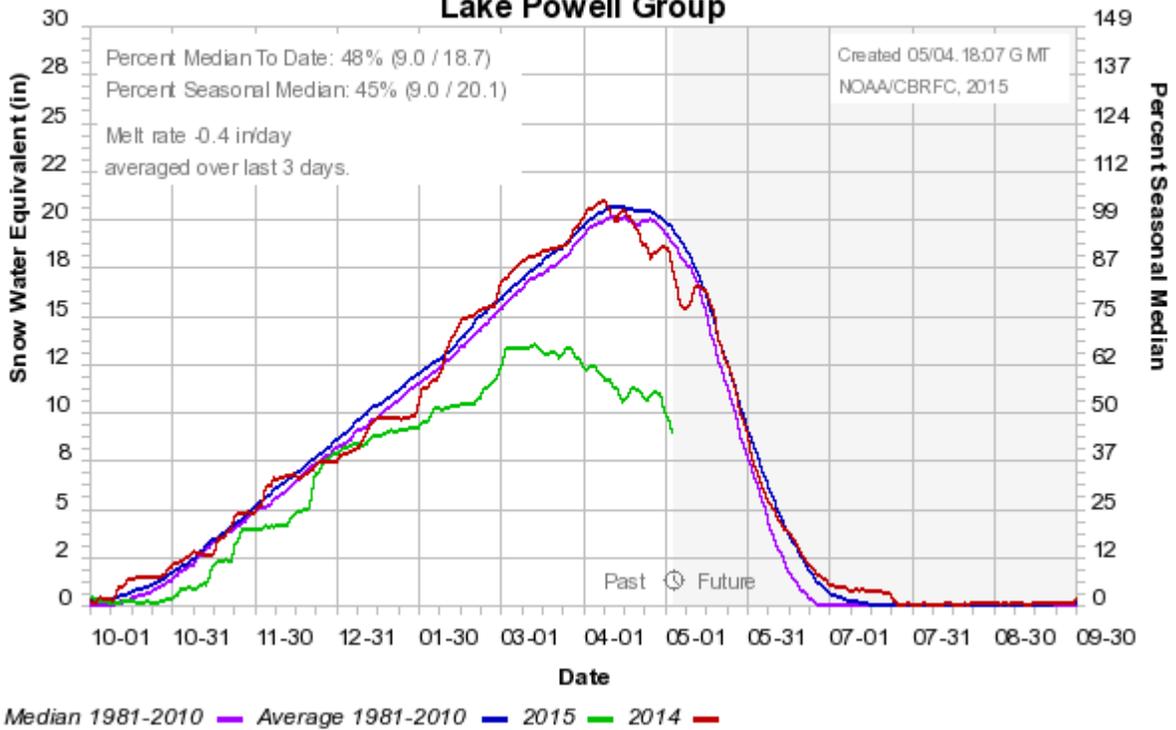
Snow Water Equivalent

- 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

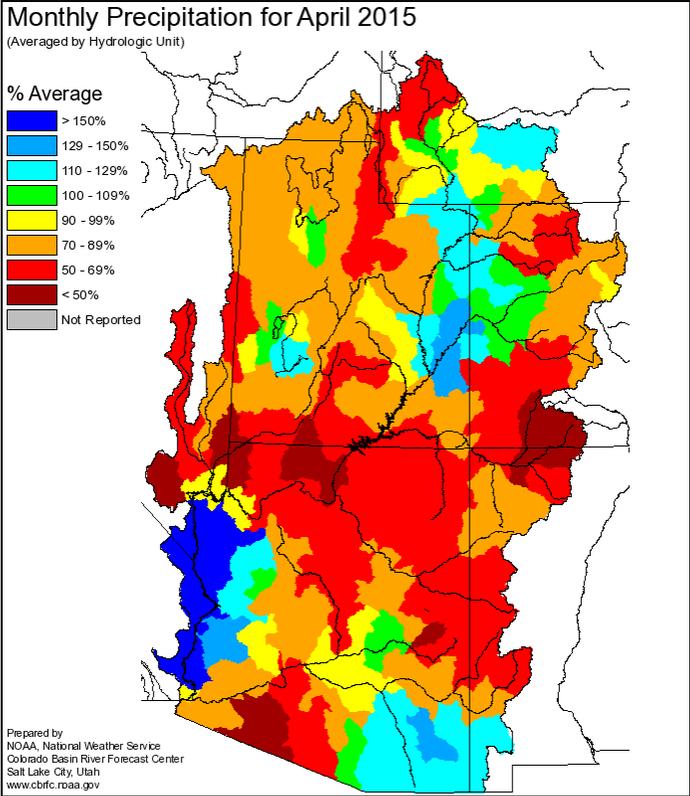
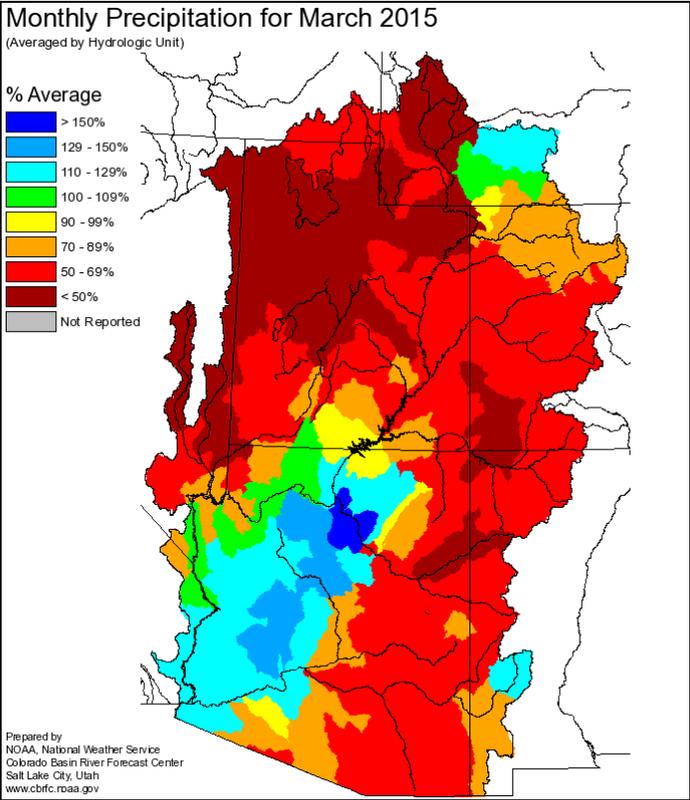
Data Provided by the Natural Resource Conservation Service

Upper Colorado
GIS
Region

Colorado Basin River Forecast Center Lake Powell Group

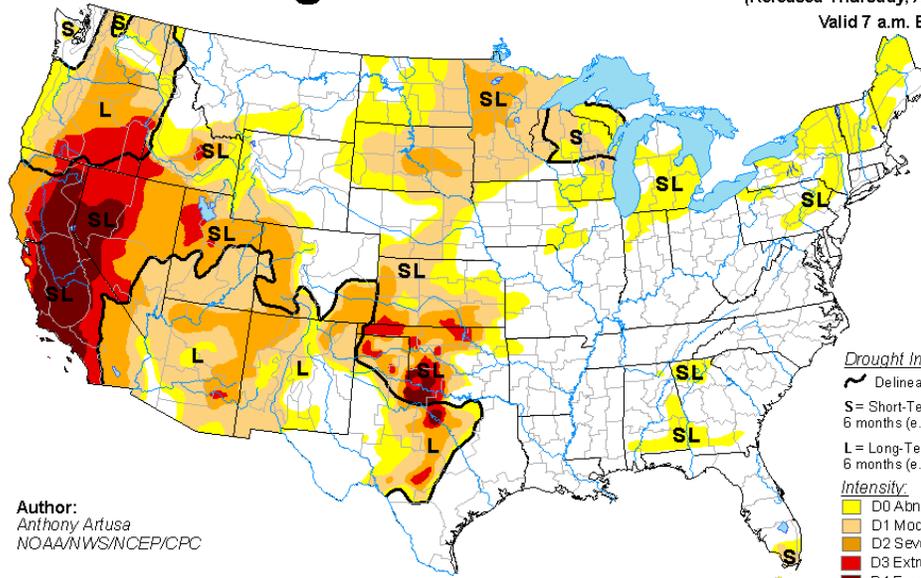


NOAA National Weather Service Monthly Precipitation Maps for March and April 2015



U.S. Drought Monitor

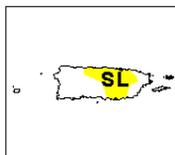
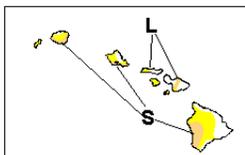
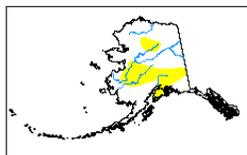
April 28, 2015
 (Released Thursday, Apr. 30, 2015)
 Valid 7 a.m. EST



Author:
 Anthony Artusa
 NOAA/NWS/NCEP/CPC

- 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

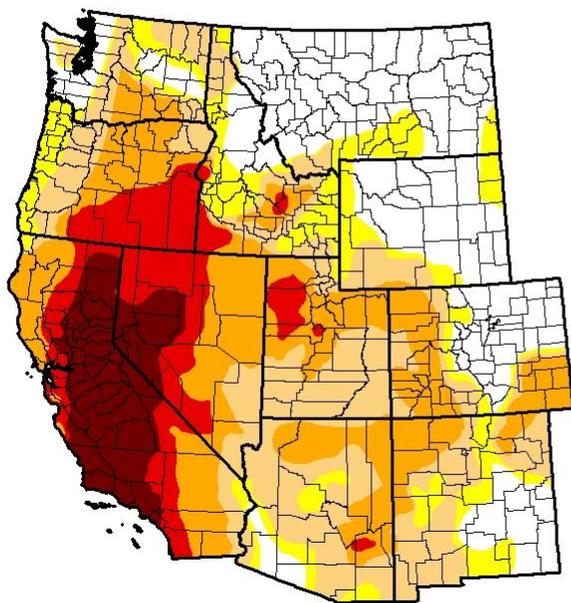
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



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

U.S. Drought Monitor West

April 28, 2015
 (Released Thursday, Apr. 30, 2015)
 Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	26.14	73.86	62.12	39.33	17.64	7.95
Last Week 4/21/2015	28.21	71.79	61.51	37.95	17.19	7.95
3 Months Ago 1/27/2015	31.10	68.90	53.77	33.36	18.72	6.96
Start of Calendar Year 12/02/2014	34.76	65.24	54.48	33.50	18.68	5.40
Start of Water Year 9/30/2014	31.48	68.52	55.57	35.65	19.95	8.90
One Year Ago 4/29/2014	30.05	69.95	61.43	45.66	19.60	4.66

- 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.

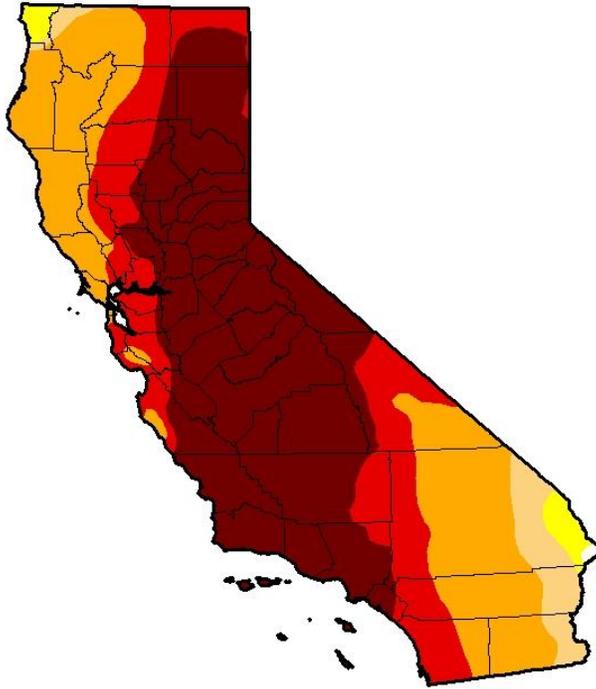
Author:
 Anthony Artusa
 NOAA/NWS/NCEP/CPC



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

U.S. Drought Monitor California

April 28, 2015
(Released Thursday, Apr. 30, 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	98.11	93.44	66.60	46.77
Last Week 4/21/2015	0.14	99.86	98.11	93.44	66.60	46.77
3 Months Ago 1/27/2015	0.00	100.00	98.13	94.34	77.52	39.99
Start of Calendar Year 12/31/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago 4/28/2014	0.00	100.00	100.00	96.01	76.68	24.77

Intensity:

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

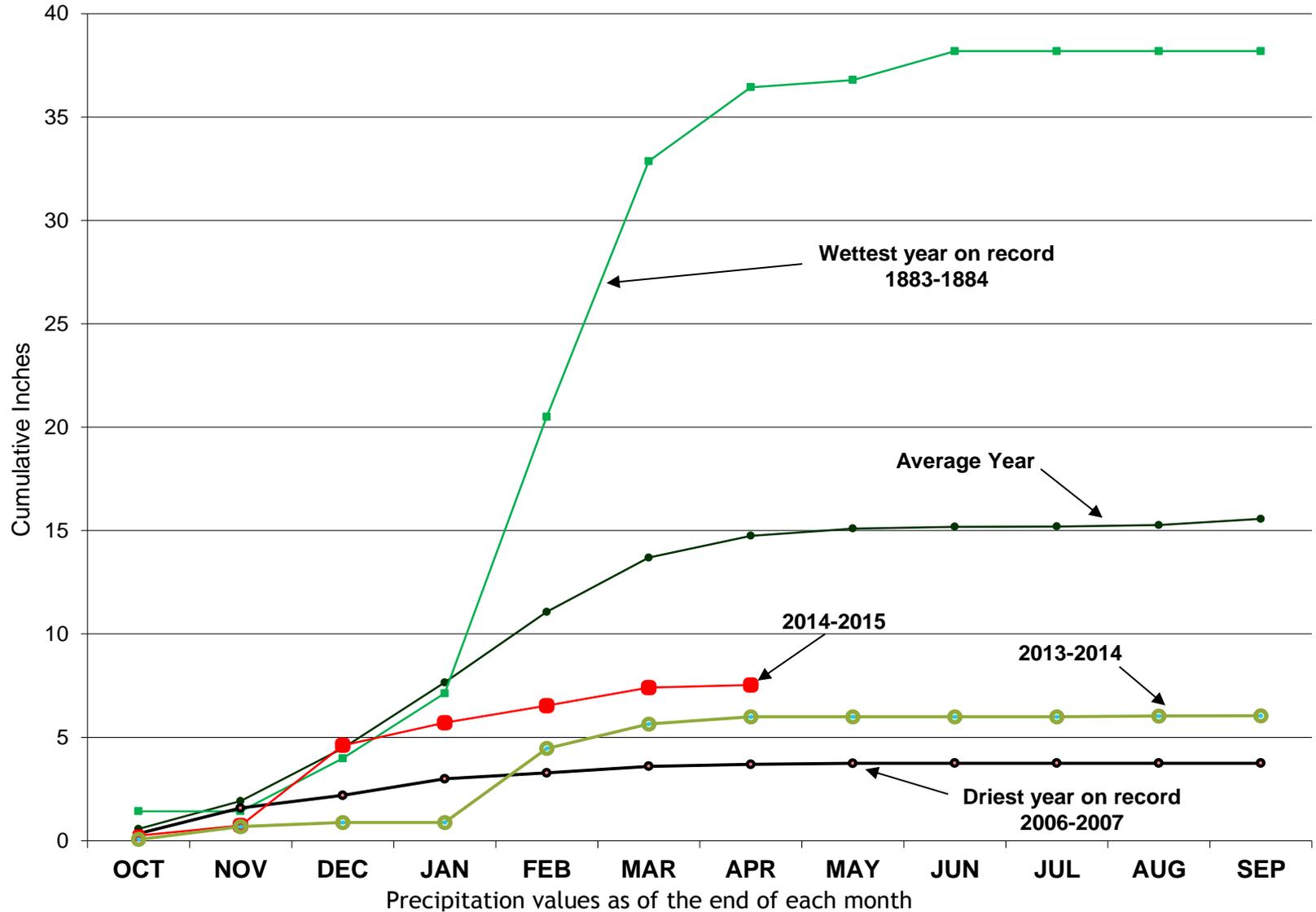
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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

Los Angeles Civic Center Precipitation

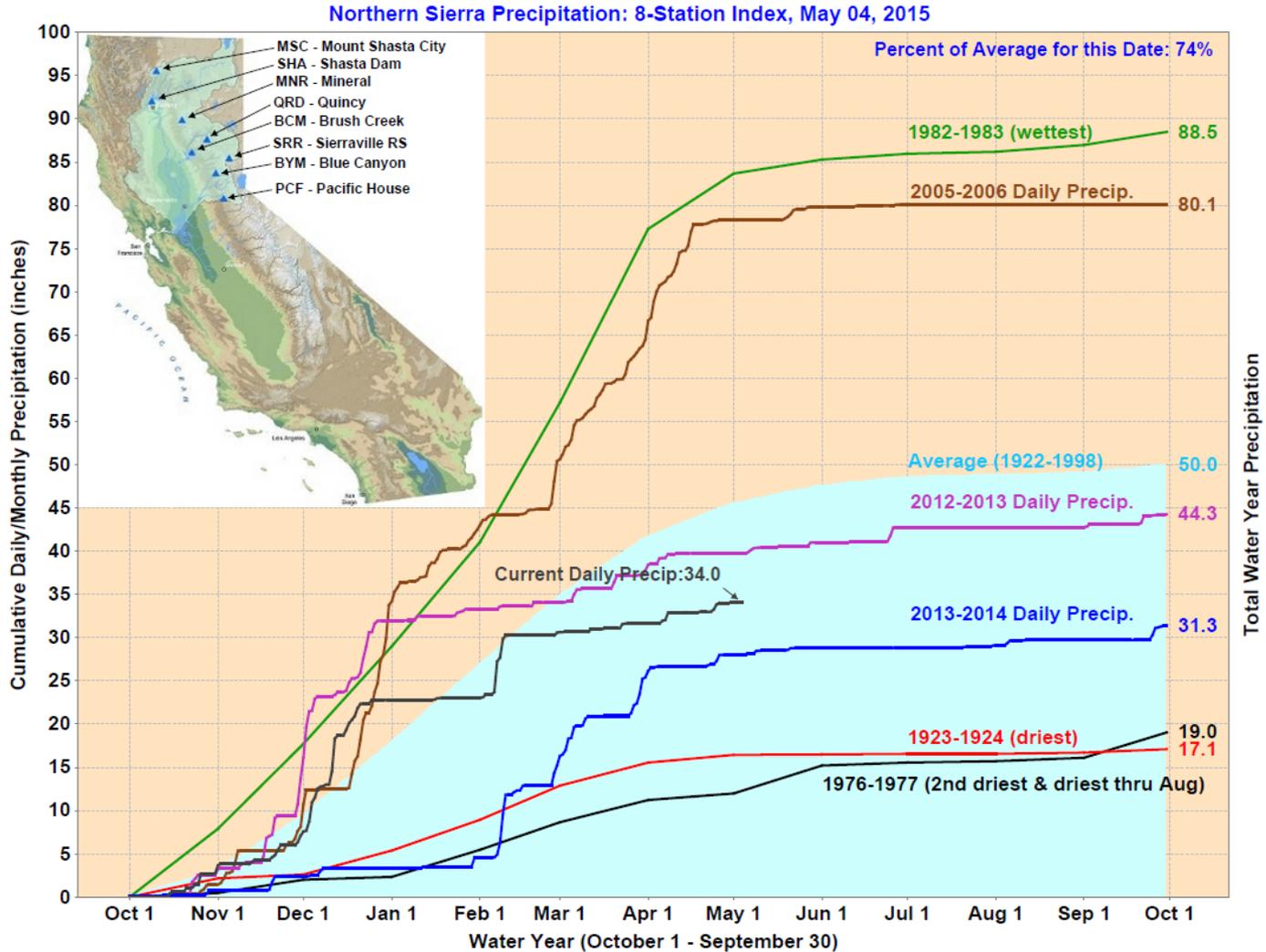


Precipitation at Six Major Stations in Southern California

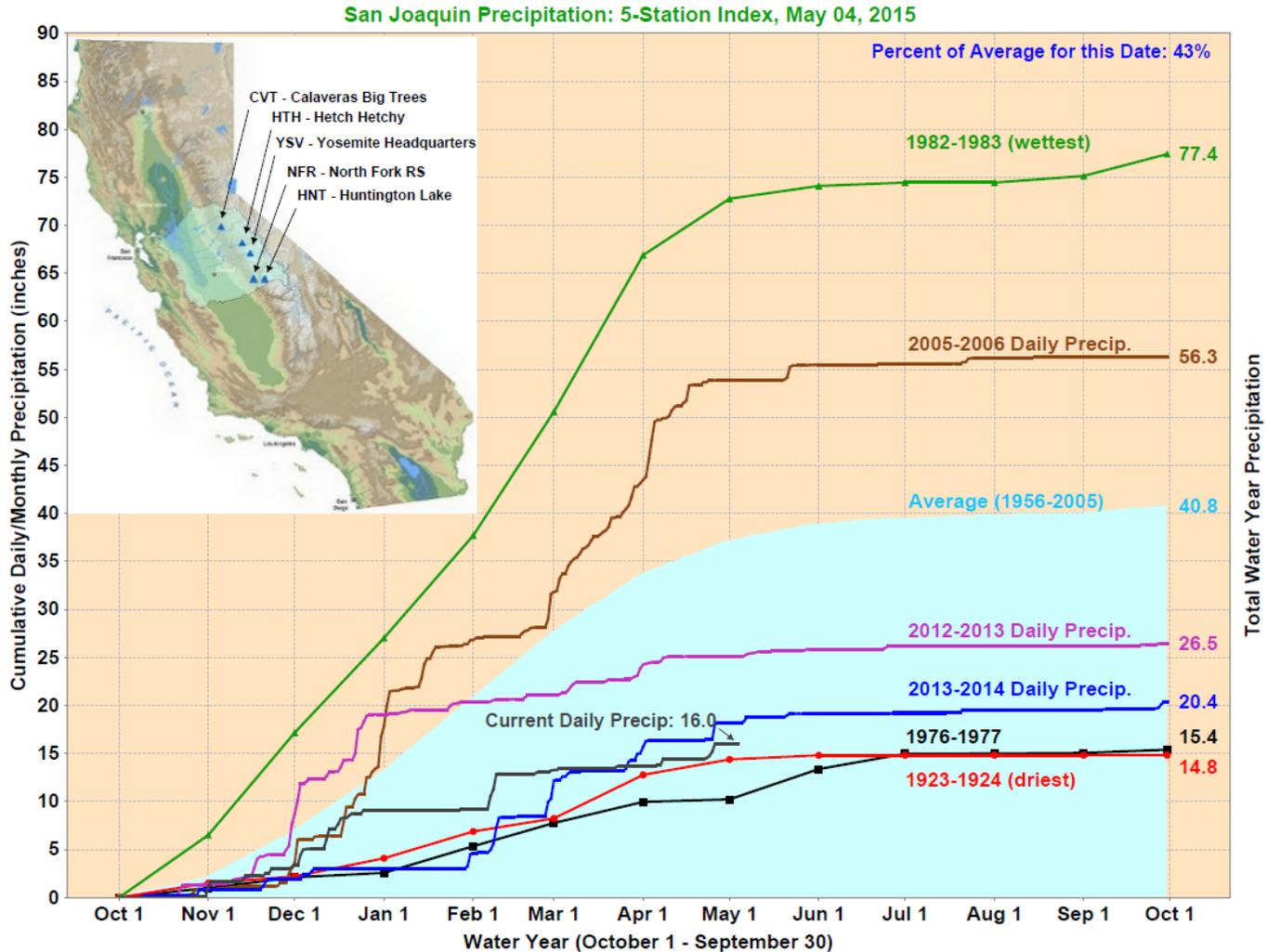
From October 1, 2014 to April 30, 2015

Station	Precipitation in inches		Average to Date	Percent of Average
	Apr	Oct 1 to Apr 30		
San Luis Obispo	0.90	7.41	21.57	34%
Santa Barbara	0.18	9.00	17.07	53%
Los Angeles	0.13	7.53	14.75	51%
San Diego	0.01	5.68	9.64	59%
Blythe	0.00	2.44	2.54	96%
Imperial	0.00	1.00	2.16	46%

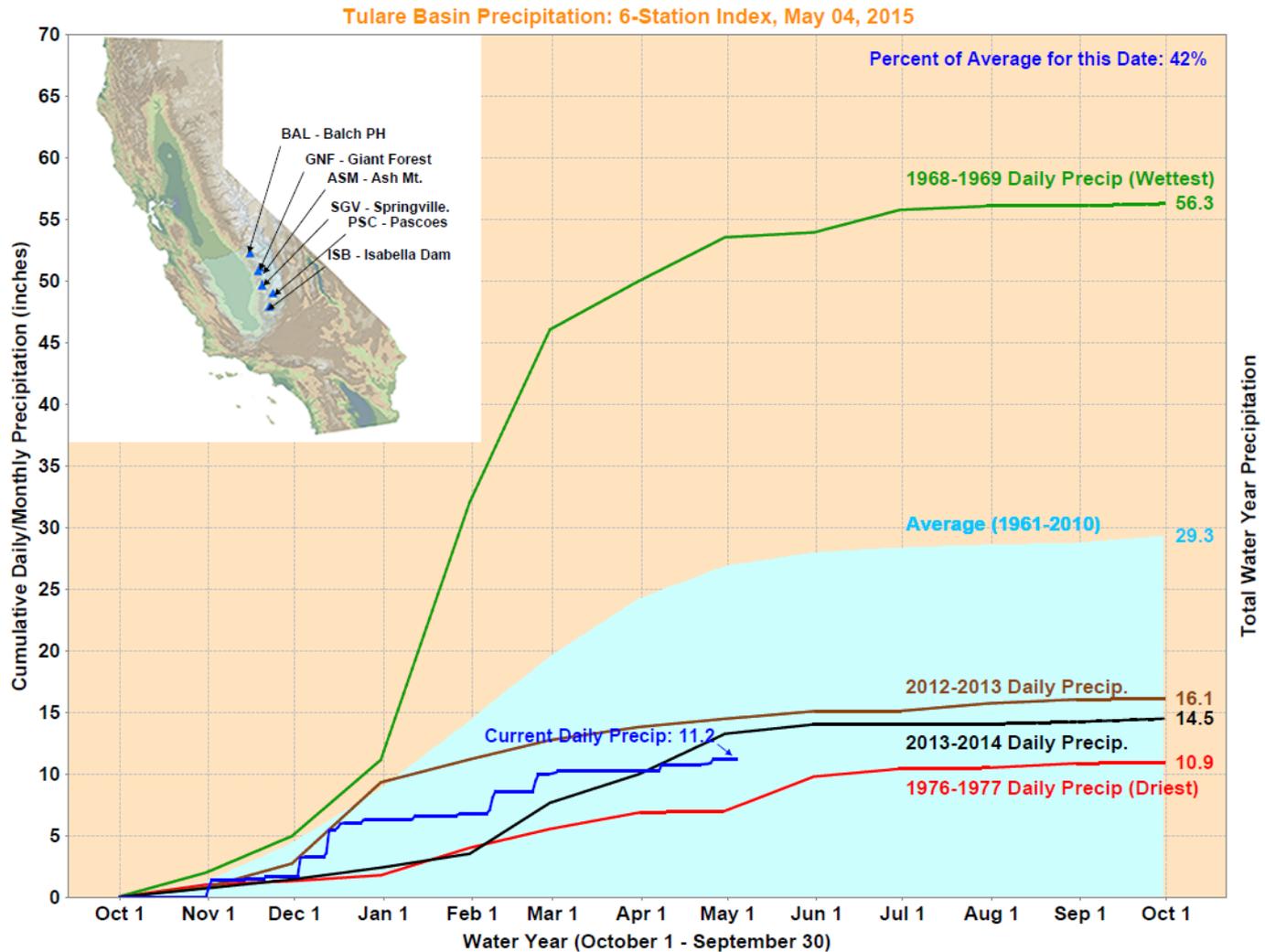
Northern Sierra Precipitation-8 Station Index



San Joaquin Precipitation-5 Station Index

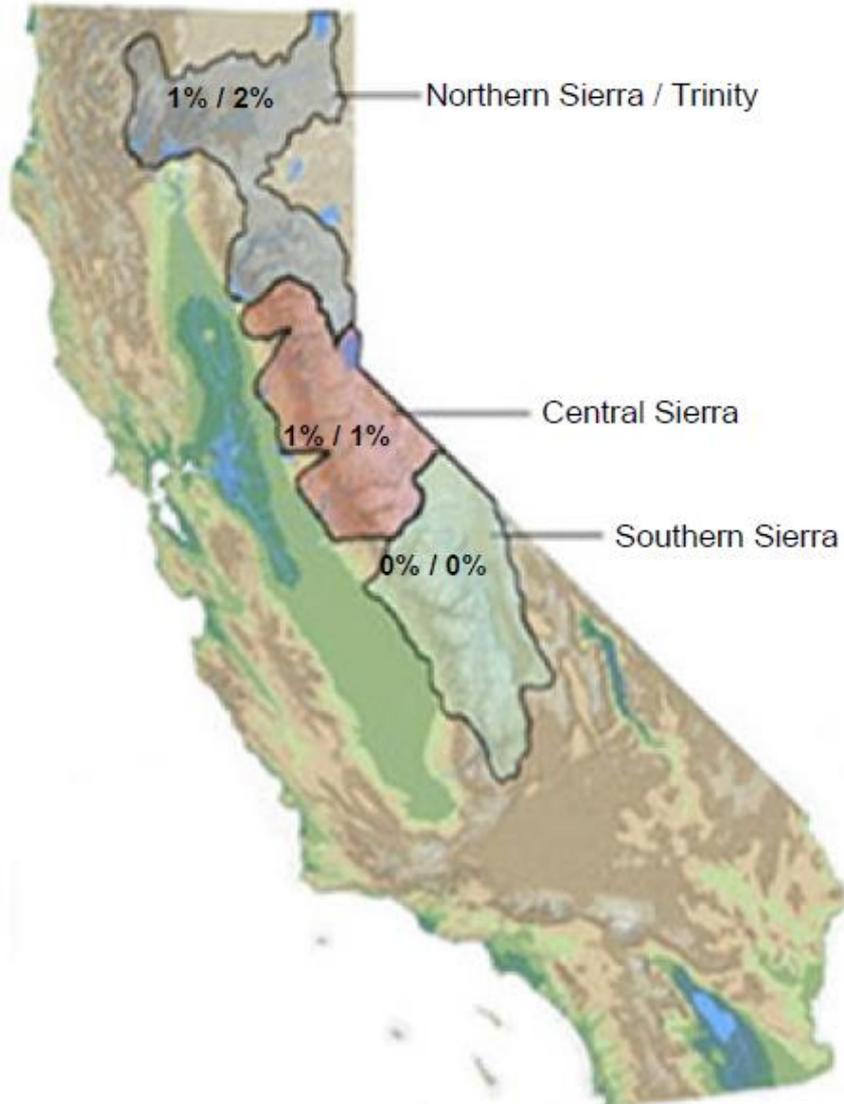


Tulare Basin Precipitation-6 Station Index



Snow Water Equivalents (inches)

% of April 1 Average / % of Normal for This Date



Data as of May 4, 2015

Comparison of SWP Water Storage

Reservoir	Capacity	2014 Storage (acre-feet)		2015 Storage (acre-feet)	
		As of May 1	% of Cap.	As of May 1	% of Cap.
Frenchman	55,475	27,971	50%	20,081	36%
Lake Davis	84,371	56,002	66%	46,845	56%
Antelope	22,564	22,453	100%	22,704	101%
Oroville	3,553,405	1,875,548	53%	1,777,442	50%
TOTAL North	3,715,815	1,981,974	53%	1,867,072	50%
Del Valle	39,914	41,395	104%	40,704	102%
San Luis (DWR)	1,062,180	387,002	36%	893,373	84%
Pyramid	169,901	165,333	97%	164,864	97%
Castaic	319,247	248,445	78%	100,539	31%
Silverwood	74,970	72,465	97%	70,733	94%
Perris	126,841	62,774	49%	51,378	41%
TOTAL South	1,793,053	977,414	55%	1,321,591	74%
TOTAL SWP	5,508,868	2,959,388	54%	3,188,663	58%

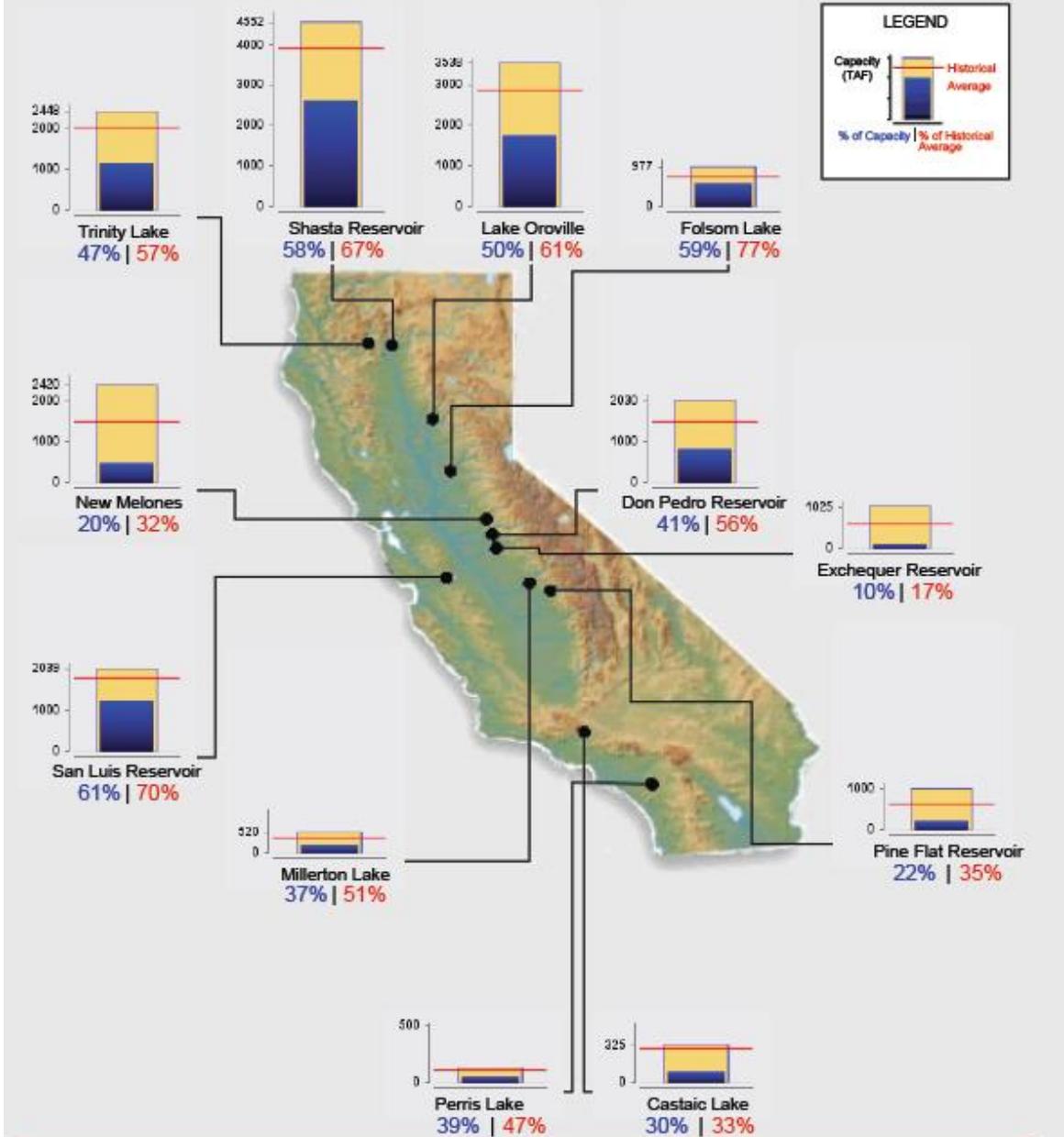
State Water Project Projected Deliveries:

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

Current Reservoir Conditions

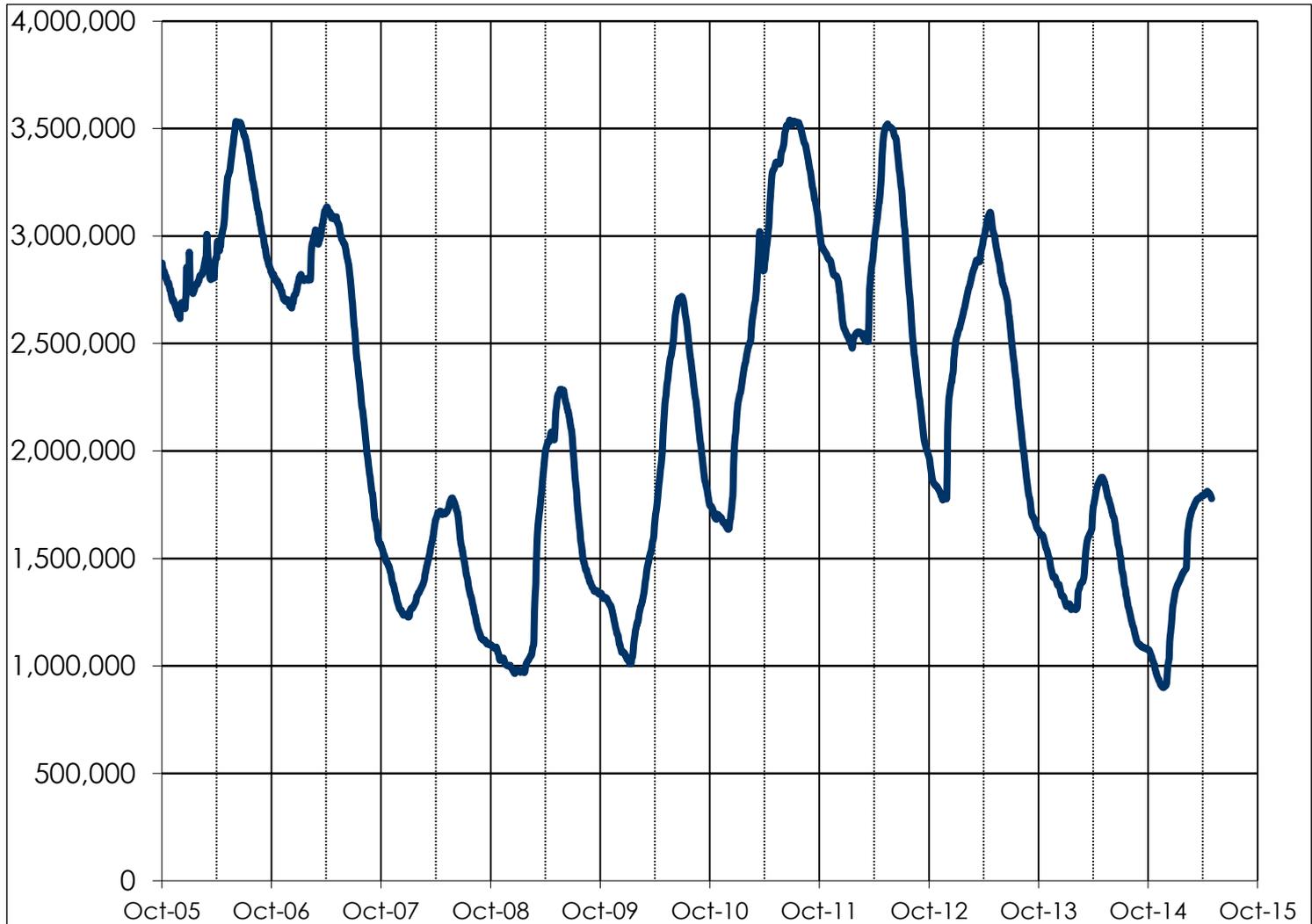
Ending At Midnight - May 4, 2015

CURRENT RESERVOIR CONDITIONS



Oroville Storage (acre-feet)

October 1, 2005 - May 1, 2015





Drought Update Monday, May 4, 2015

CURRENT CONDITIONS

Recent Precipitation: Over the last week, California received limited rainfall in several areas of the state, including: Parts of the Sierra Nevada range (1 to 2 inches of precipitation), the Central Coast (0.5 to 0.75 inches), the Central Valley (0.5 inches) and the mountains near San Diego (1 to 2 inches). The precipitation was minimal and had no substantive impact on drought conditions.

Below are estimates of precipitation totals (in inches) from April 27 through May 4, and year-to-date rainfall based on the water year cycle (October 1, 2014 to September 30, 2015).

- | | |
|---------------------------------------|--|
| • Bakersfield: 0.00" (4.61") | • Pacific House: 0.04" (27.92") |
| • Folsom Dam: 0.16" (29.69") | • Redding: 0.00" (31.04") |
| • Fresno: 0.00" (5.85") | • Riverside: 0.00" (4.23") |
| • Hetch Hetchy: 0.00" (17.72") | • Sacramento: 0.00" (13.58") |
| • Los Angeles: 0.00" (7.46") | • San Diego: 0.00" (6.53") |
| • Modesto: 0.00" (9.98") | • Shasta Dam: 0.00" (48.92") |
| • Oroville: 0.00" (25.84") | • Willits: 0.00" (37.92") |

Precipitation Forecast: Overall, dry conditions are expected across the state over the next week with temperatures expected to be warmer than average. Light storms are expected over the eastern Sierra on Monday and Tuesday, but these events will not provide significant rainfall.

Snow Survey: As of May 1, [automated snow sensors](#) captured the statewide average snowpack conditions at just 2 percent of the average to date. Regionally, the Northern Sierra Nevada is at 2 percent of average, the Central Sierra is at 1 percent of average, and the Southern Sierra Nevada is at zero percent of average. DWR reports that many watersheds with snowpack are experiencing peak runoff and that snow runoff will begin to sharply decline moving forward.

Reservoir Levels (% capacity): Since April 24, Central Valley reservoirs from Shasta and Trinity in the North to Isabella in the South had a net loss in storage of 101,800 acre-feet, with total gains being 24,500 acre-feet and total losses being 126,300 acre-feet. Shasta Reservoir decreased by 46,600 acre-feet, while San Luis Reservoir, an off-stream reservoir for the Central Valley Project and State Water Project, decreased its storage by 25,700 acre-feet.

[Reservoir Levels](#) as of May 3 remain low, including: Castaic Lake 30% of capacity (33% of year to date average); Don Pedro 41% of capacity (56% of average); Exchequer 10% of capacity (17% of average); Folsom Lake 59% of capacity (78% of average); Lake Oroville 50% of capacity (61% of average); Lake Perris 39% (46% of average); Millerton Lake 37% of capacity (52% of average); New Melones 20% of capacity (32% of average); Pine Flat 22% of capacity (35% of average); San Luis 62% of capacity (70% of average); Lake Shasta 58% of capacity (67% of average); and Trinity Lake 48% of capacity (58% of average). An update of water levels at [other smaller reservoirs](#) is also available.

Fire Activity: Since the beginning of the year, CAL FIRE has responded to over 1,065 wildfires across the state, burning 4,129 acres in the State Responsibility Area. This fire activity is above the five year average for the same time period with 612 fires and 2,055 acres burned. CAL FIRE has hired additional seasonal firefighters and trained in preparation for the peak fire season and continues to augment resources throughout the state as needed.

Each year, California highlights the importance of wildfire prevention and preparedness during Wildfire Awareness Week. During the week of May 4, CAL FIRE and other state, local and federal agencies will remind residents of the dangers posed by wildfires and the simple steps that should be followed to prevent and prepare for, especially during the drought.

Open Burn Bans: Burn bans were lifted throughout the State during the winter, while restrictions on burning remained in place in many areas. As the state transitions to the dry season, open burn bans are once again being implemented in certain counties. Recently, [burn bans were instituted](#) in Fresno, King, Monterey, San Benito, Tulare County and Marin County.

Vulnerable Water Systems: The State Water Board [Division of Drinking Water Programs](#) continues to provide technical and funding assistance to several communities facing drinking water shortages, and is monitoring water systems across the state. As of this week, approximately \$14.8 million has been committed for specific emergency drinking water projects out of \$15 million appropriated early last year for this purpose. Additional funds to continue assisting emergency projects have been appropriated by the recent emergency drought legislation announced this past March.

KEY ACTION ITEMS FROM THIS WEEK

- **Governor Brown Announces Efforts to Help Cities Bolster Water Waste Enforcement, and Streamline Water Projects:** On April 28, [Governor Brown held a meeting with mayors](#) from across the state and discussed how to help cities and water districts meet new state mandated water reductions and build new local water supply projects. Specifically, Governor Brown announced that he would propose state law changes to help local officials better enforce conservation requirements and will direct state agencies to help local governments streamline local water supply projects.
- **Governor Brown Announces New Dual Approach to Delta: California WaterFix and California EcoRestore:** On April 30, Governor Brown [announced](#) a new dual approach to improving water conveyance and ecosystem health in the Sacramento-San Joaquin Delta. [California WaterFix](#) and [California EcoRestore](#), formally known as the Bay Delta Conservation Plan (BDGP), which would accelerate the restoration of the Delta's ecosystem and fix the state's aging water infrastructure. The governor's proposed approach no longer seeks a 50-year permit, but would upgrade Delta conveyance and restore habitat through separate permitting tracks. The approach proposes to simultaneously advance new water conveyance and habitat restoration in the Delta.
- **State Water Board Issues Curtailment Orders:** On May 1, the State Water Board issued curtailment notices for all junior water-right holders within the [Sacramento River watershed and Delta](#) due to insufficient flows along the Sacramento River. The Water Board requires water rights holders to curtail their diversion of surface water supplies when rivers and streams reach critically low levels. Curtailments often translate to reduced water for agricultural irrigation. In pre-drought years, these water rights holders reported average diversions of five million acre-feet from June through September.

- **State Board Releases Formal Emergency Regulation for Mandatory Reductions in Urban Water Use:** On April 28, the State Water Board released the [formal emergency regulatory package](#) for implementing the state's required 25% reduction in urban water use. This package is the third iteration of the regulation, which was first released April 7, then again April 18 after modifications. The statewide 25% reduction was outlined in the April 1 emergency executive order issued by Governor Brown. The State Board is responsible for implementing the reduction and is scheduled to adopt the regulations by May 6.
- **State Water Board Approves Petition to Allow Water Transfers South of the Delta:** On April 27, the State Water Board approved a request from the state's two major water projects to allow more [efficient transfers of water south of the Delta](#) to address critical supply needs. The approval, similar to those granted in previous years, is supportive of the Governor's direction to take actions to expedite transfers. It allows easier water transfers among contractors of the State Water Project and the federal Central Valley Project.
- **Sacramento River Fishing Closure into Effect Monday:** On April 24, the Office of Administrative Law (OAL) approved the recommendation by the state Fish and Game Commission to [close more than five miles of the Sacramento River](#) to fishing and will go into effect on May 4. The emergency regulation closes all fishing on the 5.5 mile stretch of the Sacramento River from the Highway 44 Bridge where it crosses the Sacramento River upstream to Keswick Dam. The closure will protect critical spawning habitat and eliminate any incidental stress or hooking mortality of winter-run salmon by anglers.
- **Investing in Innovative Water & Energy Saving Technologies:** In response to California's drought, the California Energy Commission (CEC) is taking steps outlined in Governor Brown's Executive Order B-29-15 to save water and invest in new water energy technologies. CEC, jointly with the Department of Water Resources, and the State Water Board, will implement a [Water Energy Technology \(WET\) program](#) to provide funding for innovative technologies to accelerate the deployment of innovative water and energy saving technologies and reduce greenhouse gas emissions. A [fact sheet](#) is available on the CEC website.

In addition, CEC will provide monetary incentives for the replacement of inefficient water consuming appliances and devices in homes including single- and multi-family. The [Drought Rebate Program](#) will help residents capture water savings while reducing greenhouse gas emissions. A [fact sheet](#) is available on the CEC website.

- **Second Round of State Water Efficiency and Enhancement Program (SWEEP) Funding:** The California Department of Food and Agriculture has announced that a second round of State Water Efficiency and Enhancement Program (SWEEP) grant funding will be available mid-May for awards up to \$150,000. SWEEP will provide an estimated \$10 million in competitive grant funding for financial assistance to agricultural operations to implement water conservation measures that result in increased water efficiency and reduced greenhouse gas emissions. For detailed information and program requirements visit the [SWEEP](#) website.
- **California Board of Food and Agriculture to Host Drought Forum May 5:** The California Board of Food and Agriculture (Board) will host a [Drought Forum in Fresno on May 5](#) to hear updates on drought response activities and statewide water operations from the Director Mark Ghilarducci, Governor's Office of Emergency Services and Drought Coordinator Bill Croyle, Department of Water Resources.

- **Emergency Food Aid, Rental, and Utility Assistance:** The Department of Social Services (CDSS) has provided to date over 620,650 boxes of food to community food banks in drought-impacted counties. Approximately 567,850 boxes of food have been picked up by 298,901 households. By May 8, an additional 11,380 boxes will be delivered to Fresno, Kern, Lake, San Joaquin, and Tulare counties.

The non-profit group La Cooperativa continues to distribute the \$10 million state-funded emergency rental assistance to impacted families and individuals across counties most impacted by the drought. As of April 23, the Department of Housing and Community Development (HCD) has reported that a total of \$8,687,425 have been issued to 5,902 applicants in 21 counties, with \$69,575 remaining in assistance funds.

The Department of Community Services and Development (CSD) allocated an additional \$600,000, under the federally-funded Community Services Block Grant (CSBG), to continue the [Drought Water Assistance Program \(DWAP\)](#) pilot project which provides financial assistance to help low-income families pay their water bills. This program targets low-income families in 10 counties identified as experiencing a high unemployment rate, high share of agricultural workers and designated to have “exceptional” drought conditions according to the U.S. Drought Monitor Classification System. As of April 30, CSD has reported that a total of \$28,396 has been issued to 160 households.

CSD is in the process of allocating \$400,000, under CSBG, to continue the Migrant and Seasonal Farmworker (MSFW) drought assistance program, which provides assistance in employment training and placement services to individuals impacted by the drought. This program has been provided in coordination with the California Human Development (CHD), Central Valley Opportunity Center (CVOC), and Center for Employment Training (CET) and Proteus, which provides employment training and placement services to migrant and seasonal farmworkers suffering job loss or reduced employment due to the drought. CSD is finalizing contract terms with these organizations and anticipates services to begin June 1, 2015.

- **California’s Water Conservation Education Program Campaign:** The Save Our Water “Keep Saving CA” campaign reports a surge in online visits to its saveourwater.com site in mid-April. The water saving tips section proved to be the most popular destination. The recently updated statewide public education campaign gives Californians a pat on the back for their water-saving efforts to date – and asks them to do more. The state’s campaign is also being utilized by local water districts. On Earth Day, Save Our Water launched a revamped Landscaping 101 section on their website featuring an all-new section dedicated to local gardening websites and expanded information on invasive species.

The Keep Saving CA campaign will run through the end of June and includes billboards, outdoor media, traditional and digital radio, digital and social media, and on-the-street efforts that will be seen and heard throughout the state. The campaign includes a robust new website loaded with easy-to-use water-saving tips at saveourwater.com. Save Our Water connects with Californians on its [Facebook](#) page, [Twitter](#) and [Instagram](#) accounts.

- **Drought Response Funding:** The \$687 million in state drought funding that was appropriated last March through emergency legislation, as well as \$142 million provided in the 2014 Budget Act, continues to advance toward meeting critical needs. To date, \$468 million has been committed, and nearly \$625 million of the emergency funds appropriated in March came from sources dedicated to capital improvements to water systems. Since March, the Department of Water Resources has expedited grant approvals, getting \$21 million immediately allocated to grantees that were pre-approved for certain projects.

As planned in March, the next \$200 million of expedited capital funding was awarded in October, and the remaining \$250 million will be granted by fall 2015. The 2014 Budget Act appropriated an additional \$53.8 million to CAL FIRE over its typical budget to enhance firefighter surge capacity and retain seasonal firefighters beyond the typical fire season. As a result of continuing drought conditions, emergency legislation was enacted in March that appropriated over \$1 billion of additional funds for drought-related projects and activities.

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

Local Government

- **City of San Diego Public Utilities Department Wins 2015 U.S. Water Prize:** On April 17, the City of San Diego Public Utilities Department was awarded the annual U.S. Water Prize for its efforts relating to the [Water Purification Project](#). The U.S. Water Prize, awarded by the U.S. Water Alliance (USWA), was created five years ago to honor organizations whose actions further the goal of water sustainability. San Diego's Water Purification Demonstration Project established the viability of supplementing local drinking water supplies with purified recycled water.
- **Local Emergency Proclamations:** A total of 56 local Emergency Proclamations have been received to date from city, county, and tribal governments, as well as special districts:
 - **26 Counties:** El Dorado, Fresno, Glenn, Inyo, Humboldt, Kern, Kings, Lake, Madera, Mariposa, Merced, Modoc, Plumas, San Bernardino, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Siskiyou, Sonoma, Sutter, Trinity, Tulare, Tuolumne, and Yuba.
 - **10 Cities:** City of Live Oak (Sutter County), City of Lodi (San Joaquin County), City of Manteca (San Joaquin County), City of Montague (Siskiyou County), City of Portola (Plumas County), City of Ripon (San Joaquin County), City of San Juan Bautista (San Benito County), City of Santa Barbara (Santa Barbara County), and City of West Sacramento (Yolo County), and City of Willits (Mendocino County).
 - **9 Tribes:** Cortina Indian Rancheria (Colusa County), Hoopa Valley Tribe (Humboldt County), Karuk Tribe (Siskiyou/Humboldt Counties), Kashia Band of Pomo Indians of the Stewarts Point Rancheria (Sonoma County), Picayune Rancheria of Chukchansi Indians (Madera County) Sherwood Valley Pomo Indian Tribe (Mendocino County), Tule River Indian Tribe (Tulare County), Yocha Dehe Wintun Nation (Yolo County), and Yurok Tribe (Humboldt County).

- **12 Special Districts:** Carpinteria Valley Water District (Santa Barbara County), Goleta Water District (Santa Barbara County), Groveland Community Services District (Tuolumne County), Lake Don Pedro Community Services District (Mariposa Stanislaus County), Mariposa Public Utility District (Mariposa County), Meiners Oaks Water District (Ventura County), Montecito Water District (Santa Barbara County), Mountain House Community Service District (San Joaquin County), Nevada Irrigation District (Nevada County), Placer County Water Agency (Placer County), Tuolumne Utilities District (Tuolumne County), and Twain Harte Community Services District (Tuolumne County).
- **Water Agency Conservation Efforts:** The Association of California Water Agencies (AWCA) [has identified](#) several hundred local water agencies that have implemented water conservation actions. These water agencies [are responding to the drought](#) by implementing conservation programs, which include voluntary calls for reduced water usage and mandatory restrictions where water shortages are worst.
- **County Drought Taskforces:** A total of 31 counties have established drought task forces to coordinate local drought response. These counties include: Butte, Glenn, Humboldt, Imperial, Kern, Kings, Lake, Madera, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Orange, Placer, Plumas, Sacramento, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Siskiyou, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, and Yolo.
- **Tribal Taskforce:** A total of 4 tribes have established drought task forces to coordinate tribal drought response. These tribes include: Hoopa Valley Tribe (Humboldt County), Kashia Band of Pomo Indians (Sonoma County), Sherwood Valley Tribe (Mendocino County), and Yurok Tribe (Humboldt and Del Norte County).

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

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

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

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

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

EXECUTIVE ORDER B-30-15

WHEREAS climate change poses an ever-growing threat to the well-being, public health, natural resources, economy, and the environment of California, including loss of snowpack, drought, sea level rise, more frequent and intense wildfires, heat waves, more severe smog, and harm to natural and working lands, and these effects are already being felt in the state; and

WHEREAS the Intergovernmental Panel on Climate Change concluded in its Fifth Assessment Report, issued in 2014, that "warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia" and that "continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems;" and

WHEREAS projections of climate change show that, even under the best-case scenario for global emission reductions, additional climate change impacts are inevitable, and these impacts pose tremendous risks to the state's people, agriculture, economy, infrastructure and the environment; and

WHEREAS climate change will disproportionately affect the state's most vulnerable citizens; and

WHEREAS building on decades of successful actions to reduce pollution and increase energy efficiency the California Global Warming Solutions Act of 2006 placed California at the forefront of global and national efforts to reduce the threat of climate change; and

WHEREAS the Intergovernmental Panel on Climate Change has identified limiting global warming to 2 degrees Celsius or less by 2050 as necessary to avoid potentially catastrophic climate change impacts, and remaining below this threshold requires accelerated reductions of greenhouse gas emissions; and

WHEREAS California has established greenhouse gas emission reduction targets to reduce greenhouse gas emissions to 1990 levels by 2020 and further reduce such emissions to 80 percent below 1990 levels by 2050; and

WHEREAS setting an interim target of emission reductions for 2030 is necessary to guide regulatory policy and investments in California in the midterm, and put California on the most cost-effective path for long term emission reductions; and

WHEREAS all agencies with jurisdiction over sources of greenhouse gas emissions will need to continue to develop and implement emissions reduction programs to reach the state's 2050 target and attain a level of emissions necessary to avoid dangerous climate change; and

WHEREAS taking climate change into account in planning and decision making will help the state make more informed decisions and avoid high costs in the future.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular Government Code sections 8567 and 8571 of the California Government Code, do hereby issue this Executive Order, effective immediately

IT IS HEREBY ORDERED THAT:

1. A new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050.
2. All state agencies with jurisdiction over sources of greenhouse gas emissions shall implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.
3. The California Air Resources Board shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

4. The California Natural Resources Agency shall update every three years the state's climate adaptation strategy, Safeguarding California, and ensure that its provisions are fully implemented. The Safeguarding California plan will:

- Identify vulnerabilities to climate change by sector and regions, including, at a minimum, the following sectors: water, energy, transportation, public health, agriculture, emergency services, forestry, biodiversity and habitat, and ocean and coastal resources;
- Outline primary risks to residents, property, communities and natural systems from these vulnerabilities, and identify priority actions needed to reduce these risks; and
- Identify a lead agency or group of agencies to lead adaptation efforts in each sector.

5. Each sector lead will be responsible to:

- Prepare an implementation plan by September 2015 to outline the actions that will be taken as identified in Safeguarding California, and
- Report back to the California Natural Resources Agency by June 2016 on actions taken.

6. State agencies shall take climate change into account in their planning and investment decisions, and employ full life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives.

7. State agencies' planning and investment shall be guided by the following principles

- Priority should be given to actions that both build climate preparedness and reduce greenhouse gas emissions;
- Where possible, flexible and adaptive approaches should be taken to prepare for uncertain climate impacts;
- Actions should protect the state's most vulnerable populations; and
- Natural infrastructure solutions should be prioritized.

8. The state's Five-Year Infrastructure Plan will take current and future climate change impacts into account in all infrastructure projects

9. The Governor's Office of Planning and Research will establish a technical, advisory group to help state agencies incorporate climate change impacts into planning and investment decisions.

10. The state will continue its rigorous climate change research program focused on understanding the impacts of climate change and how best to prepare and adapt to such impacts.

This Executive Order is not intended to create, and does not, create any rights or benefits, whether substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 29th day of April 2015.

EDMUND G. BROWN JR.
Governor of California

ATTEST:

ALEX PADILLA



Media Release

State Water Board Adopts 25 Percent Mandatory Water Conservation Regulation

For Immediate Release
May 5, 2015

Contact: George Kostyrko
gkostyrko@waterboards.ca.gov

SACRAMENTO – With emergency drought conditions persisting throughout California, the State Water Resources Control Board Tuesday adopted an [emergency regulation](#) requiring an immediate 25 percent reduction in overall potable urban water use statewide in accordance with Gov. Jerry Brown’s April 1 [Executive Order](#).

The Governor’s Executive Order required, for the first time in the state’s history, mandatory conservation for all residents and directed several state agencies, including the State Water Board, to take immediate action to safeguard the state’s remaining potable urban water supplies in preparation for a possible fifth year of drought.

A 25 percent savings in potable urban water use amounts to more than 1.2 million acre-feet of water over the next nine months, or nearly as much water as is currently in Lake Oroville.

Tuesday’s action follows the release of water production figures for the month of March which registered only a slight increase from the amount of water saved in the prior month. The amount of water conserved in March 2015, as compared to March 2013 was 3.6 percent, up less than one percent from February’s results.

Since the State Water Board adopted its initial emergency urban conservation regulation in July 2014, voluntary statewide conservation efforts have reached 9 percent overall – far short of the 20 percent Governor Brown called for in 2014. To see how various regions and communities have done conserving water, please visit this link [here](#).

“This is the drought of the century, with greater impact than anything our parents and grandparents experienced, and we have to act accordingly,” said Felicia Marcus, Chair of the State Water Resources Control Board.

“Today we set a high but achievable bar, with the goal of stretching urban California’s water supply. We have to face the reality that this drought may continue and prepare as if that’s the case. If it rains and snows next winter, we celebrate. If the drought continues, we’ll be glad we took difficult but prudent action today. It’s the responsible thing to do.”



Conservation Standard

The emergency regulation identifies how much water communities must conserve based on their average residential water use, per person per day, last summer. Every person should be able keep indoor water use to no more than 55 gallons per day. For the most part, the amount of water that each person uses in excess of this amount is water that is applied to lawns and other ornamental landscapes.

On average, 50 percent of total residential use is outdoors, in some cases up to 80 percent. To save water now, during this drought emergency, the regulation targets these outdoor uses. Communities that are approaching, at or below the indoor target, are assigned a modest conservation standard while communities that use water well above the indoor target will be asked to do much more.

To reduce water use by 25 percent statewide, the regulation adopted by the Board this week places each urban water supplier into one of eight tiers which are assigned a conservation standard, ranging between four percent and 36 percent. Each month, the State Water Board will compare every urban water suppliers' water use with their use for the same month in 2013 to determine if they are on track for meeting their conservation standard. Local water agencies will determine the most cost effective and locally appropriate way to achieve their standard. The State Water Board will be working closely with water suppliers to implement the regulations and improve local efforts that are falling short.

“This likely will result in all communities significantly cutting back on outdoor watering, particularly ornamental landscapes surrounding homes, institutions, and businesses, resulting in many golden landscapes statewide,” said Marcus. “This will be a heavy lift for some, but we believe that the regulatory strategy adopted today is doable – in fact, many communities that have focused on conserving water have already achieved significant conservation without losing their landscapes.”

Residential customers of water suppliers with a conservation standard of 36 percent currently use between 216 and 614 gallons of water per person per day during the months of July, August, and September. Reducing their water use by 36 percent will still leave these residents with a minimum of 137 and up to 393 gallons of water per person per day; far more than the accepted standard of 55 gallons per person per day for indoor use. The difference between 55 gallons per person per day and 137 – 393 gallons per person per day means that these residents will still have water available for outdoor irrigation. Communities using less than 65 gallons per person per day will be required to reduce their overall water use by 8 percent.

“Over the longer term, we have many ways to extend our precious water resources, particularly in urban areas — conservation, recycling, stormwater capture, and desalination in appropriate cases have great promise. Many communities have done a lot already, or have ambitious goals that we hope to help them achieve. In the short run however, conservation is the cheapest, fastest and smartest way to become more resilient in the face of drought today and climate change in the future,” said Marcus.

Summary of New Requirements

- The conservation savings for all urban water suppliers (serving more than 3,000 connections) are allocated across nine tiers of increasing levels of residential gallons per capita per day (R-GPCD) water use to reduce water use by 25 percent statewide and will take effect June 1st. For specific information on the tiers and the suppliers in each tier, please visit [here](#).
- Smaller water suppliers (serving fewer than 3,000 connections) must either reduce water use by 25 percent, or restrict outdoor irrigation to no more than two days per week. These smaller urban suppliers, that collectively serve less than 10 percent of Californians, must submit a report on December 15, 2015 to demonstrate compliance.
- Commercial, Industrial and Institutional properties that are not served by a water supplier (or are self-supplied, such as by a groundwater well) also must either reduce water use by 25 percent or restrict outdoor irrigation to no more than two days per week. No reporting is required but these properties must maintain documentation of their water use and practices.
- The new prohibitions in the Executive Order apply to all Californians and will take effect immediately upon approval of the regulation by the Office of Administrative Law. These include:
 - Irrigation with potable water of ornamental turf on public street medians; and
 - Irrigation with potable water outside of newly constructed homes and buildings not in accordance with emergency regulations or other requirements established by the Building Standards Commission and the Department of Housing and Community Development.
- These are in addition to the existing restrictions that prohibit:
 - Using potable water to wash sidewalks and driveways;
 - Allowing runoff when irrigating with potable water;
 - Using hoses with no automatic shutoff nozzles to wash cars;
 - Using potable water in decorative water features that do not recirculate the water;
 - Irrigating outdoors during and within 48 hours following measureable rainfall; and
 - Restaurants serving water to their customers unless the customer requests it.
- Additionally, hotels and motels must offer their guests the option to not have their linens and towels laundered daily and prominently display this option in each guest room.

Enforcement

In addition to other powers, local agencies can fine property owners up to \$500 a day for failure to implement the water use prohibitions and restrictions. The State Water Board can issue informational orders, conservation orders or cease and desist orders to water suppliers for failure to meet their conservation standard. Water agencies that violate cease and desist orders are subject to a civil liability of up to \$10,000 a day.

Next Steps

Following Board adoption, the regulation will be submitted to the Office of Administrative Law, which has 10 days to approve or deny the regulation. If approved by the Office of Administrative Law, the regulation will take effect immediately and remain in effect for 270 days from that date.

For more information, please visit the [Emergency Water Conservation](#) website.

To learn more about the state's drought response, visit [Drought.CA.Gov](#).

Every Californian should take steps to conserve water. Find out how at [SaveOurWater.com](#).

Draft Agenda
May 18 – 19, 2015
Salt Lake City Utah

Work Group 1:00 pm start (5/18)

1. Welcome/Introductions Patrick
2. Reclamation Kib/Brad
 - a. Financial
 - i. LBDF status
 - ii. FOA
 - iii. Basin States Program
 - b. Paradox-MAISP Lisa/Chis
3. USGS Reports Lambert/Susong/Watts
 - a. Paradox Regression Equations/SIR Project
4. NRCS Travis
 - a. Summary for the M&E reports
 - b. New allocation for TA, Change in Field implementation
 - c. Update on Salinity Efforts for 2015
5. BLM Cole
 - a. Report on 2015 Allocation of BLM Funds/Activities
6. FWS Barb
7. Review of Forum/AC Agenda Patrick/Don
 - a. Federal Responses to Advisory Council Report
 - i. Reclamation
 - ii. NRCS
 - iii. BLM
 - iv. NRCS
 - v. FWS
 - vi. USGS
8. Upper Basin Benefits Report Update Patrick/Brenna
9. Paradox (continued) Kib
 - a. Status EIS
 - b. EVAP CRB
 - c. 2nd Well Citing CRB
 - d. Update on Contingency Plan
10. Forum Media Materials Patrick
 - a. Written Brochures
 - b. Video Segment on the Program
 - i. Outline
 - ii. Cost
 - iii. Interviews/Filming at Fall Meeting

- 11. Work Group Report to the Forum Patrick
 - a. Upper Basin Benefits Draft report
 - b. Forum Policy Review
 - i. Recommend Forum Sub-committee
 - c. Economic Damages
 - d. SIR Recommendations

- 12. Executive Director's report Don

- 13. Next meeting(s)
 - a. Salt Lake City, July 8 - 10
 - b. Glenwood Springs (September 22-24)

Adjourn 11:00 am on 5/19

PROPOSED AGENDA
COLORADO RIVER BASIN SALINITY CONTROL FORUM
Ninety-second Meeting

Utah Senate Building
Salt Lake City, Utah

May 20-21, 2015

Beginning time: Wednesday, May 20, 8:30 a.m.

Conducting: Chairman David Robbins

- | | | |
|-------|--|-------------------|
| I. | Introductions | Robbins |
| | A. Recognitions | |
| II. | Approval of proposed agenda | Robbins |
| III. | Welcome to Utah | Millis |
| IV. | Approval of Santa Fe minutes | Robbins |
| V. | Changes in Agency Personnel | |
| | A. NRCS | James |
| | B. Reclamation | Jacobson/Eastland |
| | C. BLM | Rossi/Miller |
| | D. USGS | Lambert |
| VI. | Congress | |
| | A. 2016 Appropriations Outside Witness Testimony | Barnett |
| | B. Washington, D.C. visits | Barnett/Trujillo |
| VII. | Forum Business | Robbins |
| | A. Approval of 2016 budget | |
| | B. Approval of 2016 State assessments | |
| | C. Appointment of Finance Committee | |
| VIII. | Short-Term Management of LCRBDF | Robbins |

BREAK

- | | | |
|-----|---------------------------------------|------------------------------------|
| IX. | Paradox Valley Unit | Jacobson/McWhirter/Norman/Nicholas |
| | A. Operations | |
| | B. EIS status | |
| | 1. Evaporation Pond CRB | |
| | 2. MASIP CRB | Wood/Block |
| | 3. 2 nd Well CRB | |
| | 4. Schedule | |
| | C. Contingency Plan | |
| | D. Letter of Support from Governors | Robbins |
| X. | Items to take to the Advisory Council | Trujillo |

Anticipated Recess to Advisory Council Meeting

RECONVENE MEETING – Thursday, May 21, 10:30 a.m.

- XI. Items from the Advisory Council Trujillo
- XII. Forum Policies Review
 - A. Discussion of Policies Dent
 - B. Action Robbins
- XIII. Report of the Program Funding Subcommittee Buschatzke/Tyrrell
- XIV. System Conservation Pilot Agreement Hasencamp
- XV. RCPP Update Kanzer/NRCS/Reclamation
- XVI. Reclamation
 - A. 2015 FOA Jacobson
 - B. Other

BREAK

- XVII. BLM
 - A. Allocation of FY2015 Appropriation Rossi
 - B. Update on Efforts to Attain a Line-item Program/Appropriation in 2017 Miller
- XVIII. NRCS
 - A. Allocation of FY2015 EQIP Funds James
 - B. Continued TA Support Under New Budget Processes State Conservationists
- XIX. Work Group Report/Tasks Dent
 - A. Assignments
- XX. Report from Executive Director Barnett
- XXI. Report from Management Committee Robbins
- XXII. Additional items Robbins
- XXIII. Public comment Robbins
- XXIV. Next meeting (Tucson, October 2015) Robbins

Anticipated Adjournment: 2:00 p.m.

AGENDA
COLORADO RIVER BASIN SALINITY CONTROL ADVISORY COUNCIL

Utah State Capitol Building
Senate Room 210
350 North State Street
Salt Lake City, Utah

Advisory Council beginning time: **Wednesday, May 20, 2015, 1:00 p.m.**

Designated Federal Officer: Kib Jacobson

Presiding: Chairman Dave Robbins

- I. Welcome and Introductions Robbins
- II. Opening Comments, Acceptance of letters appointing substitute members Jacobson
- III. Review and approval of proposed Agenda Robbins
- IV. Draft Minutes of 2014 Fall Council Meeting – Santa Fe NM
 - a. Review Jacobson
 - b. Action Robbins
- V. Report on the responses to the Advisory Council report Robbins
 - a. USDA-NRCS
 - b. Reclamation
 - c. BLM
 - d. USGS
 - e. FWS
 - f. EPA
- VI. Items from the Forum Tanya Trujillo
- VII. Basinwide Program Jacobson/Brad Parry/James Durrant
 - a. Agreements status
- VIII. Funding Reclamation’s Salinity Control Program Brent Rhees
- IX. Update from Reclamation’s LC Region Rich Eastland
- X. Rangeland Study by USDA-ARS
 - a. Science Team Perspective Pat Lambert/Cole Green
 - b. Update on Study Mark Weltz
- XI. Public Comment Robbins

Recess Meeting: **Approximately 4:30 p.m.**

Agenda Continued on Next Page

Reconvene Meeting:

Thursday, May 21, 2015, 8:30 a.m.

- XII. Basin States Program (BSP)
 - a. Update on Grand Valley Wildlife Project Jim Currier
 - b. Program status Jacobson/Parry
 - c. Basin Funds status and accounting Parry/Eastland
 - d. Contracts w/ Federal and State agencies Parry
 - e. Accounting of past Studies, Investigations, and Research (SIR) Parry

 - f. Technical Advisory Group (TAG) BSP Funding Recommendations
 - i. Continuing Recommendations Patrick Dent
 - ii. Studies, Investigations, and Research (SIR) Dent

 - g. Recommendations of the AC
 - i. On items i and ii above Robbins

 - h. Lower Gunnison Basin Coordinator Jacobson/Currier
 - i. Uinta Basin Coordinator Jacobson/Quilter
- XIII. Items for Forum Robbins
- XIV. Additional Items Robbins
- XV. Public Comment Robbins
- XVI. Other Business/Actions Robbins

Adjourn Meeting:

Approximately 11:30 a.m.

THE PARADOX VALLEY UNIT

A significant component of the Colorado River Basin Salinity Control Program

SUMMARY

The Paradox Valley Unit (PVU), a series of brine collection wells and a deep injection disposal well, is a critical component of the Colorado River Basin Salinity Control Program (Program). The PVU prevents approximately 100,000 tons of salt from entering the waters of the Colorado River Basin each year, providing just under 10 percent of the total salinity control implemented in the Colorado River Basin. It is estimated that the PVU's injection well could have as few as three to five years of operating life left due to increasing wellhead pressure. Additionally, injection induced seismic events could further shorten the operational life of the PVU injection well. Failure of the existing PVU is projected to increase salinity levels in the Colorado River by 9-10 mg/L at Hoover Dam during periods of average hydrology and could be as high as 15 mg/L during drought conditions. This would increase economic damages to agricultural, municipal, and industrial entities by approximately \$24 million annually during average hydrology. Failure of the PVU would also increase the likelihood of exceeding water quality standards. Even if there is not "failure" of the injection well, concerns with induced seismicity have led to reductions in the effectiveness of the project. The Bureau of Reclamation (Reclamation) is currently working on an Environmental Impact Statement (EIS) that evaluates long-term solutions to the current PVU. Unfortunately, under the current NEPA schedule, the final Finding of No Significant Impact (FONSI) or Record of Decision (ROD) will not be published until 2018. This time frame may surpass the life of the existing PVU injection well. Accordingly, the Colorado River Basin Salinity Control Forum (Forum) members are very concerned and support additional congressional funding for Reclamation to expedite the EIS process as quickly as possible.



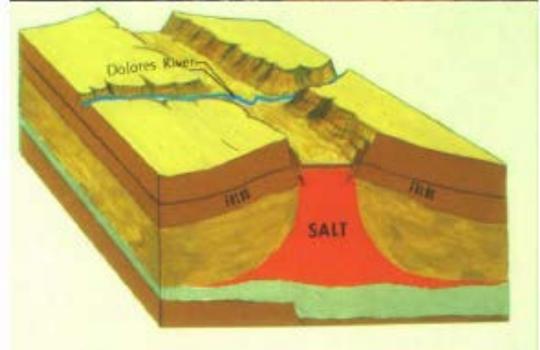
Paradox Valley, Colorado. View looking northwesterly towards the La Sal Mountains, Utah. The Dolores River cuts across (perpendicular to) the valley near its middle. The brine collection wells are along the Dolores River in the center of the valley. The deep well injection facility is behind the cliff in the Dolores River canyon on the center left of the photo.

BACKGROUND

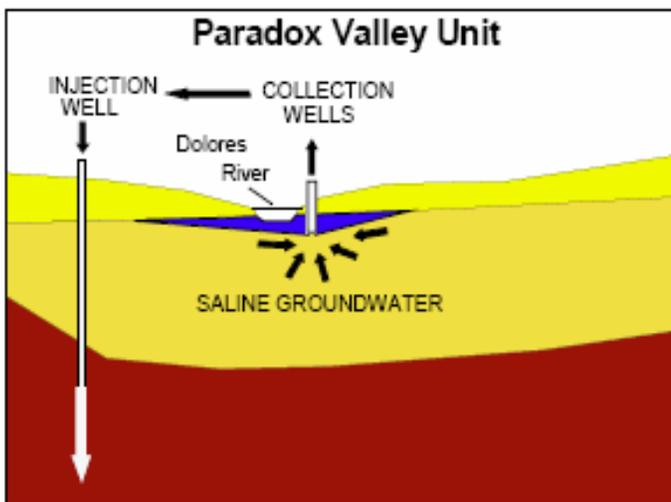
The PVU, which is operated by Reclamation, is an integral component of the Program. The PVU is located along the Dolores River (a tributary to the Colorado River) in the Paradox Valley in Montrose County,

Colorado. The Paradox Valley is a collapsed salt anticline which developed as deeply buried salts flowed upward, doming up the valley. These salts were then partially dissolved and the overlying bedrock collapsed, forming the valley.

The PVU is an original unit authorized by Congress as part of the Colorado River Basin Salinity Control Act (P.L. 93-320) in 1974. It was constructed as part of the Program's effort to meet federal water quality standards under the Federal Water Pollution Control Act, as amended. Shallow groundwater in the Paradox Valley is one of the most concentrated sources of salinity (approximately 260,000 mg/L) in the Upper Basin. The PVU was designed to intercept shallow saline groundwater (brine) before it discharges to the Dolores River. Constructed in the late 1980s and early 1990s, the PVU is comprised of a brine collection well field, a brine treatment facility, and a 16,000-foot deep injection well, along with associated roads, pipelines and electrical facilities.



Aerial photo and schematic showing the collapsed salt anticlinal structure which created the Paradox Valley and its salt issues.



Schematic of PVU operations including shallow collection wells and deep well injection.

Under normal operations, the PVU injects about nine to ten million gallons of brine per month, or about 100,000 tons of salt per year. To put that number in perspective, 100,000 tons of dried salt would fill a football field about 40 feet high. Absent the PVU, the brine would otherwise enter the Dolores River and then the main stem of the

Colorado River, significantly degrading its water quality. The PVU currently provides about 10 percent of the total salinity control on the Colorado River at a cost of approximately \$60 per ton.

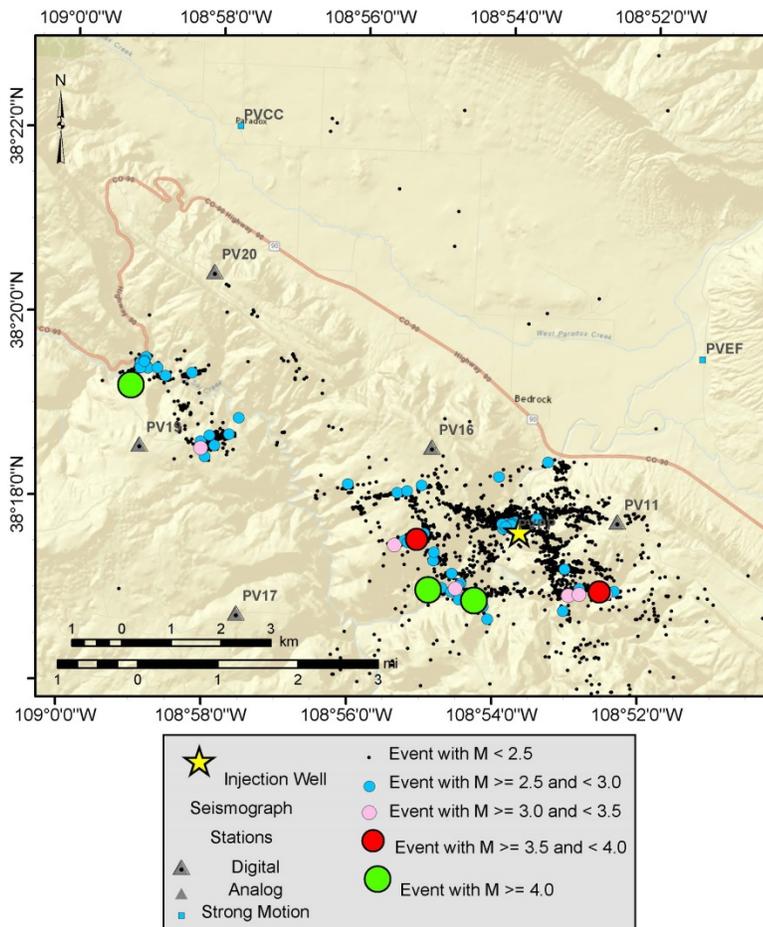
CONCERN

The PVU's existing deep injection well is nearing the end of its viability. The wellhead injection pressure has been increasing steadily towards the maximum permitted injection pressure of 5,350 psi. The permitted pressure was increased from 5,000 psi in 2006 when Reclamation was given approval from EPA to modify the Underground Injection Control permit. In 2010, it was estimated that this could be exceeded in three to five years, reducing the efficacy of the injection well. In 2013, the injection rate was reduced from 230 gpm to 200 gpm, which reduced the wellhead injection pressure. Not considering other factors that could affect the life of the well, this decrease in pressure will extend the projected utility of the well to some degree. The other remaining features of the PVU, which constitute about half of the overall investment, are not affected by the wellhead injection pressure and are projected to be operable for many years.

An additional concern that has become critical to continued operations is the increased seismic activity caused by years of long-term fluid injection into the underlying formation. Prior to the construction of PVU, the Paradox Valley was fairly aseismic. Since initiation of operations, the valley has experienced

thousands of earthquakes, with an average of more than 100 earthquakes each year. Most of these are small. In recent years, Reclamation scientists have been particularly concerned about the rate and magnitude of seismic activity occurring farther away from the well and toward the community of Paradox, Colorado.

On January 24, 2013, an M_L 4.4 earthquake struck near Paradox, Colorado causing minor damages. Consistent with its Emergency Action Plan, Reclamation immediately shut down PVU. Reclamation's Emergency Action Plan identifies contacts, responsibilities, and actions to be taken should there be an emergency.



Location and magnitude of Paradox seismic events. Modified from Reclamation's Draft Technical Memorandum TM-86-68330-2013-12 dated March 2013.

During this shutdown, Reclamation evaluated the seismic event and studied operational options. After three months it was determined to reinstate operations with the following two major changes: 1) shutdown periods would change from bi-annual to weekly, and 2) the injection rate would change from approximately 230 gpm to 200 gpm. These operational changes have decreased the rate of pressure buildup and likely reduced the short-term potential for further earthquakes, but have also reduced the amount of salt removed each year. As long-term injection continues, pressures will again rise, eventually requiring further reductions to avoid the risk of damaging earthquakes. A long-term replacement alternative is urgently needed.

IMPACT OF FAILURE

Salinity in the Colorado River causes economic damages to water users in the Lower Colorado River Basin. Economic modeling shows several hundred million dollars per year of economic damages to agricultural crops, water utilities and municipal water suppliers, the commercial and industrial sectors, and residential household appliances

which use Colorado River water. If the PVU were to become inoperable, absent the development of another alternative to remove the salt load, salinity levels in the Dolores River would increase by more than 700 mg/L. In the Lower Basin, the TDS of the Colorado River would increase by 9-10 mg/L in just a few years during average hydrological conditions, causing damages to increase by approximately \$24 million annually. Even more severe, during periods of drought the increase in downstream salinity could exceed 15 mg/L. Moreover, the loss of the PVU injection well will increase the probability of exceeding water quality standards.

DEVELOPMENT OF ALTERNATIVES

To address the crucial need to develop a long-term replacement solution to the PVU injection well, Reclamation is preparing an EIS under which it is currently evaluating: 1) the siting and construction of a second deep-injection well, 2) creation of evaporation ponds, or 3) other new technology alternatives (so

far unidentified). Reclamation published its EIS Scoping Report in January 2013 after several years of conducting preliminary studies with experts in geology, exploration, geophysics, drilling, seismicity, injection wells and operational activities. As part of the EIS process, further analysis is being conducted and Reclamation is working closely with the U.S. Fish & Wildlife Service, U.S. Bureau of Land Management, State of Colorado, Montrose County, Colorado, and the Paradox Valley community to evaluate the potential of a pilot evaporation pond. The pilot evaporation pond project is described in Reclamation's 2013 EIS Scoping Report.

Reclamation does not anticipate completing alternative impact analyses before July of 2016, nor having a final NEPA document before the fall of 2017. This means a final FONSI or ROD will not likely be published before 2018. The most significant hindrance to its completion is the availability of sufficient funding for each of the identified alternatives to be appropriately analyzed.

FORUM'S POSITION

Loss of the Paradox Valley Unit's injection well presents real concerns to the Colorado River Basin Salinity Control Program. Due to seismic activity, the efficacy of the unit has already been reduced. The Colorado River Basin Salinity Control Forum members, comprised of representatives from the Colorado River Basin States, feel strongly that this unit must remain operational in order for the States to meet their water quality obligations and avert economic damages in areas like Las Vegas, Los Angeles, San Diego, Phoenix, Tucson, Yuma and the Imperial and Coachella Valleys. The Forum members, Reclamation, other federal agencies, scientists, and consultants are all in agreement that an alternative to the existing deep-well injection unit is needed to ensure that its failure does not cause salinity levels to increase in the Colorado River, leading to unacceptable increases in economic and physical damages. The analysis and construction of alternatives is essential to avoid the risk of increased seismic activity at or near the town of Paradox. While the EIS is currently underway, the time frame for its completion may surpass the life of the injection well. Furthermore, no contingency or emergency plan or alternative is in place outside of the current EIS process to replace this essential facility. For these reasons, the Forum members would like Reclamation 1) to complete the EIS process as soon as possible (sooner than the current schedule) and 2) to maintain a viable Emergency Action Plan. The Forum Members support Reclamation's efforts and pledge their assistance to ensure sufficient funding exists for Reclamation to accomplish these paramount tasks.

Photos and schematics used in figures courtesy of the U.S. Bureau of Reclamation

COLORADO RIVER BASIN SALINITY CONTROL FORUM

The Colorado River Basin Salinity Control Forum was created by the seven Colorado River Basin states in 1973 to act as a common voice for the states on salinity matters and to coordinate with federal agencies in the implementation of the Program. Forum membership consists of appointees from each of the governors of the Colorado River Basin states and includes water quantity and water quality agency leads and representatives from major water user organizations.

Don A. Barnett
Executive Director

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Updated April 28, 2015