

September 1, 2016

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

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

Date: Wednesday, September 14, 2016
Time: 1:00 p.m.
Place: The Metropolitan Water District of Southern California Weymouth Water Treatment Plant - Water Quality Lab Room 2-11 700 North Moreno Ave. La Verne, CA 91750

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

Regular Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, September 14, 2016
1:00 p.m.

The Metropolitan Water District of Southern California
Weymouth Water Treatment Plant
Water Quality Lab – Room 2-11
700 North Moreno Ave.
La Verne, CA 91750

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

1. Call to Order
2. Opportunity for the Public to Address the Board (Limited to 5 minutes)
In accordance with California Government Code, Section 54954.3(a)
3. Administration
 - a. Consideration and approval of the Minutes of the Meeting held August 11, 2016
(Action)
4. Colorado River Basin Water Reports
 - a. Reports on current reservoir storage, reservoir releases, projected water use, and forecasted river flows
 - b. State and Local Water Reports
5. Review and consideration of Applications for Lower Colorado Water Supply Project water **(Action)**
6. Staff reports regarding Colorado River Basin Programs
 - a. Review status of Basin States drought contingency planning
 - b. Review status of the Colorado River Basin Water Supply and Demand Study
 - c. Review status of Minute 319 and Minute 32x
 - d. Review status of the Salinity Control Forum, Workgroup, and Advisory Council
 - e. Review status of the Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental Management Plan EIS
 - f. Review status of the Lower Colorado River Multi-Species Conservation Program
7. Announcements/Notices
8. Executive Session
An Executive Session may be held by the Board pursuant to provisions of Article 9

(commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code and Sections 12516 and 12519 of the Water Code to discuss matters concerning interstate claims to the use of Colorado River system waters in judicial proceedings, administrative proceedings, and/or negotiations with representatives from other states or the federal government.

10. Other Business

- a. Next Board Meeting: Regular Meeting
October 12, 2016
10:00 a.m.
Vineyard Room
Holiday Inn Ontario Airport
2155 East Convention Center Way
Ontario, CA 91764-4452
Tel: (909) 212-8000, Fax: (909) 418-6703

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Thursday, August 11, 2016

A meeting of the Colorado River Board of California was held at the Los Angeles Department of Water and Power in Bishop, California. Thursday, August 11, 2016

Committee Members and Alternates Present

Stephen Benson	David R. Pettijohn
Brian Brady	John Powell, Jr.
Dana Bart Fisher, Jr., Chairman	Jack Seiler
Jeanine Jones	David Vigil
Peter Nelson	Doug Wilson
Glen D. Peterson	

Committee Members and Alternates Absent

James Hanks	Christopher Hayes
Hank Kuiper	
Michael Touhey	

Others Present

Steve Abbott	Eric Katz
Marty Adams	Andrew Leimgruber
Robert Cheng	Ronald C. Leimgruber
Dan Denham	Sara Leimgruber
Matt Dessert	Jessica Lovecchio
Karen Donovan	Jan Matusak
Castulo Estrada	Vic Nguyen
Andrew Fisher	Fernando Paludi
Sally Fisher	Autumn Plourd
Norma Sierra Galindo	Angela Rashid
Serge Haddad	Tom Ryan
Christopher Harris	Tina Shields
Bill Hasencamp	Darren Simon
Scott Houston	Tanya Trujillo
Michael Hughes	Gerald Zimmerman
Lisa Johansen	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 11:05 A.M.

WELCOME

General Manager Adams with the Los Angeles Department of Water and Power welcomed everyone to the Owens Valley, Inyo County and Mono Basin to see the Los Angeles Aqueduct system. He acknowledged the similarities between the environmental mitigation projects in the Owens Valley and projects proposed for the Salton Sea. Mr. Adams also thanked the speakers from his staff that were present and provided vital information during the tour. He also introduced Jeff Griffiths, the Chair of the County Board of Supervisors for Inyo County. Mr. Griffiths also welcomed everyone and acknowledged the county's long relationship with the Los Angeles Department of Water and Power.

OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD

Chairman Fisher invited anyone in the audience to address the Board on items on the agenda or matters related to the Board.

Consideration and Approval of the Minutes

Chairman Fisher asked for a motion to approve the June 15, 2016 meeting minutes. Mr. Benson moved that the minutes be approved, seconded by Mr. Pettijohn, and by unanimous support, the June 15, 2016 meeting minutes were approved.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Water Reports and State and Local Water Reports

Ms. Trujillo reported that as of, August 1, the Colorado River Basin system was 52% of capacity. Lake Mead was 36% of capacity, while storage in Lake Powell was 56%. Ms. Trujillo stated that Lake Mead's elevation was 1072.2 feet, noting that in late July, Lake Mead hits its lowest level on record but its elevation is slowly increasing. The preliminary observed April to July 2016 runoff to Lake Powell was 92% of normal. Ms. Trujillo noted that on August 15, 2016, Reclamation will be releasing the August 24-Month study which will be used to set the operating tiers for reservoir operations in 2017. For 2017, recent projections show that 9.0

million acre-feet will be released from Lake Powell and that Lake Mead will be operating under a normal or surplus year for the Lower Basin. Ms. Trujillo reported that for 2018, Reclamation's current projections indicate that there is a 50% chance of hitting the first level of shortage under the 2007 Guidelines.

Ms. Trujillo reported that the second consultation meeting for the Annual Operating Plan (AOP) was held at the end of July in Las Vegas, Nevada. Public drafts are available on Reclamation's website. Ms. Trujillo reiterated that the AOP governs the operation of all the reservoirs in the system. Further, Ms. Trujillo reported that during the meeting she provided a brief annual report on California's compliance with the Colorado Water Use Plan, which included reporting of various conservation efforts, canal linings, transfers and fallowing programs that have been implemented over the past several years and concluded that California has exceeded the targets that were established in the 2007 Guidelines for California's agricultural water use reductions. Her report also included an update on the status of California's drought.

State and Local Reports

Mr. Benson reported on the status of Imperial Irrigation District's transfers to the Coachella Valley Water District and the San Diego County Water Authority as required by the Quantification Settlement Agreement. Mr. Benson reported that IID currently has an over 100,000 acre-feet underrun and is scheduled to store 25,000 acre-feet in Lake Mead as Intentionally Created Surplus.

Ms. Jones reported that the California Department of Water Resources has released the results of the Spring Statewide Groundwater Level Monitoring from the California Statewide Groundwater Elevation Monitoring program on its website. The results indicated continued declines in the San Joaquin Valley and significant decline in the Ventura Coastal Plain.

Mr. Peterson reported that it is anticipated that the Metropolitan Water District will deliver the same amount of water it received last month. To date, MWD has delivered 82% of its average interim deliveries which indicates that their member agencies are still conserving water.

Vice Chairman Wilson reported that SDCWA conservation targets have been reduced because it has passed the State's "stress test", certifying that it has three years of dry year storage available. Mr. Wilson reported that SDWCA has met and exceeded the State's mandated conservation targets, conserving 22% over a 13-month period of time. Mr. Wilson noted that SDWCA is still advising customers to conserve water.

Mr. Pettijohn stated that the LADWP has also passed the stress test and is no longer required to implement the State mandated conservation target. Mr. Pettijohn explained that aside

from the State mandated conservation targets, the City of Los Angeles, under direction of the Mayor, has set a goal to improve water efficiency and reduce its use to 104 gallon per capita per day. Further, despite passing the stress test, the City of Los Angeles will continue water use restrictions. Mr. Pettijohn reported that the LADWP recently adopted the 2015 Urban Water Management Plan which outlines the levels of water use efficiency that the City of Los Angeles hopes to achieve. Mr. Pettijohn stated that LADWP is exporting 100,000 acre-feet from the LA Aqueduct system and leaving a lot of water in the Owens Valley watershed for environmental maintenance and enhancement. Mr. Pettijohn explained that LADWP water supplies are very closely integrated with the Delta and the Colorado River systems because if LADWP exports less water from the Owens Valley it needs to purchase more water from MWD to supplement its supply. These actions affect MWD's incremental supplies in the Delta, its land fallowing programs tied to the Colorado River systems and the water supply needs of its member agencies.

Mr. Nelson reported that Coachella Valley Water District has also certified that it has three years of dry-year storage and no longer needs mandatory conservation. In July 2016, CVWD conserved 28% and 36% over a ten-year average. He also reported that CVWD has removed over 6 million square feet of turf. CVWD continues to recharge the aquifer with Colorado River water and the Board is in the process of developing policies to address the aquifer's overdraft issues using QSA water.

Ms. Trujillo reported that as of August 1, the State Water Project reservoirs were at 57% of capacity.

Drought Contingency Planning

Ms. Trujillo reported that the drought contingency planning efforts are still underway and that there have been no new developments. Ms. Trujillo reported that during the latest meeting, which involved managers from California, Arizona, Nevada and the Commissioner of Reclamation the attendees reviewed the status of the planning efforts and discussed the potential for coming to an agreement by the end of the year, before the transition of the new federal government. Ms. Trujillo reiterated that the California agencies would like the agreement to include increased operational flexibility regarding ICS retrieval below the existing shortage triggers outlined in the 2007 Guidelines and that there should be incentives for creating additional storage in Lake Mead. The ultimate goal of the drought contingency planning process is to avoid hitting critically low levels at Lake Mead. Responding to a question from Mr. Wilson regarding the timeline for California to finalize an agreement, Ms. Trujillo stated that each agency would have an opportunity for its Board to review the agreement and would determine its own approval process.

Mr. Benson asked whether there have been discussions regarding the Salton Sea Memorandum of Understanding with the State of California. Ms. Trujillo responded that the federal government recognizes the significant challenges within California regarding the Bay Delta and the Salton Sea. She noted that the California Natural Resources Department has established an Assistant Secretary positions for the Salton Sea and has been holding meetings to discuss the restoration efforts. The federal government is interested in putting together a MOU between the Department of the Interior and the State Natural Resources Department. Chairman Fisher noted that in addition to finalizing the Salton Sea MOU and Bay Delta issues, the federal government will also continue its work in the Yuma area to create 100,000 acre-feet to offset water released via the Bypass for Minute 242 operations.

Salinity Control Forum

Ms. Trujillo reported that the next Forum meeting is scheduled for the end of October in Moab, Utah and will include a tour and 20th anniversary celebration for the Paradox Disposal Well. Ms. Trujillo reiterated that the Paradox Well has far exceeded its projected useful life and an EIS process is underway to replace the well. It is anticipated that the EIS will be completed by 2018. Ms. Trujillo reported that the EIS is considering three options for salt disposal which include constructing a new injection well, surface evaporation ponds, and a commercial disposal concept. Ms. Trujillo also reported that the Forum is developing a video to highlight the successes of the Salinity Control Program. The primary source of funding for the Salinity Control Program is from power revenues from the Hoover Dam. California contractors represent the largest purchasers of energy from the Hoover Dam and contributors to the program.

Minute 319/32x

Ms. Trujillo reported that the bi-national negotiation group has had three negotiation sessions since June 2016. It is anticipated that a draft framework of the new Minute may be completed by the end of September. Ms. Trujillo stated that the new Minute would include similar provisions to Minute 319 such as the provision for Mexico to share in shortages if there are shortages in the U.S. The new Minute will also include a project component, which will give U.S. funders the opportunity to invest in conservation projects in Mexico, resulting in increased water for water users in the U.S. Ms. Trujillo reported that the environmental flows team would probably not recommend an additional pulse flow release but rather utilize their water to maintain existing habitat in Mexico. The new Minute's provisions may extend through the 2026 timeframe so that they are in-sync with the 2007 Guidelines. Ms. Trujillo added that the Mexican negotiators are currently reviewing how Reclamation analyzes and develops the hydrology projections so that they are comfortable with Reclamation's operating procedures for the reservoir system.

Glen Canyon Dam Adaptive Management Program

Ms. Trujillo stated that the Glen Canyon Dam Adaptive Management Program evaluates the various resource goals along the river through the Grand Canyon, from Lake Powell down to Lake Mead. An EIS process has been underway for several years to evaluate and determine new operating criteria for that region. Ms. Trujillo stated that completion of the EIS is also driven by the deadline for the federal administration transition. A Record of Decision is anticipated within the next few months. The next Adaptive Management Group meeting is scheduled for the end of August in Flagstaff, Arizona.

Multiple Species Conservation Program

Mr. Harris reported that the Fiscal Year 2017 budget has been approved, which is approximately \$30 million for program implementation. He also reported that Reclamation finalized the Accomplishment Reports for 2015, which details the amount of habitat created and fish repatriated to the river system. Mr. Harris added that and Reclamation is working to fill a position for a Biological Program Manager as one of the program's key biologists accepted a position with the National Park Service. The next meeting for the Workgroup is scheduled for September and a Steering Committee meeting is scheduled for late October. Mr. Harris added that copies of the program's annual California Endangered Species Act (CESA) Compliance Report were submitted to Chris Hayes and David Vigil with the Department of Fish and Wildlife. Mr. Harris explained that the report outlines the progress made toward meeting the program's CESA obligations.

ANNOUNCEMENTS

Ms. Trujillo reported that Jennifer Gimbel, Acting Assistant Secretary for Water and Science has retired and moved back to Colorado. She also noted that she thinks Mike Connor, Deputy Secretary of the Interior and Estevan Lopez, Commissioner of the Bureau of Reclamation plan to stay with the administration through January 20, 2017, the federal administration transition deadline.

Ms. Trujillo reported that planning for the Colorado River Water Users Association (CRWUA) conference is underway and the conference will be held on December 14 -16, 2016. A Colorado River Board meeting will be held in conjunction to the conference.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn the meeting. Upon the motion of Mr. Pettijohn, seconded Mr. Nelson, and unanimously carried, the meeting was adjourned at 11:52 P.M.

Sep 06, 2016

LOWER COLORADO WATER SUPPLY REPORT

River Operations
Bureau of Reclamation

Questions: BCOOWaterops@usbr.gov

(702) 293-8373

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

	PERCENT	Content 1000 ac-ft (kaf)	Elev. (Feet above mean sea level)	7-Day Release (CFS)
CURRENT STORAGE	FULL			
LAKE POWELL	54%	13,042	3613.07	12,400
* LAKE MEAD	37%	9,625	1075.30	11,800
LAKE MOHAVE	93%	1,674	642.10	10,900
LAKE HAVASU	94%	583	448.17	8,700
TOTAL SYSTEM CONTENTS **	51%	30,601		
As of 09/05/2016				
SYSTEM CONTENT LAST YEAR	52%	30,764		
* 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	48%	1,104		
Painted Rock Dam	0%	0	535.10	0
Alamo Dam	4%	39	1080.56	25
Forecasted Water Use for Calendar Year 2016 (as of 09/06/2016) (values in kaf)				
NEVADA			247	
SOUTHERN NEVADA WATER SYSTEM				219
OTHERS				28
CALIFORNIA			4,196	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				765
IRRIGATION DISTRICTS				3,286
OTHERS				144
ARIZONA			2,507	
CENTRAL ARIZONA PROJECT				1,389
OTHERS				1,118
TOTAL LOWER BASIN USE				6,950
DELIVERY TO MEXICO - 2016 (Mexico Scheduled Delivery + Preliminary Yearly Excess ¹)				1,512
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - SEPTEMBER FINAL FORECAST DATED 09/01/2016				
		MILLION ACRE-FEET	% of Normal	
FORECASTED WATER YEAR 2016		9.634	89%	
OBSERVED APRIL-JULY 2016		6.610	92%	
AUGUST OBSERVED INFLOW		0.253	51%	
SEPTEMBER INFLOW FORECAST		0.300	74%	
		Upper Colorado Basin	Salt/Verde Basin	
WATER YEAR 2016 PRECIP TO DATE		96% (28.1")	89% (23.8")	
CURRENT BASIN SNOWPACK		NA% (NA)	NA% (NA)	

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

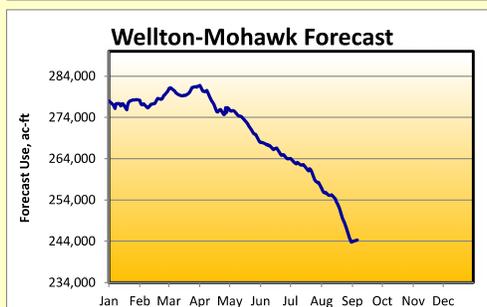
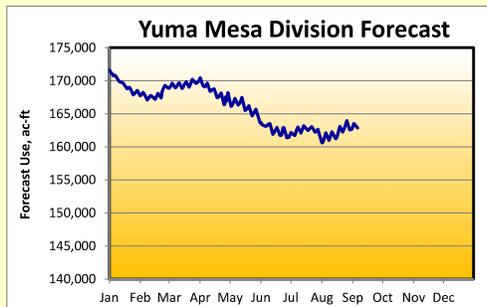
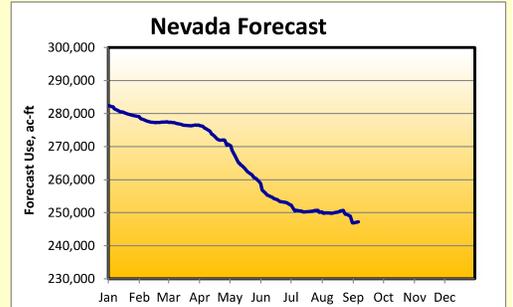
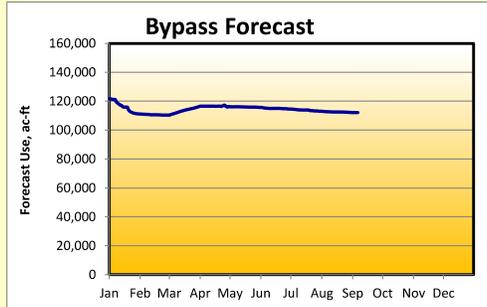
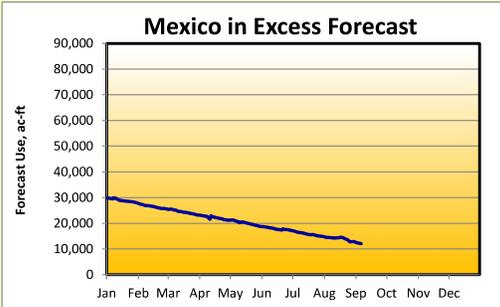
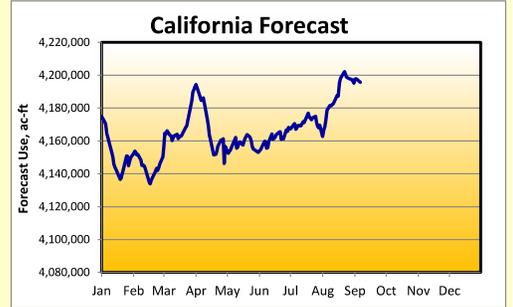
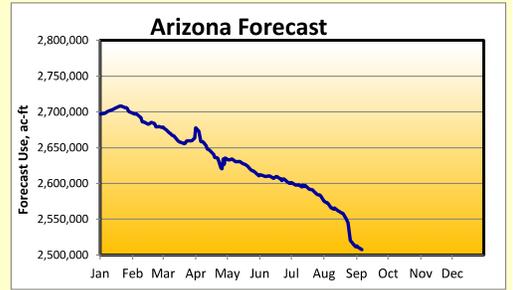
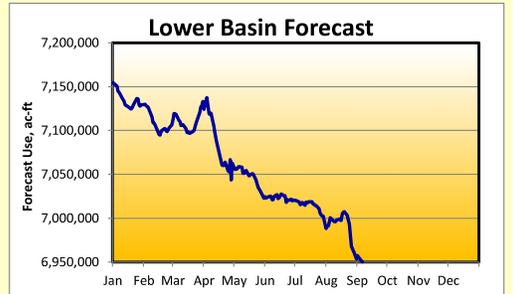
**U.S. BUREAU OF RECLAMATION
LOWER COLORADO REGION
CY 2016**

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

WATER USE SUMMARY

	Use To Date CY2016	Forecast Use CY2016	Approved Use ² CY2016	Excess to Approval CY2016
ARIZONA	1,829,406	2,507,345	2,625,942	-118,597
CALIFORNIA	3,200,585	4,195,584	4,175,000	20,584
NEVADA	169,855	247,249	282,500	-35,251
STATES TOTAL ³	5,199,846	6,950,178	7,083,442	-133,264
MEXICO IN SATISFACTION OF TREATY (Including downward delivery) TO MEXICO AS SCHEDULED	1,153,839	1,512,119	1,500,000	12,119
MEXICO IN EXCESS OF TREATY	2,536	12,119		
BYPASS PURSUANT TO MINUTE 242	63,880	112,066		
TOTAL LOWER BASIN & MEXICO	6,417,565	8,574,363		

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



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

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

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

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

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

WATER USER	Use To Date CY2016	Forecast Use CY2016	Estimated Use CY2016	Excess to Estimated Use CY2016	Diversion To Date CY2016	Forecast Diversion CY2016	Approved Diversion CY2016	Excess to Approved Diversion CY2016
ARIZONA PUMPERS	11,162	14,539	14,539	--	17,297	22,530	22,530	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	78	131	131	--	78	131	131	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	115	169	169	--	115	169	169	0
DAVIS DAM PROJECT	2	2	2	--	43	56	56	0
BULLHEAD CITY	4,647	7,354	8,523	--	6,936	10,974	12,720	-1,746
MOHAVE WATER CONSERVATION	454	592	592	--	676	881	881	0
BROOKE WATER LLC	161	210	210	--	241	314	314	0
MOHAVE VALLEY IDD	14,329	20,707	21,549	--	26,536	38,345	39,905	-1,560
FORT MOJAVE INDIAN RESERVATION, AZ	27,031	35,491	47,790	--	50,058	65,725	88,500	-22,775
GOLDEN SHORES WATER CONSERVATION DISTRICT	243	316	316	--	362	472	472	0
HAVASU NATIONAL WILDLIFE REFUGE	3,550	4,168	3,563	--	29,579	36,827	41,820	-4,993
LAKE HAVASU CITY	5,494	8,087	8,370	--	8,861	13,044	13,500	-456
CENTRAL ARIZONA PROJECT	986,337	1,388,876		--	986,337	1,388,876		
TOWN OF PARKER	262	375	392	--	589	867	916	-49
COLORADO RIVER INDIAN RESERVATION, AZ	254,846	310,687	341,393	--	437,493	597,615	662,402	-64,787
EHRENBURG IMPROVEMENT ASSOCIATION	174	226	226	--	244	318	318	0
CIBOLA VALLEY IRRIGATION DISTRICT	13,219	17,218	17,218	--	18,482	24,074	24,074	0
CIBOLA NATIONAL WILDLIFE REFUGE	9,467	12,035	12,741	-706	15,269	19,411	20,550	-1,139
IMPERIAL NATIONAL WILDLIFE REFUGE	1,342	2,265	3,019	-754	2,167	3,654	4,868	-1,214
BLM PERMITEES (PARKER DAM to IMPERIAL DAM)	755	984	984	--	1,164	1,516	1,516	0
CHA CHA, LLC	967	1,216	1,225	--	1,488	1,870	1,884	-14
BEATTIE FARMS	240	437	723	--	368	671	1,110	-439
YUMA PROVING GROUND	328	466	550	--	328	466	550	-84
GILA MONSTER FARMS	2,301	3,427	5,271	--	4,135	6,129	9,156	-3,027
WELLTON-MOHAWK IDD	181,670	244,289	278,000	-33,711	266,765	379,490	424,350	-44,860
BLM PERMITEES (BELOW IMPERIAL DAM)	66	86	86	0	101	132	132	0
CITY OF YUMA	9,438	14,310	16,036	-1,726	16,742	25,507	27,583	-2,076
MARINE CORPS AIR STATION YUMA	978	1,381	1,385	--	978	1,381	1,385	-4
UNION PACIFIC RAILROAD	16	24	24	--	33	48	48	0
UNIVERSITY OF ARIZONA	598	795	690	--	598	795	690	105
YUMA UNION HIGH SCHOOL DISTRICT	111	151	151	--	148	201	200	1
DESERT LAWN MEMORIAL	67	87	87	--	94	123	123	0
NORTH GILA VALLEY IDD	8,550	10,662	10,929	--	29,329	42,012	44,000	-1,988
YUMA IRRIGATION DISTRICT	26,601	37,026	40,822	--	49,088	68,988	75,100	-6,112
YUMA MESA IDD	83,822	115,165	119,859	--	143,230	194,513	202,464	-7,951
UNIT "B" IRRIGATION DISTRICT	14,647	20,120	21,037	--	20,709	28,126	29,800	-1,674
FORT YUMA INDIAN RESERVATION	1,069	1,392	1,392	--	1,643	2,140	2,140	0
YUMA COUNTY WATER USERS' ASSOCIATION	163,114	228,913	250,443	--	242,361	356,694	386,000	-29,306
COCOPA INDIAN RESERVATION	1,135	2,940	5,778	--	1,238	4,030	8,960	-4,930
RECLAMATION-YUMA AREA OFFICE	20	26	26	--	20	26	26	0
RETURN FROM SOUTH GILA WELLS								
TOTAL ARIZONA	1,829,406	2,507,345	2,625,903		2,381,923	3,339,141	3,541,005	
CAP	986,337	1,388,876				1,388,876		
ALL OTHERS	843,069	1,118,469	1,236,241			1,950,265	2,151,343	
YUMA MESA DIVISION, GILA PROJECT	118,973	162,853	171,610	-8,757		305,513		

ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
Creation of Protection Volume - CAWCD ¹	-134,860
Creation of Protection Volume - Reclamation ²	-13,933
System Conservation Water - CAWCD ³	-25,265
Total State Adjusted Apportionment	2,625,942
Excess to Total State Adjusted Apportionment	-118,597
Estimated Allowable Use for CAP	1,508,183

1/ In 2016, CAWCD intends to conserve no less than 134,860 AF of Colorado River water as part of its commitment under the 2014 Memorandum of Understanding for Pilot Drought Response Actions (MOU).

2/ On October 6, 2015, the Fort McDowell Yavapai Nation (Nation) and Reclamation entered into a Drought Response Agreement in which the Nation agreed to forego delivery of 13,933 AF of the Nation's CAP water entitlement in 2016. Reclamation intends to apply this volume of water toward its commitment under the MOU.

3/ On March 17, 2016, Reclamation and CAWCD entered into a System Conservation Implementation Agreement (SCIA) under the Pilot System Conservation Program. In accordance with the SCIA, CAWCD agreed to create System Conservation Water by forbearing from remarketing 25,265 AF of CAP water within the CAP service area for delivery in 2016.

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

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

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

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

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

WATER USER	Use	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess to
	To Date	Use	Use	Estimated	To Date	Diversion	Diversion	Approved
	CY2016	CY2016	CY2016	Use	CY2016	CY2016	CY2016	Diversion
CALIFORNIA PUMPERS	1,352	1,761	1,761	--	2,450	3,191	3,191	0
FORT MOJAVE INDIAN RESERVATION, CA	4,776	6,186	8,995	--	8,879	11,499	16,720	-5,221
CITY OF NEEDLES (includes LCWSP use)	943	1,494	1,931	-437	1,412	2,189	2,720	-531
METROPOLITAN WATER DISTRICT	676,264	765,497	591,360	--	678,127	768,354	594,451	--
COLORADO RIVER INDIAN RESERVATION, CA	2,485	3,237	3,237	--	4,117	5,362	5,362	0
PALO VERDE IRRIGATION DISTRICT	289,643	378,002	400,192	--	585,240	818,407	868,000	-49,593
YUMA PROJECT RESERVATION DIVISION	35,213	46,961	57,009	--	67,212	94,281	107,359	-13,078
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	--	--	--	--	33,327	46,063	52,359	-6,296
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	--	--	--	--	33,885	48,218	55,000	-6,782
YUMA ISLAND PUMPERS	3,485	4,540	4,540	--	6,307	8,215	8,215	0
FORT YUMA INDIAN RESERVATION - RANCH 5	509	663	663	--	922	1,201	1,201	0
IMPERIAL IRRIGATION DISTRICT	1,846,450	2,493,172	2,612,400	-119,228	1,820,556	2,507,378	2,727,875	--
SALTON SEA SALINITY MANAGEMENT	78,606	130,000	130,000	0	80,929	136,420	136,420	--
COACHELLA VALLEY WATER DISTRICT	260,160	363,160	362,000	1,160	271,272	380,835	378,869	--
OTHER LCWSP CONTRACTORS	559	728	728	--	884	1,152	1,152	0
CITY OF WINTERHAVEN	52	68	68	--	75	98	98	0
CHEMEHUEVI INDIAN RESERVATION	88	115	115	--	8,706	11,340	11,340	0
TOTAL CALIFORNIA	3,200,585	4,195,584			3,537,088	4,749,922	4,862,973	

CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION

California Basic Apportionment	4,400,000
Conservation for Salton Sea Restoration - 2010 ¹	-25,000
Creation of Extraordinary Conservation ICS (IID)	-200,000
Creation of Extraordinary Conservation ICS (MWD)	
Total State Adjusted Apportionment	4,175,000
Excess to Total State Adjusted Apportionment	20,584

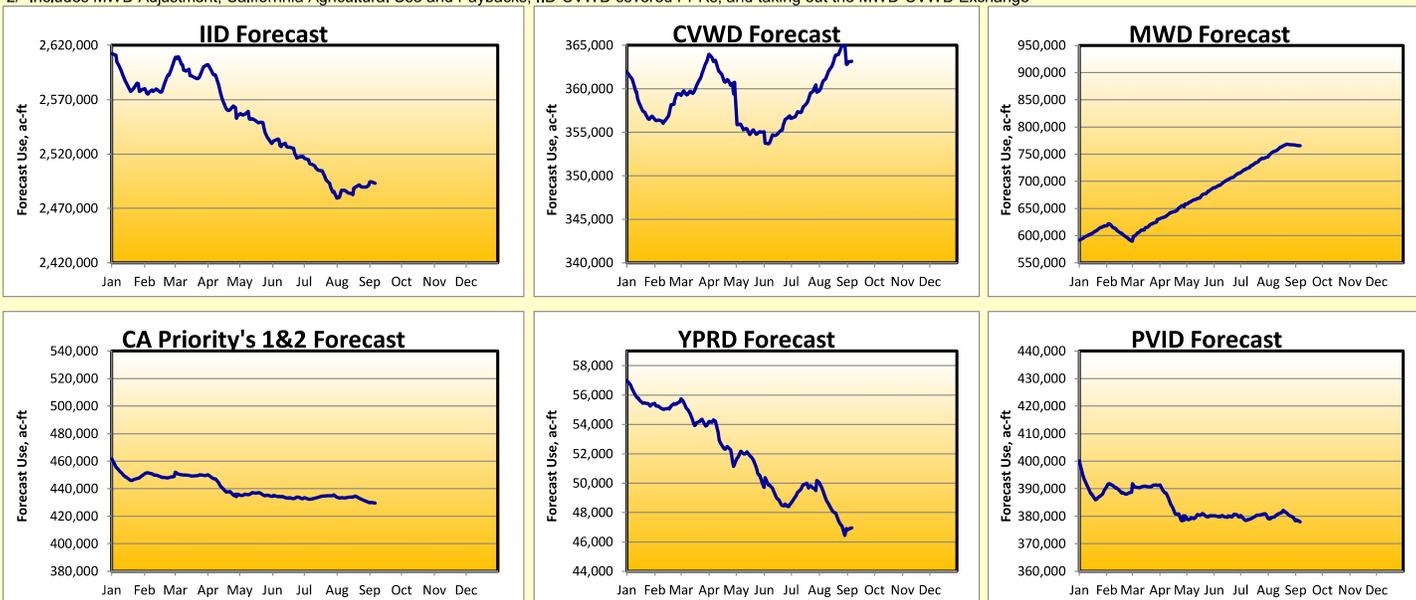
ISG ANNUAL TARGET COMPARISON CALCULATION

Priorities 1, 2, 3b Use (PVID+YPRD+Island+PVID Mesa)	429,503
MWD Adjustment	-9,503
Total California Agricultural Use (PVID+YPRD+Island+IID+CVWD)	3,285,835
California Agricultural Paybacks	0
Misc. PPRs Covered by IID and CVWD	14,500
California ICS Creation (IID ICS)	25,000
Total Use for Target Comparison ²	3,315,832
ISG Annual Target (Exhibit B)	3,440,000
Amount over/(under) ISG Annual Target	-124,168

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

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

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



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

NOTE:
 • Diversions and uses that are pending approval are noted in *red italics*.
 • Water users with a consumptive use entitlement - **Excess to Estimated Use** column indicates overrun/underrun of entitlement. Dash in this column indicates water user has a diversion entitlement.
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NEVADA WATER USERS
 FORECAST OF END OF YEAR CONSUMPTIVE USE
 FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS

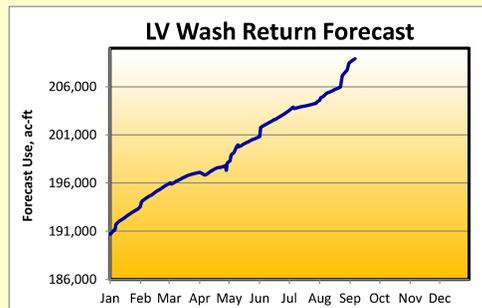
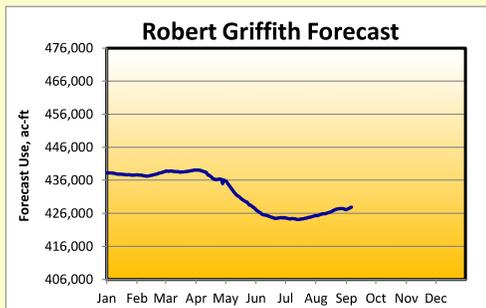
[Nevada Schedules and Approvals](#)
[Historic Use Records \(Water Accounting Reports\)](#)

WATER USER	Use	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess to
	To Date	Use	Use	Estimated		To Date	Diversion	Diversion
	CY2016							
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	299,330	427,872	438,176	-10,304	299,330	427,872	438,176	-10,304
LAKE MEAD NRA, NV - Diversions from Lake Mead	246	358	403	---	246	358	403	-45
LAKE MEAD NRA, NV - Diversions from Lake Mohave	109	155	152	---	109	155	152	3
BASIC MANAGEMENT INC.	3,979	6,738	8,208	---	3,979	6,738	8,208	-1,470
CITY OF HENDERSON (BMI DELIVERY)	8,576	13,593	15,878	---	8,576	13,593	15,878	-2,285
NEVADA STATE DEPT. OF FISH & GAME	7	11	12	-1	385	505	405	---
PACIFIC COAST BUILDING PRODUCTS INC.	624	923	928	---	624	923	928	-5
BOULDER CANYON PROJECT	133	173	173	---	230	300	300	0
BIG BEND WATER DISTRICT	1,601	3,133	5,355	---	3,362	6,273	10,000	-3,727
FORT MOJAVE INDIAN TRIBE	2,296	3,189	3,886	---	3,427	4,760	5,800	-1,040
LAS VEGAS WASH RETURN FLOWS	-147,046	-208,896	-190,671	---				
TOTAL NEVADA	169,855	247,249	282,500	-10,305	320,268	461,477	480,250	-18,873
SOUTHERN NEVADA WATER SYSTEM (SNWS)	152,284	218,976				427,872		
ALL OTHERS	17,571	28,273				33,605		
NEVADA USES ABOVE HOOVER	165,958	240,927				450,444		
NEVADA USES BELOW HOOVER	3,897	6,322				11,033		

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

Pilot System Conservation Program	
Tributary Conservation - Left in Lake Mead ¹	7,500

NEVADA ADJUSTED APPORTIONMENT CALCULATION	
Nevada Basic Apportionment	300,000
Creation of Protection Volume ²	-17,500
Total State Adjusted Apportionment	282,500
Excess to Total State Adjusted Apportionment	-35,251



1/ On June 4, 2015, Reclamation and SNWA entered into a System Conservation Implementation Agreement in which SNWA agreed to conserve 7,500 AF of Colorado River water from its Tributary Conservation projects to create System Conservation Water.

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

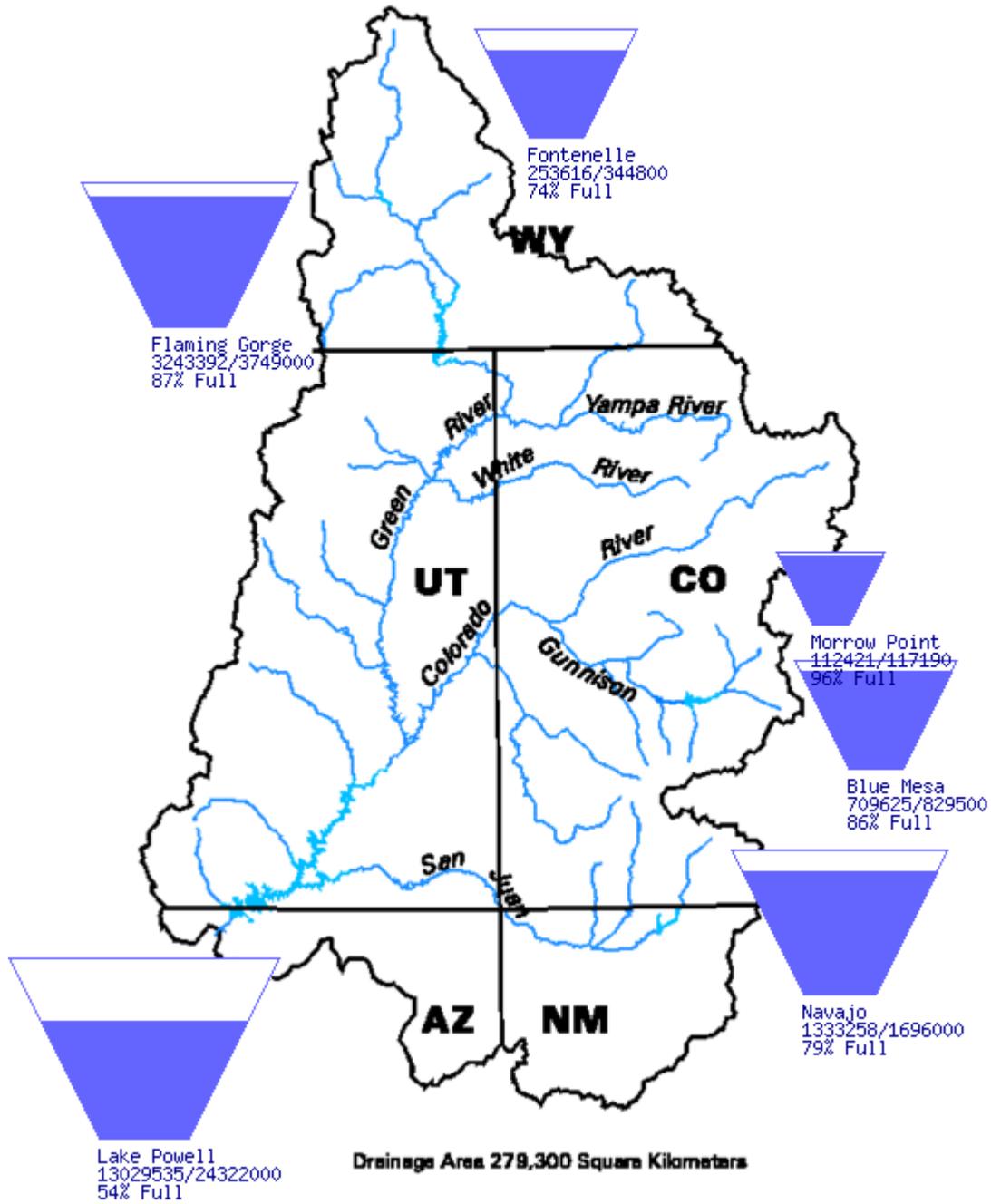
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

Upper Colorado Region Water Resources Group

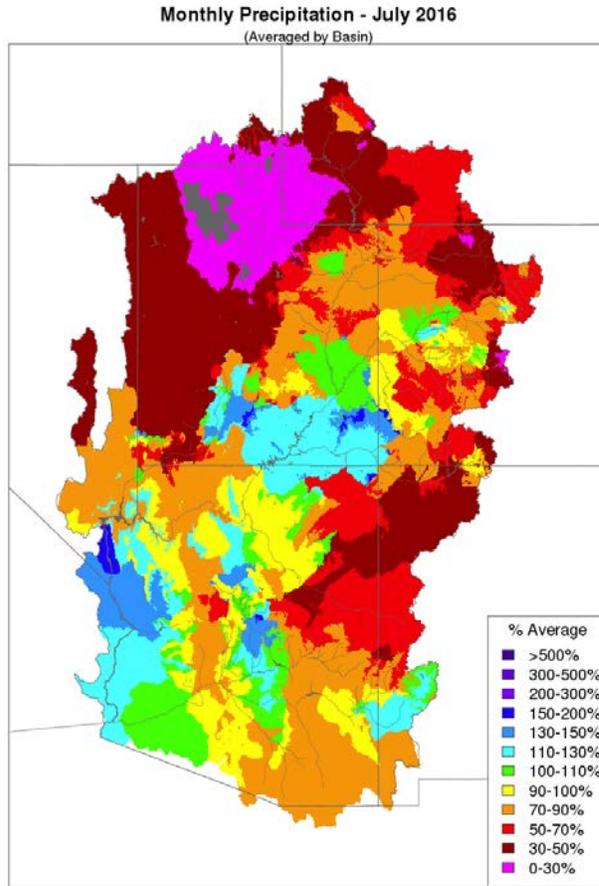
River Basin Tea-Cup Diagrams

Data Current as of:
09/06/2016

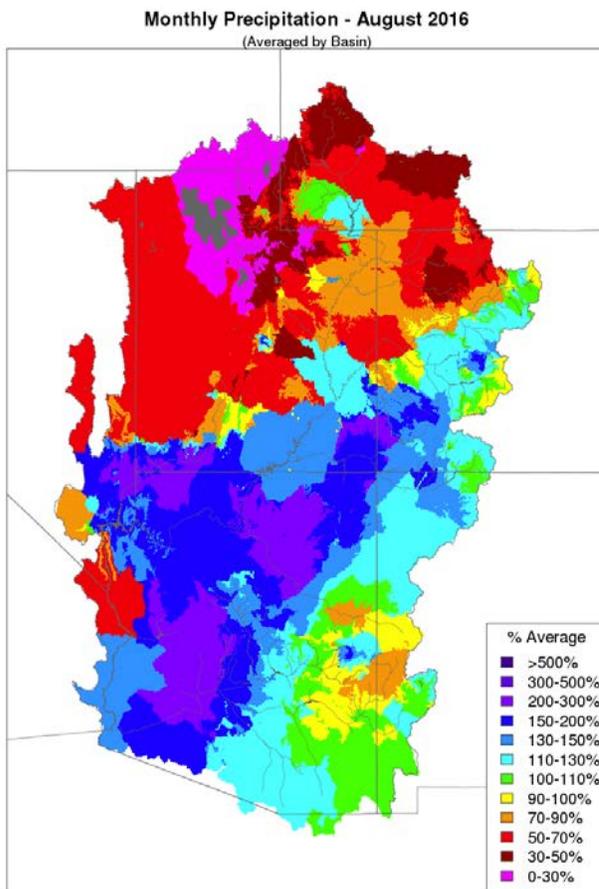
Upper Colorado River Drainage Basin



NOAA National Weather Service Monthly Precipitation Maps for July and August 2016



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

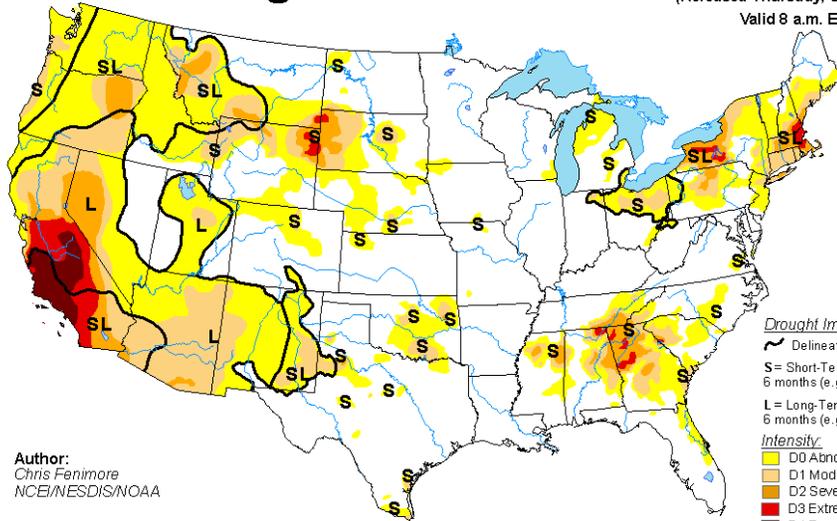


Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

USDA United States Drought Monitor Map

U.S. Drought Monitor

August 30, 2016
 (Released Thursday, Sep. 1, 2016)
 Valid 8 a.m. EDT



Author:
 Chris Fenimore
 NCEI/NESDIS/NOAA

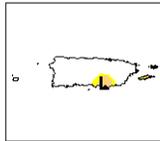
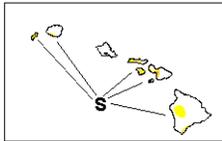
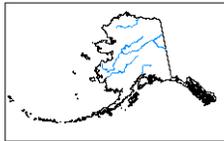
Drought Impact Types:

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

Intensity:

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

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

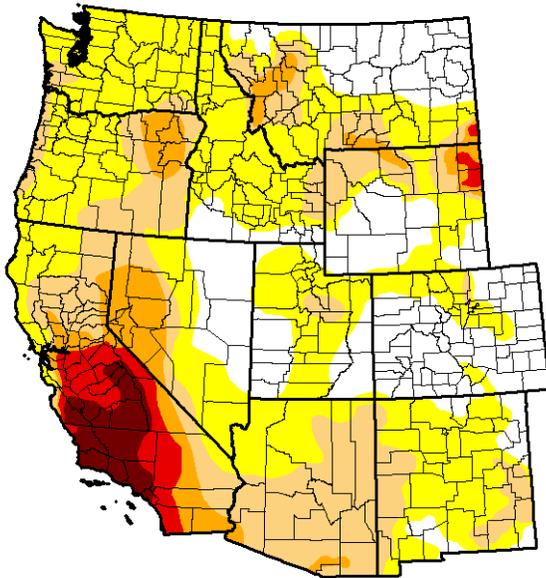


<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor West

August 30, 2016

(Released Thursday, Sep. 1, 2016)
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.36	75.64	34.75	12.84	5.99	2.81
Last Week 8/23/2016	23.76	76.24	33.92	12.95	5.99	2.81
3 Months Ago 5/31/2016	45.16	54.84	27.17	10.00	6.23	2.81
Start of Calendar Year 12/29/2015	33.17	66.83	45.07	29.30	15.92	6.85
Start of Water Year 9/28/2015	22.77	77.23	57.81	42.42	26.50	7.62
One Year Ago 8/1/2015	25.33	74.67	59.67	42.69	26.73	7.62

Intensity:

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

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

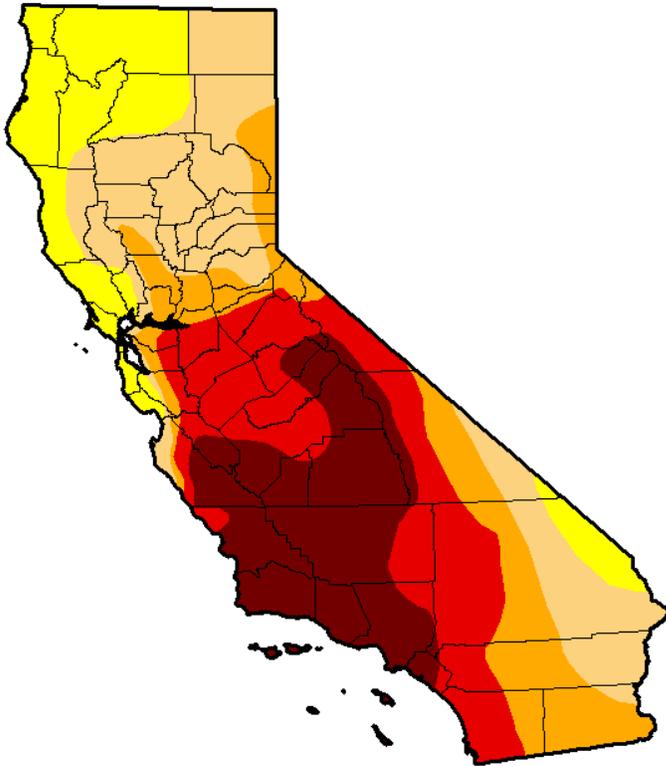
Author:
 Chris Fenimore
 NCEI/NESDIS/NOAA



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

U.S. Drought Monitor California

August 30, 2016
(Released Thursday, Sep. 1, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	83.59	59.02	42.80	21.04
Last Week 8/23/2016	0.00	100.00	83.59	59.02	42.80	21.04
3 Months Ago 5/31/2016	6.08	93.92	83.91	59.02	42.99	21.04
Start of Calendar Year 1/2/2015	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year 9/29/2015	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago 8/1/2015	0.14	99.86	97.35	92.36	71.08	46.00

Intensity:

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

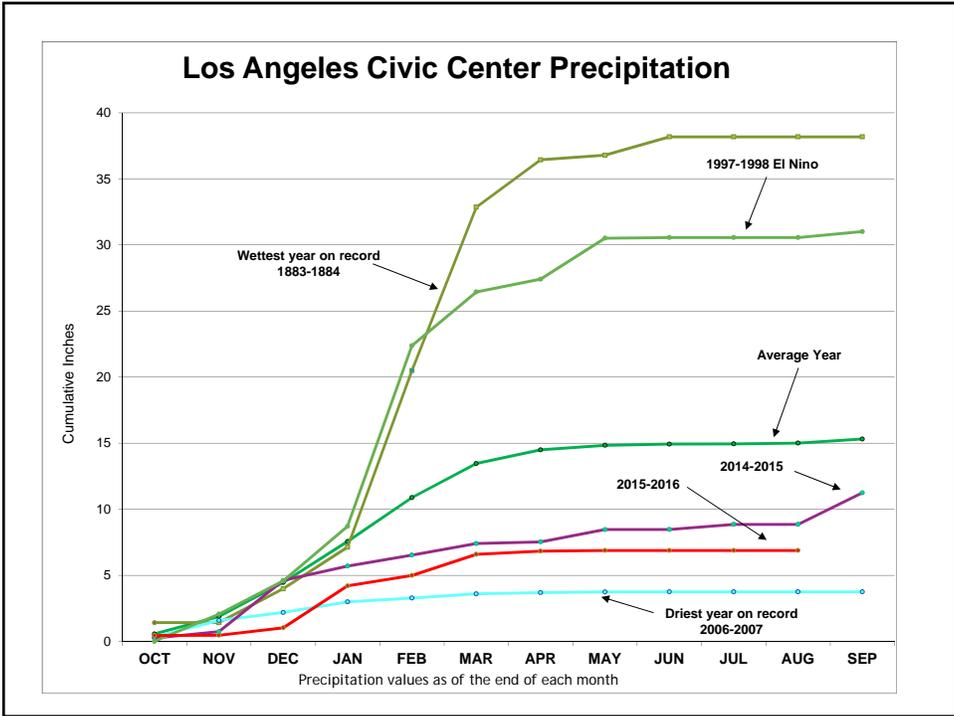
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Chris Fenimore
NCEI/NESDIS/NOAA



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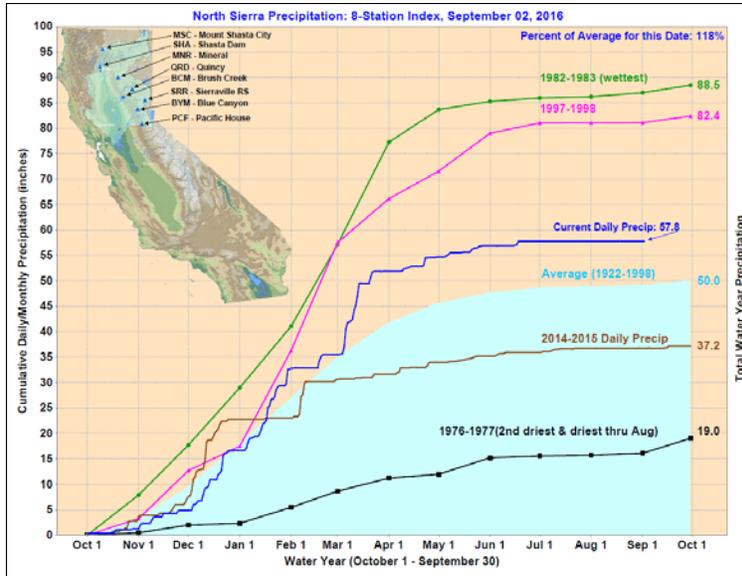


Precipitation at Six Major Stations in Southern California

From October 1, 2015 to September 1, 2016

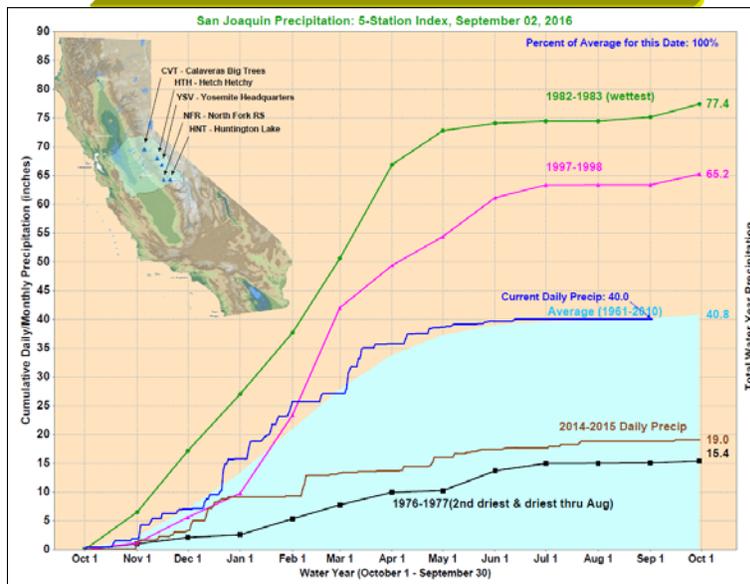
Station	Precipitation in inches		Average to Date	Percent of Average
	Aug	Oct 1 to Sep 1		
San Luis Obispo	0.00	12.55	22.18	57%
Santa Barbara	0.00	10.21	17.57	58%
Los Angeles	0.00	6.88	15.01	46%
San Diego	0.00	6.88	9.98	69%
Blythe	0.14	2.00	3.42	58%
Imperial	0.00	0.83	2.59	32%

Northern Sierra Precipitation-8 Station Index



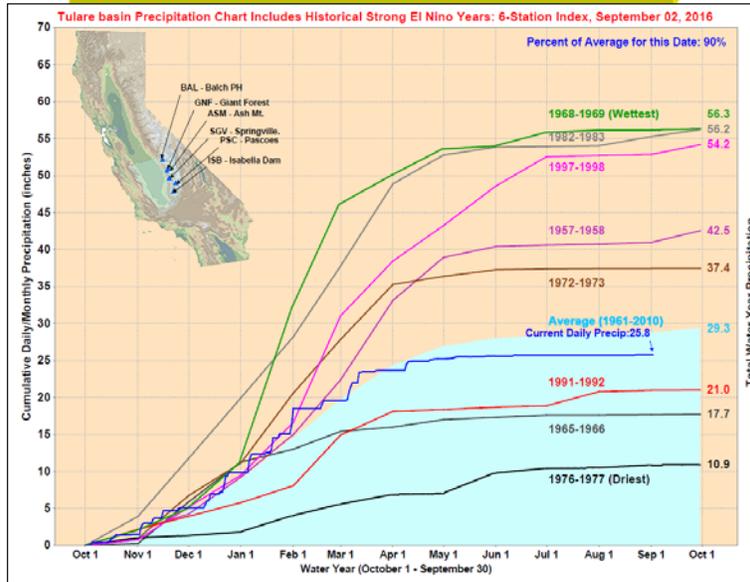
California Data Exchange Center
http://cdec.water.ca.gov/cgi-progs/products/PLOT_ESI.pdf

San Joaquin Precipitation: 5-Station Index



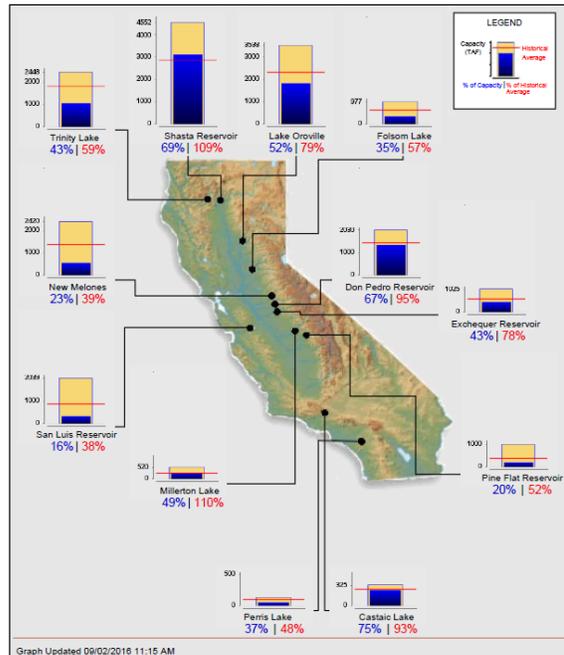
California Data Exchange Center
http://cdec.water.ca.gov/cgi-progs/products/PLOT_FSI.pdf

Tulare Basin Precipitation: 6-Station Index



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

Current Reservoir Conditions



<http://cdec.water.ca.gov/cdecapp/resapp/getResGraphsMain.action>

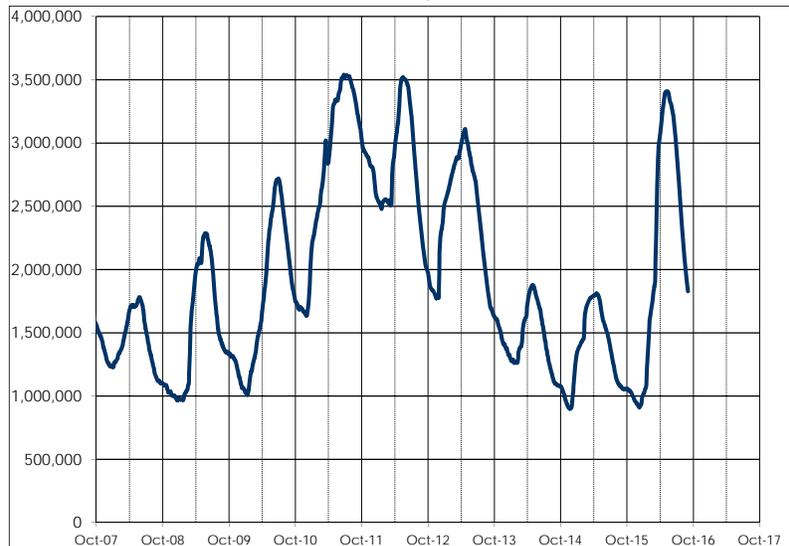
Comparison of SWP Water Storage

Reservoir	Capacity	2015 Storage (acre-feet)		2016 Storage (acre-feet)	
		As of Sep 1	% of Cap.	As of Sep 1	% of Cap.
Frenchman	55,475	13,606	25%	18,602	34%
Lake Davis	84,371	39,483	47%	48,425	57%
Antelope	22,564	18,388	81%	18,737	83%
Oroville	3,553,405	1,070,070	30%	1,827,949	51%
TOTAL North	3,715,815	1,141,547	31%	1,913,713	52%
Del Valle	39,914	35,235	88%	37,500	94%
San Luis (DWR)	1,062,180	361,789	34%	263,998	25%
Pyramid	169,901	168,459	99%	168,049	99%
Castaic	319,247	120,561	38%	244,349	77%
Silverwood	74,970	70,506	94%	69,951	93%
Perris	126,841	46,698	37%	48,020	38%
TOTAL South	1,793,053	803,248	45%	831,867	46%
TOTAL SWP	5,508,868	1,944,795	35%	2,745,580	50%

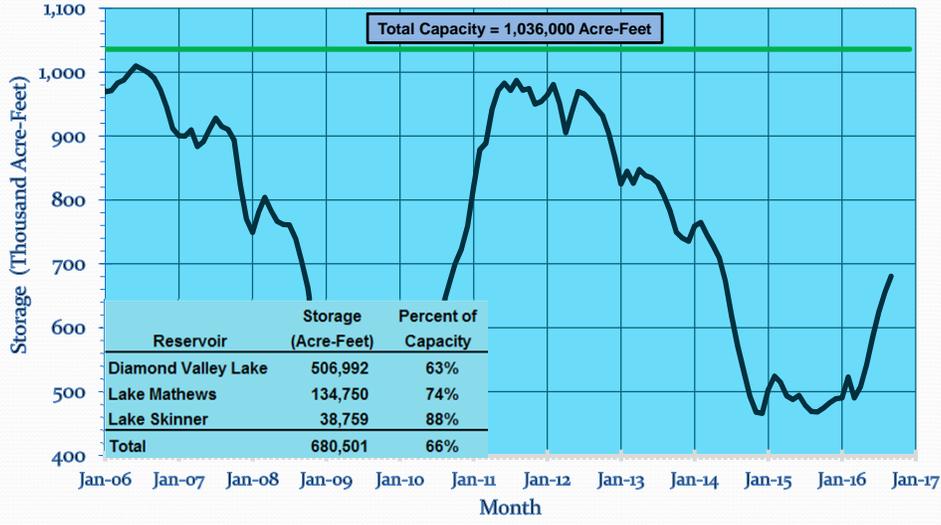
State Water Project Projected Deliveries:
 As of April 21, 2016, the Table-A allocations for 2016 is 60%

Oroville Storage (acre-feet)

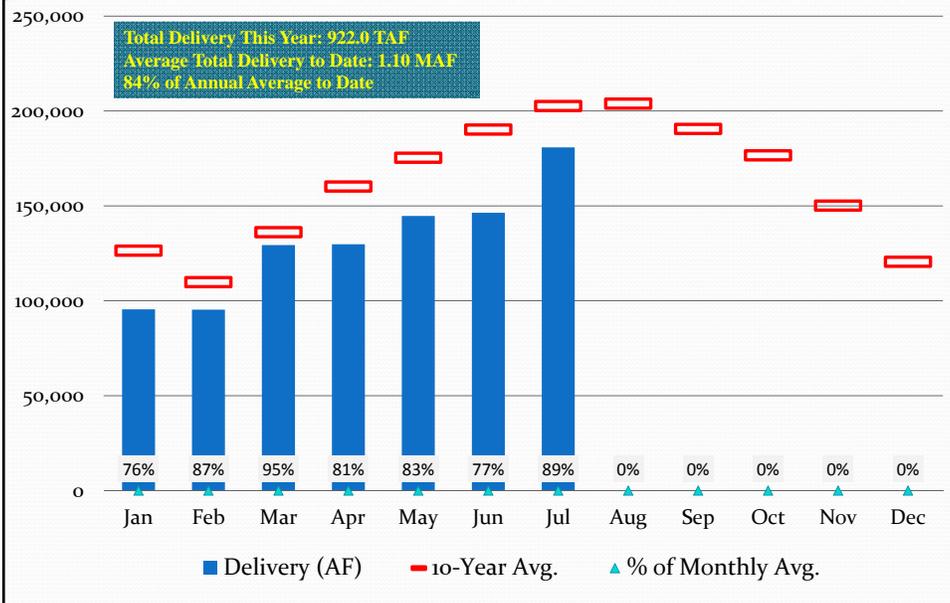
October 1, 2007 - September 1, 2016



MWD's Combined Reservoir Storage as of September 1, 2016 Lake Skinner, Lake Mathews, and Diamond Valley Lake



2016 Water Deliveries to Member Agencies (AF)





Will La Niña Make a Difference?

August 2016

◆ Making seasonal forecasts of precipitation – the ability to predict now if 2017 will be wet or dry (and how wet or dry) – is scientifically difficult, and the accuracy of such predictions is very low, much less than that of a seven-day weather forecast.

◆ Scientists consider teleconnections (recurring and persistent, large-scale patterns of pressure and circulation anomalies over important regions of the globe that correlate with climate at a site of interest) when attempting to make seasonal climate forecasts.

◆ The El Niño-Southern Oscillation (ENSO) is one of the most studied climate phenomena, and one that can provide some predictive guidance in parts of the United States under certain conditions. ENSO is characterized by year-to-year fluctuations in sea surface temperatures along the equator in the Pacific Ocean between Peru and the International Date Line, and simultaneous fluctuations in sea level air pressures between Tahiti and Darwin, Australia. The ENSO cycle is expressed as three states: neutral conditions, El Niño (warm ocean phase), and La Niña (cold ocean phase).

◆ The National Oceanic and Atmospheric Administration's Climate Prediction Center classifies current ENSO conditions as neutral, with slightly better than even odds that these neutral conditions will transition to weak La Niña conditions this fall and winter.

◆ The graphics on the reverse show the relationship over an 80-year period between measured precipitation in each of California's climate divisions (see indicator map) and ENSO conditions, expressed as the Southern Oscillation Index, a measure of air pressure fluctuations between Tahiti and Darwin, Australia. The strongest El Niño and La Niña events plot on the far left and far right sides of the graphics, respectively.

◆ ENSO's strongest signal in California is for Southern California to be drier than average in La Niña years. California's large year-to-year variability and the importance of a few individual large storms prevent using ENSO alone to predict seasonal precipitation outcomes for California.

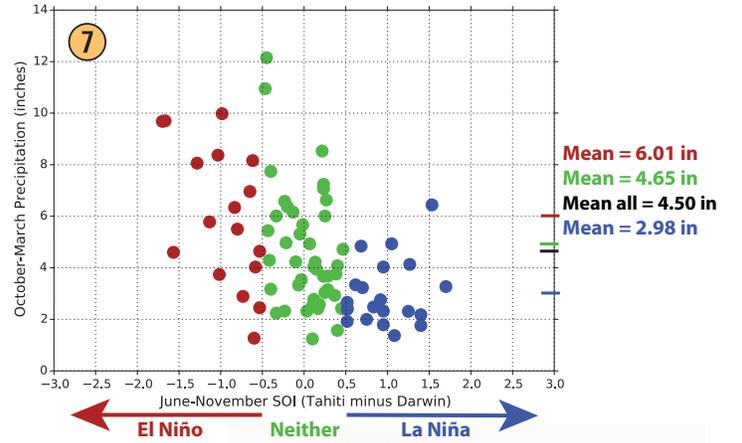
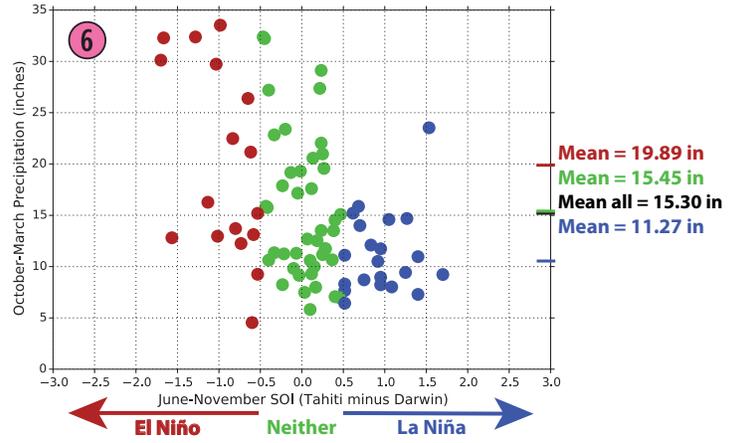
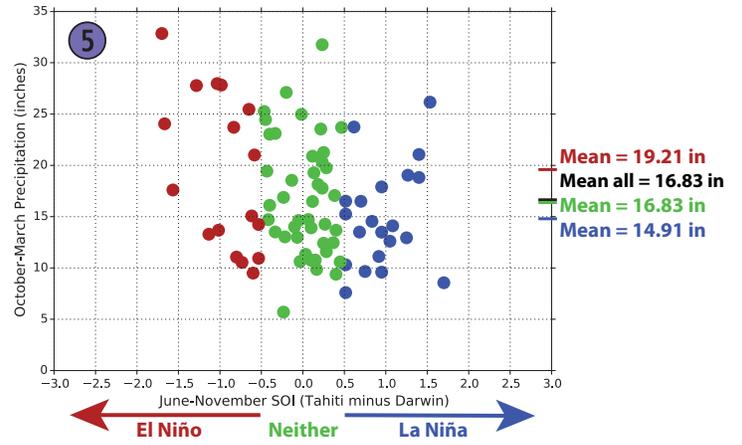
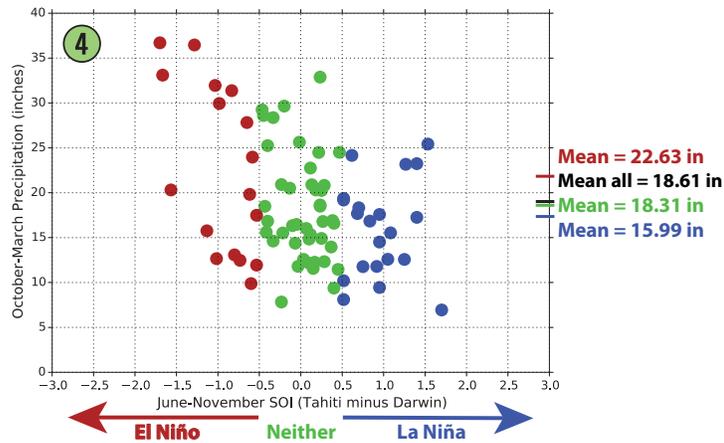
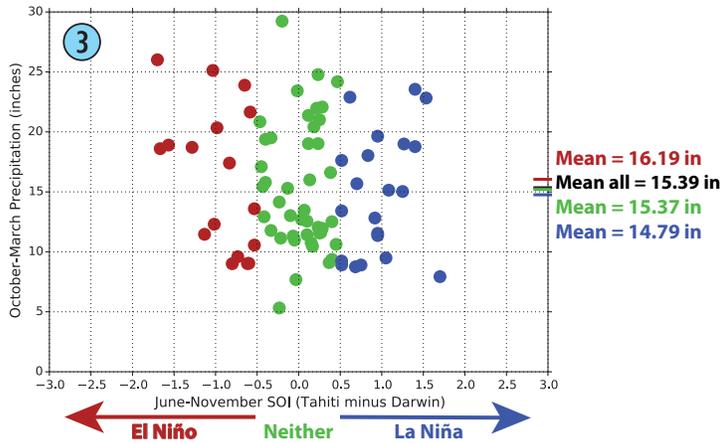
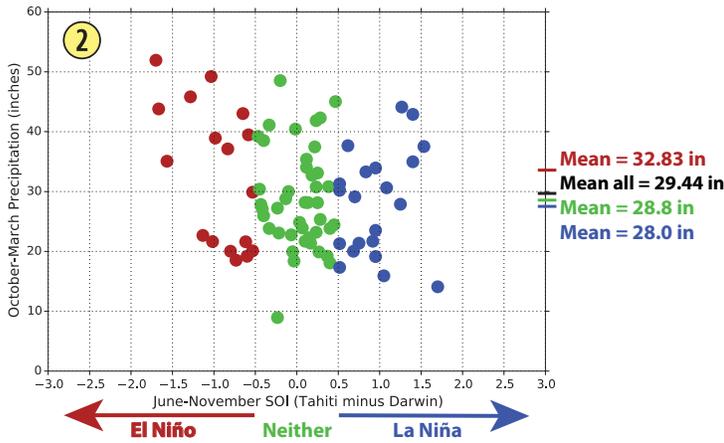
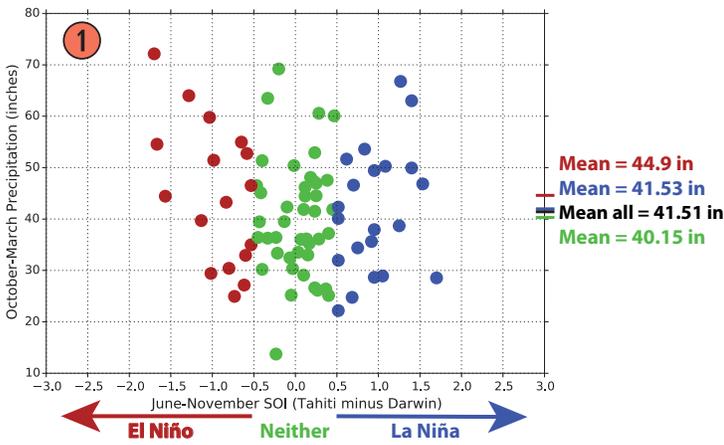
◆ Floods can happen in any given winter. Some major floods (December 1955, December 1964, February 1986, and New Year 1997) have occurred in La Niña and neutral years.

◆ Of the 18 La Niña winters since 1950-51, 16 have provided below average precipitation for Southern California's coastal region (region 6), and 15 winters have resulted in below average precipitation for Southern California's interior region (region 7). Water year 2011 contained the only significantly wet La Niña event in this time period.

◆ Conversely, when La Niña conditions were in place during winter from 1950-51, above average precipitation was recorded in 11 years for the Northern Sierra and in 8 years for the Central and Southern Sierra.

Seasonal forecasts of precipitation are difficult and much less accurate than a 7-day weather forecast.

Years 1933/34 through 2013/14 • October - March (winter) precipitation by Climate Division versus Southern Oscillation Index for immediately preceding June - November



Key: climate divisions



RESOLUTION
of the
COLORADO RIVER BOARD OF CALIFORNIA
Regarding
Potential Applicant to Receive
Lower Colorado Water Supply Project Water
2016-1

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

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

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

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

WHEREAS, the staff of the Colorado River Board on September 14, 2016, submitted the eligible applicants to the Board for its recommendation;

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

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

County	Numbers of Parcels	Current Use (AF/YR)	Future Use (AF/YR)	Total Use (AF/YR)
San Bernardino	3	2	1	3

- (2) At the time a subcontract is prepared, the annual quantity of water to be diverted, consumptively used, and returned will be refined to specify quantities of water to be reported in accordance with Article V in the Consolidated Decree in *Arizona v. California, et al.* entered March 27, 2006, (547 U.S. 150 (2006));
- (3) Reclamation should include provisions in the subcontract that the water is to be put to reasonable beneficial use within a ten-year period of time, subject to renewal for another ten-year period.

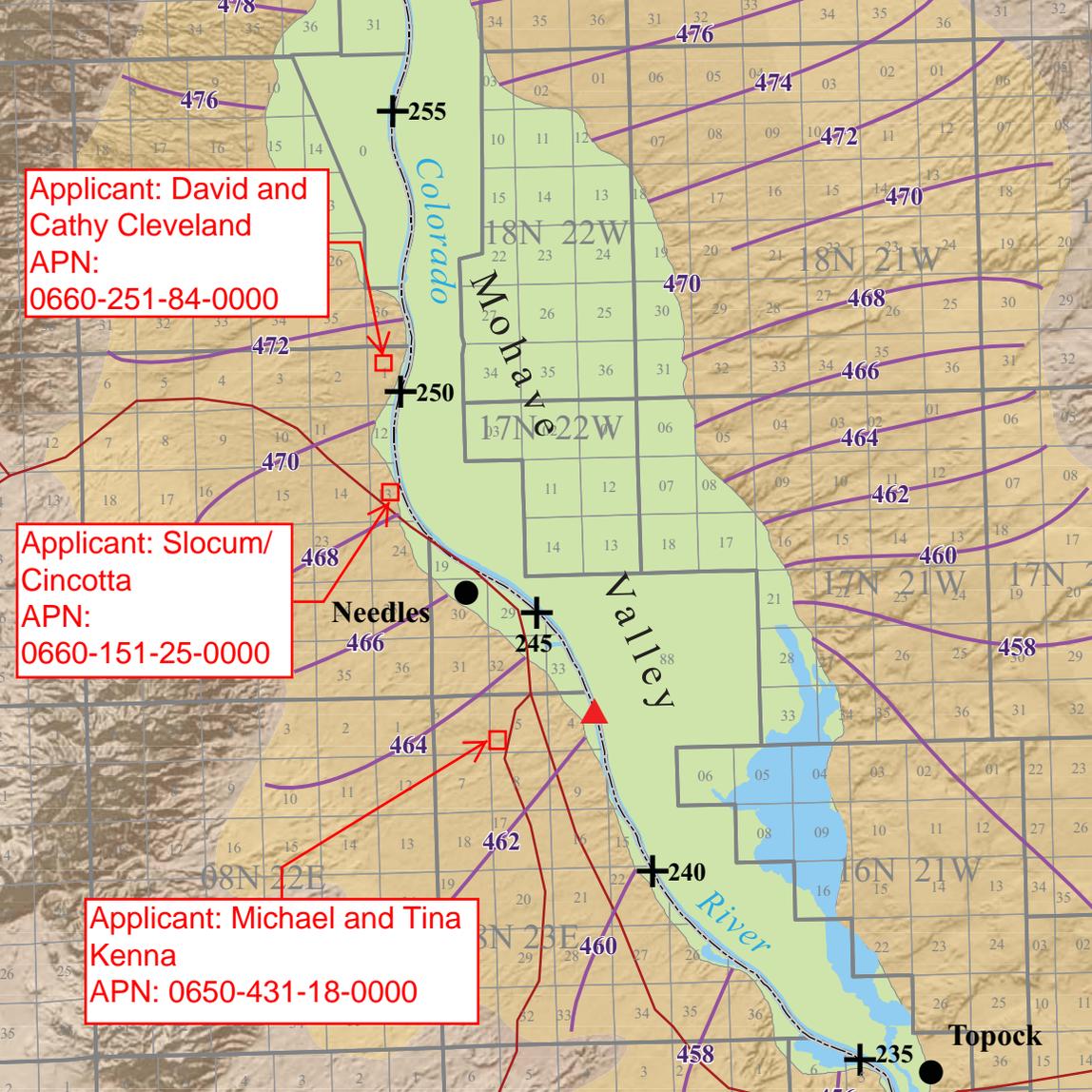
THE FOREGOING RESOLUTION is approved and adopted by the Colorado River Board, this 14th day of September 2016.

Dana B. Fisher, Jr., Chairman

Applicant: David and
Cathy Cleveland
APN:
0660-251-84-0000

Applicant: Slocum/
Cincotta
APN:
0660-151-25-0000

Applicant: Michael and Tina
Kenna
APN: 0650-431-18-0000



Exhibit

September 14, 2016, Lower Colorado Water Supply Project

County	APN	Owner	Current use (AF/YR)	Future use (AF/YR)	Total use (AF/YR)
San Bernardino	0660-251-84-0000	David and Cathy Cleveland	0	1	1
San Bernardino	0660-151-25-0000	Joe Slocum and Joel Cincotta	1	0	1
San Bernardino	0650-431-18-0000	Michael and Tina Kenna	1	0	1



MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

THE UNITED STATES DEPARTMENT OF THE INTERIOR

AND

THE STATE OF CALIFORNIA NATURAL RESOURCES AGENCY

REGARDING THE COORDINATION OF ACTIVITIES TO MANAGE THE SALTON SEA

I. INTRODUCTION AND BACKGROUND

The Salton Sea (Sea), an endorheic water-body, is California's largest lake and located in Imperial and Riverside Counties. The Sea is the modern incarnation of Lake Cahuilla, a prehistoric, intermittent freshwater sea that filled and evaporated multiple times over thousands of years as the Colorado River (River) meandered on its delta—shifting between emptying into the Gulf of California, or diverting northwest, into the Salton Trough.

In 1905 when the River flood flows breached an inadequate diversion structure (built by what was then the California Development Company), the full might of the River emptied once again into the basin. After 2 years the River's course was engineered back to the Gulf, and left behind was the Salton Sea. In 1924, certain specified lands beneath the Sea were designated a drainage reservoir by Presidential Order. Where the Sea would have evaporated once more, agricultural runoff from the Imperial and Coachella Valleys (with water from the Colorado River) and other sources has maintained its elevation and affected its composition over the last century.

The Sea loses approximately one million acre-feet of water a year to evaporation. Early on, the accumulation of salts and nutrients in the terminal lake, by its sustaining agricultural drainage waters, were acknowledged as a challenge to the future viability of the Sea. From the start, various studies were conducted to assess the issue, but no comprehensive actions were taken. Thirty or more species of sport fish were stocked by the California Department of Fish and Game between 1929 and 1956, and soon the Sea was enjoying more yearly visitors than Yosemite National Park. After a period of developmental boom and recreational success at the Sea, a series of storms and heavy River water use in 1977 and 1978 caused widespread flooding and inundation of seaside developments, and the properties were soon abandoned.

With nearly 90 percent of California's wetlands lost to development, the Sea over the last century has become a vital stop on the Pacific Flyway for millions of birds. A refuge for several endangered species, over 400 bird species have been identified at the Sea. In 1992, an estimated 150,000 eared grebes died at the Sea, and as one of the largest bird die-offs in U.S. history, it brought national attention to the Sea's plight. In 1996 and 1998 there were further die-offs of fish and birds due to large algal blooms that drew oxygen from the waters, killed large numbers of fish, and spread botulism killing fish-feeding birds.

In response to the declines, in 1992 Congress passed the Reclamation Projects Authorization and Adjustment Act (Public Law 102-575) that directed the Secretary of the Interior to "conduct a research project for the development of a method or combination of methods to reduce and control salinity, provide endangered species habitat, enhance fisheries, and protect human recreational values in the area of the Salton Sea." In addition, the Salton Sea Reclamation Act of 1998, (Public Law 105-372), was enacted by Congress and directed the Secretary to "complete studies including, but not limited to, environmental and other reviews of the feasibility and benefit-cost of various options that permit the continued use of the Salton Sea as a reservoir for irrigation drainage..." Congress further required in the Salton Sea Reclamation Act of 1998 that any such studies performed by the Secretary, "shall not include any option that—(i) relies on the importation of any new or additional water from the Colorado River."

In 2003, following years of negotiation and analysis, a number of actions and agreements – often commonly and collectively referred to as the "Quantification Settlement Agreement" (QSA) were adopted. The QSA "settle[d] a variety of long-standing Colorado River disputes regarding the priority, use and transfer of Colorado River water, established the terms for the further distribution of Colorado River water among [Coachella, the Imperial Irrigation District, and Metropolitan] for a period of time. ... These conserved water transfers and the [Quantification Settlement Agreement] are critical components of the State's efforts to comply with the California Limitation Act of 1929, Section 4 of the Boulder Canyon Project Act of 1928 and to implement the California Constitutional mandate of Article X, Section 2 (which mandates that 'water be put to reasonable and beneficial use')."

Under the QSA, the State of California agreed to assume responsibility for environmental mitigation requirements in excess of \$133 million (in 2003 dollars), the amount that the QSA requires three local water agencies to pay for this purpose. This MOU does not modify the responsibilities of the State of California in this regard.

The California Legislation enacted in 2003 to facilitate the implementation of the QSA required the Secretary of the California Natural Resources Agency, in consultation with other entities, to undertake an ecosystem restoration study to determine a preferred alternative for restoring the Sea ecosystem and permanently protecting the wildlife dependent on it. That preferred alternative was selected in 2007, and came with a cost of \$9 billion in 2007 dollars. In the following years, a recession hit, administrations changed, and the plan was subsequently deemed financially infeasible. Instead, the State moved forward with "no regrets" projects around the Sea for air quality and habitat benefits, and commenced development of a comprehensive Salton Sea Management Program.

Recognizing that the QSA only provided mitigation flows for the Sea through 2017, and the need for projects that would acknowledge the current and projected resource conditions at the Sea, the State established the Salton Sea Task Force, by order of the Governor of California, in May 2015. Through the work of the Task Force, the State recognizes that immediate implementation of sustainable habitat and air quality management and mitigation at the Sea through a Salton Sea Management Program is critical for the protection of regional air quality, natural resources at the sea, and the management of a stable River water supply for California. After meetings with key stakeholders, the Task Force identified acreage targets for wildlife habitat, mitigation, and other projects, and found that implementation of a successful Salton Sea Management Program depends on the following three principles: 1) strong Federal, State, and local partnerships; 2) clear and achievable milestones with State-directed plans to achieve them; and 3) committed participation from all stakeholders who share the goals of protecting air quality, reducing habitat impacts, and maintaining a secure Colorado River Water Supply. These three principles are driving State-led decisionmaking on short, medium, and long term plans and projects, and require coordinating all available fiscal and technical resources to deliver them in an expedited manner.

The United States and the State have significant and complementary interests regarding development and enhancement of activities that provide certainty to the Sea, anticipate changes in the Sea's elevation, water quality and associated regional environment, and recognize the multiple values and unique opportunities the Sea embodies in the face of a changing climate, resource constraints, and the need to build resiliency and certainty in affected Tribal and regional communities.

II. PARTIES

This Memorandum of Understanding (MOU) is entered into by and between the United States through the Department of the Interior (DOI), and the State of California, through the California Natural Resources Agency (CNRA), and, hereafter referred to as "the Agencies," and will become effective as of the latest date shown below on the signature page.

The Agencies recognize the unique role and interests of tribal governments, including jurisdiction and decisionmaking, in the future of the Sea. The United States recognizes the United States' trust responsibility to all federally recognized Indian tribes and the duty to engage in meaningful government-to-government consultation prior to any action related to the Sea that impacts a tribe. Future activities to address conditions at the Sea must recognize Federal and State responsibilities to any affected tribes pursuant to applicable law (including settlement acts) and agreements, ensure protection of trust resources, and work in a spirit of partnership with affected Indian tribes.

Though not a party to this MOU, other Federal and State agencies, local governments and agencies, and non-profit, philanthropic, and academic institutions are recognized as potentially having jurisdiction, resources, decisionmaking roles, and common interests at the Sea, and will be essential to include for successful management activities and outcomes at the Sea. The Agencies will coordinate and consult with all of these entities as appropriate to develop specific tasks, timelines, and form subsequent agreements to further future partnership at the Sea.

III. PURPOSE

The Agencies enter into this MOU to ensure that long-term coordination between the Federal and State and Government will be recognized as a priority and will occur in order to facilitate prompt and informed decisionmaking regarding the natural and economic resources of the Sea.

The Agencies recognize that the purpose of this coordination is to facilitate specific, incremental and sequential projects in a timely manner that improve upon air and water quality, existing obligations to Native American communities, fish and wildlife habitat, water security, resource management processes and decisionmaking economic opportunities, and collaboration of scientific research efforts. Coordinating limited resources will be necessary to achieve common goals that address the natural resources and regional interests associated with the Sea.

IV. OBJECTIVES

Recognizing the State's role as lead on Sea management, in line with the findings of the Salton Sea Task Force, and the United States' agreement through this MOU to support the goals and principles of the Salton Sea Management Program (SSMP), and in furtherance of the purpose of this MOU, the Agencies affirm their commitments to undertake the following objectives:

- A. In order to facilitate prompt decisionmaking, permitting accountability, and high-level coordination, the Agencies shall each identify at least one senior level policy official to participate in a Salton Sea Working Group (SSWG) tasked with ensuring interagency continuity in Sea management efforts and overseeing the implementation of—and any necessary updates to—this MOU.
- B. The Agencies will work together as they coordinate with affected Colorado River Basin States, tribes, and local governments regarding implementation of this MOU.
- C. The Agencies recognize that the State has identified a goal of 25,000 acres of wildlife habitat, air and water quality projects, and other projects as necessary to minimize human health and ecosystem impacts at the Sea in the mid-term (through 2025). See “Salton Sea Task Force – Agency Actions” – Attachment 1. The Agencies acknowledge this goal as critical, and a common target to reasonably work toward.
- D. The Agencies will undertake an analysis of current Federal and State laws applicable to the Salton Sea to assess existing authorities, identify common objectives, explore opportunities to align authorities that benefit the purpose of this MOU, and inform areas for further coordination.
- E. The Agencies will perform a funding analysis that identifies all current Federal and State spending on programs, projects, and studies related to, potentially benefiting, or impacting the Sea. The analysis should also identify opportunities to better coordinate and match existing spending and programs, and provide a foundation for further discussions on the anticipated financial need to reach acreage goals and creative means to meet them.

- F. The Agencies will, within existing authorities, perform an analysis of land ownership, any existing Indian settlement obligations, leases, and other land use agreements in the region to facilitate project development and identify necessary coordination between parties to achieve the purpose of this MOU.
- G. The Agencies will, within existing authorities, expand and integrate Sea science and monitoring programs to better inform decisionmaking, coordinate investigations, and aid adaptive management of the Sea. The Agencies will also assess the cost benefit of sharing office or other physical spaces in order to reduce the cost of science activities and increase their efficacy.
- H. The Agencies will pursue a multi-year partnership with United States Department of Agriculture (USDA) Natural Resources Conservation Service, tribal governments, local agencies, and others, to advance projects to protect air quality and improve water quality of major inflows to Sea habitat.
- I. The Agencies shall make every effort to ensure resources are allocated to expedite and prioritize permitting processes at the Sea.
- J. The Agencies will explore the feasibility of developing a common decision support system that integrates the analyses called for in this MOU, the existing wealth of studies and data on the Sea, and any additional information necessary, into a single platform that facilitates the work of the Salton Sea Management Program and the purpose of this MOU.

In furtherance of these Objectives, the United States agrees to pursue the following, in accordance with applicable statutes, and to the extent appropriate and consistent with legislative appropriations, approved budgets, and funding opportunities:

1. \$20 million to operation and maintenance costs of habitat and dust suppression projects associated with the SSMP;
2. \$10 million for State managed monitoring of SSMP projects;
3. Continued USGS scientific and technical support on Sea issues during the implementation of the SSMP;
4. Continued USGS scientific input on, and review of, selenium management measures and target concentrations for selenium in created habitat at Sea;
5. Consideration of a Pilot Project under Phase 2 of the Colorado River Basin Study to continue the ongoing innovative and collaborative efforts underway at the Sea to increase security for California's Colorado River water supplies, consistent with DOI's efforts to increase security for other Basin States' water supplies.

V. GENERAL PROVISIONS

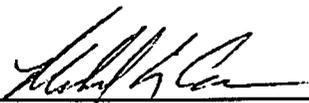
- A. This MOU is subject, as applicable, to the laws of the United States of America and the State.

- B. Nothing in this Agreement may be construed to obligate the United States or the State to any current or future expenditures in advance of the availability of legislative appropriations. Nor does this agreement obligate the United States or the State to spend funds on any particular project or purpose, even if funds are available.
- C. The mission requirements, funding, personnel, and other priorities of the Agencies may affect their ability to fully implement all the provisions identified in this MOU.
- D. Specific activities that involve the transfer of money, services, or property between the Agencies will require execution of separate agreements or contracts.
- E. Nothing in this MOU is intended to or will be construed to restrict the Agencies from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.
- F. Any information furnished between the Agencies under this MOU may be subject to the Freedom of Information Act, 5 U.S.C. 552, et seq. (FOIA) and the California Public Records Act, Gov. Code 6250, et seq. (CPRA). The United States and the State agree to consult each other regarding any such relevant requests and prior to releasing potentially privileged or exempt documents, subject to any applicable regulatory, statutory, or judicial timeframe.
- G. This MOU is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States or the State; their respective departments, agencies, or entities; their respective officers, employees, or agents; or any other person.
- H. The Agencies anticipate consensus implementation of this MOU. In the unforeseen event that any disputes arise between the Agencies, the respective representatives and leadership of DOI and CNRA will work promptly to resolve any such matter.
- I. This MOU shall remain in effect for an initial term of 10 years after its effective date and may be renewed if both Parties agree. This MOU may be terminated at any time by mutual consent of both Parties, or unilaterally by either Party after 30-days written notice to the other Party of intent to terminate.
- J. Either Party to this MOU will consult with the other party in a timely manner prior to release of any statements for publication or public dissemination that refers to this MOU, to the Parties in connection with this MOU, or the name or title of any employee of the Parties in connection with this MOU.
- K. Nothing in this MOU may be interpreted to imply that the United States endorses any product, service or policy of the State. Nothing in this MOU may be interpreted to imply that the State endorses any product, service or policy of the United States. Neither Party will take any action or make any statement that suggests or implies such type of endorsement.

L. The DOI and CNRA may amend or modify this MOU only by agreement of both Parties.

VI. APPROVALS

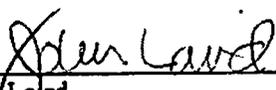
For the Department of the Interior:



Michael L. Connor
Deputy Secretary

8/31/16
Date

For the State of California:



John Laird
Secretary for Natural Resources

8/31/16
Date



Salton Sea Task Force Agency Actions

The implementation of sustainable habitat and air quality management and mitigation at the Salton Sea through a Salton Sea Management Program is critical for the protection of regional air quality, natural resources at the sea, and the management of a stable Colorado River Supply for California. The Salton Sea Task Force recognizes the contributions of the local leadership, plans, and initiatives that have informed the Task Force process. Following meetings with key stakeholders, the Task Force finds that implementation of a successful Salton Sea Management Program depends on the following three principles: 1) strong state, federal, and local partnerships; 2) clear and achievable milestones with state-directed plans to achieve them; and 3) committed participation from all stakeholders who share the goals of protecting air quality, reducing habitat impacts, and maintaining a secure Colorado River Water Supply. These three factors will drive decision-making on a short- and a medium-term plan while leveraging fiscal and technical resources to deliver projects in an expedited manner.

The Natural Resources Agency will take the following actions over an accelerated timeline:

- **Begin immediate implementation and further development of Salton Sea management plan**
 - The plan will prioritize actions that respond to air quality and natural resources impacts while incorporating opportunities for regional economic development, including recreational and renewable opportunities that benefit implementation of the plan.
 - A science advisory committee will be utilized to provide scientific expertise into plan development.
 - Colorado River stakeholders will be asked to assist with the development of the plan. The Salton Sea Authority and its members will be asked to help facilitate local involvement.
- **Improve public outreach and local partnership**
 - Air quality and environmental impacts of a reduced Salton Sea will be felt foremost by the residents of the region. The state will provide a meaningful public forum to discuss Salton Sea issues locally and to develop future plans and actions.
- **Accelerate project implementation and delivery**
 - The state will work with Salton Sea, Colorado River partners to accelerate planning, state and federal permitting and construction.
- **Meet a short-term goal of 9,000-12,000 acres of habitat creation and dust suppression projects at the sea**
 - Projects to meet short-term goals will be achievable with available funding.
 - Short-term projects will address dust suppression and natural resources needs while laying the foundation for a long-term Salton Sea management framework.
 - Projects will be staged to address the expected progression of playa exposure and designed to provide access corridors for renewable energy development on those lands.
- **Set medium-term goal of 18,000-25,000 acres of habitat creation and dust suppression projects at the sea**
 - Funding plans to meet medium-term goals will need to be developed by the state with Salton Sea and Colorado River partners.

Ensure Oversight by Regulatory Agencies:

- The State Water Resources Control Board will regularly monitor and assess progress on the implementation of the Salton Sea Management Program, including the development of management plans and funding options, and any potential action by the State Board.
- The State Water Resources Control Board will periodically hold public workshops as part of its monitoring and assessment function.
- The State Water Resources Control Board will work with the Colorado River Regional Water Board and the Administration to improve water quality and upstream co-benefits in the New River and the Alamo River.
- The California Air Resources Board will coordinate with local partners to address air quality impacts from the Salton Sea, work with Imperial and South Coast air districts to monitor air quality, and provide technical and scientific expertise to ensure effective mitigation of dust impacts from exposed playa.

Consider opportunities for increasing renewable energy development at and around the Salton Sea:

- As part of the implementation of the Clean Energy and Pollution Reduction Act of 2015 (SB 350), the California Energy Commission and the Public Utilities Commission will evaluate how renewables at and around the Salton Sea will further the goals of the integrated resources plans, including a balanced resource mix and the minimization of localized air pollutants.
- Within the next year, as part of planning to meet the 2030 greenhouse gas goals, the Public Utilities Commission, the Energy Commission and the Independent System Operator will consider renewable energy opportunities at and around the Salton Sea and the region, and any additional transmission that may be needed for the near term or long term.