Colorado River Board of California

October 1, 2020

NOTICE OF REGULAR MEETING OF THE COLORADO RIVER BOARD

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

Date:	Wednesday, October 14, 2020
Time:	10:00 a.m.
Place:	Pursuant to Governor Newsom's Executive Order N-29-20 issued on March 17, 2020, this meeting will be held virtually via Zoom Webinar. Board members will receive instructions separately. The public are welcome to attend. Attendees may access this meeting using the following: Webinar Link: https://us02web.zoom.us/j/85671387211 Telephone: US: +1 669 900 9128, enter Meeting ID: 856 7138 7211, followed by #; then press # again to connect.

The Colorado River Board of California welcomes any comments from members of the public pertaining to items included on this agenda and related topics. If members of the public wish to make a comment regarding items on the agenda, there are three options for consideration: (1) Public comments may be submitted by electronic mail, and **should be addressed to the Board's Chairman, Mr. Peter Nelson, at crb@crb.ca.gov and will be accepted up until 10:00 a.m. on the day of the meeting**; (2) During the meeting, members of the public may submit comments by participating in the Zoom Webinar and utilizing the "**Q&A**" feature in the control panel; **or** (3) By calling into the Zoom Webinar using the telephone number above and pressing ***9** to "**Raise Hand**." Please note, **written submissions will be read aloud at the public comment period** to the extent they fit within the five-minute time limit.

If accommodations from individuals with disabilities are required, such persons should provide a request at least 24 hours in advance of the meeting by electronic mail to the Board's staff member, Mr. Brian Alvarez at balvarez@crb.ca.gov.

Requests for additional information may be directed to: Mr. Christopher S. Harris, 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.

Christopher S. Harris
Executive Director

Regular Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, October 14, 2020
10:00 a.m.

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.

COVID-19 Notice

The Board is following guidance provided by Governor Newsom, pursuant to Executive Order N-29-20 issued on March 17, 2020, for adhering to the Bagley-Keene Act's open meeting requirements.

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 September 9, 2020 (Action)
- b. Consideration and adoption of Board Resolution Acknowledging Federal Service of Terrance J. Fulp, Ph.D., Regional Director, U.S. Bureau of Reclamation (Action)

4. Water Supply and Operations Reports
- a. Colorado River Basin Water Supply and Operations Report
- b. State and Local Water Supply and Operations Reports

5. San Diego County Water Authority, Regional Conveyance System Study

6. Staff Reports Regarding Colorado River Basin Programs
- a. Minute No. 323 Implementation
- b. Salinity Control Program
- c. Lower Colorado River Multi-Species Conservation Program
- d. Status of Reclamation's 2007 Guidelines 7.D Review Process
- e. General Announcements
  - i. Lake Powell Pipeline Project Update

7. 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.

8. Other Business

9. Future Agenda Items/Announcements

Next Scheduled Board Meeting: November 18, 2020
10:00 a.m.
Webinar

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, September 9, 2020

A meeting of the Colorado River Board of California (Board) was held virtually on Wednesday, September 9, 2020, using the Zoom Webinar meeting platform.

Board Members and Alternates Present:

David DeJesus (MWD Alternate)
Dana B. Fisher, Jr. (PVID)
James Hanks (IID)
Jeanine Jones (DWR Designee)
Henry Kuiper (Public Member)
Jim Madaffer (SDCWA)
Peter Nelson, Chairman (CVWD)
Glen D. Peterson (MWD)
David R. Pettijohn (LADWP)
John Powell, Jr. (CVWD Alternate)
Jack Seiler (PVID Alternate)
Mark Watton (SDCWA Alternate)

Board Members and Alternates Absent:

Evelyn Cortez-Davis (LADWP Alternate)
Norma Sierra Galindo (IID Alternate)
Christopher Hayes (DFW Designee)
David Vigil (DFW Alternate)

Others Present:

Steven Abbott
Brian Alvarez
Jim Barrett
Bert Bell
Robert Cheng
JR Echard
Melissa Baum-Haley
Emily Halvorsen
John Hamby
Christopher Harris
Bill Hasencamp
Lynda Lo-Hill
Michael Hughes
Ned Hyduke
Lan James
Sarai Jimenez
Lisa Johansen
Lori Jones
Rich Juricich
Larry Lai
Laura Lamdin
Tom Levy
Lindia Liu
Henry Martinez
Kara Mathews
Jessica Neuwerth
Ivory Reyburn
Kelly Rodgers
Shanti Rosset
Tom Ryan
Roberta Saligumba
Tina Shields
Gary Tavetian
Jay Weiner
Meena Westford
Jerry Zimmerman

CALL TO ORDER

Chairman Nelson announced the presence of a quorum and called the meeting to order at 10:02 a.m.

OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD

Chairman Nelson invited members of the audience to address the Board on items on the agenda or matters related to the Board.

Mr. Harris reported on the letter received from Mr. John Hamby, regarding a concern for the entitlement of a contract water right in the State of Arizona. Mr. Harris stated that the Arizona Department of Water Resources recommended that the U.S. Bureau of Reclamation approve a transfer of 1,078 acre-feet (AF) of water to Queen Creek, Arizona. Mr. Kuiper noted that the letter from Mr. Hamby appeared in the Imperial Valley Press as well.

Mr. Hamby addressed the Board regarding his concern of the proposed sale of the Colorado River entitlement in the State of Arizona. Mr. Hamby stated that landowner-initiated water transfers by permanent sale with Section 5 contracts are not in the public interest and carry with them permanently damaging social, cultural, economic, and environmental impacts. Mr. Hamby asked that the Colorado River Board consider and draft a letter of opposition to this transfer.

Hearing no more public comments, Chairman Nelson moved to the next item on the agenda.

ADMINISTRATION

Chairman Nelson asked for a motion to approve the August 12, 2020, meeting minutes. Mr. Peterson moved that the minutes be approved, seconded by Mr. Kuiper. By roll-call vote, the minutes were unanimously approved.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Report

Mr. Juricich reported that as of August 31st, the water level at Lake Powell was 3,599.93 feet with 11.74 million-acre feet (MAF) of storage, or 48% of capacity. The water level at Lake

Mead was 1,084.02 with 10.35 MAF of storage, or 40% of capacity. The total system storage was 29.72 MAF, or 50% of capacity, which is 2.57 MAF less than system storage at this time last year.

Mr. Juricich reported that as of September 1st, the unregulated inflow into Lake Powell for Water Year 2020 was 6.18 MAF, or 57% of normal and the Water Year-2020 forecasted April to July inflow to Lake Powell is 3.76 MAF, or 52% of normal. For Water Year-2020, the observed July inflow to Lake Powell was 0.29 MAF, or 27% of normal and the August to Lake Powell is 0.1 MAF, or 19% of normal. The precipitation to date is 80%.

Mr. Juricich reported that the precipitation conditions in July and August were very dry throughout the Basin. He also noted the Basin received very little of the monsoon activity that is typical for the summer season.

Mr. Juricich reported that the reservoir storage in the Upper Basin is doing well and noted that the Upper Green River Basin had good precipitation conditions this season benefitting the Flaming Gorge Reservoir.

Mr. Juricich reported that as of September 3rd, the Brock and Senator Wash regulating reservoirs captured 101,430 AF and 54,464 AF, respectively. He also reported that the excess deliveries to Mexico through September 3rd, were 49,545 AF. He noted that the excess flows are a remnant of storm activity that occurred earlier this year. Mr. Juricich reported that as of September 1st, the total amount of saline drainage water bypassed to the Cienega de Santa Clara in Mexico was 86,765 AF.

Annual Operating Plan, Final Consultation

Mr. Juricich reported that on September 3rd, the CRB staff participated in the third and final consultation for the Annual Operating Plan (AOP) hosted by the Bureau of Reclamation (Reclamation). He reported that the projected WY2021 operational tier for Lake Powell is the Upper Elevation Balancing Tier. He added that with the potential for an adjustment in April 2021, the most probable release from Glen Canyon Dam is 9.0 MAF. The most probable operational tier for Lake Mead is the Normal or ICS Surplus Condition with Lower Basin DCP and Minute 323 water savings contributions.

Mr. Juricich reported that the August-24 Month Study projected the most probable end of Calendar Year (CY) elevation for 2021 and 2022 for Lake Powell is 3,591.60 feet and 3,581.02 feet, respectively. The August 24-Month Study most probable projected end of CY elevations for Lake Mead for 2020 and 2021 are 1,085.28 feet and 1086.90 feet, respectively.

State and Local Report

Ms. Jones, representing the California Department of Water Resources (DWR), reported the 2020 Water Year would be coming to a close at the end of September. She reported that precipitation conditions in Northern California were dry throughout the season, impacting smaller water systems on the North Coast. She reported that precipitation conditions in Southern California fared better due to a couple of late season storms, noting the importance one or two storms could have on the State's average annual precipitation.

Ms. Jones noted that the temperatures during the winter season were warm throughout the State impacting the State's snowpack. Ms. Jones reported that the reservoir system has done well due to the wet precipitation conditions of WY-2019. She added that we will have to wait to see what the next water year will bring, noting that it takes more than one poor water year to have a large impact, especially if reservoir conditions are good.

Mr. Peterson, representing the Metropolitan Water District of Southern California (MWD), reported, that MWD's reservoir storage was good, as it approaches the end of the Water Year. He also noted that water consumption and sales have greatly declined, noting that sales in July were 75% of normal. Mr. Peterson reported that during the heat wave in August, MWD was asked to conserve energy and reduce the Colorado Aqueduct to a 3-pump flow to assist with the State's energy-use reduction goals during that period. He added the aqueduct has returned to a 7-pump flow until the end of the year. Ms. Jones added the State Water Project has also had to amend its pumping operations due to the State's energy use issues in the past.

STATUS OF COLORADO RIVER BASIN PROGRAMS

Status of the Salinity Control Program

Mr. Juricich reported that the Work Group is set to meet from September 28th through 30th via webinars. On the status of the Paradox Valley Unit (PVU) EIS, Mr. Juricich reported that the Forum is trying to get clarification from Reclamation on when the final EIS would be released. In terms of the PVU operations, Reclamation is expecting to restart the six-month injection test in November.

Status of the Glen Canyon Dam Adaptive Management Program

Board Staff Ms. Neuwerth reported that the Adaptive Management Work Group for the Glen Canyon Dam Adaptive Management Program (GCDAMP) met via webinar on August 19-20. Ms. Neuwerth reported that the group discussed the Triennial Work Plan and Budget for FY2021-2023, which allocates approximately $11 million per year for restoration, monitoring, and

program administration. Ms. Neuwerth noted that the funding source for the GCDAMP in FY2021 remains uncertain. Although the House had passed legislation directing that the program was to receive funding from power revenues, the measure hadn't yet been taken up by the Senate, and a continuing resolution seems the most likely short-term funding source. Ms. Neuwerth reported that the Technical Work Group would meet October 14-15 via webinar.

Ms. Neuwerth reported that there are several experimental releases from Glen Canyon Dam under consideration in the next year. "Bug flows," or low steady weekend flows, concluded on August 31st after 4 months of implementation. Ms. Neuwerth reported that 2020 is the third consecutive year in which bug flows have been implemented, and scientists reported that a strong data set was collected this year in spite of the challenges posed by the pandemic. Ms. Neuwerth also noted that a fall high-flow experiment (HFE) release may be possible, although tributary sediment was currently far below the levels needed to trigger an HFE. Finally, Ms. Neuwerth reported that the group is considering a new potential experimental flow release, called a "spring disturbance flow," for March 2021, in coordination with planned dam maintenance that will require low flows of 4,000 cfs for about a week. The proposed spring disturbance flow would follow these unusually low flows with several days at maximum power plant capacity, or about 25,000 cfs, and measure the ecological response.

ANNOUNCEMENTS

Lake Powell Pipeline Project

Chairman Nelson provided some introductory remarks regarding the Lake Powell Pipeline Project. He noted several Basin States Principal's meetings were held over the last few weeks trying to work together with Utah to resolve outstanding issues. Chairman Nelson highlighted the goal of the meetings was to work collaboratively as seven Basin States with the Bureau of Reclamation to reach agreement on all the legal and operational issues.

Mr. Harris provided an overview of the Lake Powell Pipeline Project. He described the project as a proposed 140-mile long pipeline that would deliver, at full build out, about 86,000 acre-feet of water to the St. George area. It would take that water supply from Lake Powell, in the Upper Basin, and transport the water westward across the southern border of Utah and Arizona to Sand Hollow Reservoir, just outside of St. George in the Lower Basin.

Mr. Harris summarized the comment letter provided by the Board on the Draft Environmental Impact Statement for the project, and the letter provided by six of the Basin States. He described how the six Basin States were not able to reach consensus with the State of Utah to resolve outstanding issues.

Board Member Hanks asked how closing the Navajo Generation Station in Arizona will affect water use in the Upper Basin. Mr. Harris agreed that this is something to watch. He expects that Arizona at some point will look at ways to move their Upper Basin allocation for use in the Lower Basin.

USBR System Conservation Projects

Mr. Juricich reported that USBR hosted a webinar on August 24 to describe preliminary plans for creating the System Conservation water supplies that USBR committed to create under the 2019 DCP. Mr. Juricich reported that the following projects were under consideration: System conservation agreements; Minute 323 obligations; Sanchez-Mejorada forebay canal sediment removal project; and Minute No. 242 wellfield expansion project. Finally, Mr. Juricich noted that a Board workshop for Agency technical staff was held on September 8, 2020, to discuss further options and feedback.

Retirement of LC Regional Director, Mr. Terry Fulp

Mr. Harris reported that the USBR-LC Regional Director, Dr. Terry Fulp, announced his retirement from federal service effective October 24, 2020. Mr. Harris noted that over Dr. Fulp's career, he has been an important part of many significant programs and activities that have been developed and implemented since the early 1990s. Finally, Mr. Harris indicated that Board staff will develop a Resolution acknowledging Dr. Fulp's service and contributions for consideration at the October Board meeting.

Salton Sea Management Program

Mr. Juricich provided an update on the Salton Sea Management Program. On August 31, 2020, the California Natural Resources Agency released the Draft Salton Sea Management Program Phase 1: 10-Year Plan Project Description report. The report identifies habitat restoration and dust suppression projects around the Sea. CNRA is hosting three virtual workshops on September 22, 23, and 24 to solicit input.

Washington, D.C. Updates

Mr. Harris reported that Congress is expected to begin working on COVID-19 relief, hurricane relief, and a continuing resolution to keep the federal government operating. In addition, Mr. Harris reported on the Snow Water Supply Forecasting Program Authorization Act. This proposed legislation, introduced by California's Senator Feinstein and Representative Harder, would provide $15M for continuation of airborne snowpack monitoring program.

Next Scheduled Board Meeting

Finally, Mr. Harris noted that the next meeting of the Colorado River Board would be held on October 14th and would also be held virtually using the Zoom Webinar meeting platform.

Additional Announcements

Board member Peterson, from the Metropolitan Water District of Southern California, announced that the Board of the Colorado River Water Users Association (CRWUA) would be meeting on September 10 to discuss the annual CRWUA conference that usually takes place in Las Vegas, Nevada in December. Mr. Peterson noted that a final decision on the CRWUA conference would be made soon. In response to a question from Ms. Jones, Mr. Peterson noted that the December CRWUA conference was likely to be held virtually this year due to the pandemic.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Nelson adjourned the meeting at 11:19 a.m.

RESOLUTION OF THE
COLORADO RIVER BOARD OF CALIFORNIA

HONORING

TERRANCE J. FULP, PH.D.

WHEREAS, the water and power resources of the Colorado River are vital to the State of California and its citizens; and

WHEREAS, the Colorado River Board of California represents and protects California's water and power interests within the Colorado River Basin, consistent with the Law of the River, through negotiations and dialogues with the other Colorado River Basin states and the federal government; and

WHEREAS, the U.S. Bureau of Reclamation and its leadership are indispensable to the management of the Basin's resources and in the resolution of the myriad challenges facing the Basin; and

WHEREAS, Dr. Terrance J. Fulp has served in several key leadership positions over his thirty-one-year career with the Bureau of Reclamation, including serving as the Lower Colorado Regional Director since 2012; and

WHEREAS, Dr. Fulp's balanced leadership and collaborative spirit have been instrumental to the development and successful implementation of numerous programs that ensure the resources of the Colorado River Basin are sustainably managed in the face of drought and uncertainty, including the 2019 Drought Contingency Plans, 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Lower Colorado River Multi-Species Conservation Program, Colorado River Water Delivery Agreement, 2001 Interim Surplus Guidelines, and implementation of the Colorado River Simulation System decision support tool on the RiverWare^{TM} modeling framework; and

WHEREAS, Dr. Fulp has been key to fostering a collaborative and cooperative relationship with the Republic of Mexico, resulting in the development of Minute Nos. 319 and 323, which implement unprecedented environmental measures for the benefit of the Colorado River Delta, including the historic 2014 Pulse Flow, and secure binational sharing of shortages, surplus, and reservoir storage; and

WHEREAS, Dr. Fulp, through his steady and engaging leadership, has developed and nurtured a team of dedicated professionals within Reclamation who skillfully discharge their key operational and river management duties, engage stakeholders on issues big and small, and serve as an invaluable resource to water managers across the Basin; and

NOW THEREFORE BE IT RESOLVED that the Colorado River Board of California recognizes and commends Terry Fulp for his eminently capable leadership, integrity, and tireless commitment to collaboration as the Lower Colorado Regional Director and over his thirty-one years of federal service;

BE IT FURTHER RESOLVED that the Colorado River Board of California and its staff extend their very best wishes to Terry and his family as he embarks on his future endeavors in the years to come.

Unanimously adopted on the 14th day of October 2020.

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Peter Nelson, Chairman

10/5/2020

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

CURRENT STORAGE	PERCENT FULL	Content 1000 ac-ft (kaf)	Elev. (Feet above mean sea level)	7-Day Release (CFS)
LAKE POWELL	47%	11,319	3,595.43	10,300
* LAKE MEAD	39%	10,280	1,083.22	10,800
LAKE MOHAVE	81%	1,474	634.55	15,000
LAKE HAVASU	95%	591	448.58	7,500
TOTAL SYSTEM CONTENTS **	48%	28,805		
As of 10/4/2020				
SYSTEM CONTENT LAST YEAR	53%	31,583		

* Percent based on capacity of 26,120 kaf or elevation 1,219.6 feet.

** TOTAL SYSTEM CONTENTS includes Upper & Lower Colorado River Reservoirs, less Lake Mead exclusive flood control space.

Salt/Verde System	81%	1,858		
Painted Rock Dam	0%	0	530.00	0
Alamo Dam	13%	128	1,121.98	25

Forecasted Water Use for Calendar Year 2020 (as of 10/5/2020) (values in kaf)

NEVADA	258	
SOUTHERN NEVADA WATER SYSTEM		225
OTHERS		34
CALIFORNIA	4,082	
METROPOLITAN WATER DISTRICT OF CALIFORNIA		828
IRRIGATION DISTRICTS		3,239
OTHERS		15
ARIZONA	2,468	
CENTRAL ARIZONA PROJECT		1,387
OTHERS		1,081
TOTAL LOWER BASIN USE		6,808
DELIVERY TO MEXICO - 2020 (Mexico Scheduled Delivery + Preliminary Yearly Excess[1])		1,557

OTHER SIGNIFICANT INFORMATION

UNREGULATED INFLOW INTO LAKE POWELL - OCTOBER FINAL FORECAST DATED 10/1/2020

	MILLION ACRE-FEET	% of Normal
PRELIMINARY OBSERVED WATER YEAR 2020	5.847	54%
OBSERVED APRIL-JULY 2020	3.758	52%
SEPTEMBER OBSERVED INFLOW	0.046	11%
OCTOBER INFLOW FORECAST	0.250	49%

	Upper Colorado Basin	Salt/Verde Basin
WATER YEAR 2020 PRECIP TO DATE[2]	6% (0.02")	8% (0.02")
CURRENT BASIN SNOWPACK	NA% (NA)	NA% (NA)

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

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

Oct 05, 2020 08:56:03 AM

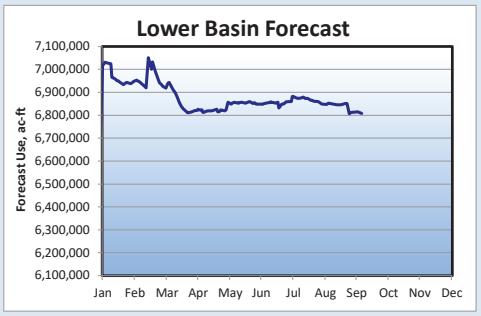
— BUREAU OF — RECLAMATION

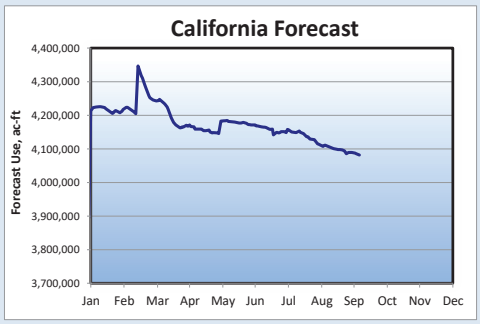
INTERIOR REGION 8: LOWER COLORADO BASIN
CY 2020

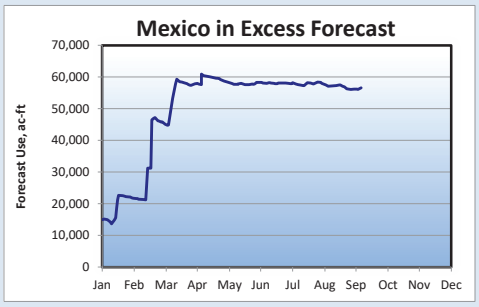
ARIZONA, CALIFORNIA, NEVADA, MEXICO
FORECAST OF END OF YEAR CONSUMPTIVE USE
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS [1]
(ACRE-FEET)

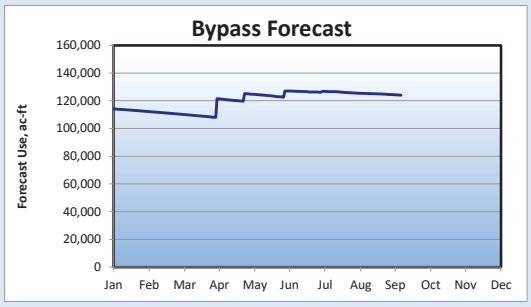
WATER USE SUMMARY	Use To Date CY 2020	Forecast Use CY 2020	Approved Use [2] CY 2020	Excess to Approval CY 2020
ARIZONA	1,889,213	2,467,511	2,454,727	**12,784**
CALIFORNIA	3,218,652	4,081,991	4,081,884	**107**
NEVADA	218,518	258,435	258,435	0
STATES TOTAL [3]	5,326,383	6,807,937	6,795,046	**12,891**
ACCOUNTABLE DELIVERIES TO MEXICO	1,293,069	1,556,575	1,500,000	**56,575**
TO MEXICO IN SATISFACTION OF TREATY (including downward delivery) [4]	1,241,747	1,500,000		
TO MEXICO IN EXCESS OF TREATY [5]	51,322	56,575		
WATER BYPASSED PURSUANT TO IBWC MINUTE NO. 242 [6]	95,759	124,070		
TOTAL LOWER BASIN & MEXICO	6,715,211	8,488,582		

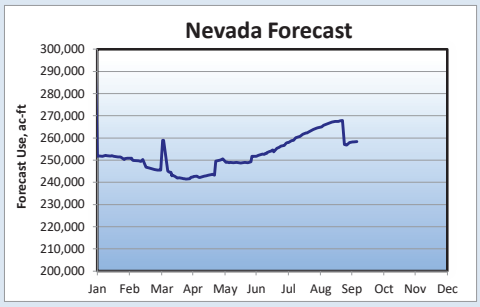
[1] Incorporates 80 daily reporting stations which may be revised after provisional data reports are distributed by the USGS. Use to date has been updated through June for users reporting monthly, and is estimated based on schedule for users reporting annually.
[2] These values reflect adjusted apportionments. 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.
[4] Includes downward adjustment(s) to Mexico's annual delivery schedule for the creation of Mexico's Recoverable Water Savings and/or Mexico's Water Reserve.
[5] Mexico excess forecast is based on actual-to-date and the 5-year average for the period 2014-2018 for remainder of the year.
[6] Bypass forecast is based on actual-to-date and the average for the period 1990-2018 for the remainder of the year.

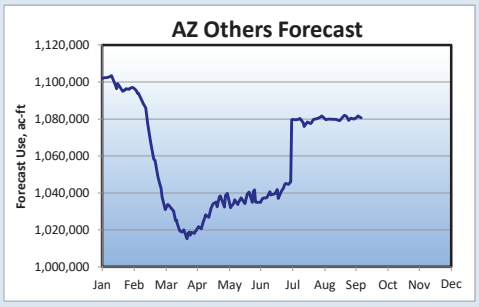


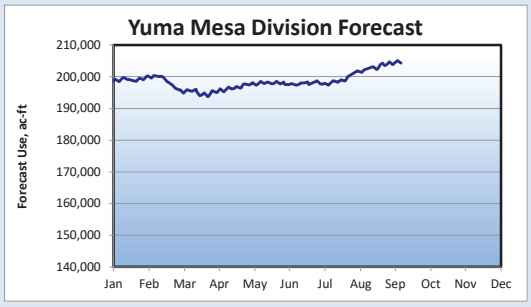


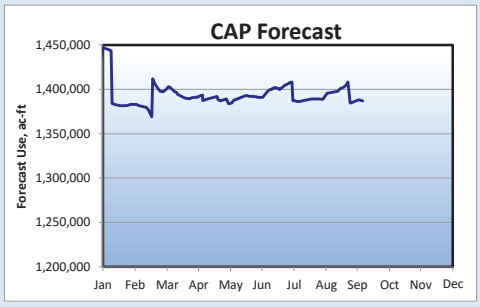


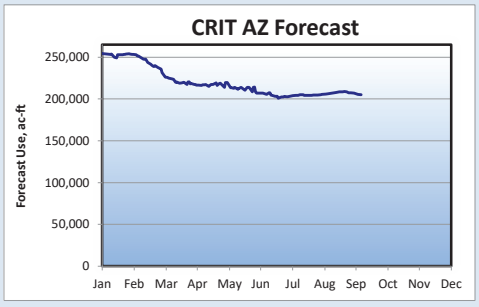


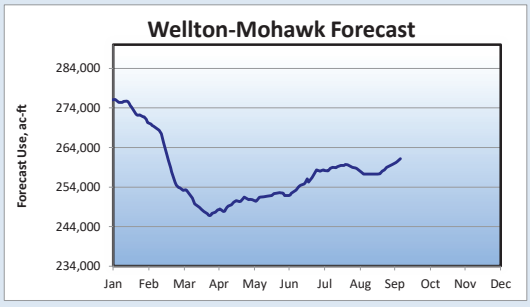


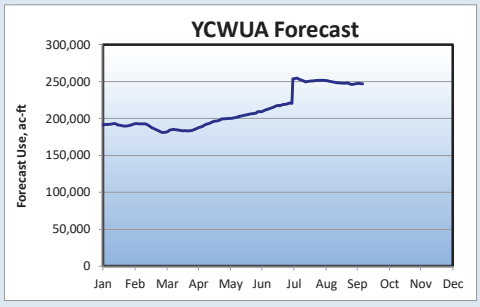












Graph notes: January forecast use is scheduled use in accordance with the Annual Operating Plan's state entitlements, available unused entitlements, and over-run paybacks. A downward sloping line indicates use at a lower rate than scheduled, upward sloping is above schedule, and a flat line indicates a use rate equal to schedule. Lower priority users such as CAP, MWD, and Robert 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.

Oct 05, 2020 08:56:03 AM

— BUREAU OF —
RECLAMATION

INTERIOR REGION 8: LOWER COLORADO BASIN
CY 2020

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 CY 2020	Forecast Use CY 2020	Estimated Use CY 2020	Excess to Estimated Use CY 2020	Diversion To Date CY 2020	Forecast Diversion CY 2020	Approved Diversion CY 2020	Excess to Approved Diversion CY 2020
ARIZONA PUMPERS	11,877	14,074	14,074	---	18,274	21,654	21,654	0
LAKE MEAD NRA, AZ - Diversions from Lake Mead	42	58	58	---	42	58	58	0
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	170	213	213	---	170	213	213	0
DAVIS DAM PROJECT	2	2	2	---	13	15	15	0
BULLHEAD CITY	5,309	7,156	8,122	---	8,286	11,186	12,720	-1,534
MOHAVE WATER CONSERVATION DISTRICT	554	656	656	---	826	979	979	0
BROOKE WATER LLC	254	328	323	---	382	493	484	**9**
MOHAVE VALLEY IDD	12,252	15,369	16,516	---	22,687	28,460	30,585	-2,125
FORT MOJAVE INDIAN RESERVATION, AZ	28,978	33,089	44,550	---	53,664	61,277	82,500	-21,223
GOLDEN SHORES WATER CONSERVATION DISTRICT	235	278	278	---	352	417	417	0
HAVASU NATIONAL WILDLIFE REFUGE	2,987	3,357	3,563	---	24,891	29,231	41,820	-12,589
LAKE HAVASU CITY	5,741	7,807	8,928	---	9,262	12,594	14,400	-1,806
CENTRAL ARIZONA PROJECT (CAP)	992,019	1,386,943		---	992,019	1,386,943		---
TOWN OF PARKER	332	416	433	---	676	873	916	-43
COLORADO RIVER INDIAN RESERVATION, AZ	182,821	205,220	246,946	---	383,374	469,090	512,102	-43,012
EHRENBURG IMPROVEMENT ASSOCIATION	192	228	228	---	269	319	319	0
CIBOLA VALLEY [1]	12,173	14,297	15,219	---	17,025	19,993	21,270	-1,277
CIBOLA NATIONAL WILDLIFE REFUGE	12,779	14,264	14,264	0	20,612	23,005	23,005	0
IMPERIAL NATIONAL WILDLIFE REFUGE	2,903	3,799	3,799	0	4,684	6,128	6,128	0
BLM PERMITEES (PARKER DAM to IMPERIAL DAM)	638	756	756	0	981	1,163	1,163	0
CHA CHA, LLC	731	982	1,365	---	1,125	1,510	2,100	-590
BEATTIE FARMS	680	812	722	---	1,046	1,251	1,110	**141**
YUMA PROVING GROUND	423	496	474	---	423	496	474	**22**
GILA MONSTER FARMS	3,088	4,112	5,257	---	5,351	7,135	9,156	-2,021
WELLTON-MOHAWK IDD	216,985	261,169	278,000	-16,831	304,847	381,938	412,965	-31,027
BLM PERMITEES (BELOW IMPERIAL DAM)	56	66	66	0	86	102	102	0
CITY OF YUMA	10,737	14,563	16,401	-1,838	18,597	25,229	27,500	-2,271
MARINE CORPS AIR STATION YUMA	1,047	1,314	1,360	---	1,047	1,314	1,360	-46
UNION PACIFIC RAILROAD	20	26	29	---	37	48	48	0
UNIVERSITY OF ARIZONA	584	754	896	---	584	754	896	-142
YUMA UNION HIGH SCHOOL DISTRICT	84	112	150	---	114	151	200	-49
DESERT LAWN MEMORIAL	17	20	20	---	24	28	28	0
NORTH GILA VALLEY IRRRIGATION DISTRICT	8,311	10,368	12,165	---	33,129	42,810	44,200	-1,390
YUMA IRRIGATION DISTRICT	30,144	38,071	38,701	---	54,309	69,232	71,700	-2,468
YUMA MESA IDD	131,523	155,884	143,893	---	181,467	223,354	239,280	-15,926
UNIT "B" IRRIGATION DISTRICT	17,635	20,887	20,888	---	20,732	25,435	29,400	-3,965
FORT YUMA INDIAN RESERVATION	1,263	1,497	1,497	---	1,939	2,298	2,298	0
YUMA COUNTY WATER USERS' ASSOCIATION	193,043	247,030	244,397	---	267,788	359,627	*375,492*	-15,865
COCOPAH INDIAN RESERVATION	497	935	1,651	---	648	1,322	2,530	-1,208
RECLAMATION-YUMA AREA OFFICE	87	103	103	---	87	103	103	0
RETURN FROM SOUTH GILA WELLS								
TOTAL ARIZONA	1,889,213	2,467,511	2,531,963		2,451,869	3,218,228	3,376,690	
CAP	992,019	1,386,943				1,386,943		
ALL OTHERS	897,194	1,080,568	1,146,963			1,831,285	1,991,690	
YUMA MESA DIVISION, GILA PROJECT	169,978	204,323	171,610	32,713		335,396		

ARIZONA ADJUSTED APPORTIONMENT CALCULATION	
Arizona Basic Apportionment	2,800,000
System Conservation Water - Pilot System Conservation Program [2]	(400)
System Conservation Water - Colorado River Indian Tribes (CRIT) [3]	(50,000)
System Conservation Water - Fort McDowell Yavapai Nation (FMYN) [4]	(10,000)
Creation of Extraordinary Conservation ICS - CRIT (Estimated) [5,8]	(3,736)
Creation of Extraordinary Conservation ICS - GRIC (Estimated) [6,8]	(83,000)
Creation of Extraordinary Conservation ICS - MVIDD (Estimated) [7,8]	(6,137)
Arizona DCP Contribution [9]	(192,000)
Total State Adjusted Apportionment	2,454,727
Excess to Total State Adjusted Apportionment	12,784
Estimated Allowable Use for CAP	**1,374,273**

[1] Includes the following water users within the Cibola Valley: Cibola Valley IDD, Arizona Game and Fish Commission, GSC Farm, LLC, Red River Land Company, LLC, Western Water, LLC, and the Hopi Tribe.

[2] The estimated amount of System Conservation Water that will be created by the City of Bullhead City pursuant to System Conservation Implementation Agreement (SCIA) No. 15-XX-30-W0587, as amended. This System Conservation Water will remain in Lake Mead to benefit system storage.

[3] System Conservation Water to be created by CRIT pursuant to the *Agreement Among the United States of America, Through the Department of the Interior, Bureau of Reclamation, the State of Arizona, Through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, and the Colorado River Indian Tribes to Fund the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in use During Calendar Years 2020-2022*. This System Conservation Water will remain in Lake Mead to benefit system storage.

[4] CAP water being conserved by FMYN pursuant to SCIA No. 19-XX-30-W0658, which will remain in Lake Mead to benefit system storage. In accordance with this SCIA and Section 3.b of the *Lower Basin Drought Contingency Plan Agreement*, the Bureau of Reclamation intends to apply this water towards the Secretary of the Interior's commitment to create or conserve 100,000 AF per annum or more of Colorado River System water to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the Lower Basin.

[5] CRIT has been approved to create up to 3,736 AF of Extraordinary Conservation (EC) ICS in 2020. The actual amount of EC ICS created by CRIT will be based on final accounting and verification.

[6] CAP water being conserved by GRIC to create EC ICS consistent with its approved plan to create up to 83,000 AF of EC ICS in 2020. The actual amount of EC ICS created by GRIC will be based on final accounting and verification.

[7] MVIDD has been approved to create up to 6,137 AF of EC ICS in 2020. The actual amount of EC ICS created by MVIDD will be based on final accounting and verification.

[8] When combined with the approved EC ICS creation amounts of other ICS creators in the state of Arizona, the total amount of EC ICS approved for creation in the state of Arizona is approximately 153,000 AF, which exceeds the state's annual creation limit set forth in Section XI.G.3.B.4 of the 2007 Interim Guidelines. In accordance with Section XI.G.3.B.4 and Section IV.B of the Lower Basin Drought Contingency Operations (LBOps), the total amount of EC ICS that may be created by the states of Arizona, California, and Nevada in 2020 will be limited to 625,000 AF.

[9] In accordance with Section III.B.1.a of LBOps, the state of Arizona shall make an annual DCP Contribution in the total amount of 192,000 AF. In accordance with the Agreement Regarding Lower Basin Drought Contingency Plan Obligations, it is currently anticipated that the required DCP Contribution will be made by the Central Arizona Water Conservation District (CAWCD) through the creation of EC ICS by and reductions in consumptive use. CAWCD has been approved to create up to 60,468 AF of EC ICS in 2020. The actual amount of EC ICS created by CAWCD and credited toward the DCP Contribution will be based on final accounting and verification.

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

Oct 05, 2020 08:56:03 AM

BUREAU OF RECLAMATION

INTERIOR REGION 8: LOWER COLORADO BASIN
CY 2020

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 To Date CY 2020	Forecast Use CY 2020	Estimated Use CY 2020	Excess to Estimated Use CY 2020	Diversion To Date CY 2020	Forecast Diversion CY 2020	Approved Diversion CY 2020	Excess to Approved Diversion CY 2020
CALIFORNIA PUMPERS	1,432	1,697	1,697	---	2,600	3,081	3,081	0
FORT MOJAVE INDIAN RESERVATION, CA	6,232	7,284	8,996	---	11,583	13,539	16,720	-3,181
CITY OF NEEDLES (includes LCWSP use)	796	1,124	1,605	-481	1,548	2,008	2,261	-253
METROPOLITAN WATER DISTRICT	548,785	827,997		---	551,019	830,909		---
COLORADO RIVER INDIAN RESERVATION, CA	2,728	3,233	3,233	---	4,519	5,355	5,355	0
PALO VERDE IRRIGATION DISTRICT	323,631	349,492	419,768	---	661,090	782,638	856,000	-73,362
YUMA PROJECT RESERVATION DIVISION	28,722	38,534	47,721	---	59,275	79,780	91,553	-11,773
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	---	---	---	---	31,945	41,831	46,058	-4,227
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	---	---	---	---	27,330	37,949	*45,495*	-7,546
YUMA ISLAND PUMPERS	1,846	2,188	2,188	---	3,337	3,954	3,954	0
FORT YUMA INDIAN RESERVATION - RANCH 5	750	939	832	---	1,356	1,694	1,501	**193**
IMPERIAL IRRIGATION DISTRICT [1]	2,022,767	2,488,528	2,640,300	-151,772	2,027,262	2,513,737	2,715,352	---
SALTON SEA SALINITY MANAGEMENT	0	0	0	0	0	0	0	---
COACHELLA VALLEY WATER DISTRICT	280,202	360,073	394,000	-33,927	294,084	377,980	406,654	---
OTHER LCWSP CONTRACTORS	542	642	642	---	889	1,054	1,054	0
CITY OF WINTERHAVEN	53	63	63	---	82	97	97	0
CHEMEHUEVI INDIAN RESERVATION	166	197	197	---	9,570	11,340	11,340	0
TOTAL CALIFORNIA	3,218,652	4,081,991			3,628,214	4,627,166	4,950,151	

CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION

California Basic Apportionment	4,400,000
System Conservation Water - Pilot System Conservation Program [2]	(145)
IID Creation of Extraordinary Conservation ICS - Stored in Lake Mead (Estimated) [3]	(1,579)
IID Creation of Additional Conserved Water (Estimated) [4]	(23,421)
MWD Creation of Extraordinary Conservation ICS (Estimated) [5]	(292,971)
Total State Adjusted Apportionment	4,081,884
Excess to Total State Adjusted Apportionment	107

Estimated Allowable Use for MWD **1,120,968**

[1] As shown here, IID's Approved Diversion and Estimated Use values reflect the maximum amount of Colorado River water available to IID in 2020.

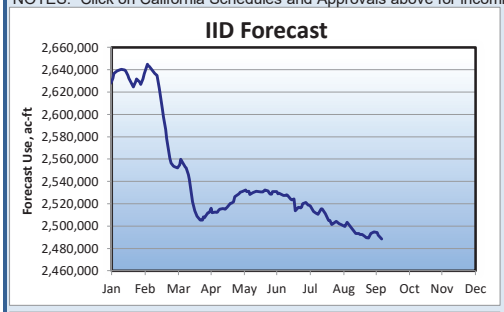
[2] System Consevation Water to be conserved by the City of Needles pursuant to System Conservation Implementation Agreement No. 15-XX-30-W0596, executed under the Pilot System Conservation Program. This water will remain in Lake Mead to benefit system storage.

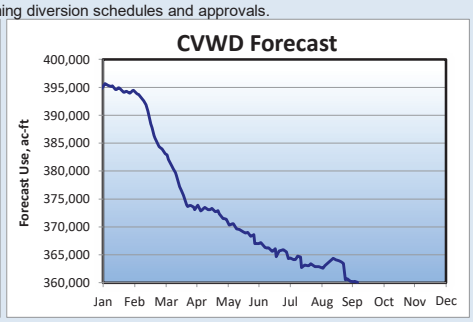
[3] IID has been approved to create up to 62,000 AF of Extraordinary Conservation (EC) ICS in 2020; however, due to limitations set forth in the California ICS Agreement, may only store up to 1,579 AF in its Lake Mead ICS Account. Creation and storage of EC ICS by IID in excess of 1,579 AF will require an executed amendment to the California ICS Agreement, which has not occurred as of the date of this forecast. The actual amount of EC ICS created by IID and stored in its Lake Mead ICS Account will be based on final accounting and verification.

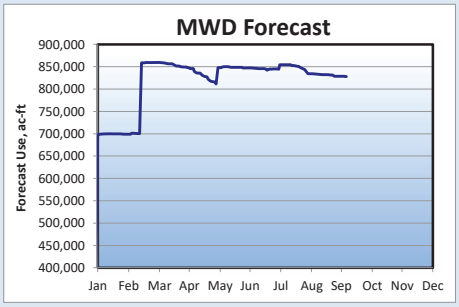
[4] In its CY 2020 water order, IID has indicated that it intends to create up to a total of 25,000 AF of "Additional Conserved Water" for purposes including, but not limited to, the creation of ICS for storage in Lake Mead. As noted above, IID may only use up to 1,579 AF of "Additional Conserved Water" for the creation and storage of EC ICS in its Lake Mead ICS Account. Storage of "Additional Conserved Water" as EC ICS in excess of this amount will require an executed amendment to the California ICS Agreement, which has not occurred as of the date of this forecast. The actual amount of "Additional Conserved Water" created by IID in 2020 will be based on final accounting and verification.

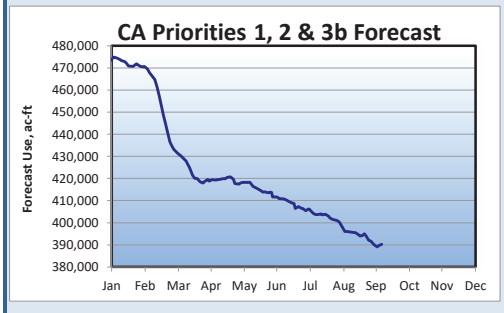
[5] MWD has been approved to create up to 450,000 AF of EC ICS in 2020, less the amount of EC ICS created by IID, and further limited to the amount that, when added to the EC ICS created by the states of Arizona and Nevada, does not exceed 625,000 AF. The actual amount of EC ICS created by MWD will be based on final accounting and verification.

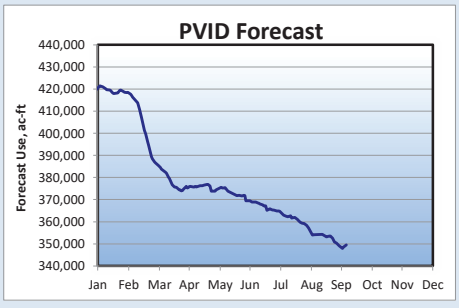
NOTES: Click on California Schedules and Approvals above for incoming diversion schedules and approvals.











Oct 05, 2020 08:56:03 AM

— BUREAU OF —
RECLAMATION

INTERIOR REGION 8: LOWER COLORADO BASIN
CY 2020

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

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

WATER USER	Use To Date CY 2020	Forecast Use CY 2020	Estimated Use CY 2020	Excess to Estimated Use CY 2020	Diversion To Date CY 2020	Forecast Diversion CY 2020	Approved Diversion CY 2020	Excess to Approved Diversion CY 2020
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	362,404	445,767		---	362,404	445,767		---
LAKE MEAD NRA, NV - Diversions from Lake Mead	409	695	1,500	---	409	695	1,500	-805
LAKE MEAD NRA, NV - Diversions from Lake Mohave	161	260	500	---	161	260	500	-240
BASIC MANAGEMENT INC.	4,094	6,115	8,208	---	4,094	6,115	8,208	-2,093
CITY OF HENDERSON (BMI DELIVERY)	13,664	19,982	15,878	---	13,664	19,982	15,878	**4,104**
NEVADA DEPARTMENT OF WILDLIFE	9	12	12	0	853	1,131	1,000	---
PACIFIC COAST BUILDING PRODUCTS INC.	729	986	928	---	729	986	928	**58**
BOULDER CANYON PROJECT	145	172	172	---	253	300	300	0
BIG BEND WATER DISTRICT	1,732	2,794	4,822	---	3,435	5,615	10,000	-4,385
FORT MOJAVE INDIAN TRIBE	2,202	2,645	4,020	---	3,288	3,949	6,000	-2,051
LAS VEGAS WASH RETURN FLOWS	-167,031	-220,993	-221,129	---				
TOTAL NEVADA	218,518	258,435	254,092	0	389,290	484,800	483,495	-5,412
SOUTHERN NEVADA WATER SYSTEM (SNWS)	195,373	224,774				445,767		
ALL OTHERS	23,145	33,661				39,033		
NEVADA USES ABOVE HOOVER	214,584	252,996				475,236		
NEVADA USES BELOW HOOVER	3,934	5,439				9,564		

Tributary Conservation Intentionally Created Surplus (ICS)

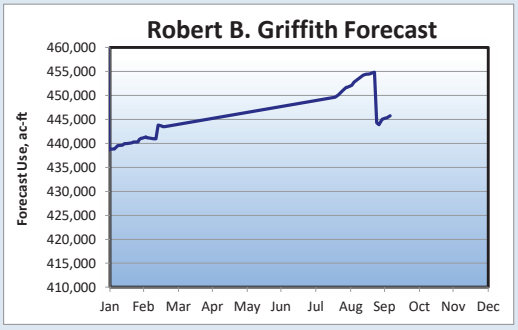
Southern Nevada Water Authority (SNWA) Creation of Tributary Conservation ICS (Approved) [1]	43,000

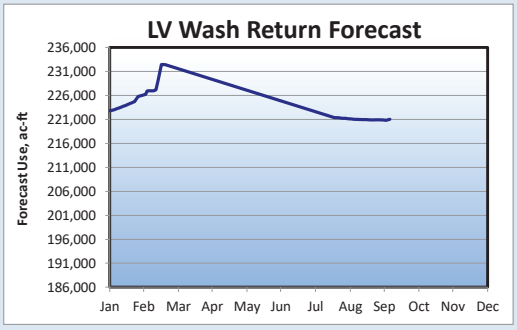
NEVADA ADJUSTED APPORTIONMENT CALCULATION

Nevada Basic Apportionment	300,000
SNWA Creation of Extraordinary Conservation (EC) ICS (Estimated) [2]	(41,565)
Total State Adjusted Apportionment	258,435
Excess to Total State Adjusted Apportionment	0

[1] SNWA has been approved to create up to 43,000 AF of TC ICS in 2020. The actual amount of TC ICS created by SNWA will be based on final accounting and verification.
[2] SNWA has been approved to create up to 100,000 AF of EC ICS in 2020. The actual amount of EC ICS created by SNWA will be based on final accounting and verification.

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

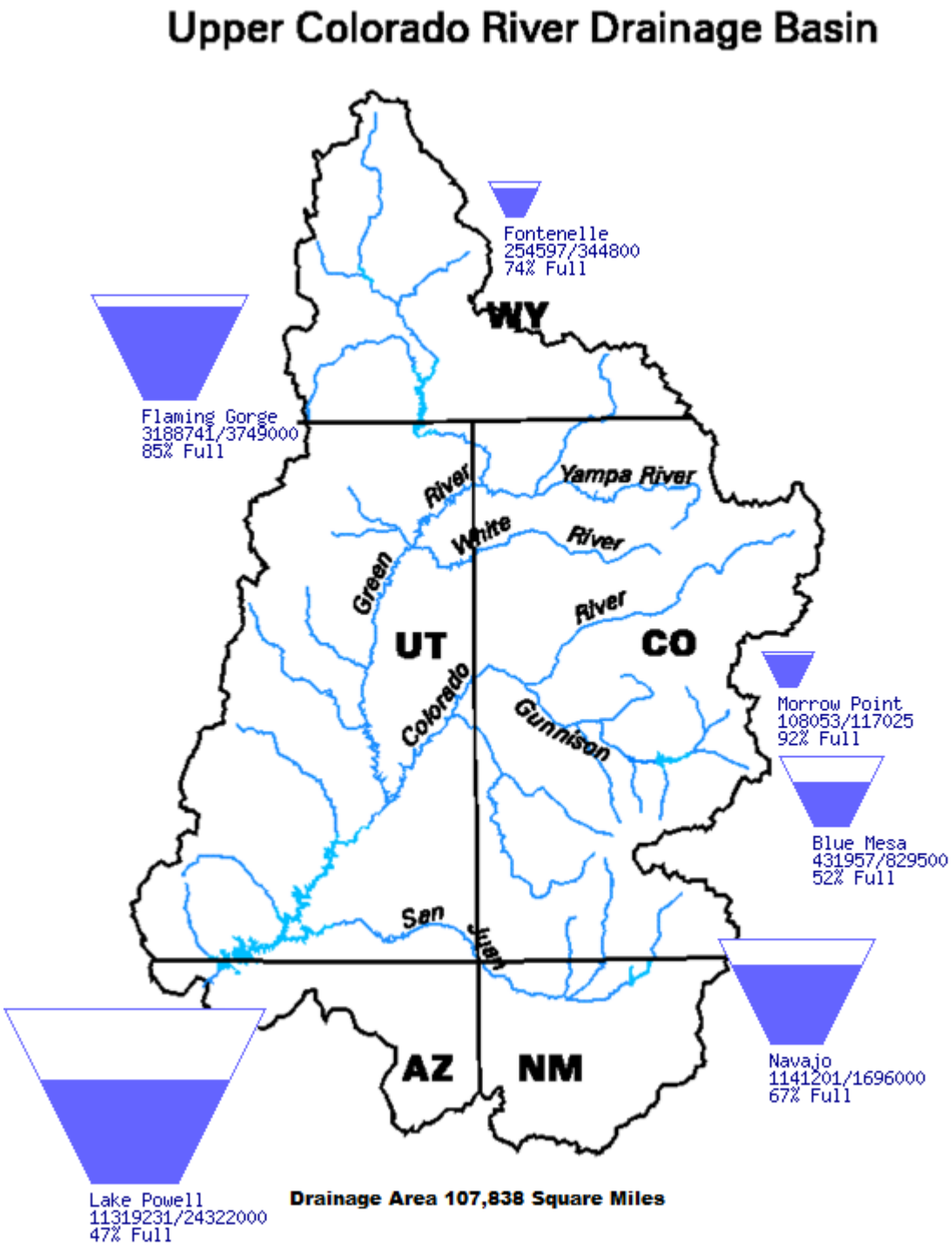




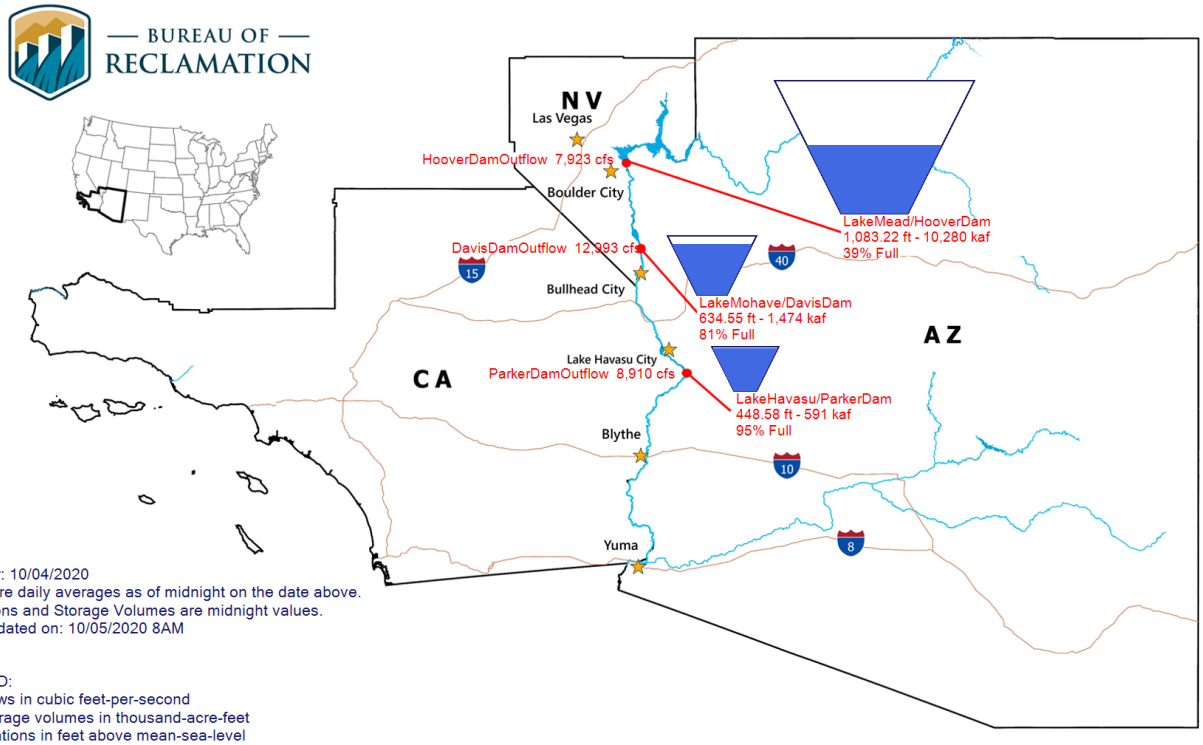
Upper Colorado Region Water Resources Group

River Basin Tea-Cup Diagrams

Data Current as of:
10/04/2020



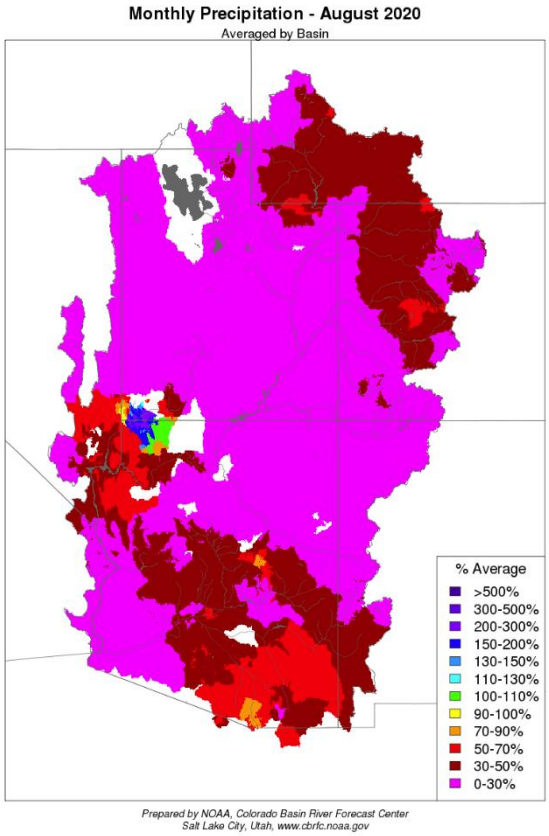
Lower Colorado River Teacup Diagram

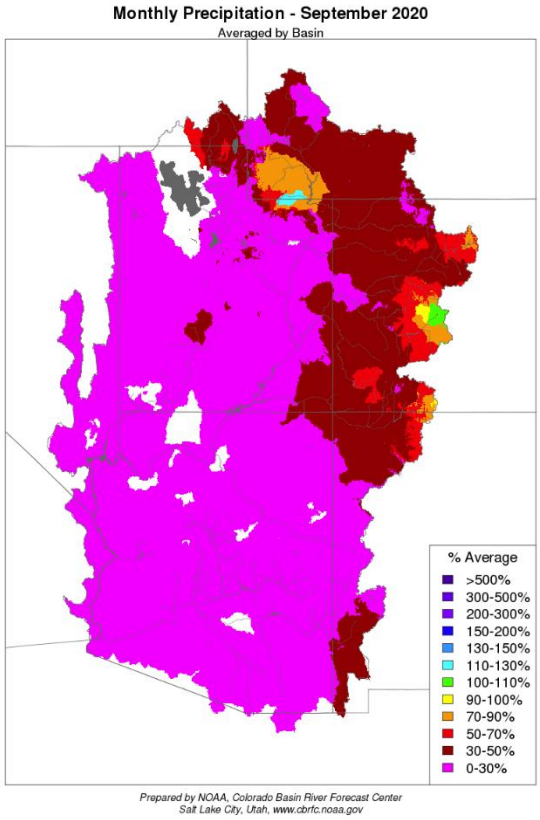


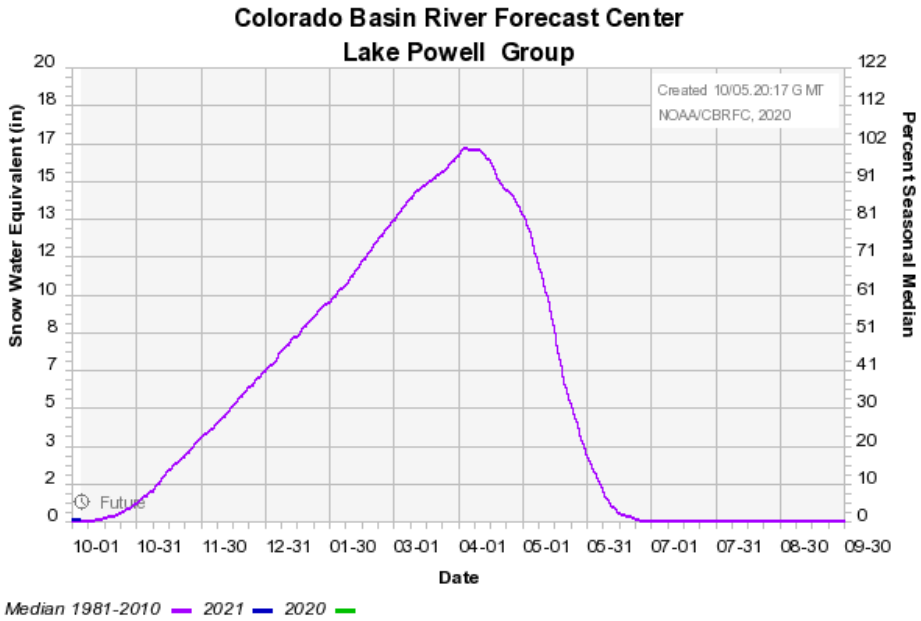
Data for: 10/04/2020
Flows are daily averages as of midnight on the date above.
Elevations and Storage Volumes are midnight values.
Last updated on: 10/05/2020 8AM

LEGEND:
cfs: Flows in cubic feet-per-second
kaf: Storage volumes in thousand-acre-feet
ft: Elevations in feet above mean-sea-level

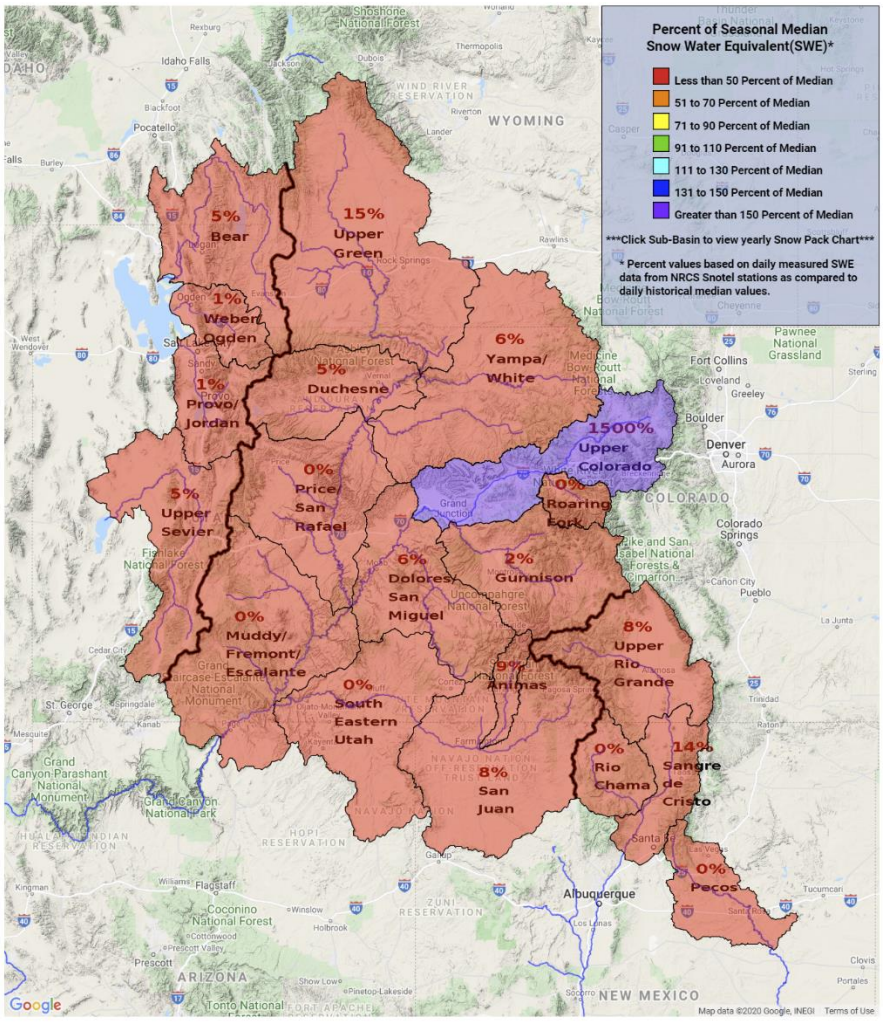
NOAA National Weather Service Monthly Precipitation Map August and September 2020





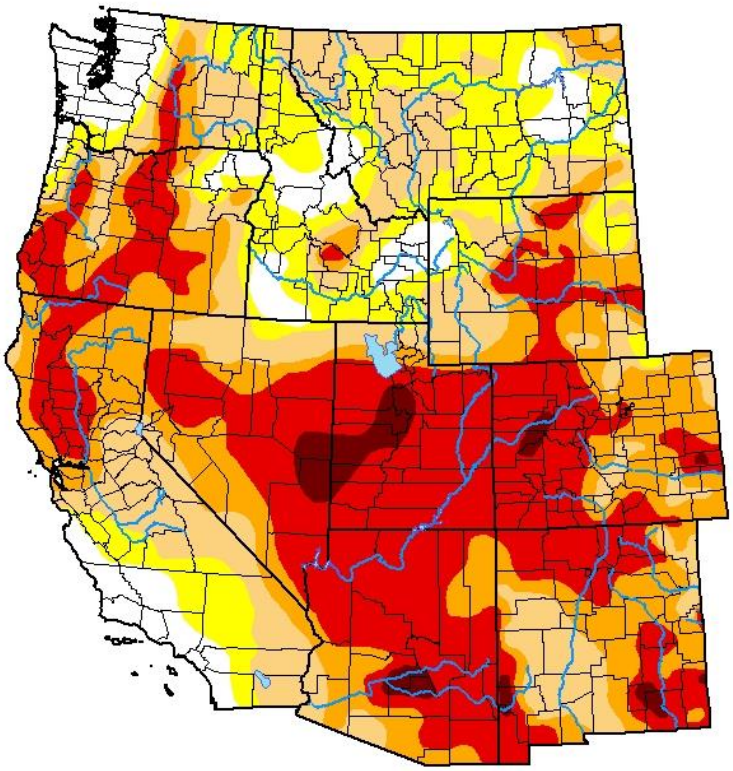


Snow Pack Conditions Map
Upper Colorado Region



USDA United States Drought Monitor Map

U.S. Drought Monitor
West



September 29, 2020
(Released Thursday, Oct. 1, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.51	91.49	76.07	54.55	33.11	2.31
Last Week 09-22-2020	7.72	92.28	73.37	52.86	29.21	1.29
3 Months Ago 06-30-2020	35.15	64.85	45.24	22.93	5.00	0.12
Start of Calendar Year 12-31-2019	59.17	40.83	18.17	7.12	0.00	0.00
Start of Water Year 10-01-2019	68.40	31.60	16.32	3.16	0.00	0.00
One Year Ago 10-01-2019	68.40	31.60	16.32	3.16	0.00	0.00

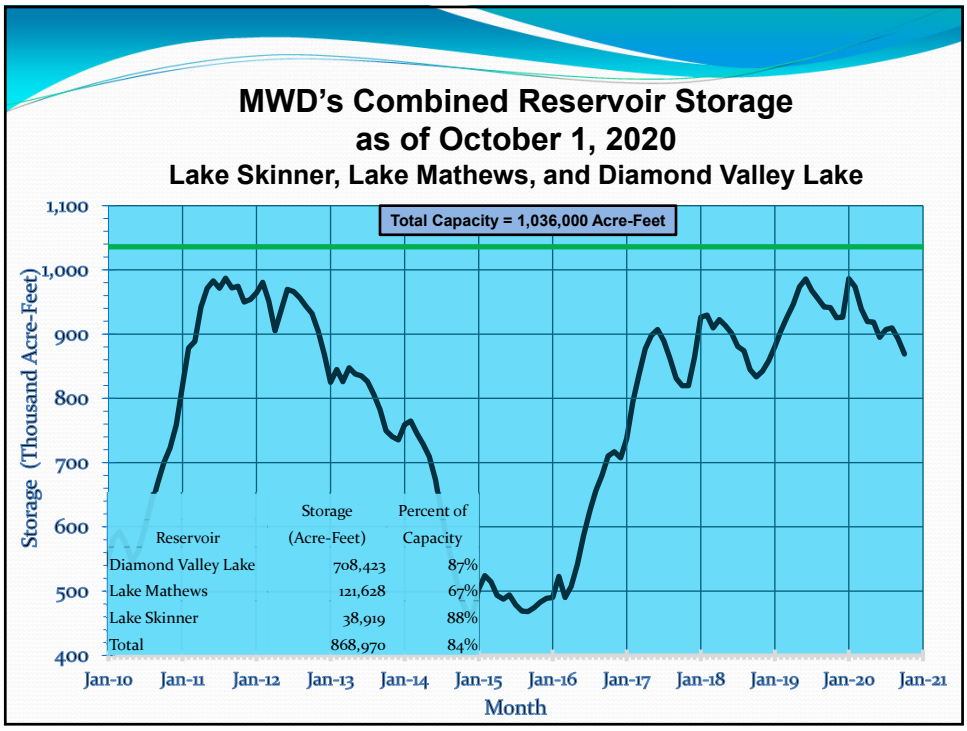
Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

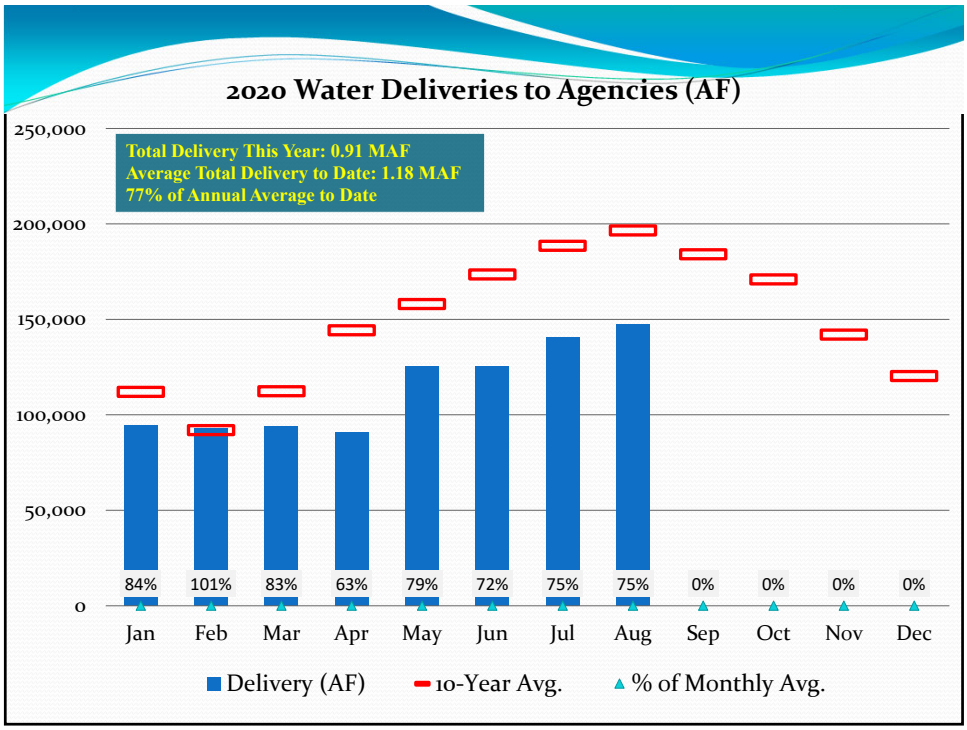
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:
Brad Rippey
U.S. Department of Agriculture

droughtmonitor.unl.edu

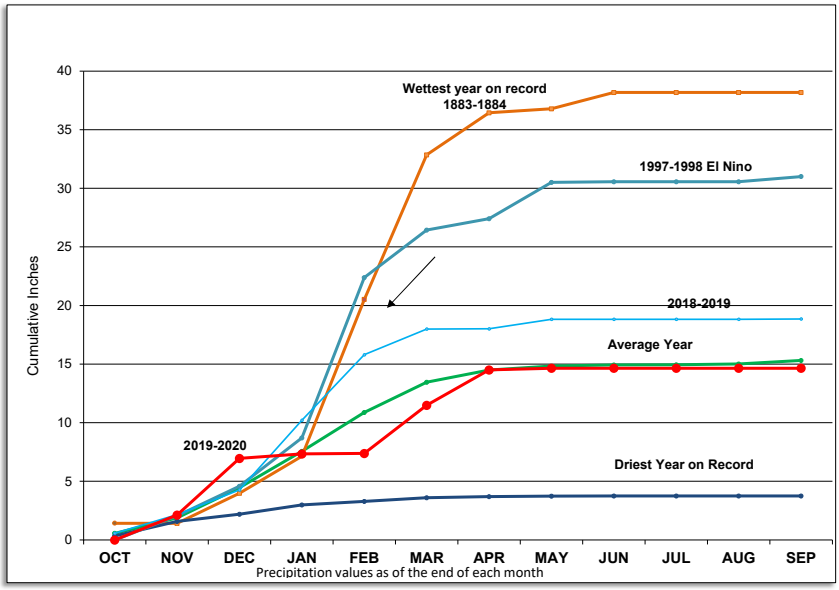

MWD's Combined Reservoir Storage
as of October 1, 2020
Lake Skinner, Lake Mathews, and Diamond Valley Lake
Total Capacity = 1,036,000 Acre-Feet
Storage (Thousand Acre-Feet)
1,100
1,000
900
800
700
600
500
400
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Month
Reservoir | Storage (Acre-Feet) | Percent of Capacity
Diamond Valley Lake | 708,423 | 87%
Lake Mathews | 121,628 | 67%
Lake Skinner | 38,919 | 88%
Total | 868,970 | 84%

1


2020 Water Deliveries to Agencies (AF)
Total Delivery This Year: 0.91 MAF
Average Total Delivery to Date: 1.18 MAF
77% of Annual Average to Date
250,000
200,000
150,000
100,000
50,000
0
84%
101%
83%
63%
79%
72%
75%
75%
0%
0%
0%
0%
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Delivery (AF)
10-Year Avg.
% of Monthly Avg.

2

Los Angeles Civic Center Precipitation



1

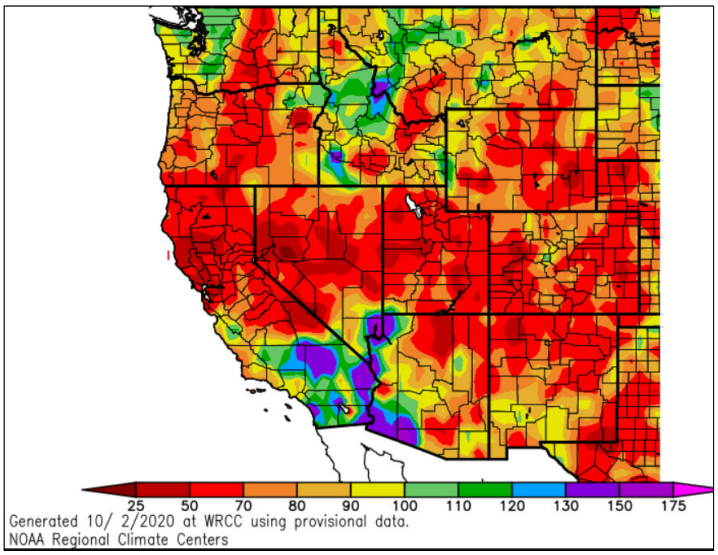
Precipitation at Six Major Stations in Southern California

From October 1, 2019 to September 30, 2020

Station	Precipitation in inches: Sept	Oct 1 to Sept 30	Average to Date	Percent of Average
San Luis Obispo	0.00	9.60	22.44	43%
Santa Barbara	0.00	11.22	17.78	63%
Los Angeles	0.00	14.65	15.31	96%
San Diego	0.00	13.60	10.15	134%
Blythe	0.00	2.92	3.81	77%
Imperial	0.00	2.00	2.83	71%

2

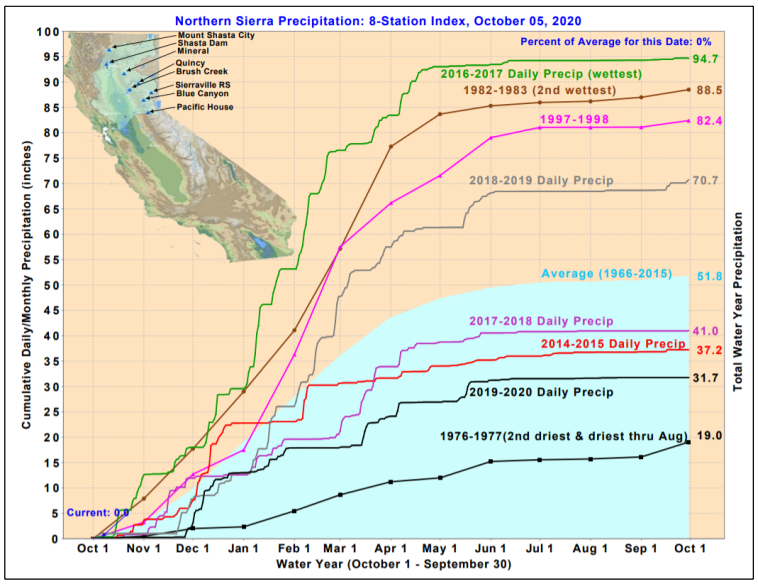
Percent of Average Precipitation (%)
October 2, 2019 – October 1, 2020



Western Regional Climate Center
https://wrcc.dri.edu/cgi-bin/anomimage.pl?wrc12mPpct.png

3

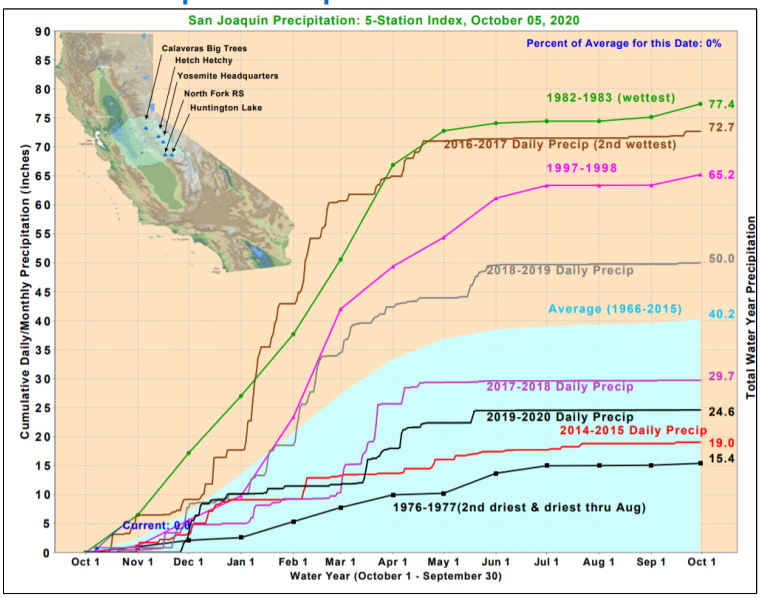
Northern Sierra Precipitation: 8 Station Index



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

4

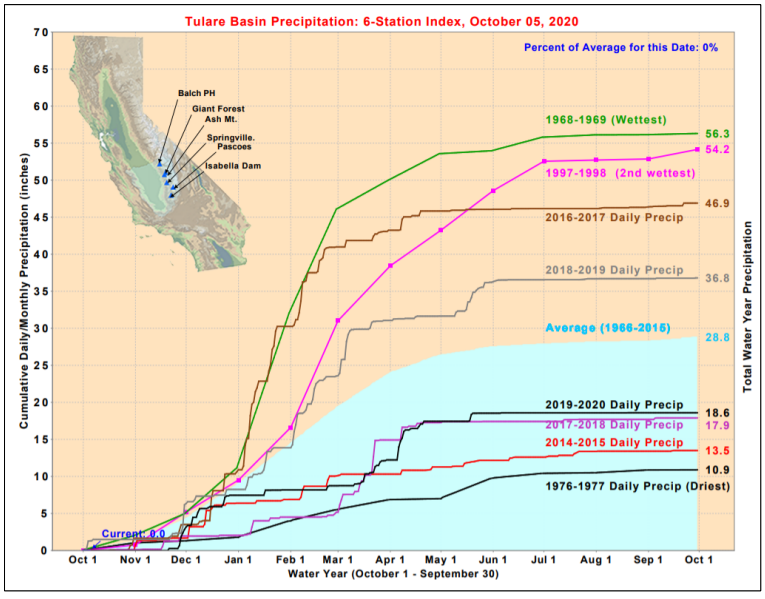
San Joaquin Precipitation: 5 Station Index



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

5

Tulare Basin Precipitation: 6 Station Index



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

6

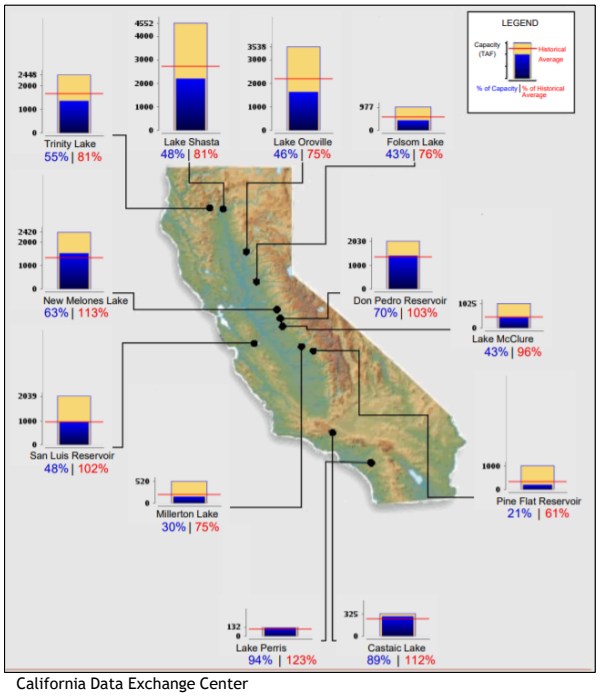
Comparison of SWP Water Storage

Reservoir	Capacity	2019 Storage (acre-feet) As of Oct 1	2019 Storage (acre-feet) % of Cap.	2020 Storage (acre-feet) As of Oct 1	2020 Storage (acre-feet) % of Cap.
Frenchman	55,475	44,595	80%	36,225	65%
Lake Davis	84,371	67,650	80%	53,906	64%
Antelope	22,564	18,729	83%	16,406	73%
Oroville	3,553,405	2,215,749	62%	1,626,252	46%
TOTAL North	3,715,815	2,346,723	63%	1,732,789	47%
Del Valle	39,914	34,092	85%	32,457	81%
San Luis	2,027,835	1,260,178	62%	972,963	48%
Pyramid	169,901	166,719	98%	167,179	98%
Castaic	319,247	289,530	91%	290,850	91%
Silverwood	74,970	72,494	97%	69,960	93%
Perris	132,164	97,135	73%	123,102	93%
TOTAL South	2,764,031	1,920,148	69%	1,656,511	60%
TOTAL SWP	6,479,846	4,266,871	66%	3,389,300	52%

As of May 22, 2020, the Table A allocations for SWP contractors is 20%.

7

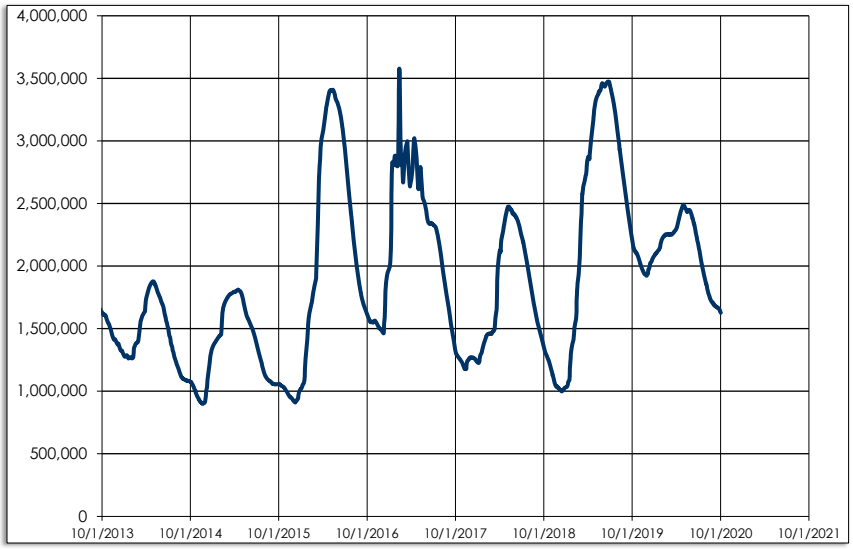
Reservoir Current Conditions as of October 1, 2020



California Data Exchange Center
https://cdec.water.ca.gov/reportapp/javareports?name=rescond.pdf

8

Oroville Storage (acre-feet)
October 1, 2013 - October 1, 2020



9

San Diego County Water Authority
Our Region's Trusted Water Leader

Regional Conveyance System Study

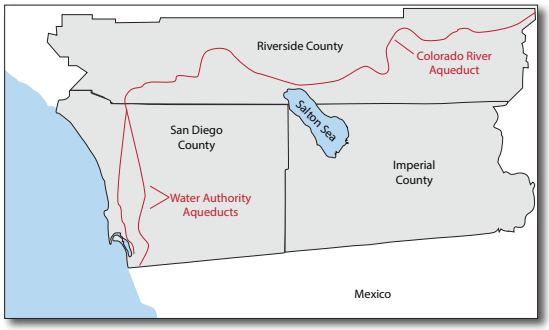
Improving INFRASTRUCTURE

A new study will explore the viability of a regional conveyance system to transport water from the Colorado River to San Diego County and provide multiple benefits across the Southwest. The San Diego County Water Authority's Board of Directors approved funds for the two-year study as part of the budget for Fiscal Years 2020 and 2021.

The conveyance system is one of the ideas being discussed by San Diego County water leaders to enhance partnerships and solutions that make sense locally and more broadly as part of Governor Newsom's Water Portfolio Program to develop resiliency statewide.

Goals of the Study

The Water Authority's study will look at a regional conveyance system that could move water conserved under the 2003 Quantification Settlement Agreement (QSA) directly between the Imperial Valley and San Diego to maintain reliability of the San Diego region's water supply at an affordable cost. The new study is focused on how a regional pipeline could provide multiple benefits as part of a long-term water management strategy for California and the Southwest. Currently, the Metropolitan Water District's Colorado River Aqueduct conveys the QSA water through Riverside County before it flows to San Diego.



An alternate "single-use" pipeline has been studied periodically over decades as part of the Water Authority's Regional Water Facilities Optimization and Master Plan Update. This new study will build upon past studies with a focus on multi-use options and potential partnerships.

Water Reliability

Since the signing of the QSA in 2003, the Water Authority has received a growing portion of the San Diego region's water through the nation's largest ag-to-urban water transfer with the Imperial Irrigation District and through the lining of the All-American and Coachella Canals. At its height, the QSA will provide half of the region's water supply, ensuring long-term reliability.

The Water Authority's water transfer agreement with IID runs through 2047 with an option to extend to 2077. The canal lining water flows to the region for 110 years.

Since the Water Authority has no direct access to this conserved water, it is delivered to the Water Authority service area under a separate agreement with MWD through 2047. After 2047, the Water Authority would need to secure delivery of the IID transfer water either through negotiating a new agreement with MWD or exploring other conveyance options. Delivery of the canal lining water is secure for the entire 110-year duration of that supply.

Regional Conveyance System Study

With discussions across the Southwest about the future of the Colorado River, the time is right to study whether it could prove more cost-effective to build a regional conveyance system directly from the Imperial Valley by pursuing potential partnerships to yield multiple benefits across the Southwest.

Potential Benefits of Regional Conveyance

In analyzing a new conveyance system between San Diego and the Imperial Valley, the study will consider a variety of partnerships that could develop or enhance local surface water and groundwater storage, renewable energy integration and generation, and other potential multi-use opportunities. The study will also consider a system that could create water storage opportunities for IID to support water conservation and agriculture while addressing critical issues like the Salton Sea. Further, the study could consider the bi-national benefits of potential partnerships with Mexico.

Three Proposed Conveyance Routes

The proposed conveyance system under review would be designed to deliver the QSA water, which in 2021 will reach its full amount of 280,000 acre-feet of water annually.

The new study will be completed in two phases over two years and include technical, economic, and legal analysis of the three proposed routes. Each route would start at the end of the All-American Canal at the Westside Main Canal in the southwest corner of the Imperial Valley. Conceptually, the pipeline would be 102 inches in diameter with a length of approximately 75 to 90 miles. It would include other facilities such as canals, a desalination plant, pump stations, and power generating facilities as needed and feasible.

Two of the potential routes would follow a southern corridor between the Imperial Valley and San Diego, with one route going over the mountains parallel to the U.S./Mexico border, mainly using open-trench construction. The other potential alignment, just to the north, would mainly involve tunneling through the mountains. Both routes would lead to San Vicente Reservoir in San Diego County, which is connected to the Water Authority's aqueduct system.

The third and northernmost route would follow the Westside Main Canal toward the Salton Sea, then head west past Borrego Springs and tunnel through the mountains. It would eventually connect to the Water Authority's Twin Oaks Valley Water Treatment Plant in San Marcos.

For more information, go to **sdcwa.org**.

San Diego County Water Authority
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Regional Conveyance System Study Update

Colorado River Board of California
October 14, 2020

Dan Denham
Deputy General Manager

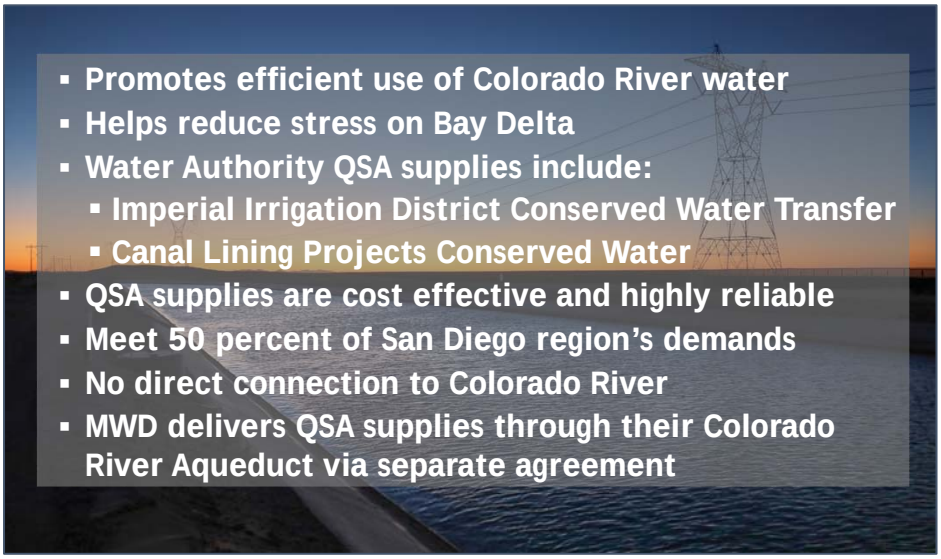
1

Overview

- Background
- Key Study Drivers
- Scope of the Study
- Key Results and Next Steps

2

Background - QSA Water is Lifeline for Region



- Promotes efficient use of Colorado River water
- Helps reduce stress on Bay Delta
- Water Authority QSA supplies include:
  - Imperial Irrigation District Conserved Water Transfer
  - Canal Lining Projects Conserved Water
- QSA supplies are cost effective and highly reliable
- Meet 50 percent of San Diego region's demands
- No direct connection to Colorado River
- MWD delivers QSA supplies through their Colorado River Aqueduct via separate agreement

3

Why Study Regional Conveyance?

- IID conserved water transfer initial term ends in 2047 with potential extension
- Exchange Agreement with MWD ends in 2047
- Decisions on supply and transportation
- Need to study options now to help inform decisions that will impact generations to come

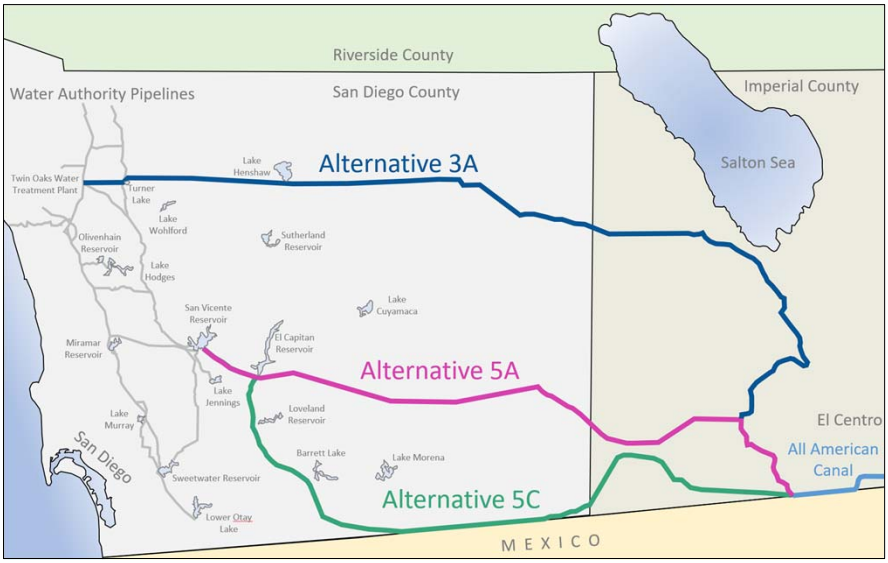
4

Current Two-Phase Study

- Incremental approach directed by Board
- Includes input from member agencies
- Offers several offramps
- Assesses potential fatal flaws
- Identifies potential partnerships
- Refines cost projections
- Conservative financial assessments
- Phase A focused on engineering and cost

5

Three Routes Studied in Phase A



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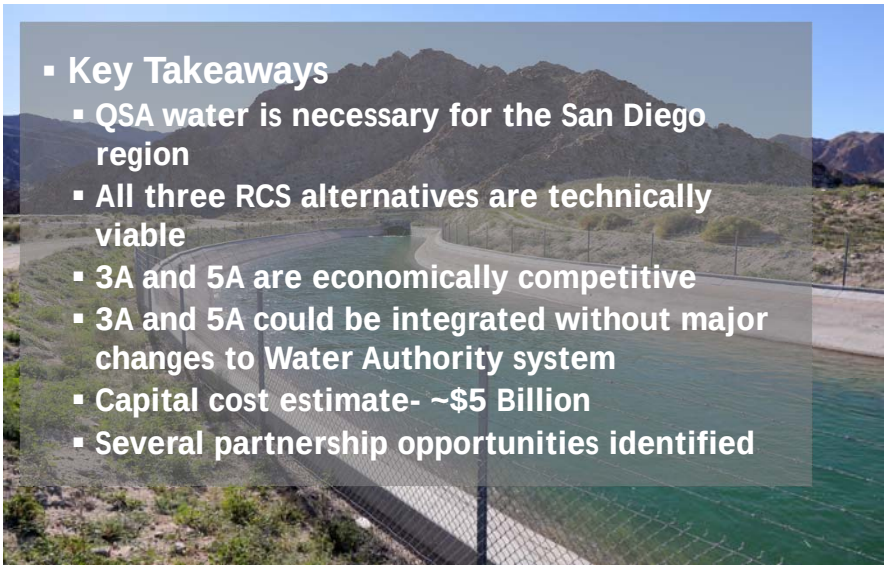
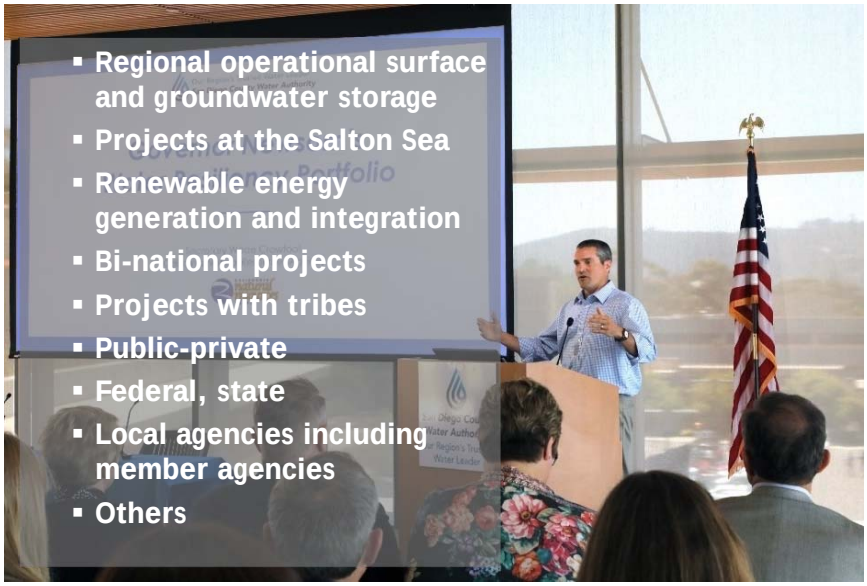
Phase A – Focus on Engineering and Cost



- Key Takeaways
  - QSA water is necessary for the San Diego region
  - All three RCS alternatives are technically viable
  - 3A and 5A are economically competitive
  - 3A and 5A could be integrated without major changes to Water Authority system
  - Capital cost estimate- ~$5 Billion
  - Several partnership opportunities identified

7

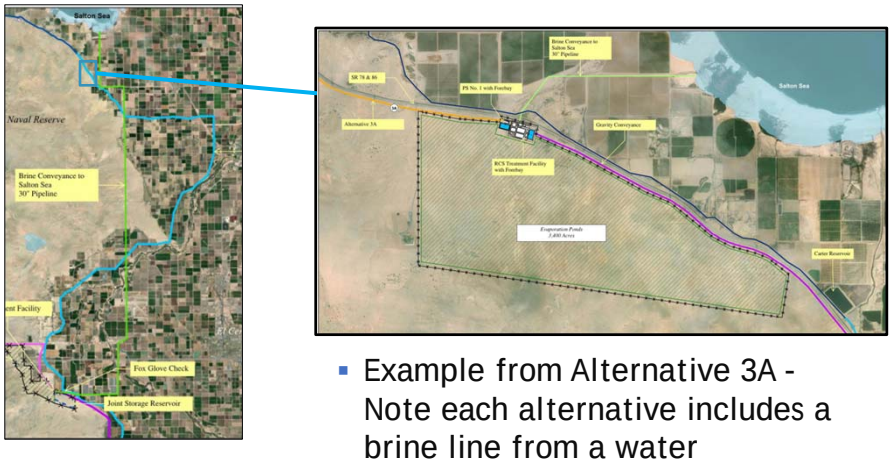
Phase A - Potential Partnerships



- Regional operational surface and groundwater storage
- Projects at the Salton Sea
- Renewable energy generation and integration
- Bi-national projects
- Projects with tribes
- Public-private
- Federal, state
- Local agencies including member agencies
- Others

8

Potential Habitat Projects at the Salton Sea



- Example from Alternative 3A - Note each alternative includes a brine line from a water treatment plant to the Salton Sea

9

Example Habitat Projects

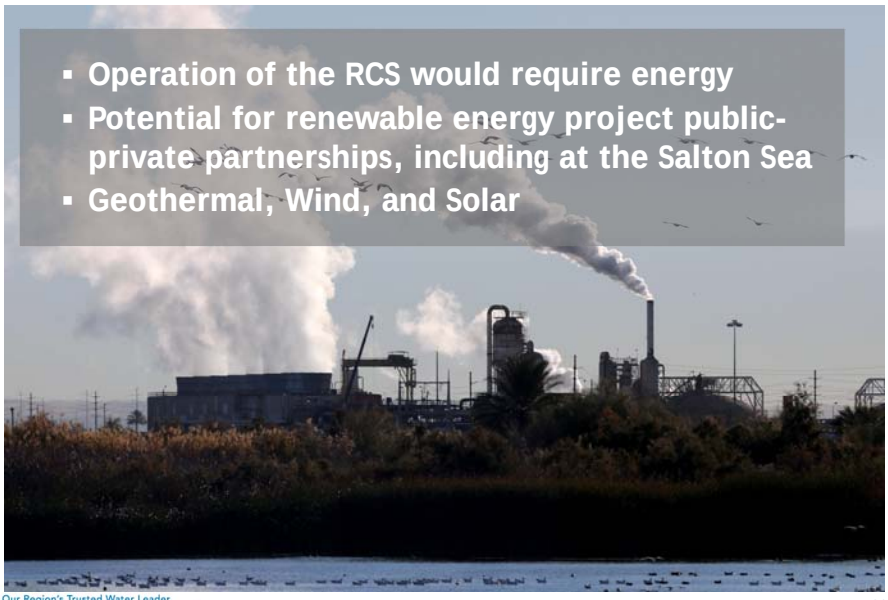
Opportunities at the Salton Sea using brine water

Existing Water Transfer Mitigation Project Managed Marsh

Existing Canal Lining Mitigation Project Wister Sports Fishery Pond

10

Renewable Energy Opportunities



- Operation of the RCS would require energy
- Potential for renewable energy project public-private partnerships, including at the Salton Sea
- Geothermal, Wind, and Solar

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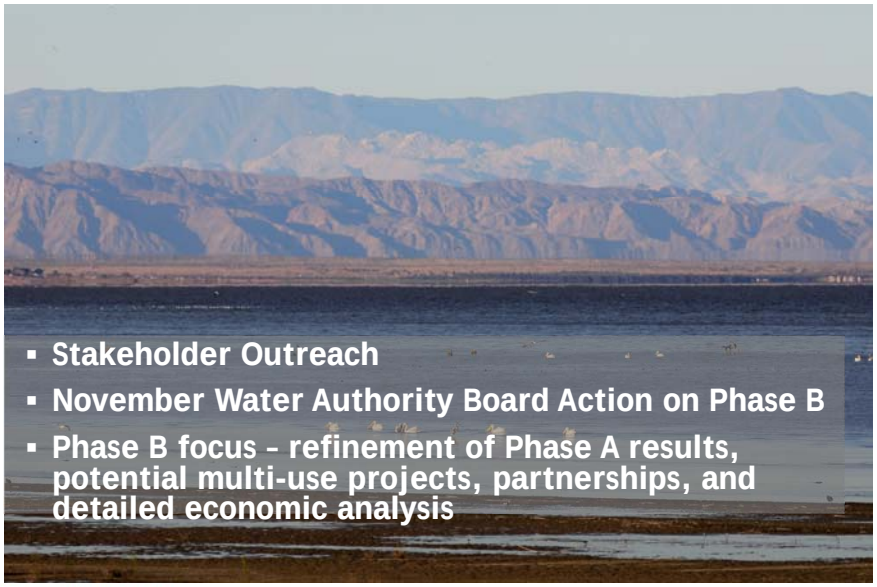
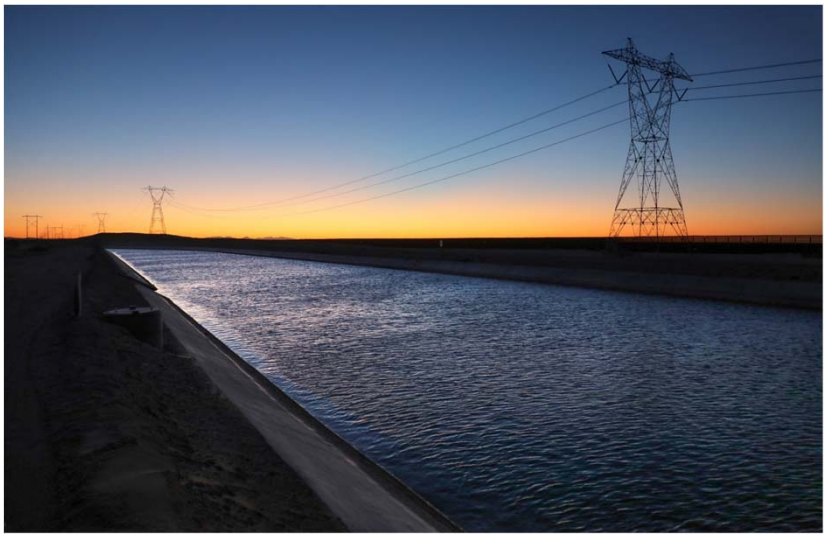
Phase B – Focus on Partnerships and Economics



- Stakeholder Outreach
- November Water Authority Board Action on Phase B
- Phase B focus – refinement of Phase A results, potential multi-use projects, partnerships, and detailed economic analysis

12

Questions



13

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED
Executive Director

Division of Water Resources

TODD D. ADAMS
Division Director

September 24, 2020

Rick Baxter, Program Manager
Bureau of Reclamation
302 E. Lakeview Parkway
Provo, UT 84606

Dear Mr. Baxter:

The Lake Powell Pipeline is a critical water infrastructure project for Utah, and we want the Draft and Final Environmental Impact Statements to be as thorough and robust as possible. We therefore request an extended timeline to allow more time to adequately consider comments submitted by the public, tribes, non-government organizations and fellow Colorado River Basin states. We're grateful to all those who have participated in the NEPA process and recognize their comments will contribute to a more comprehensive analysis.

We remain committed to working in good faith with the Colorado River Basin states to resolve legal and operational concerns regarding the Colorado River. We have a history of solving complex challenges associated with the river and will continue to work together.

We respectfully request Reclamation establish a reasonable new timeline to provide for careful examination of the comments. As the project applicant and beneficiary, we remain committed to completing the Lake Powell Pipeline.

Thank you for your efforts on behalf of this important project.

Respectfully,

Todd D. Adams, Director, Utah Division of Water Resources

Zachary Renstrom, General Manager, Washington County Water Conservancy District

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