

MONTHLY REPORT TO THE COLORADO RIVER BOARD OF CALIFORNIA

October 25, 2021

COLORADO RIVER BASIN WATER SUPPLY CONDITIONS REPORT

October 1st marked the start of Water Year 2022. As of October 25th, the surface water elevation at Lake Powell was 3,544.41 feet with 7.19 million-acre feet (MAF) of storage, or 30% of capacity. The surface water elevation at Lake Mead was 1,067.37 feet with 8.99 MAF of storage, or 34% of capacity. As of October 24th, the total system storage was 22.6 MAF, or 38% of capacity, which is about 5.75 MAF less than the total system storage at this same time last year.

As of October 17th, the Upper Basin reservoirs, excluding Lake Powell, were 68% of capacity at Fontenelle Reservoir in Wyoming; 78% of capacity at Flaming Gorge Reservoir in Wyoming and Utah; 95% of capacity at Morrow Point, and 26% of capacity at Blue Mesa Reservoir in Colorado; and 53% of capacity at Navajo Reservoir in New Mexico.

As of October 18th, the preliminary observed inflow into Lake Powell for Water Year (WY) 2021 is 3.50 MAF (32% of normal), representing the second lowest inflow on record. The observed April through July 2021 runoff into Lake Powell for Water Year-2021 is 1.83 MAF (26% of normal). For WY-2021 the September observed Lake Powell inflow was 0.16 MAF (39% of normal), and for WY-2022 the October Lake Powell inflow forecast is 0.26MAF (56% of normal). To date, WY-2022 precipitation is 151% of normal in the Upper Colorado River Basin.

Overview of the 1991 – 2020 Normal Period and Model Impacts

On October 18th the Bureau of Reclamation (Reclamation) held a joint webinar with the Colorado Basin River Forecast Center (CBRFC) to discuss the CBRFC effort to recalibrate its forecast model and explain the shift to the new 30-year climate normal of 1991 – 2020, and how that shift affects the unregulated inflow into reservoirs in the Upper Basin. For example, the average annual unregulated inflow into Lake Powell was 10.8 MAF for the 1981-2010 period and was 9.6 MAF for the 1991-2020 period, 11.3% decrease.

The CBRFC update of the “climate normal” conforms with World Meteorological Organization standards and acknowledges and incorporates recent trends. The 1991-2020 climate normals

include the driest 20 years of the Colorado River Basin and are more representative of the current drier conditions being experienced in the Basin.

The CBRFC compared the monthly averages of observed unregulated streamflow volumes of the climate normals periods between 1981–2010 and 1991–2020 and found that streamflow volumes during the latter period declined and the magnitude of the decreases increased from north to south within the Colorado River Basin. The CBRFC plans to schedule an outreach session to provide more detailed information about its recalibration efforts.

October 24-Month Study Webinar

Reclamation presented an overview of WY-2021 precipitation conditions, noting that the summer monsoonal activity made a significant difference to soil moisture levels. The Upper Colorado River above Lake Powell snowpack peaked on March 30, 2021, at 89% of median; but because of antecedent dry soil conditions and elevated temperatures, the preliminary observed inflow into Lake Powell for WY-2021 was 3.50 MAF, just 32% of average.

Reclamation also discussed its effort to incorporate the 30-year climate normal period of 1991 – 2020 into its operations and statistical reporting. The new period will provide projections that are more reflective of drier and hotter conditions experienced in the basin over the last two decades.

Reclamation provided a summary of the Upper Basin Drought Response Operations Agreement (DROA) efforts to date, emphasizing the 181 KAF DROA releases from Flaming Gorge, Blue Mesa and Navajo reservoirs that began in July 2021 to protect Lake Powell’s elevation from declining below 3,525 feet.

As of October 4th, the CBRFC forecast for the projected inflow into Lake Powell for WY-22 is 7.4 MAF (77% of average). The October 2021 24-Month Study Report projects that the most probable elevation for Lake Powell at the end of Calendar Year (CY) 2021 and 2022 is 3,536.36 feet (27% full) and 3,528.08 feet (25% full), respectively. For Lake Mead, the October 24-Month Study projects that the most probable elevation for Lake Mead at the end of CY-2021 and CY-2022 is 1,066.06 feet (34% full) and 1,050.63 feet (30% full), respectively.

COLORADO RIVER BASIN PROGRAM UPDATES

Colorado River Basin Salinity Control Program

Program Implementation

The Colorado River Basin Salinity Control Forum Work Group held its summer meeting on September 20 and 21, 2021, in Salt Lake City, Utah. This was the first Work Group meeting with an option for in-person attendance since February 2020. During the two days of meetings Work Group members received updates from federal agencies on program funding, studies, and project implementation.

Reclamation provided an update on modeling associated with expected impacts of lower reservoir levels on salinity conditions in Lake Powell and Lake Mead. The Work Group is working with Reclamation to receive regular updates on the salinity conditions in these reservoirs. Reclamation reported a declining rate of seismic activity in the Paradox Valley, which is an important condition to restarting the Paradox Valley Salinity Control Project. However, Reclamation also reported that it could be late 2023 before a decision is made to restart PVU operations pending results of an engineering risk assessment being prepared at the behest of Reclamation.

Work Group representatives from the states of Utah and Colorado described efforts to improve the implementation of habitat replacement projects required under the Salinity Control Act. The Work Group is developing a technical memorandum describing current habitat replacement challenges and identifying potential options that will be shared with the Forum in a future meeting.

The USGS provided an update on technical work they have done to evaluate how base flow in the Colorado River Basin tributaries might be impacted by a changing climate. The USGS also reported on successful data collection activities to evaluate the impact of monsoonal flows on salinity conditions in tributaries to the Colorado River.

The Fall meetings of the Forum Work Group, Forum, Advisory Council, and are scheduled for October 25, and 27-28, 2021 respectively in Las Vegas, Nevada. The Work Group meeting is virtual participation only, while the Forum and Advisory Council meetings will allow hybrid in-person / remote participation.

Glen Canyon Dam Adaptive Management Program

The Secretary of the Interior determined that a High Flow Experiment (HFE) will not be implemented this fall. HFEs are designed to utilize fine sediment brought into the Grand Canyon by tributaries to achieve ecological benefits and the rebuilding of sandbars. Monsoonal rains resulted in sufficient sediment inputs below Glen Canyon Dam to trigger a potential HFE this fall. In determining whether or not to implement an HFE, potential impacts to resources identified in the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP) were evaluated. The Secretary's decision not to implement an HFE in the fall of 2021 was based on a lack of consensus by both the Leadership Team and the Planning and Implementation Team of the Glen Canyon Dam Adaptive Management Program. Both teams relayed concerns regarding unacceptable adverse impacts to resources, including the potential for the level of Lake Powell to be below the critical elevation of 3525 feet for an increased number of days.

The Technical Work Group for the Glen Canyon Dam Adaptive Management Program meeting was held via webinar on October 13-14.

GENERAL ANNOUNCEMENTS AND UPDATES

Seven Basin States plus Reclamation Technical Staff Meetings

Reclamation initiated discussions on modeling improvements with technical staff from the seven basin states with webinars on October 7th, 14th, 19th, and 22nd, 2021. These webinars have focused on necessary technical improvements to address three key priorities outlined by Reclamation:

1. Any modeling or technical questions regarding the September 2021, 2- and 5-year probabilistic projections.
2. Any modeling or technical questions regarding the ongoing implementation of DROA planning and the anticipated 1030' consultation in the Upper and Lower Basins, respectively.
3. Any modeling or technical questions regarding model preparation/development for the development of post-2026 operations.

Reclamation is working with the technical staff from the seven basin states to prepare a presentation and task schedule for the October 26th seven states principals meeting. The presentation will highlight specific technical tasks to be accomplished to support three modeling priorities identified above (i.e., 2- and 5-year projections, DROA and 1030' consultation, and post 2026 operations). Tasks will be scheduled through January 2022 to support the January 5-year

probabilistic projections, through April 2022 to support the April 5-year probabilistic projections, and longer-term tasks beyond April 2022. Finally, discussions are continuing in both basins regarding (1) development of a CY-2022 DROA operational plan by Reclamation and the Upper Basin states; and (2) the Lower Basin states continue to explore options to further protect Lake Mead critical elevation 1,020 feet in calendar-years 2022 and 2023.

OpenET

On October 21st, a consortium of governmental and non-governmental entities, which includes NASA, the Desert Research Institute and Environmental Defense Fund, with support from Google Earth Engine, announced the release of OpenET. OpenET is an online water data management platform that uses information generated from satellites to estimate water consumed by vegetation. The aim of OpenET is to make satellite-based water management data more accessible. The OpenET platform can be accessed at: <https://openetdata.org/>.

Drought Early Warning System (DEWS) Strategic Plan

The National Integrated Drought Information System (NIDIS) and the National Oceanic and Atmospheric Administration (NOAA) recently released the 2021-2025 Intermountain West Drought Early Warning System (DEWS) Strategic Action Plan addressing the current needs and gaps of the drought early warning system. The Plan included the input gathered during a series of stakeholder meetings which focused on the needs of various sectors, such as Colorado River management, recreation, tourism, and fire management. The Plan will serve as a “living document” with the goal of evolving to address the needs of stakeholders in the Intermountain West. The 2021-2025 DEWS Plan can be accessed at:

<https://www.drought.gov/documents/intermountain-west-drought-early-warning-system-strategic-action-plan-2021-2025>.

Washington, D.C. Report

Drought Response Measures House Water, Oceans Wildlife Subcommittee Hearings, October 15, and 20, 2021

On October 15th and 20th, the House Natural Resources Committee’s Water, Oceans and Wildlife Subcommittee held two days of virtual hearings focused on Colorado River drought conditions and response measures. Witnesses testifying on October 15th included Interior Assistant Secretary for Water and Science, Tanya Trujillo, and representatives of the Jicarilla Apache Nation and Colorado River Indian Tribes and the seven Colorado River Basin States, including Board

Chairman Peter Nelson. On October 20th, the subcommittee heard from an additional panel of witnesses including MWD General Manager Adel Hagekhalil and IID General Manager Henry Martinez. Generally, all of the witnesses emphasized the impacts of the current Millennium Drought on the water supply conditions in the Basin and storage in the reservoir system. Witnesses also highlighted the need for collaborative and consensus-based solutions in implementing additional water conservation, reuse, and augmentation activities and programs and emphasized the need for federal participation and funding in support of these efforts. Witnesses also emphasized the need for “an all-hands on deck” approach involving water users and stakeholders across the Basin, including the Tribes and Mexico.

For your information, the written testimony provided to the House Water, Oceans, and Wildlife Subcommittee by Assistant Secretary Trujillo, Chairman Nelson, and the general managers of IID and MWD is being included in the distribution with this monthly report.

Climate and Water Observation in the West

In an attempt to improve insight into the relationship between air, land, and water, the U.S. Department of Energy is using observational tools to better analyze the Colorado River headwaters. The Surface Atmosphere Integrated Field Laboratory (SAIL) project, after investigating aerosols, clouds, precipitation, heat fluxes, and other factors, aims to produce better models of the physical world and therefore more accurate forecasts of water availability. Data collection will begin in September in Crested Butte, Colorado, and continue for nearly two years, through June 2023.

10/25/2021

LOWER COLORADO WATER SUPPLY REPORT

River Operations
Bureau of Reclamation

Questions: BCOOWaterops@usbr.gov

(702)293-8373

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

	PERCENT	Content 1000 ac-ft (kaf)	Elev. (Feet above mean sea level)	7-Day Release (CFS)
CURRENT STORAGE	FULL			
LAKE POWELL	30%	7,192	3,544.41	7,900
* LAKE MEAD	34%	8,992	1,067.37	11,100
LAKE MOHAVE	81%	1,462	634.09	10,600
LAKE HAVASU	94%	583	448.15	6,500
TOTAL SYSTEM CONTENTS **	38%	22,604		
As of 10/24/2021				
SYSTEM CONTENT LAST YEAR	48%	28,357		
*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	70%	1,594		
Painted Rock Dam	0%	0	530.00	0
Alamo Dam	10%	98	1,112.64	25
Forecasted Water Use for Calendar Year 2021 (as of 10/25/2021) (values in kaf)				
NEVADA			247	
SOUTHERN NEVADA WATER SYSTEM				221
OTHERS				26
CALIFORNIA			4,355	
METROPOLITAN WATER DISTRICT OF CALIFORNIA				1,075
IRRIGATION DISTRICTS				3,263
OTHERS				17
ARIZONA			2,442	
CENTRAL ARIZONA PROJECT				1,368
OTHERS				1,074
TOTAL LOWER BASIN USE				7,044
DELIVERY TO MEXICO - 2021 (Mexico Scheduled Delivery + Preliminary Yearly Excess)				1,492
OTHER SIGNIFICANT INFORMATION				
UNREGULATED INFLOW INTO LAKE POWELL - OCTOBER MID-MONTH FORECAST DATED 10/18/2021				
		MILLION ACRE-FEET		% of Normal
PRELIMINARY OBSERVED WATER YEAR 2021 ²		3.502		32%
OBSERVED APRIL-JULY 2021 ²		1.834		26%
SEPTEMBER OBSERVED INFLOW ²		0.159		39%
OCTOBER INFLOW FORECAST ³		0.255		56%
		Upper Colorado Basin		Salt/Verde Basin
WATER YEAR 2022 PRECIP TO DATE ^{3,4}		151% (2.6")		202% (1.6")
CURRENT BASIN SNOWPACK		NA% (NA)		NA% (NA)

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

WY 2021 statistics are based on the 30-year period from 1981-2010

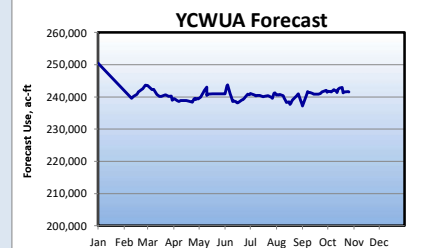
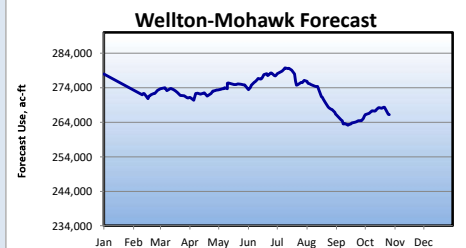
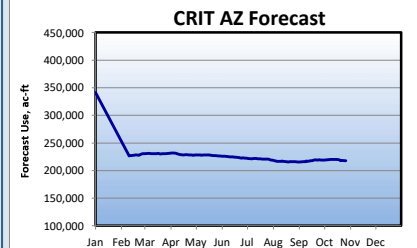
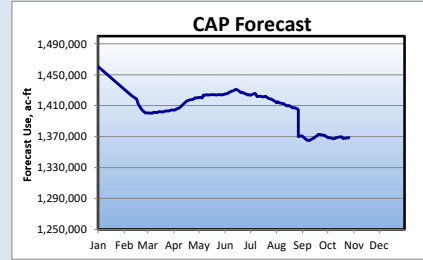
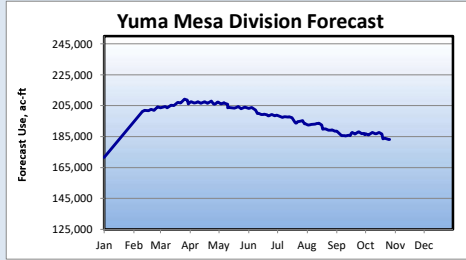
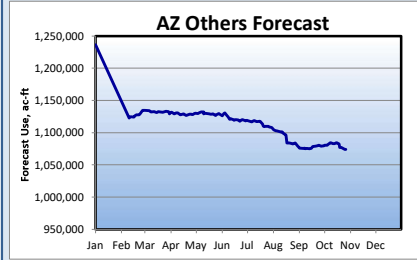
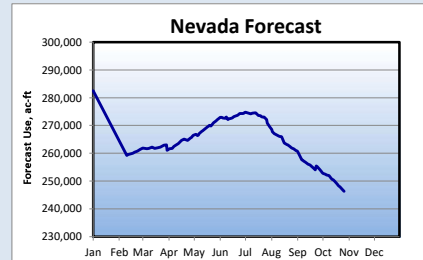
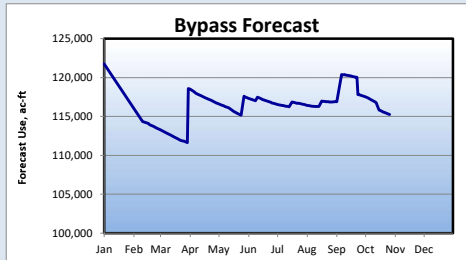
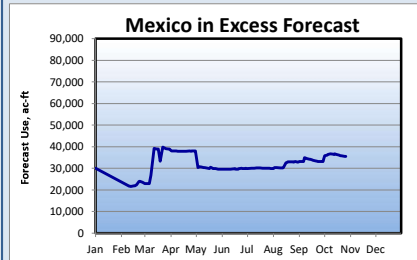
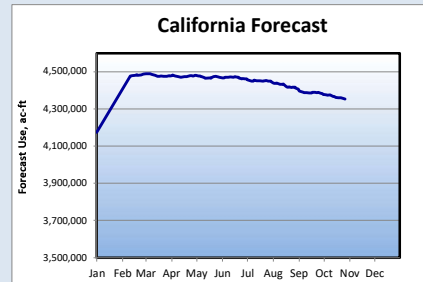
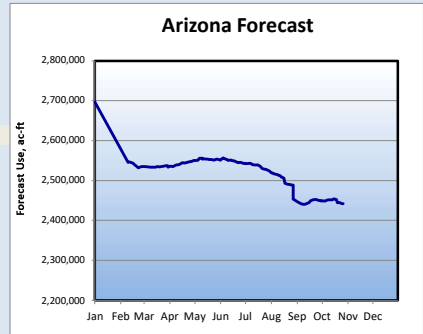
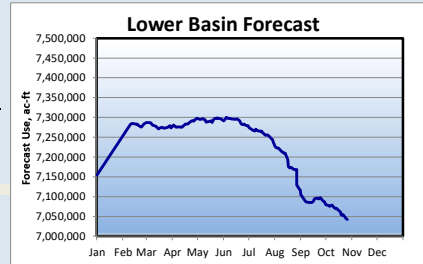
³WY 2022 statistics are based on the 30-year period from 1991-2020

⁴Precipitation values may vary significantly from week-to-week early in the water year.

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)

	Use To Date CY 2021	Forecast Use CY 2021	Approved Use ² CY 2021	Excess to Approval CY 2021
WATER USE SUMMARY				
ARIZONA	2,084,841	2,442,413	2,440,705	1,708
CALIFORNIA	3,776,454	4,353,499	4,353,499	0
NEVADA	219,489	246,359	246,359	0
STATES TOTAL ³	6,080,784	7,042,271	7,040,563	1,708
TOTAL DELIVERIES MEXICO IN SATISFACTION OF TREATY REQUIREMENTS ⁴	1,289,933	1,456,683		
CREATION OF MEXICO'S RECOVERABLE WATER SAVINGS ⁵	23,207	41,000		
CREATION OF MEXICO'S WATER RESERVE ⁶	36,994	37,340		
DELIVERY OF MEXICO'S WATER RESERVE ⁷	(34,182)	(35,023)		
TOTAL TO MEXICO IN SATISFACTION OF TREATY REQUIREMENTS ⁸	1,315,952	1,500,000		
TO MEXICO IN EXCESS OF TREATY ⁹	28,294	35,500		
WATER BYPASSED PURSUANT TO IBWC MINUTE NO. 242 ¹⁰	93,530	115,248		
TOTAL LOWER BASIN & MEXICO ¹¹	7,492,541	8,649,702		

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 July for users reporting monthly and estimated 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 deliveries to Mexico at the Northerly International Boundary (including delivery from Mexico's Water Reserve), Southerly International Boundary, Limitrophe, and Diversion Channel Discharge; and diversions at Parker Dam for Emergency Delivery to Tijuana; does not include Creation of Mexico's Water Reserve or Creation of Mexico's Recoverable Water Savings.
⁵ Water deferred by Mexico pursuant to Section IV of IBWC Minute 323 and the Joint Report of the Principal Engineers with the Implementing Details of the Binational Water Scarcity Contingency Plan in the Colorado River Basin, dated July 11, 2019. (Mexico's required Binational Water Scarcity Contingency Plan Contribution).
 Water deferred by Mexico pursuant to Section V of IBWC Minute 323.
 Delivery from Mexico's Water Reserve pursuant to Section V.E.13 of IBWC Minute 323. Pursuant to Sections VIII.A and VIII.B of IBWC Minute 323, this water is being delivered for environmental purposes within Mexico.
 In accordance with the procedure documented in USIBWC's letter to the Mexican Section of the IBWC dated July 25, 2017 regarding the calculation process applied when accounting for the quantity and quality of the volumes of Mexico's Water Reserve and Mexico's Recoverable Water Savings during creation and delivery, "Total Delivery to Mexico in Satisfaction of Treaty Requirements" adds in Mexico's Water Reserve and Mexico's Recoverable Water Savings creation and subtracts out Mexico's Water Reserve and Mexico's Recoverable Water Savings delivery.
 Mexico excess forecast is based on the 5-year average for the period 2015-2019.
 Bypass forecast is based on the average for the period 1990-2019.
 Includes States Total, Deliveries to Mexico in Satisfaction of Treaty, To Mexico in Excess of Treaty, and Water Bypassed Pursuant IBWC Minute 242.



Graph notes: January 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.

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	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess
	To Date CY 2021	Use CY 2021	Use CY 2021	Use CY 2021		To Date CY 2021	Diversion CY 2021	Diversion CY 2021
ARIZONA PUMPERS	14,077	15,828	15,828	---	21,658	24,351	24,351	
LAKE MEAD NRA, AZ - Diversions from Lake Mead	69	76	76	---	69	76	76	
LAKE MEAD NRA, AZ - Diversions from Lake Mohave	183	220	220	---	183	220	220	
DAVIS DAM PROJECT	2	2	2	---	15	17	17	
BULLHEAD CITY	6,679	8,098	8,163	---	10,422	12,637	12,720	-
MOHAVE WATER CONSERVATION DISTRICT	601	676	676	---	898	1,010	1,010	
BROOKE WATER LLC	267	323	323	---	401	485	485	
MOHAVE VALLEY I.D.D.	11,860	14,056	15,932	---	21,963	26,025	29,503	-3.4
FORT MOJAVE INDIAN RESERVATION, AZ	33,805	36,819	44,550	---	62,602	68,183	82,500	-14.3
GOLDEN SHORES WATER CONSERVATION DISTRICT	254	286	286	---	380	427	427	
HAVASU NATIONAL WILDLIFE REFUGE	3,808	4,044	3,564	---	31,734	34,503	41,835	-7.3
LAKE HAVASU CITY	6,738	8,258	9,021	---	10,868	13,320	14,550	-1.2
CENTRAL ARIZONA PROJECT	1,119,235	1,368,527		---	1,119,235	1,368,527		
TOWN OF PARKER	475	530	430	---	714	854	917	-
COLORADO RIVER INDIAN RESERVATION, AZ	211,485	217,804	226,280	---	434,957	495,735	509,647	-13.9
EHRENBURG IMPROVEMENT ASSOCIATION	206	232	232	---	289	325	325	
CIBOLA VALLEY ¹	13,931	14,350	15,618	---	19,484	20,072	21,843	-1.7
CIBOLA NATIONAL WILDLIFE REFUGE	13,403	14,264	14,264	0	21,618	23,005	23,005	
IMPERIAL NATIONAL WILDLIFE REFUGE	1,921	2,605	3,799	-1,194	3,097	4,200	6,128	-1.9
BLM PERMITTEES (PARKER DAM to IMPERIAL DAM)	751	844	844	---	1,155	1,299	1,299	
CHA CHA, LLC	809	985	1,365	---	1,244	1,515	2,100	-5
BEATTIE FARMS	475	567	722	---	731	875	1,110	-2
YUMA PROVING GROUND	464	513	516	---	464	513	516	
GILA MONSTER FARMS	3,821	4,506	5,273	---	6,867	8,091	9,156	-1.0
WELLTON-MOHAWK IDD	241,080	266,243	278,000	-11,757	350,980	405,601	423,333	-17.7
BLM PERMITTEES (BELOW IMPERIAL DAM)	66	74	74	0	101	114	114	
CITY OF YUMA	11,149	14,020	16,201	-2,181	20,548	25,615	27,500	-1.8
MARINE CORPS AIR STATION YUMA	1,072	1,258	1,320	---	1,072	1,258	1,320	-
UNION PACIFIC RAILROAD	21	25	29	---	39	48	48	
UNIVERSITY OF ARIZONA	882	1,017	1,050	---	882	1,017	1,050	-
YUMA UNION HIGH SCHOOL DISTRICT	106	126	150	---	144	171	200	-
DESERT LAWN MEMORIAL	20	23	23	---	29	33	33	
NORTH GILA VALLEY IRRIGATION DISTRICT	8,209	9,223	11,563	---	37,578	44,007	44,200	-1
YUMA IRRIGATION DISTRICT	32,264	37,547	37,835	---	62,027	72,404	69,900	2.5
YUMA MESA I.D.D.	117,781	136,267	150,455	---	199,037	231,392	242,080	-10.6
UNIT "B" IRRIGATION DISTRICT	15,924	17,968	20,816	---	23,502	26,647	29,400	-2.7
FORT YUMA INDIAN RESERVATION	1,329	1,494	1,494	---	2,045	2,299	2,299	
YUMA COUNTY WATER USERS' ASSOCIATION	208,834	241,606	242,377	---	288,781	346,368	360,400	-14.0
COCOPA INDIAN RESERVATION	583	882	1,686	---	749	1,207	2,585	-1.3
RECLAMATION-YUMA AREA OFFICE	202	227	227	---	202	227	227	
RETURN FROM SOUTH GILA WELLS								
TOTAL ARIZONA	2,084,841	2,442,413	2,500,784		2,758,764	3,264,673	3,357,929	
CAP	1,119,235	1,368,527				1,368,527		
ALL OTHERS	965,606	1,073,886	1,131,284			1,896,146	1,988,429	
YUMA MESA DIVISION, GILA PROJECT	158,254	183,037	199,853	-16,816		347,803		

ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
System Conservation Water - Pilot System Conservation Program ²	(360)
System Conservation Water - Colorado River Indian Tribes (CRIT) ³	(50,000)
System Conservation Water - Fort McDowell Yavapai Nation (FMYN) ⁴	(13,933)
System Conservation Water - Mohave Valley I.D.D. (MVIDD) ⁵	(6,925)
System Conservation Water - Gila River Indian Community (GRIC) ⁶	(40,000)
Creation of Extraordinary Conservation ICS - CRIT (Estimated) ^{7,9}	(4,685)
Creation of Extraordinary Conservation ICS - GRIC (Estimated) ^{8,9}	(40,000)
Arizona DCP Contribution ¹⁰	(203,392)
Total State Adjusted Apportionment	2,440,705
Excess to Total State Adjusted Apportionment	1,708
Estimated Allowable Use for CAP	1,366,527

¹ Includes the following water users within the Cibola Valley: Cibola Valley IDD, Arizona Game and Fish Commission, GSC Farms, Red River Land Co., Western Water, 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, 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. 20-XX-30-W0688, which will remain in Lake Mead to benefit system storage. In accordance with this SCIA and Section 3.b of the *Drought Contingency Plan Agreement* 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 System Conservation Water to be created by MVIDD pursuant to SCIA No. 20-XX-30-W0686, which will remain in Lake Mead to benefit system storage. In accordance with this SCIA and Section 3.b of the LB DCP Agreement, Reclamation intends to apply this water towards the Secretary'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.
⁶ CAP water being conserved by GRIC pursuant to SCIA No. 21-XX-30-W0713, which will remain in Lake Mead to benefit system storage. In accordance with this SCIA and Section 3.b of the LB DCP of water supplies in Lake Mead and other Colorado River reservoirs in the Lower Basin.
⁷ CRIT has been approved to create up to 4,685 AF of Extraordinary Conservation (EC) ICS in 2021. The actual amount of EC ICS created by CRIT will be based on final accounting and verification.
⁸ CAP water being conserved by GRIC in 2021 to create EC ICS. The actual amount of EC ICS created by GRIC will be based on final accounting and verification.
⁹ 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 110,185 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 2021 will be limited to 625,000 AF. Additionally, the total amount accumulated in Arizona's ICS accounts will be limited in accordance with Section IV.C, of LBOPs.
¹⁰ In accordance with Sections III.B.1.a and III.E.4 of LBOPs, the state of Arizona is required to make a DCP Contribution in the total amount of 203,392 AF in 2021. This includes the annual contribution amount required under Section III.B.1.a of LBOPs (192,000 AF) and the state's 2020 DCP Contribution Deficiency amount of 11,392 AF, as shown in Table 23 in the 2020 *Colorado River Accounting and Water Use Report*. 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 has been approved to create up to 60,500 AF of EC ICS in 2021. 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.


BUREAU OF RECLAMATION
LOWER COLORADO BASIN REGION
CY 2021

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 \(Water Accounting Reports\)](#)

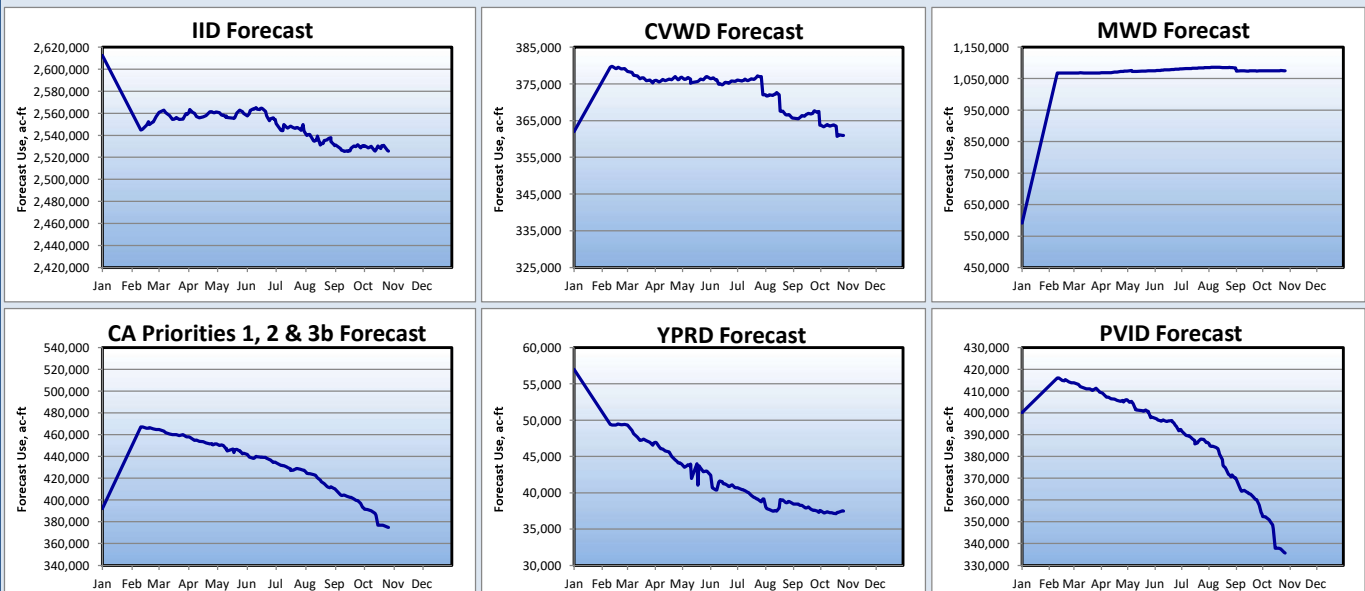
WATER USER	Use	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess to
	To Date	Use	Use	Estimated	To Date	Diversion	Diversion	Approved
	CY 2021	CY 2021	CY 2021	Use	CY 2021	CY 2021	CY 2021	Diversion
CALIFORNIA PUMPERS	1,302	1,464	1,464	---	2,353	2,646	2,646	0
FORT MOJAVE INDIAN RESERVATION, CA	6,417	7,287	8,996	---	11,930	13,547	16,720	-3,173
CITY OF NEEDLES (includes LCWSP use)	1,010	1,241	1,605	-364	1,654	1,979	2,261	-282
METROPOLITAN WATER DISTRICT	861,258	1,074,956	---	---	863,592	1,077,753	---	---
COLORADO RIVER INDIAN RESERVATION, CA	4,459	5,014	5,014	---	7,388	8,307	8,307	0
PALO VERDE IRRIGATION DISTRICT	332,577	335,662	343,672	---	696,701	770,346	774,000	-3,654
YUMA PROJECT RESERVATION DIVISION	31,080	37,477	46,687	---	64,151	78,640	90,394	-11,754
YUMA PROJECT RESERVATION DIVISION - INDIAN UNIT	---	---	---	---	34,950	41,829	45,384	-3,555
YUMA PROJECT RESERVATION DIVISION - BARD UNIT	---	---	---	---	29,201	36,811	45,010	-8,199
YUMA ISLAND PUMPERS	1,574	1,770	1,770	---	2,845	3,199	3,199	0
FORT YUMA INDIAN RESERVATION - RANCH 5	1,122	1,273	938	---	2,031	2,303	1,696	607
IMPERIAL IRRIGATION DISTRICT ¹	2,228,195	2,525,613	2,622,800	-97,187	2,302,646	2,621,372	2,694,973	---
SALTON SEA SALINITY MANAGEMENT	0	0	0	0	0	0	0	---
COACHELLA VALLEY WATER DISTRICT	306,749	360,943	379,000	-18,057	329,415	387,788	390,812	---
OTHER LCWSP CONTRACTORS	469	527	527	---	820	922	922	0
CITY OF WINTERHAVEN	56	63	63	---	81	91	91	0
CHEMEHUEVI INDIAN RESERVATION	186	209	209	---	10,086	11,340	11,340	0
TOTAL CALIFORNIA	3,776,454	4,353,499			4,295,693	4,980,233	5,075,574	

CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION

California Basic Apportionment	4,400,000
System Conservation Water - Pilot System Conservation Program ²	(145)
System Conservation Water - PVID Following Program ³	(12,650)
IID Creation of Extraordinary Conservation ICS - Stored in Lake Mead (Estimated) ⁴	(1,579)
MWD Creation of Extraordinary Conservation ICS (Estimated) ⁵	(32,127)
Total State Adjusted Apportionment	4,353,499
Excess to Total State Adjusted Apportionment	0

Estimated Allowable Use for MWD 1,107,083

¹ As shown here, IID's Approved Diversion and Estimated Use values reflect the maximum amount of Colorado River water available to IID in 2021.
² System Conservation 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 The estimated amount of System Conservation Water that will be created pursuant to Funding Agreement No. 21-XX-30-W0714 (Funding Agreement). This System Conservation Water will remain in Lake Mead to benefit system storage. In accordance with the Funding Agreement, the Bureau of Reclamation intends to apply 50 percent this water towards the Secretary of the Interior's commitment to create or conserve 100,000 AF or more per annum of System Conservation Water pursuant to Section 3.b of the *Lower Basin Drought Contingency Plan Agreement*.
⁴ IID has been approved to create up to 62,000 AF of "Additional Conserved Water" in 2021 for purposes including, but not limited to, the creation of ICS. Due to limitations set forth in the California ICS Agreement, IID may currently only store up to 1,579 AF in its Lake Mead ICS Account. Should IID elect to use "Additional Conserved Water" to create and credit EC ICS to the ICS account of another California contractor through application of Section XI.G.3.B.8 of the 2007 Interim Guidelines, IID must first obtain written agreement of the contractor. The actual amount of "Additional Conserved Water" created by IID in 2021 will be based on final accounting and verification.
⁵ MWD has been approved to create up to 450,000 AF of EC ICS in 2021, 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.



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.

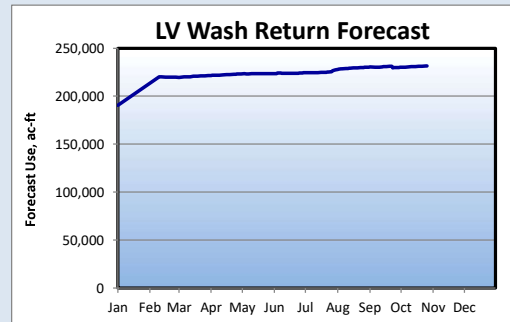
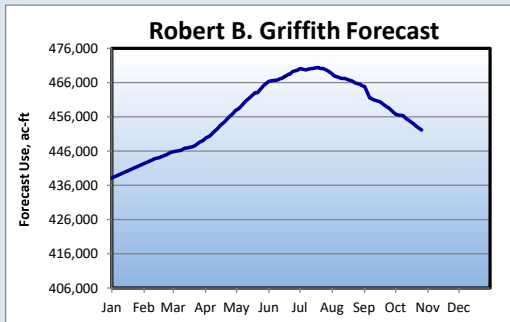
NEVADA WATER USERS
 FORECAST OF END OF YEAR CONSUMPTIVE USE
 FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS
[Nevada Schedules and Approvals](#)
[Historic Use Records \(Water Accounting Reports\)](#)

WATER USER	Use	Forecast	Estimated	Excess to	Diversion	Forecast	Approved	Excess to
	To Date	Use	Use	Estimated				
	CY 2021	CY 2021	CY 2021	CY 2021	CY 2021	CY 2021	CY 2021	CY 2021
ROBERT B. GRIFFITH WATER PROJECT (SNWS)	390,459	452,105	452,709	-604	390,224	451,870	452,709	-839
LAKE MEAD NRA, NV - Diversions from Lake Mead	476	712	1,500	---	476	712	1,500	-788
LAKE MEAD NRA, NV - Diversions from Lake Mohave	202	278	500	---	202	278	500	-222
BASIC MANAGEMENT INC.	4,579	6,118	8,208	---	4,579	6,118	8,208	-2,090
CITY OF HENDERSON (BMI DELIVERY)	8,945	12,616	15,878	---	8,945	12,616	15,878	-3,262
NEVADA DEPARTMENT OF WILDLIFE	10	12	12	0	864	1,101	1,000	---
PACIFIC COAST BUILDING PRODUCTS INC.	782	942	928	---	782	942	928	14
BOULDER CANYON PROJECT	153	172	172	---	267	300	300	0
BIG BEND WATER DISTRICT	1,502	2,199	4,733	---	3,123	4,708	10,000	-5,292
FORT MOJAVE INDIAN TRIBE	2,526	2,833	4,020	---	3,772	4,230	6,000	-1,770
LAS VEGAS WASH RETURN FLOWS	-190,145	-231,628	-221,394	---				
TOTAL NEVADA	219,489	246,359	267,266	-604	413,234	482,875	497,023	-14,249
SOUTHERN NEVADA WATER SYSTEM (SNWS)	200,314	220,477				451,870		
ALL OTHERS	19,175	25,882				31,005		
NEVADA USES ABOVE HOOVER	215,461	241,327				473,937		
NEVADA USES BELOW HOOVER	4,028	5,032				8,938		

Tributary Conservation (TC) Intentionally Created Surplus (ICS)
 Southern Nevada Water Authority (SNWA) Creation of TC ICS (Approved) ¹ 43,000

NEVADA ADJUSTED APPORTIONMENT CALCULATION
 Nevada Basic Apportionment 300,000
 SNWA Creation of Extraordinary Conservation (EC) ICS (Estimated) ² (53,641)
 Total State Adjusted Apportionment 246,359
 Excess to Total State Adjusted Apportionment 0

¹ SNWA has been approved to create up to 43,000 AF of TC ICS in 2021. 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 2021. The actual amount of EC ICS created by SNWA will be based on final accounting and verification. The total amount accumulated in Nevada's ICS accounts will be limited in accordance with Section IV.C. of the *Lower Basin Drought Contingency Operations*.



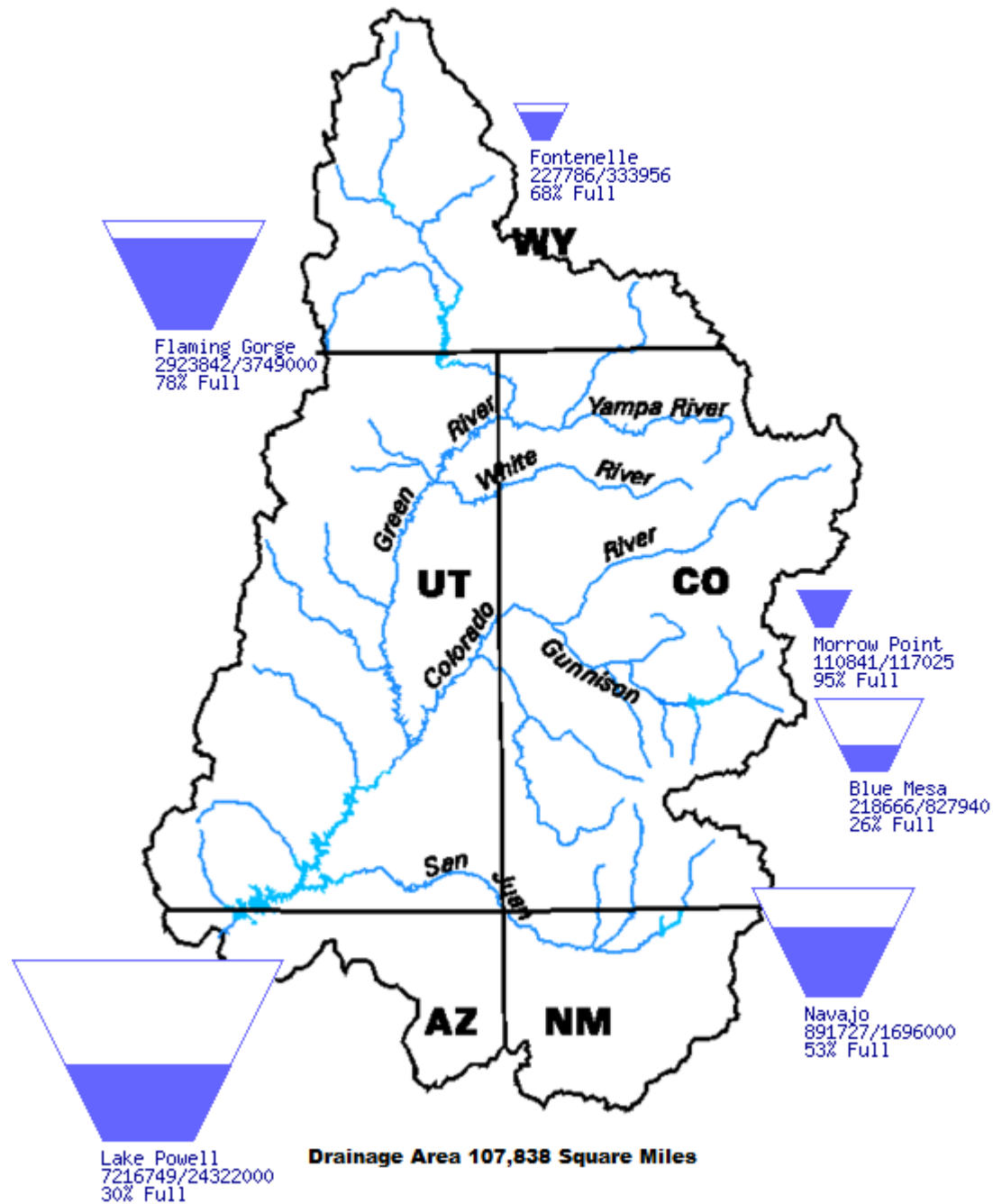
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

Upper Colorado Region Water Resources Group

River Basin Tea-Cup Diagrams

Data Current as of:
10/17/2021

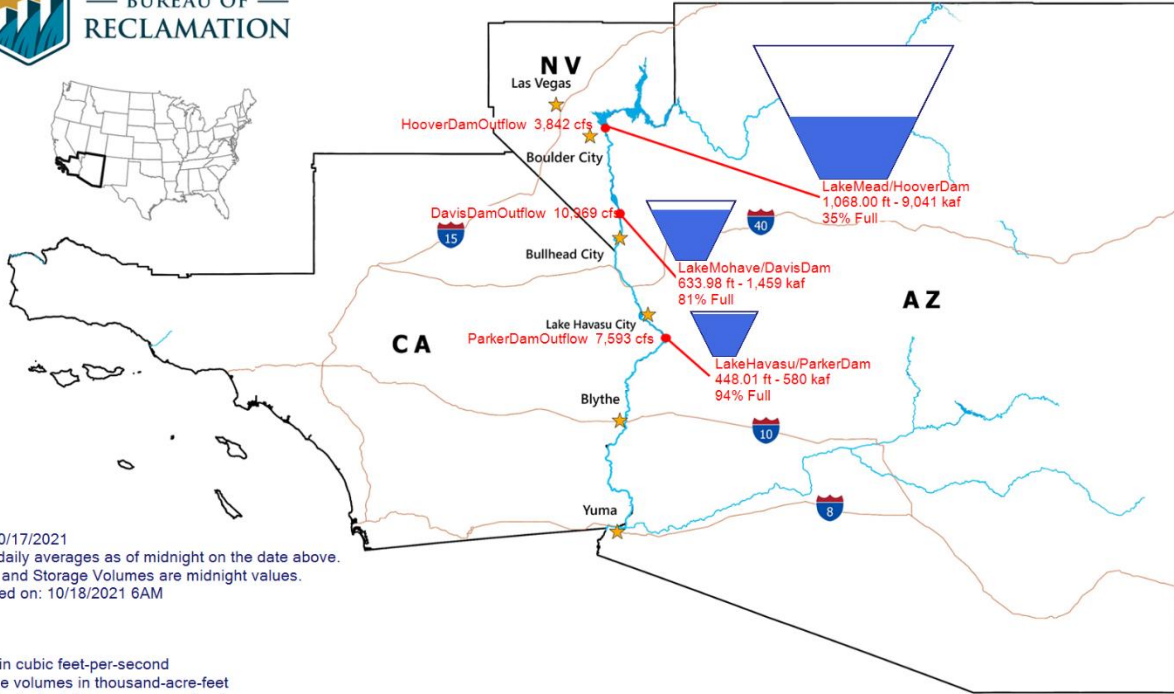
Upper Colorado River Drainage Basin



Lower Colorado River Teacup Diagram



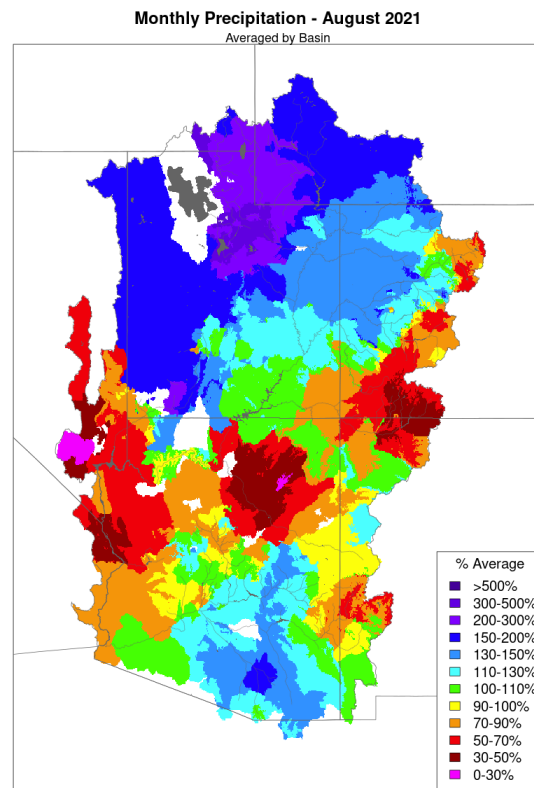
BUREAU OF RECLAMATION



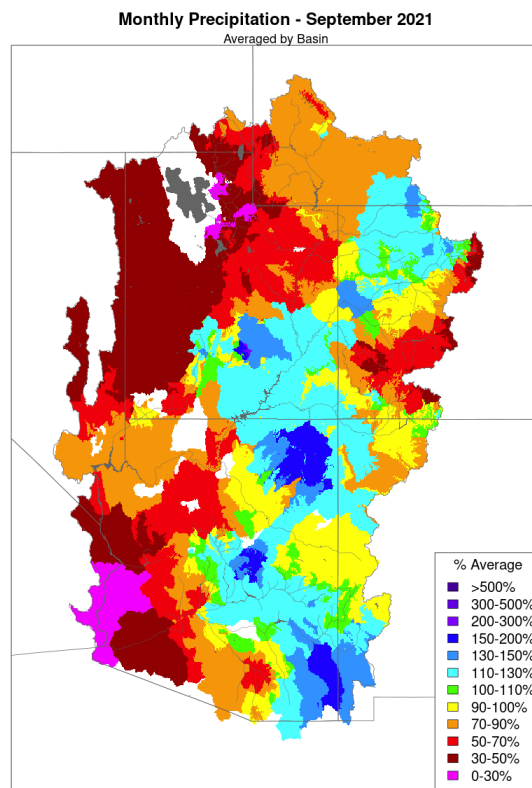
Data for: 10/17/2021
 Flows are daily averages as of midnight on the date above.
 Elevations and Storage Volumes are midnight values.
 Last updated on: 10/18/2021 6AM

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 2021



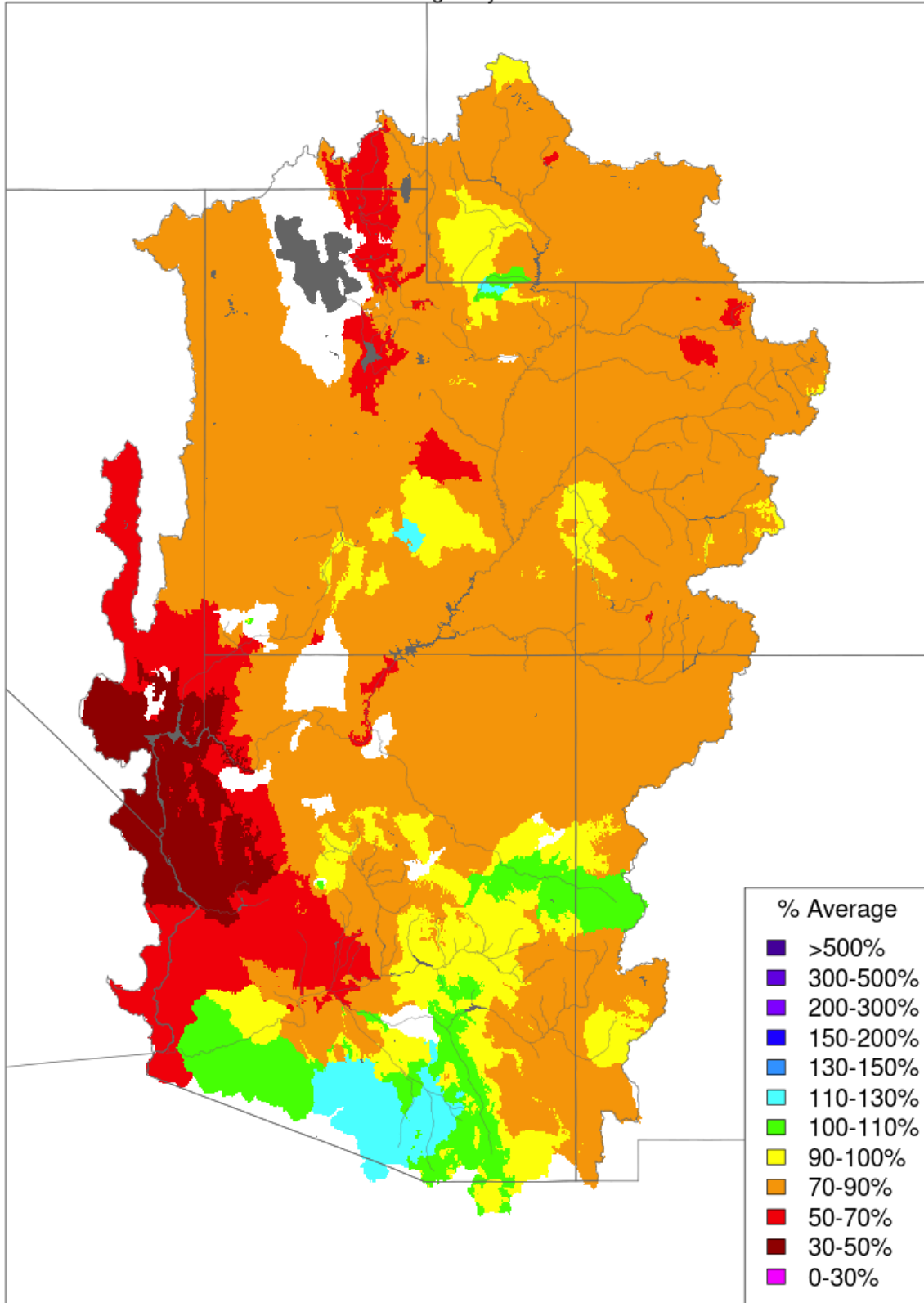
Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov



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

Water Year Precipitation, October 2020 - September 2021

Averaged by Basin



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

UPPER COLORADO RIVER BASIN

WASATCH FRONT RIVER BASINS

GUNNISON RIVER BASIN

SAN JUAN RIVER BASIN

RIO GRANDE BASINS

GREEN RIVER BASIN

UINTA BASIN

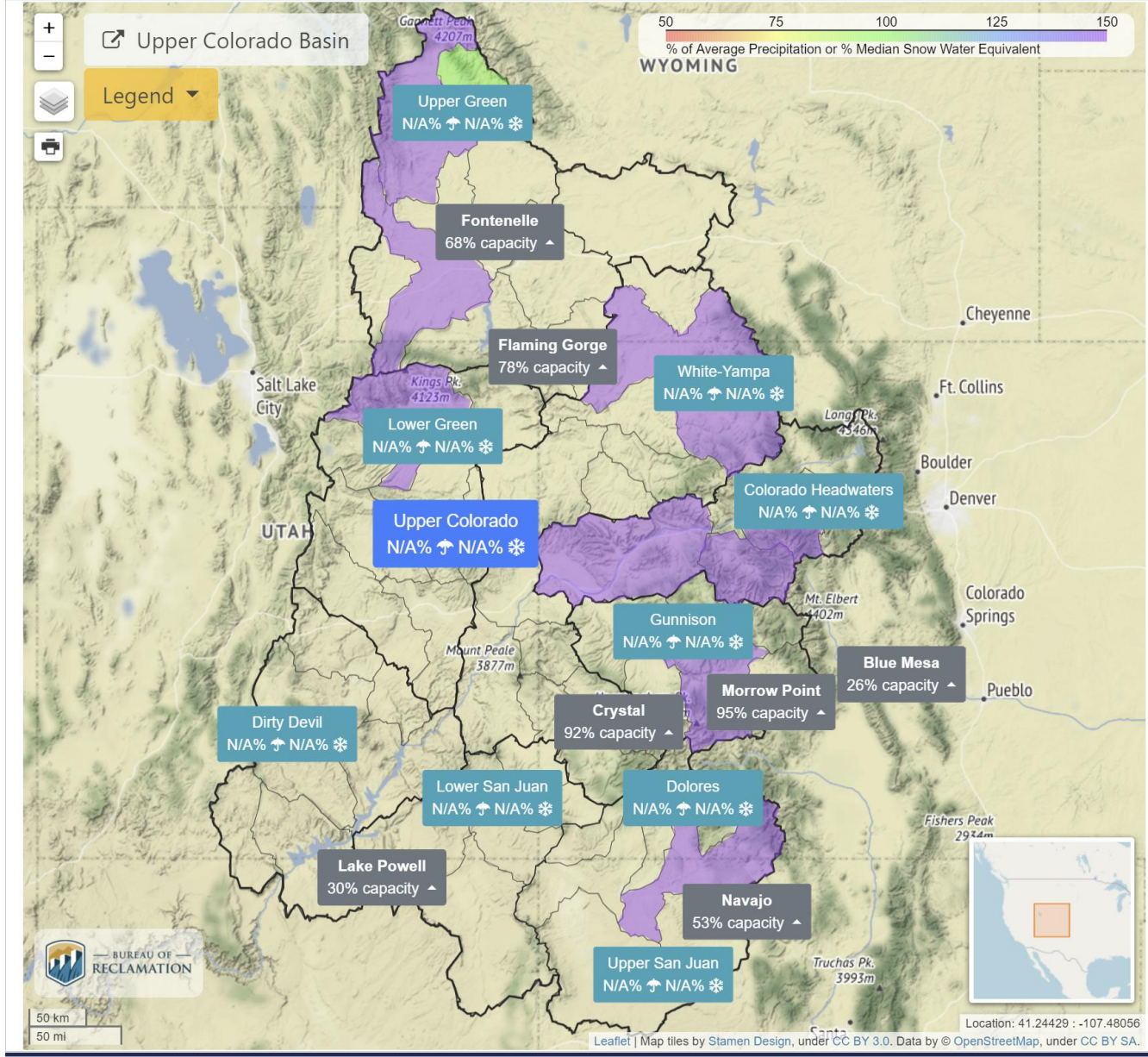
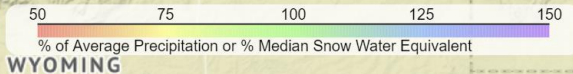
PRICE/SAN RAFAEL RIVER BASIN



Upper Colorado Basin



Legend



50 km
50 mi

Location: 41.24429 ; -107.48056

Leaflet | Map tiles by Stamen Design, under CC BY 3.0. Data by © OpenStreetMap, under CC BY SA.

Upper Green
N/A% ↑ N/A% ❄

Fontenelle
68% capacity ▲

Flaming Gorge
78% capacity ▲

White-Yampa
N/A% ↑ N/A% ❄

Lower Green
N/A% ↑ N/A% ❄

Upper Colorado
N/A% ↑ N/A% ❄

Colorado Headwaters
N/A% ↑ N/A% ❄

Gunnison
N/A% ↑ N/A% ❄

Blue Mesa
26% capacity ▲

Dirty Devil
N/A% ↑ N/A% ❄

Crystal
92% capacity ▲

Morrow Point
95% capacity ▲

Lower San Juan
N/A% ↑ N/A% ❄

Dolores
N/A% ↑ N/A% ❄

Lake Powell
30% capacity ▲

Navajo
53% capacity ▲

Upper San Juan
N/A% ↑ N/A% ❄

Garrett Peak
4207m

Kings Pk.
4123m

Long Pk.
4346m

Mt. Elbert
4402m

Mount Peale
3877m

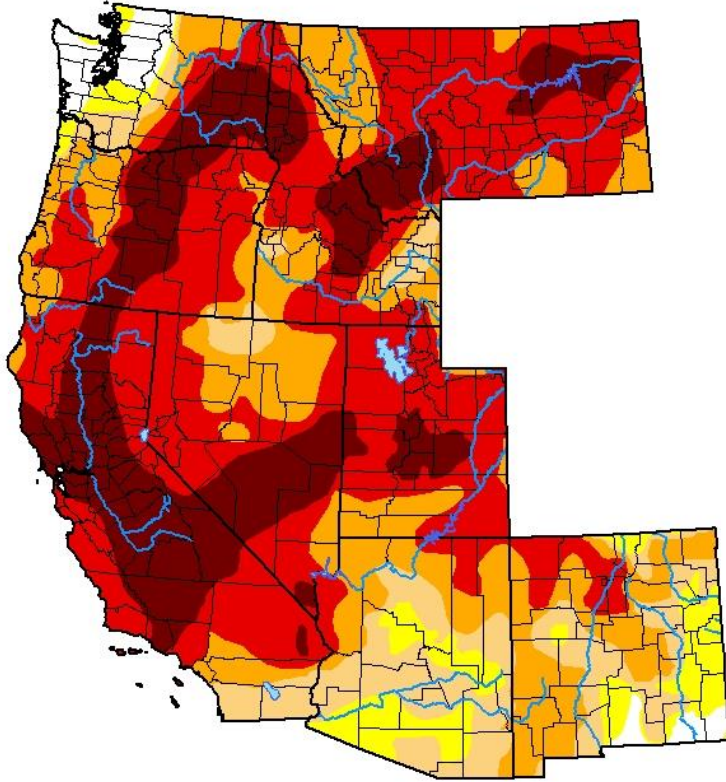
Fishers Peak
2974m

Truchas Pk.
3993m

USDA United States Drought Monitor Map

**U.S. Drought Monitor
West**

October 19, 2021
(Released Thursday, Oct. 21, 2021)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.40	97.60	91.86	80.42	58.32	20.21
Last Week <i>10-12-2021</i>	2.55	97.45	91.86	80.50	57.66	21.21
3 Months Ago <i>07-20-2021</i>	0.88	99.12	95.25	85.75	65.42	28.03
Start of Calendar Year <i>12-29-2020</i>	13.52	86.48	75.49	63.25	45.40	23.76
Start of Water Year <i>09-28-2021</i>	1.32	98.68	93.35	81.07	58.72	21.77
One Year Ago <i>10-20-2020</i>	8.06	91.94	74.54	53.77	38.41	5.04

Intensity:

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

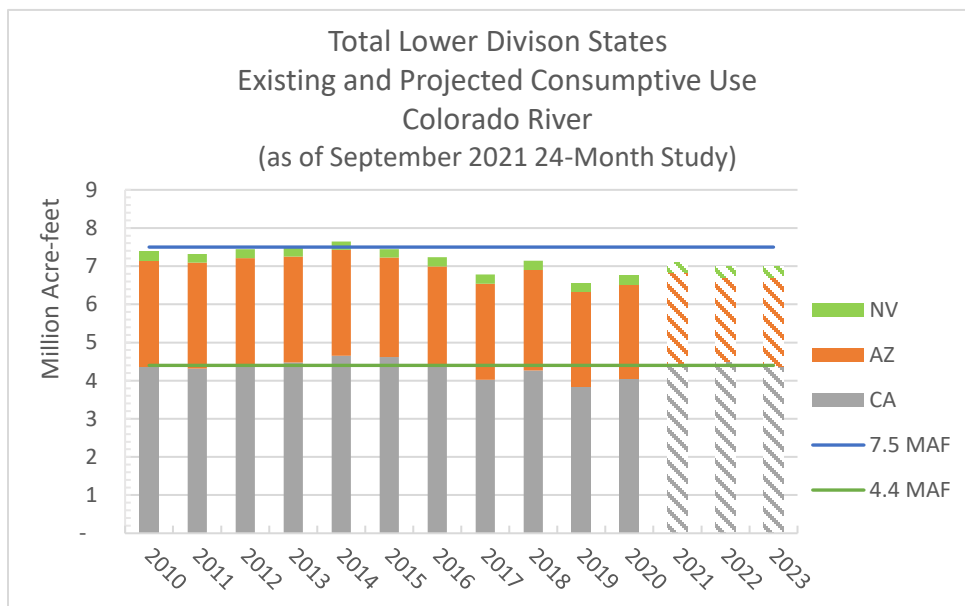
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brad Pugh
CPC/NOAA



droughtmonitor.unl.edu



October 2021 24-Month Study Projections

Lake Powell and Lake Mead: End of Month Elevation Charts



Explanation of Hydrologic Scenarios

In addition to the October 2021 24-Month Study based on the Most Probable inflow scenario, Reclamation has conducted model runs in October to determine a possible range of reservoir elevations under Probable Minimum and Probable Maximum inflow scenarios. The Probable Minimum inflow scenario reflects a dry hydrologic condition which statistically would be exceeded 90% of the time. The Most Probable inflow scenario reflects a median hydrologic condition which statistically would be exceeded 50% of the time. The Probable Maximum inflow scenario reflects a wet hydrologic condition which statistically would be exceeded 10% of the time. There is approximately an 80% probability that a future elevation will fall inside the range of the minimum and maximum inflow scenarios. Additionally, there are possible inflow scenarios that would result in reservoir elevations falling outside the ranges indicated in these reports.

Consistent with the Upper Basin DROA provisions to protect a target elevation at Lake Powell of 3,525 feet, these October 2021 24-Month scenarios include releases from the upstream initial units of the Colorado River Storage Project Act to deliver an additional 181 thousand acre-feet (kaf) to Lake Powell by the end of December 2021 and is included in all three model runs described above. The additional releases began in July and will continue to be implemented on the following schedule:

Upper Basin Drought Response Operations Releases

	Jul (kaf)	Aug (kaf)	Sep (kaf)	Oct (kaf)	Nov (kaf)	Dec (kaf)	Total (kaf)
Flaming Gorge Reservoir	13	42	43	27	0	0	125
Blue Mesa Reservoir	0	14	18	4	0	0	36
Navajo Reservoir	0	0	0	0	10	10	20
Total	13	56	61	31	10	10	181

The releases detailed above are in addition to the already established releases determined by operational plans for each of the identified facilities. The additional delivery of 181 kaf is equivalent to Lake Powell’s elevation of approximately three feet.

October 2021 Probable Minimum 24-Month Study¹

The water year 2022 unregulated inflow in the Probable Minimum inflow scenario is 4.00 million acre-feet (maf), or 42% of average. Consistent with the Interim Guidelines, the October Probable Minimum 24-Month Study includes a release volume from Glen Canyon Dam of 7.48 maf in water year 2022 and 7.00 maf in water year 2023. Under the probable minimum scenario, Lake Powell’s elevation is projected to be 3,482.53 feet on December 31, 2022. With intervening flows between Lake Powell and Lake Mead of 0.764 maf in calendar year 2022, Lake Mead’s elevation is projected to be 1,047.86 feet on December 31, 2022.

October 2021 Most Probable 24-Month Study¹

The water year 2022 unregulated inflow into Lake Powell in the August Most Probable inflow scenario is 7.40 maf, or 77% of average. Consistent with the Interim Guidelines, the October Probable Minimum 24-Month Study includes a release volume from Glen Canyon Dam of 7.48 maf in water year 2022 and 7.82 maf in water year 2023. Under the most probable scenario, Lake Powell’s elevation is projected to be 3,528.08 feet on December 31, 2022. With intervening flows between Lake Powell and Lake Mead of 0.875 maf in calendar year 2022, Lake Mead’s elevation is projected to be 1,050.63 feet on December 31, 2022.

October 2021 Probable Maximum 24-Month Study¹

The water year 2022 unregulated inflow in the Probable Maximum inflow scenario is 15.60 maf, or 162% of average. Consistent with the Interim Guidelines, the October Probable Minimum 24-Month Study includes a release volume from Glen Canyon Dam of 7.48 maf in water year 2022 and 9.00 maf in water year 2023. Under the probable maximum scenario, Lake Powell's elevation is projected to be 3,608.84 feet on December 31, 2022. With intervening flows between Lake Powell and Lake Mead of 0.994 maf in calendar year 2022, Lake Mead's elevation is projected to be 1,061.17 feet on December 31, 2022.

The 2021 AOP is available online at:

<https://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP21.pdf>.

The Draft 2022 AOP is available online at:

https://www.usbr.gov/lc/region/g4000/AOP2022/2022%20AOP_2021-08-26_Consultation-3.pdf.

The Interim Guidelines are available online at:

<https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf>.

The Colorado River DCPs are available online at:

<https://www.usbr.gov/dcp/finaldocs.html>.

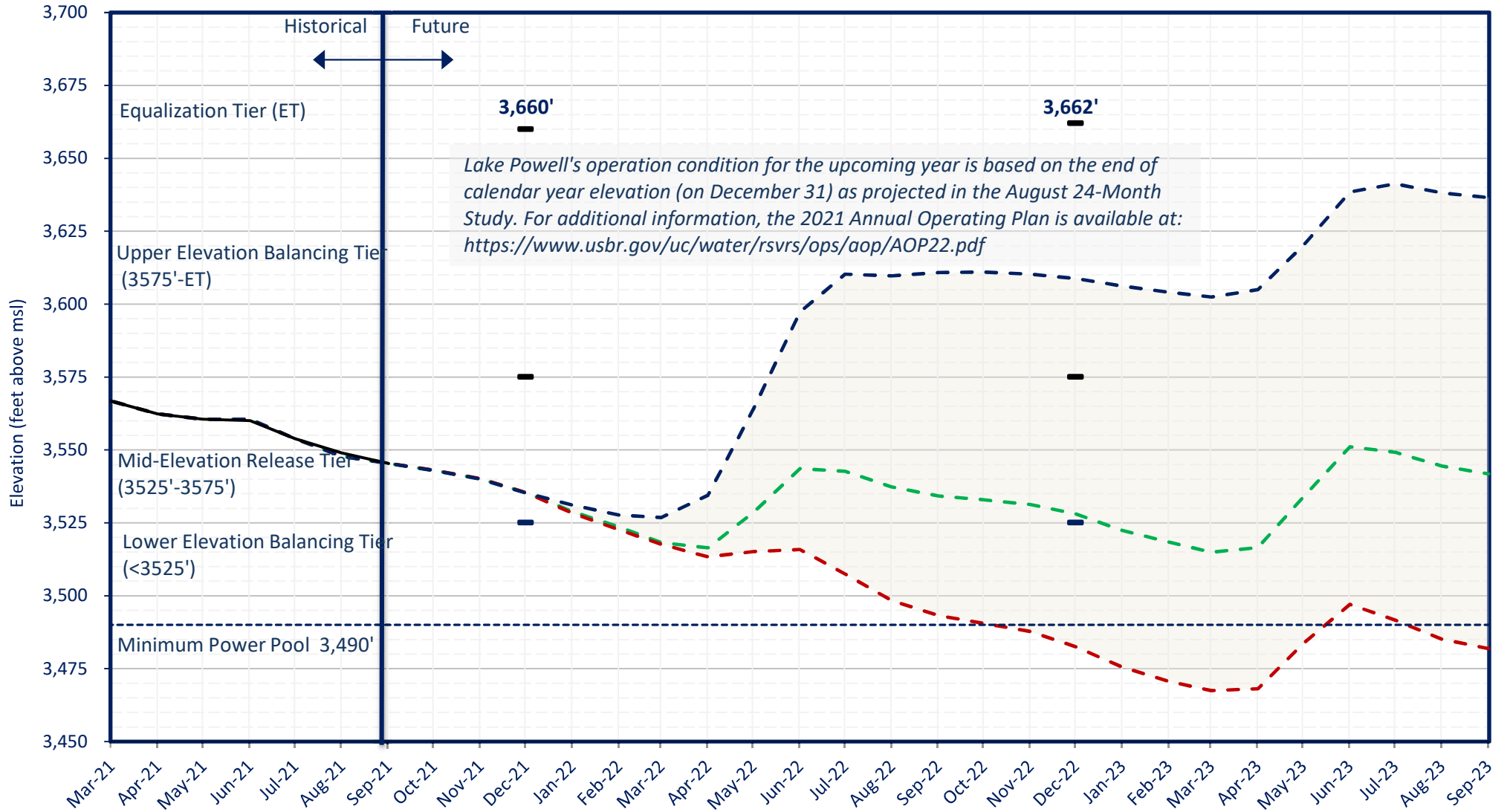
The Upper Basin Hydrology Summary is available online at:

https://www.usbr.gov/uc/water/crsp/studies/24Month_10_ucb.pdf.

¹ This October 2021 24-Month Study includes the Colorado Basin River Forecast Center shift to the 1991-2020 period of record. All statistics shown in the study refer to this new 30-year period of record.

Lake Powell End of Month Elevations

Projections from the October 2021 24-Month Study Inflow Scenarios



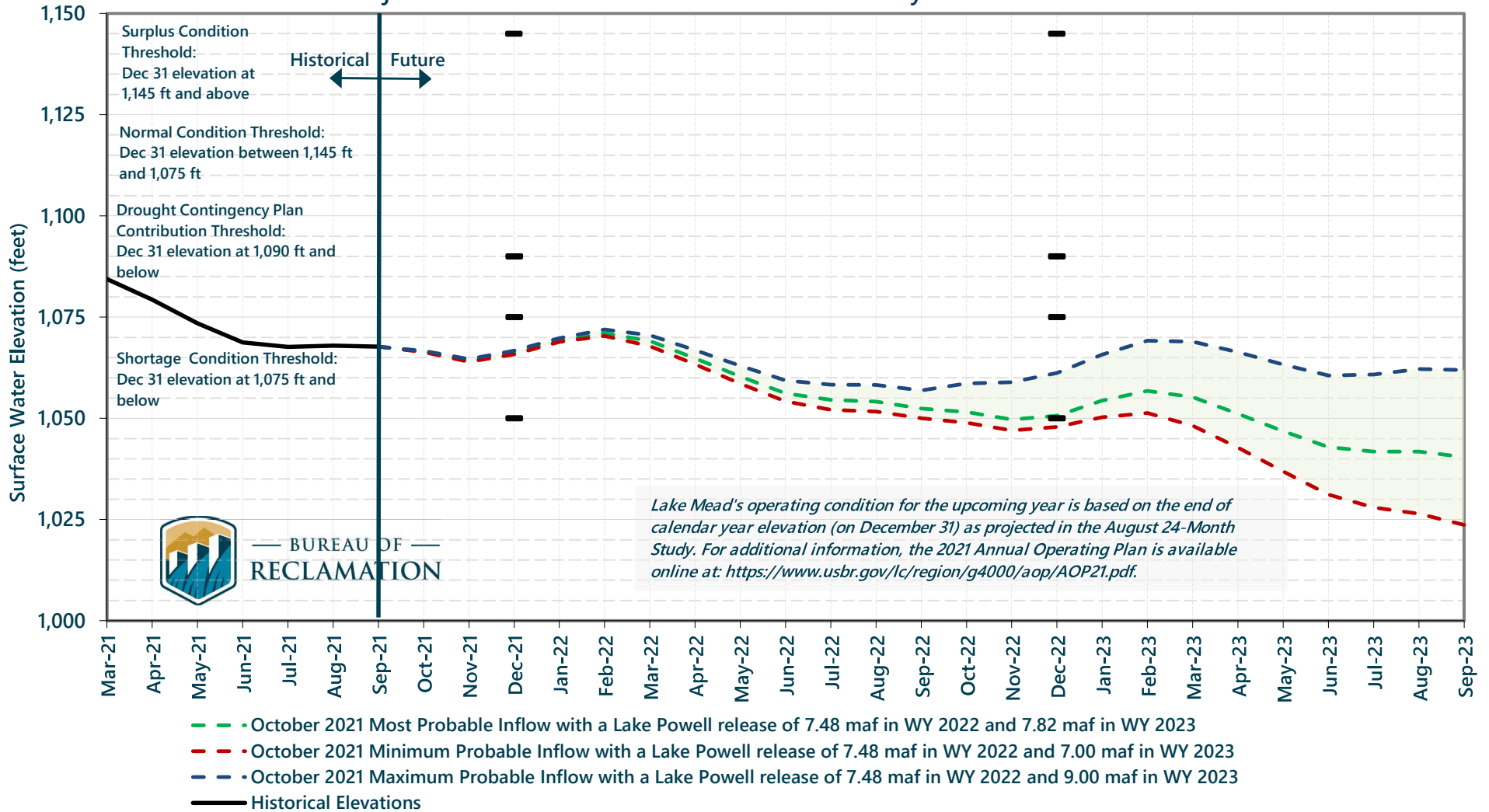
- - - October 2021 Most Probable Inflow - Lake Powell release of 7.48 maf in WY2022 and 7.82 maf in WY2023
- - - October 2021 Minimum Probable Inflow - Lake Powell release of 7.48 maf in WY2022 and 7.0 maf in WY2023
- - - October 2021 Maximum Probable Inflow - Lake Powell release of 7.48 maf in WY2022 and 9.0 maf in WY2023
- Historical Elevations



BUREAU OF RECLAMATION

Lake Mead End of Month Elevations

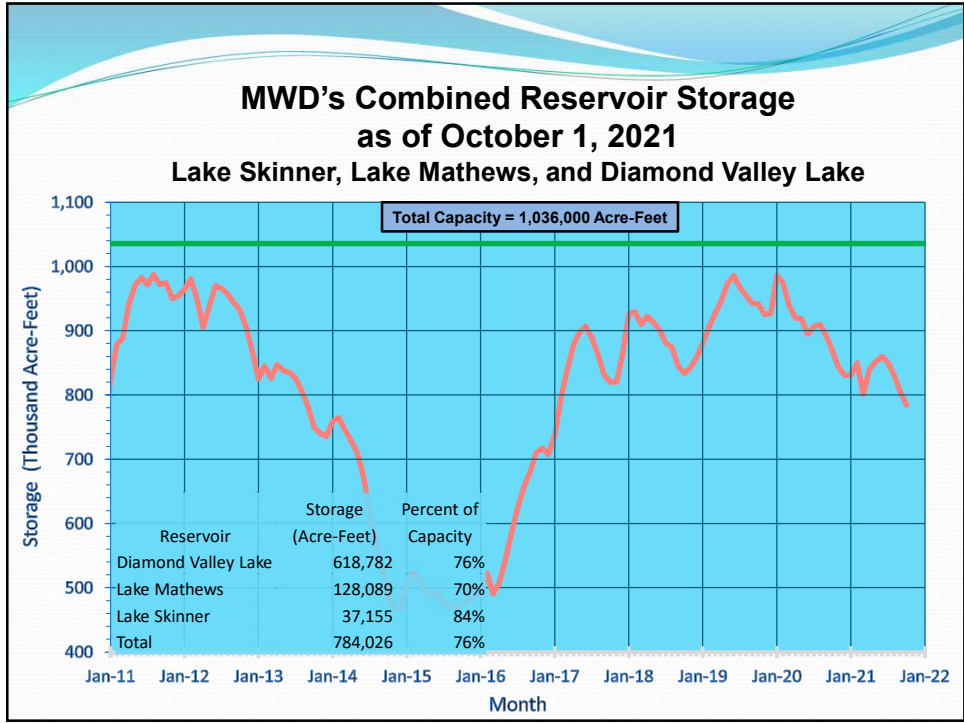
Projections from the October 2021 24-Month Study Inflow Scenarios



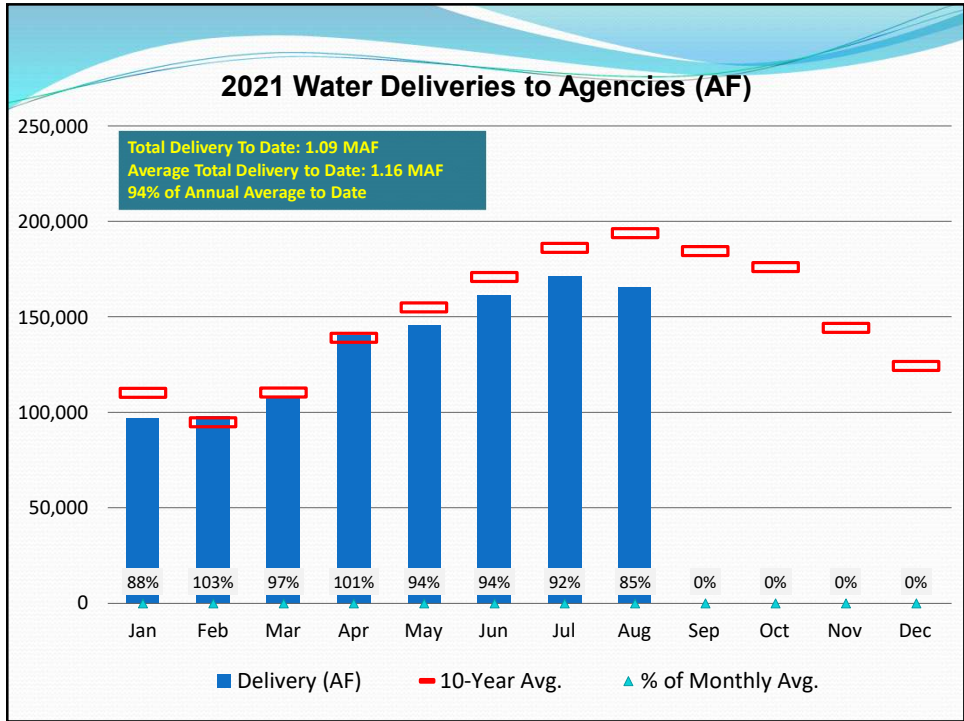
Lake Mead's operating condition for the upcoming year is based on the end of calendar year elevation (on December 31) as projected in the August 24-Month Study. For additional information, the 2021 Annual Operating Plan is available online at: <https://www.usbr.gov/lc/region/g4000/aop/AOP21.pdf>.



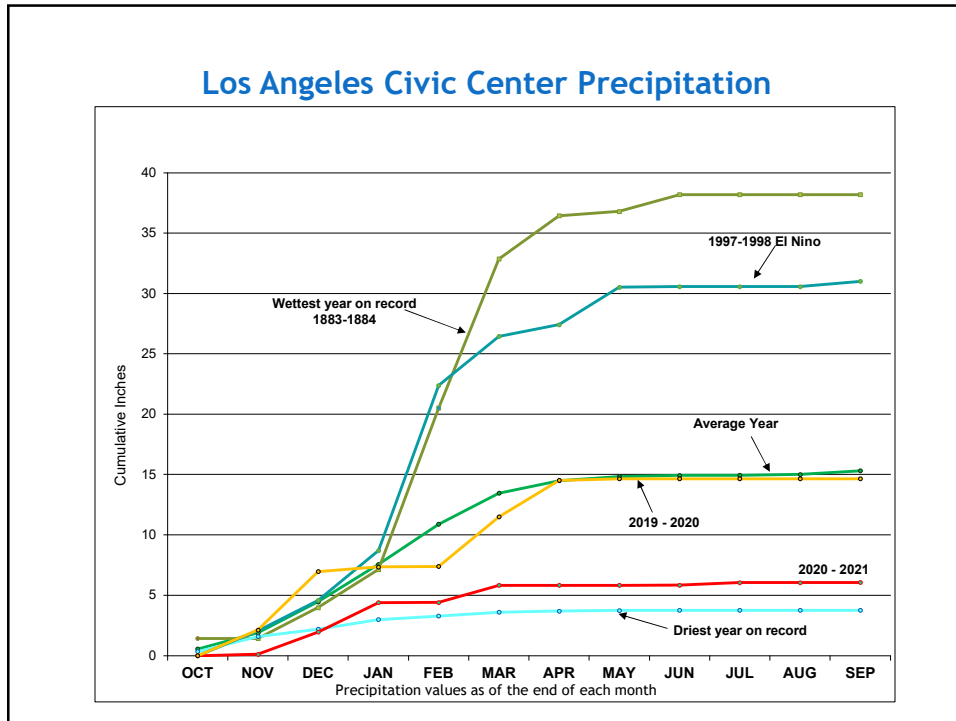
The Drought Response Operations Agreement (DROA) is available online at: <https://www.usbr.gov/dcp/finaldocs.html>.



1



2



1

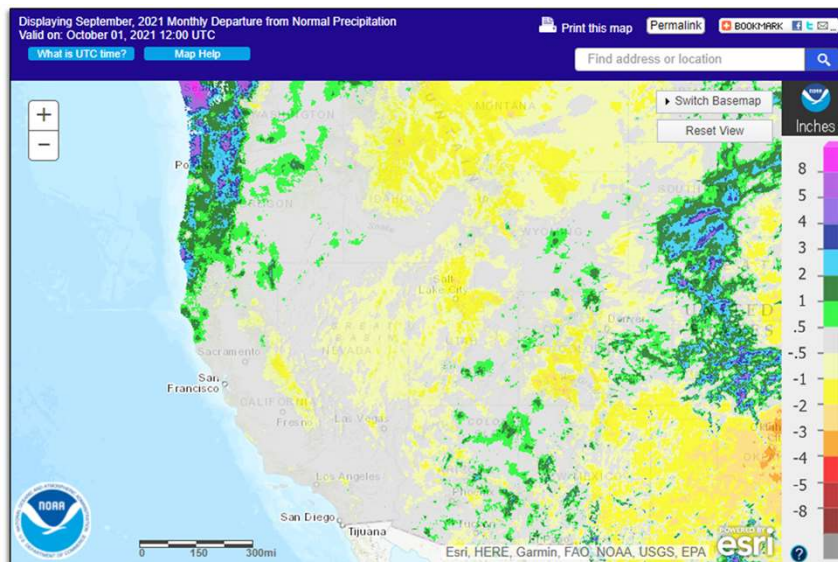
Precipitation at Six Major Stations in Southern California

From October 1, 2020 to September 30, 2021

Station	Precipitation in inches		Average to Date	Percent of Average
	Sept	Oct 1 to Sept 30		
San Luis Obispo	0.00	8.32	22.44	37%
Santa Barbara	0.00	5.96	17.78	34%
Los Angeles	0.01	6.07	15.31	40%
San Diego	0.50	5.12	10.15	50%
Blythe	0.03	1.18	3.81	31%
Imperial	0.00	0.00	2.83	0%

2

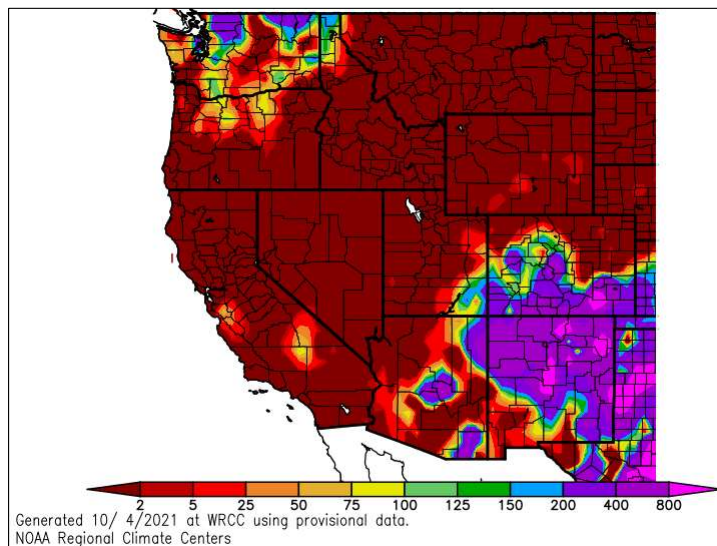
Monthly Departure From Normal Precipitation (inches) October 1, 2021



<https://water.weather.gov/precip/>

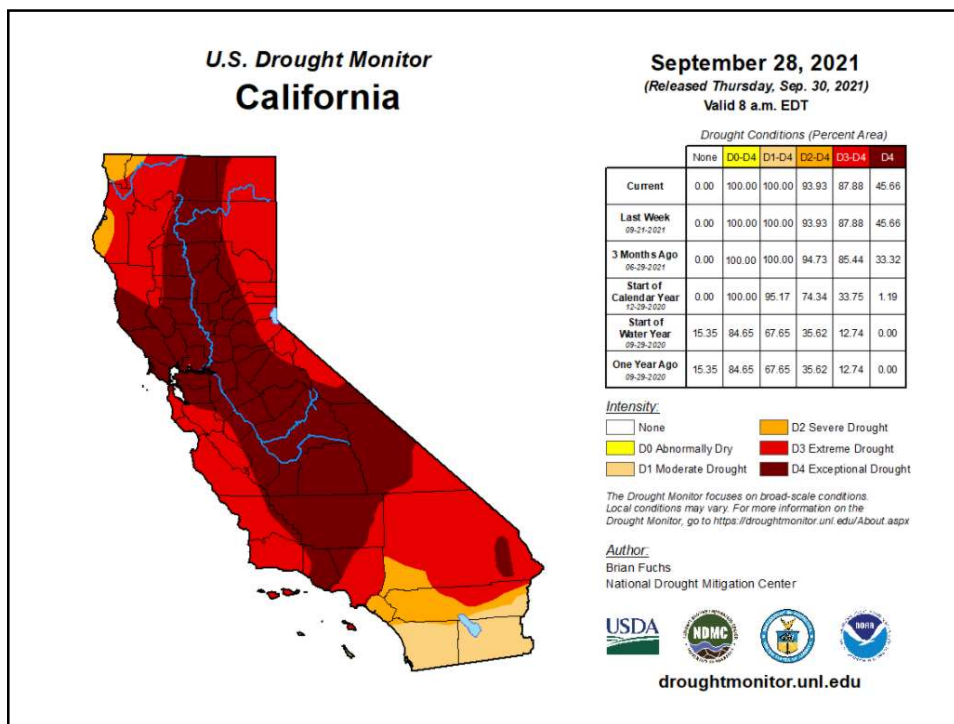
3

Percent of Average Precipitation (%) October 1, 2020 - October 4, 2021

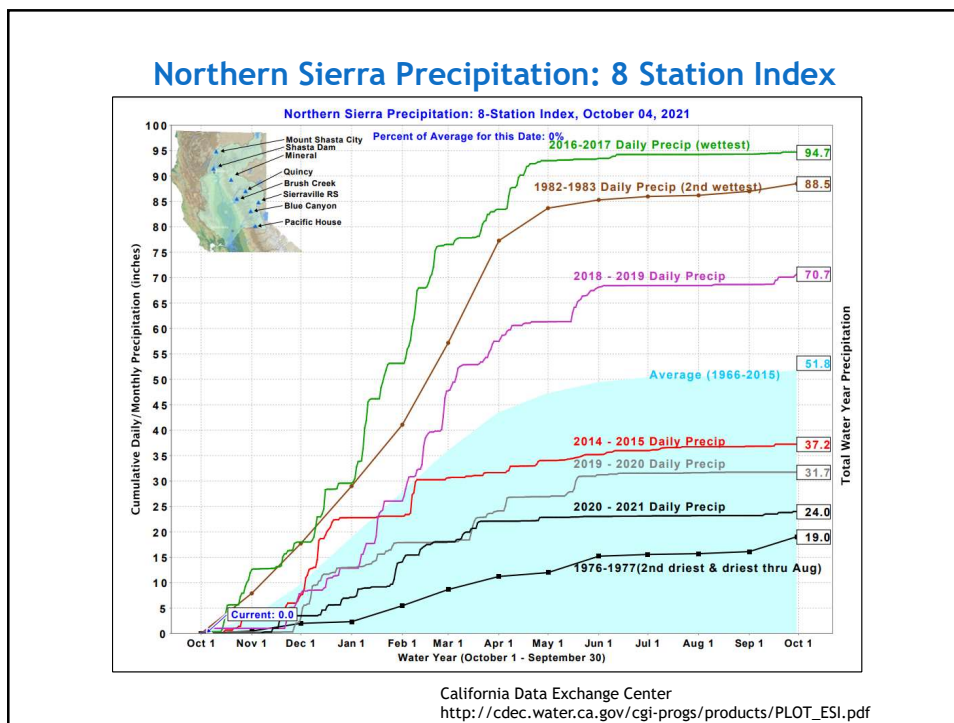


Western Regional Climate Center
<https://wrcc.dri.edu/cgi-bin/anomimage.pl?wrc12mPpct.png>

4

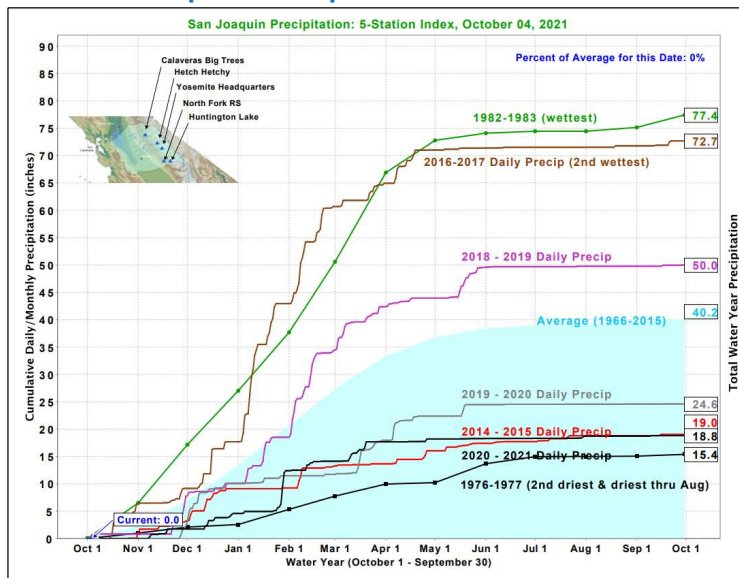


5



6

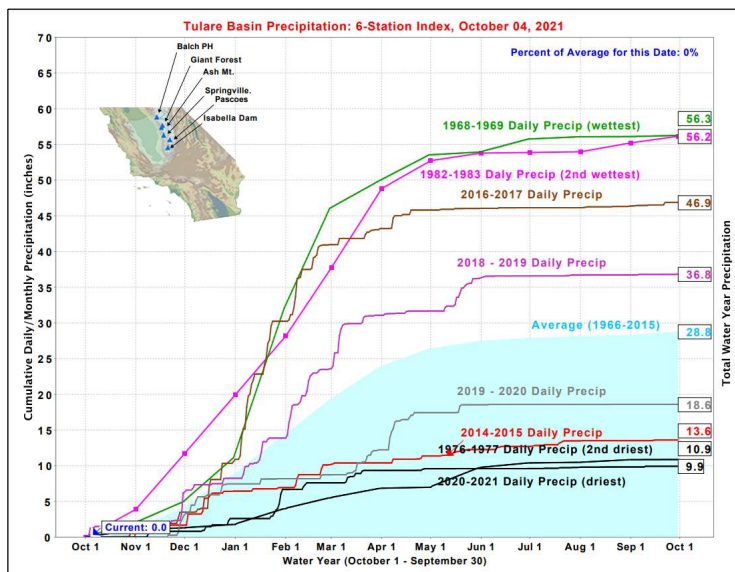
San Joaquin Precipitation: 5 Station Index



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

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Tulare Basin Precipitation: 6 Station Index



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

8

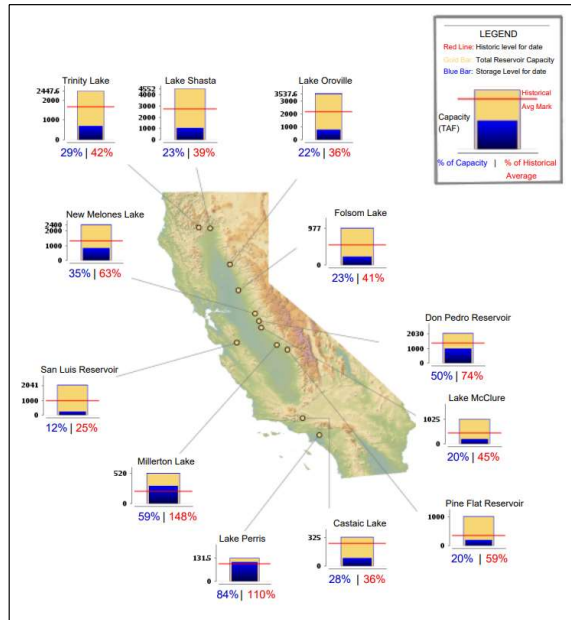
Comparison of SWP Water Storage

Reservoir	Capacity	2020 Storage (acre-feet)		2021 Storage (acre-feet)	
		As of Oct 1	% of Cap.	As of Oct 1	% of Cap.
Frenchman	55,475	36,225	65%	26,914	49%
Lake Davis	84,371	53,906	64%	40,698	48%
Antelope	22,564	16,406	73%	13,685	61%
Oroville	3,553,405	1,626,252	46%	787,633	22%
TOTAL North	3,715,815	1,732,789	47%	868,930	23%
Del Valle	39,914	32,457	81%	37,072	93%
San Luis	2,027,835	972,963	48%	246,750	12%
Pyramid	169,901	167,179	98%	165,270	97%
Castaic	319,247	290,850	91%	90,108	28%
Silverwood	74,970	69,960	93%	68,011	91%
Perris	132,614	123,102	93%	110,160	83%
TOTAL South	2,764,481	1,656,511	60%	717,371	26%

As of March 23, 2021, the Table A allocations for SWP contractors is 5%.

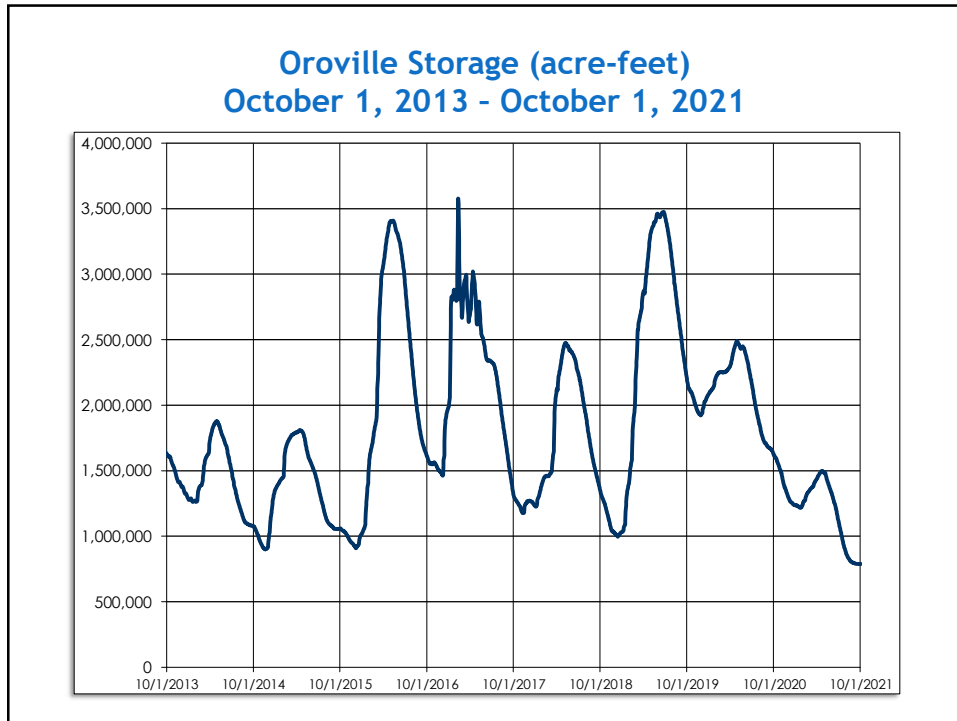
9

Reservoir Current Conditions as of October 4, 2021



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

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