

June 1, 2022

**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, June 15, 2022  
Time: 10:00 a.m.  
Place: Sheraton Ontario Airport Hotel  
Orchid Room  
429 North Vineyard Avenue  
Ontario, CA 91764

The Colorado River Board of California welcomes any comments from members of the public pertaining to items included on this agenda and related topics. Members of the public may provide comments in the following ways: (1) Oral comments can be provided at the beginning of each Board meeting; and (2) Public comments may be submitted by electronic mail, addressed to the Board's Chairman, Mr. Peter Nelson, at [crb@crb.ca.gov](mailto:crb@crb.ca.gov) and will be accepted up until 10:00 a.m. on the day of the meeting. 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 Board staff at [crb@crb.ca.gov](mailto:crb@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. A copy of this Notice and Agenda may be found on the Colorado River Board's web page at [www.crb.ca.gov](http://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, June 15, 2022**  
**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.

- 1. Call to Order**
- 2. Opportunity for the Public to Address the Board<sup>1</sup>** (Limited to 5 minutes)
- 3. Administration**
  - a. Consideration and approval of April 13, 2022, Board meeting Minutes (**Action**)
  - b. Consideration and approval of May 11, 2022, Board meeting Minutes (**Action**)
  - c. Presentation of Colorado River Board of California FY-2022/2023 Budget (**Action**)
  - d. FY-2021/2022 Accomplishments Report and FY-2022/2023 Planned Activities Report (**Information**)
  - e. Consideration and approval of resolution on application for Lower Colorado River Water Supply Project (**Action**)
- 4. Colorado River Basin and Local Water Supply and Operations Reports**
- 5. Colorado River Basin Programs Staff Reports**
- 6. Executive Session<sup>2</sup>**
- 7. Other Business**
- 8. Future Agenda Items/Announcements**

**Next Scheduled Board Meeting:**

July 13, 2022  
10:00 a.m., Pacific  
Sheraton Ontario Airport Hotel, Orchid Room  
429 North Vineyard Avenue  
Ontario, CA 91764

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<sup>1</sup> In accordance with California Government Code, Section 54954.3(a).

<sup>2</sup> 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 the other Basin states or federal government.



Minutes of Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, April 13, 2022

A meeting of the Colorado River Board of California (Board) was held on Wednesday, April 13, 2022, at the Sheraton Ontario Airport Hotel, 429 North Vineyard Avenue, Ontario, California 91764.

Board Members and Alternates Present:

David De Jesus (MWD Alternate)  
Dana B. Fisher, Jr. (PVID)  
John B. Hamby (IID)  
Jeanine Jones (DWR Designee)

Peter Nelson, Chairman (CVWD)  
Glen D. Peterson (MWD)  
David R. Pettijohn, Vice Chairman (LADWP)  
Jim Madaffer (SDCWA)

Board Members and Alternates Absent:

Castulo Estrada (CVWD Alternate)  
James Hanks (IID Alternate)  
Christopher Hayes (DFW Designee)  
Delon Kwan (LADWP Alternate)

Jack Seiler (PVID Alternate)  
Mark Watton (SDCWA Alternate)  
David Vigil (DFW Alternate))

Others Present:

Steve Abbott  
Robert Cheng  
Dennis Davis  
Nadia Hardjadinata  
Chris Harris  
Bill Hasencamp  
Larry Lai  
Jessica Neuwerth  
Angela Rashid

David Rheinheimer  
Kelly Rodgers  
Tom Ryan  
Alexi Schnell  
Tina Shields  
Gary Tavetian  
Petia Vasileva  
Jerry Zimmerman



## **CALL TO ORDER**

Chairman Nelson announced the presence of a quorum and called the meeting to order at 10:12 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. Hearing none, Chairman Nelson moved to the next item on the agenda.

## **ADMINISTRATION**

Chairman Nelson asked for a motion to approve the March 9, 2022, meeting minutes. Mr. Madaffer moved that the minutes be approved, seconded by Mr. Pettijohn. By roll-call vote, the minutes were unanimously approved.

Chairman Nelson asked for a motion to approve a Board resolution Posthumously Honoring Mr. Henry (Hank) Kuiper. Mr. Hamby moved that the resolution be approved, seconded by Ms. Jones. By roll-call vote, the resolution was unanimously approved.

Mr. Tavetian noted that Bill Abbey from the California Attorney General's office passed away about a month ago. He stated that Mr. Abbey was always happy, optimistic, and cheerful.

## **COLORADO RIVER BASIN WATER REPORTS**

### **Colorado River Basin Report**

Ms. Rashid reported that as of April 4<sup>th</sup>, the water level at Lake Powell was 3,523.04 feet with 5.81 million-acre feet (MAF) of storage, or 24% of capacity. The water level at Lake Mead was 1,061.04 feet with 8.50 MAF of storage, or 33% of capacity. The total system storage was 20.88 MAF, or 35% of capacity, which is 5.39 MAF less than system storage at this time last year.

Ms. Rashid reported that as of April 4<sup>th</sup>, for Water Year-2022 (WY-2022), the observed March inflow to Lake Powell was 0.33 MAF, or 55% of normal. The April inflow forecast to Lake Powell is 0.60 MAF, or 66% of normal. The forecasted unregulated inflow into Lake Powell for WY-2022 is 6.31 MAF, or 66% of normal and the WY-2022 forecasted April to July inflow to Lake

Powell is 4.1 MAF, or 64% of normal. Ms. Rashid reported that overall precipitation conditions in the Upper Colorado River Basin were 97% of normal and the current Basin snowpack is 87% of normal.

Ms. Rashid reported on the Water Year-2022 (October to March) Precipitation. She stated that the WY-2022 precipitation was near normal despite dry conditions over the last three months, noting that this was due to near normal to above normal precipitation conditions in October and December of last year.

Board member Peterson inquired about the impacts of shifting to the new climate normal period of 1991 to 2020, noting that the previous normal period of 1981 to 2010 had wetter precipitation conditions. He added that it is hard to determine whether the current conditions are normal or above normal for winter this year. Mr. Harris added that last year's monsoon season was above normal and the Lower Basin picks up most of its moisture during this season and it is also important for the side inflows between Glen Canyon Dam and Lake Mead.

*Drought Response Operations and Basin States Activities to Protect Critical Elevations in Lakes Powell and Mead*

Mr. Harris reported that precipitation conditions have been deteriorating since January and the 24-Month Study and Colorado River Midterm Modeling System (CRMMS) indicate the risk to Lake Powell was beginning to increase significantly. He reported that the latest modeling shows Lake Powell's elevation has the potential to reach 3,525 feet and by early 2023, may decline to or below 3,490 feet. Mr. Harris stated that the Basin States have been discussing how to further bolster and protect Lake Powell from reaching these critical elevations. He stated that there is a public roll-out of the Upper Basin's proposed Drought Operations Plan (DROA) for 2022. Mr. Harris stated that last year, the Bureau of Reclamation (Reclamation) implemented drought operation releases from Flaming Gorge reservoir and other Colorado River initial units, of 180,000 AF to Lake Powell to try to keep the elevation above 3,525 feet.

Mr. Harris reported that Upper Basin and Reclamation are working together to make a larger DROA release of about 500,000 AF. He added that is amount may not be enough to keep Lake Powell from reaching 3,525 feet and potential declining further. Mr. Harris stated that Reclamation indicated that monthly Glen Canyon Dam releases would be adjusted to shift 350,000 AF from release in the spring to the summer months. Mr. Harris noted if additional measures aren't made to protect Lake Powell's critical elevation, Lake Mead could be harmed.

Mr. Harris reported the Basin States and the Department of the Interior (DOI) have had a series of coordination meetings to consider additional measures to protect critical water elevations at Lakes Powell and Mead. He stated that Assistant Secretary for Water and Science, Tanya Trujillo issued a letter on April 8<sup>th</sup> that describes the need for additional action, outlines the justification to protect critical elevations in Lake Powell such as, operational reliability, water delivery uncertainty for downstream users and the risk and instability to the western electrical grid. DOI proposed to reduce Glen Canyon Dam annual release in 2022 from 7.48 MAF to 7.0 MAF and provide some certainty regarding proposed 2023 operations at both Lakes Powell and Mead. This proposed action will be done in conjunction with the Upper Basin's plan DROA release. He stated that these two actions together would result in about 1.0 MAF of additional storage in Lake Powell.

Chairman Nelson asked for more clarity about Lake Powell's critical elevations and how it is related to power generation and why Lake Mead's elevations, as outlined in the Lower Basin DCP, are used as thresholds by which the Lower Basin takes water use cuts. Mr. Harris explained that Lake Powell's elevations are tied to operational integrity of maintaining the management of Glen Canyon Dam. He explained that at 10 feet above elevation 3,490 feet, it will become very difficult to operate the reservoir, noting however, that there is very limited operational experience operating the facility at that elevation. Mr. Harris stated at 3,490 feet water could be routed to the river outlet works and pass water through the jet bypass tubes but there is an operational risk if one of the jet tubes fails or needs maintenance, limiting how much water can physically be released from the facility. He added that Reclamation has not done maintenance on the river outlet works in some time and maintenance is scheduled to over the next couple of years and will be needed if the elevation declines to or below 3,490 feet. Mr. Harris stated that the river outlet works are steel-lined and may be epoxy-coated, noting that maintenance is needed. He added that if the flapper gate on the jet tubes fails, they fail in the open position, with no way to close them or repair them.

Mr. Harris reported that Glen Canyon and Hoover Dams were back start units for Palo Verde nuclear generating station. Mr. Harris explained that if there is a failure of the western electrical grid, the hydropower facilities would be used to bring electricity back to grid and then the nuclear reactor could be put back online. He stated from a system redundancy perspective, Reclamation wants to preserve the ability to utilize the Glen Canyon Dam generating facility. He stated further, if Glen Canyon Dam was not able to generate electricity, power would have to be procured on the spot market, which would further stress the already maxed out southwestern power grid. He stated that Reclamation has been clear that hydropower is not trumping water supply or water delivery. Mr. Harris reported that Paige, Arizona, and a few other rural communities, including communities in the Navajo Nation, have a couple of plumb lines off the

penstocks in Lake Powell near the elevation of 3,490 feet that supply 100% of its water supply. He noted that they are using about 3,000 AF. He stated that the DOI is cognizant of all these issues and it trying to balance them all.

Mr. Harris stated there is an increased risk to storage in Lake Mead by taking this action. He stated the month of April has the highest water use demands, and now with the war in Ukraine, agricultural production has greatly increased to produce wheat. He stated that Lake Mead's capacity is 33% of storage and this action could cause further decline in storage. He explained that the Basin States and Reclamation are proposing that the action will be operationally neutral and will limit the risk of adverse impacts to downstream users below Glen Canyon Dam. He stated that with the DROA release from the Upper Basin, we need to get as much of the 500-plus plan into Lake Powell.

Mr. Peterson inquired about how Reclamation plans to account for the water not released downstream from Glen Canyon Dam. Mr. Harris explained that Reclamation would use its authority under the 2007 Interim Guidelines to take action for public safety and health infrastructure protection. Mr. Harris explained that under the Guidelines, a minimum release out of Glen Canyon Dam is allowed. He stated if for some reason this action wasn't taken and 7.48 MAF was released and we had another dry winter, Lake Powell's elevation could drop below 3,490 feet causing operational issues that only allow for releases less than 7.0 MAF. He stated further that taking this action can guarantee at least next year's release could be 7.0 MAF or greater. Mr. Harris stated this action will cause Lake Mead's elevation to decline and recovery is uncertain at the moment. He stated that this year's release from Glen Canyon Dam will be reduced and next year releases may vary between 7.0 MAF up to 8.23 MAF. Mr. Harris stated that the proposed action would not impact the Upper Basin's Compact requirement of delivering 75 MAF over a running ten-year period.

Mr. Zimmerman stated the first obligation for deliveries from Glen Canyon Dam are for the Mexican Treaty, then you can account for the 75 MAF over a ten-year period. Mr. Harris added that Upper Basin's carriage losses are not included but should be, and this issue can be discussed during the renegotiation of the Guidelines.

Mr. Harris stated that the April 8<sup>th</sup> letter from Ms. Trujillo have requested responses to the proposed action by April 22<sup>nd</sup> and the Board would discuss it during an Executive Session.

Board member Jones remarked that DOI's letter mentioned that it did not foresee the severity of the hydrologic conditions and that precipitation conditions this year were near normal, yet spring runoff forecasts began trailing off. She requested Board staff to address the

disconnect between precipitation and runoff forecasts at a future Board meeting. Mr. Harris stated that the Basin States, Reclamation and DOI have seen this coming and not enough media attention has been given to the issue and the collaborative work the Basin has done to deal with the drought since 2000. Mr. Harris outlined the various actions the Basin and California have employed to deal with the on-going drought. He stated in 2003, California implemented the the Quantification Settlement Agreement (QSA) in California to bring its uses from 5.2 MAF to 4.4 MAF, noting that there was no soft landing to reducing the use. Next, he stated that the 2007 Interim Shortage Guidelines were implemented, with shortage criteria at elevations 1,075 feet, 1,050 feet, and 1,025 feet, noting that in hindsight Arizona should probably have taken shortages at higher elevations. Mr. Harris stated that Minutes 319 and 323 included water conservation actions that called for Mexico to take shortages with the United States and set up policy for Mexico to store conserved water in Lake Mead to bolster its storage. Next, the Lower Basin developed that Drought Contingency Plan in 2019, along with the Upper Basin developing its own DCP. Mr. Harris stated after the Basin saw that there was still significant risk to Lakes Powell and Mead, the Lower Basin developed the 500-plus plan. Mr. Harris reiterated that all of these efforts need to be better messaged to the public to show that the Basin has reacted to the drought appropriately year by year to ensure that critical elevation in both reservoirs are protected. Board member Fisher remarked on the importance of addressing many of these issues in the next set of Guidelines.

Mr. Peterson expressed concern regarding how the water that should have been released will be repaid to the Lower Basin. Mr. Harris responded that the details for the repayment have not been figured out yet.

Ms. Jones remarked on the importance of improving runoff forecasting tools to better understand the Basin's snowpack. She noted that it is important to make these investments now, stating that a financial framework is needed by Reclamation to get snowpack data that will provide better runoff forecasts. Mr. Fisher concurred, noting having better data will help them better manage DROA releases in the future. Ms. Jones reported that in order to improve runoff forecasting physical basin models will be needed, such as the airborne snow observatory (ASO), which is costly. She stated historically in California, the State spends a million dollars to develop the old-fashion point-based snow data, which involves sticking a pole in the snow to take measurement of snow pillows. She stated that the California Department of Water Resources (DWR) has a budget for \$4 million a year to conduct ASO in the San Joaquin River Basin, primarily for flood control benefits. She remarked that DWR is hoping to get funding next year for ASO for the Sacramento Basin to improve runoff modeling, which will cost \$5 million. She stated that the Colorado River Basin snow covered area is bigger, hence will be more expensive. She stated that Reclamation does not have the authority in their budget, and the National Oceanic and

Atmospheric Administration (NOAA) does not have the money to fund ASO in the Basin. She stated this is a good opportunity for stakeholders to consider encouraging Reclamation to seek this funding in Fiscal Year 2024. Mr. Harris stated the Six Agency Committee (SAC) has sent letters of support for Reclamation to obtain funding to improve its forecasting abilities in the past.

### **State and Local Report**

Ms. Jones, representing the California Department of Water Resources (DWR), reported that the statewide precipitation was 69% of average. She stated that precipitation conditions are better this year than last year. She also stated that last year experienced extreme temperatures and dry conditions. She stated that snowpack was 22% of average and began to melt early. The April 1<sup>st</sup> snowpack was close to 34% of normal and has been rapidly declining. She added that statewide reservoir storage was 70% of average and that is partly due to a very wet precipitation conditions in October and December of last year.

Ms. Jones showed graphics of DWR's full natural flow at various California rivers noting that 2014, 2015 and 2021 were the driest years of the historical period. She added that runoff conditions were much drier last year for most of California's river basins.

Ms. Jones thanked the SAC for supporting the funding request for congressional appropriation for NOAA's sub-seasonal to seasonal (S2S) precipitation forecasting. She noted this is an area that greatly needs improvement, not just for the lead time that precipitation forecasting provides but also can provide insight into spring snowmelt runoff forecasts. She stated that the Western States Water Council (WSWC) is participating in a Snowmelt Runoff Forecasting workshop on June 1<sup>st</sup>. She stated that she hopes the workshop will encourage more federal investments in this area. She also announced that the WSWC is hosting an S2S forecasting workshop in San Diego May 17 – 19, 2022 and that everyone was welcome. Mr. Harris asked Ms. Jones to keep the Board abreast of additional efforts that the SAC or individual agencies can help with for NOAA's FY-2024 budget request. Ms. Jones encouraged agencies to send digital signatures that she could add to a letter that DWR is submitting to the congressional offices to begin funding precipitation forecasting efforts in FY-2023.

Board member Peterson, representing The Metropolitan Water District of Southern California (MWD) reported that as of April 1<sup>st</sup>, MWD's system storage is 70% of capacity. The Colorado River Aqueduct (CRA) is on an eight-pump flow, which is a full aqueduct, through September. He stated that MWD plans to pull 1.1 MAF of water out of MWD's storage accounts this year, already pulling out 215,000 AF. Mr. Peterson stated that dry conditions in February

caused an increase in deliveries. He noted that the deliveries over the last two months were 101% of the ten-year average. For 2022, the target delivery for the Desert Water Agency is 15,000 AF.

Mr. Peterson stated that MWD will adopt water restrictions in State Water Project (SWP) exclusive areas, with outdoor watering allowed only one day a week. He stated that those areas will also be on health and safety deliveries from the SWP, which MWD must pay back, but the payback schedule has not been determined. Mr. Peterson noted that the restrictions will be painful and is hoping that that a storm forecasted for later in the week will bring much need precipitation to the State. He noted that a few months ago, Lake Oroville's storage was at 1.6 MAF and if it gains additional water, the SWP may be able to increase its allocation to 15%. Mr. Peterson stated that the Los Angeles Department of Water and Power (LADWP) customers in the SWP exclusive areas are suffering the worst of the restrictions.

Ms. Jones added that the SWP and Central Valley Project (CVP) are currently operating under a Temporary Urgency Change Order (TUCO) that allows for more water to be pulled out of Lake Oroville from April to July because the system is so dry, adding that the system operated under a TUCO last year as well. She stated that TUCOs are granted through an approval process through the State Water Resources Control Board, noting that many people object to TUCOs because it reduces environmental flows. Ms. Jones stated that unfortunately, we are all gaining experience with minimum health and safety allocations. She stated that the SWP had initially announced a minimal health and safety allocation for contractors on December 1<sup>st</sup>. The health and safety allocation is based on the State Water Resources Control Board criteria which only applies to residential, not commercial, industrial, institutional (CII). She added that the CVP recently announced a health and safety allocation to all its municipal and industrial (M&I) contractors, noting that it has different criteria, allowing up to 70% of CII, but this becomes difficult in communities that have a large percentage of CII demand. She stated that the SWP had to provide emergency water to the city of Kettleman which has a significant commercial demand. She added that the State has been asked to help with emergency water for some of the CVP's M&I contractors, particularly in Avenal and Coalinga, both of which have very high institutional demands due to the State Prison and cannot be covered by a traditional residential allocation.

Vice Chairman Pettijohn, representing LADWP, reported that LADWP is in the worst water supply reliability situation that the city of Los Angeles has been in its entire history, dating back a hundred years. He stated that they are faced with historically low ability to meet demands and for the first time LADWP had to go to the state for health and safety deliveries, which only serve 55 gallons per capita per day (GPCD) for residential customers. He stated that the city of Los Angeles has a very large and critical CII needs such as hospitals and schools.

He reported that the snowpack on the Los Angeles aqueduct system peaked in January, and it has been followed by the three driest months on the Eastern Sierra in the system's history. In January, the aqueduct system was 60% of normal but declined to 26% of normal with no appreciable runoff. Mr. Pettijohn stated that MWD has the third highest amount of storage in its history but can't supply LADWP with the water because it does not have the ability to move water from storage to several parts of Los Angeles, and municipal water districts and agencies in its service area including Las Virgenes, Calleguas Upper San Gabriel Valley, Three Valleys, and the Inland Empire. He stated that these areas account for one-third of MWD's service area and are under a health and safety allocation.

Mr. Pettijohn stated that parts of the LADWP service area will be restricting to outdoor watering to one day a week and likely be restricted to zero later in the year. He added that several disadvantaged communities, about a quarter to one-third of the service area, will have yards and gardens that will go brown and die, while to the south of the service area, communities will have green gardens and full swimming pools due to the fact that these areas can receive water from MWD.

Mr. Cheng, representing the Coachella Valley Water District, commented on the potential for heightened water quality impacts such as salinity and PFAS will increase due to drought and the reduced release from Glen Canyon Dam.

## **GENERAL ANNOUNCEMENTS**

### **California Drought Executive Order**

Mr. Harris described that on March 28<sup>th</sup>, California Governor Newsom signed a new executive order regarding the ongoing drought conditions. The governor asked the State Water Board to consider a ban on watering of decorative grass around commercial, industrial, and institutional buildings. The governor is encouraging suppliers to consider going above and beyond level 2 of their existing shortage contingency plans. And he also directed state agencies to submit funding proposals in support of the state's short- and long-term drought response measures.

### **State/Local/Federal Agencies Announce Agreement to Improve Sacramento/San Joaquin River Delta Watershed**

Mr. Harris described that recent agreement was reached with respect to the Sacramento-San Joaquin River Delta Watershed on March 29th. The MOU among state, federal, and local



agencies lays out an eight-year program that provides in-stream flow commitments, additional flow for fish species in the January to June time frame. The MOU calls for habitat restoration and accelerated permitting and implementation of the restoration activities. Also sets up governance, monitoring, and decision-making framework, and requires progress reports every three years.

#### **Funding Opportunity for Drought Resiliency**

Mr. Harris described federal funding available for Drought Resiliency Projects that provides federal cost share funds for drought response measures and projects that improve water supply reliability and water management. Eligible applicants could include States, Tribes, irrigation districts and water districts, and NGOs. The amount of funding available is varied based upon proposed project size and completion.

#### **Washington DC Updates**

Mr. Harris reported that the 2023 federal budget proposes \$1.4 billion for Reclamation, and they are going to spend \$1.6 billion from the bipartisan Infrastructure Investment and Jobs Act by the end of fiscal year 2022. Senator Feinstein is working hard right now to get a draft of her big western water bill complete, and she hopes to introduce that in the April to May time frame in the Senate. At the end of March, there was a hearing in the Senate's Indian Affairs Committee on Senate Bill 3308, which is the CRIT legislation which has been agreed upon within the state of Arizona. This would grant the CRIT the ability to lease and enter into transfers and storage agreements for a portion of its Arizona allocation within Arizona for use within Arizona or storage within Arizona or storage in Lake Mead. Mr. Harris stated out of Arizona's 2.8 million acre-feet, 670 thousand acre-feet is CRIT water.

#### **EXECUTIVE SESSION**

Pursuant to provisions of Article 9, commencing with Section 11120, of Chapter 1 of Part 1, Division 3 of Title 2 of the government Section Program 12516 and 12519 of the Water Code, a motion was made by Mr. Fisher to go into Executive Session, seconded by Mr. Madaffer, to discuss matters concerning interstate negotiations with representatives from other states or the federal government. The motion was unanimously approved. The Board entered Executive Session at 11:31 a.m.

## **REGULAR SESSION**

The Board resumed the regular session at 12:10 p.m. and Chairman Nelson reported that the Board took action during the Executive Session to authorize the Chairman to sign a response letter to the letter received from Assistant Secretary Trujillo from April 8th.

## **ADJOURNMENT**

With no further items to be brought before the Board, Chairman Nelson adjourned the meeting at 12:12 p.m.







## ***Fiscal-Year 2021/2022 Accomplishments Report***

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## ***Fiscal-Year 2022/2023 Planned Activities Report***





## **Fiscal-Year 2021/2022 Budget**

The budget for the Colorado River Board of California for Fiscal Year 2021/2022 was \$2,413,000, and was adopted by the Board at its June 9, 2021, regularly scheduled meeting.

## **Fiscal-Year 2021/2022 Accomplishments**

### COVID-19 Operations

During Fiscal-Year 2021/2022 (FY-21/22), the staff of the Colorado River Board of California (CRB), operated under the public health guidance and restrictions associated with responding to the COVID-19 pandemic. This included staff primarily working remotely in a telework environment, although as the fiscal year progressed, staff have returned to the office more regularly. In-person CRB meetings and travel has resumed and grown more regular throughout the year. CRB staff continue to comply with all state, county, and local public health agency guidance and public safety protocols.

### Fiscal-Year 2021/2022 Accomplishments

In FY-21/22 (July 2021 through June 2022), Colorado River Board of California staff participated in the following major programs and activities:

- Continued to provide California representation and coordination associated with the binational implementation of Minute No. 323 with Mexico, including participation in the Minute No. 323 Oversight Group, Salinity Work Group, Hydrology Work Group, Environmental Work Group, and Desalination Work Group;
- Represented California's interests in the ongoing implementation of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP), including ongoing discussions with Reclamation and the California Department of Fish and Wildlife regarding the implementation of habitat restoration activities pursuant to the terms and conditions of the California Endangered Species Act Section 2081 permit for California LCR MSCP participants. In FY-21/22, Board staff worked closely with Reclamation to implement necessary changes to the federal LCR MSCP permit in order to allow for greater reductions in flow below Hoover Dam as water conservation activities by the Lower Basin States increase. The CRB contributed approximately \$16,000 in FY-21/22 for LCR MSCP implementation;
- Represented California's interests in the ongoing implementation of the Glen Canyon Dam Adaptive Management Program (GCDAMP), including annual decision-making regarding

Glen Canyon Dam operational activities pursuant to implementation of the Long-Term Experimental Management Plan. Monitored and reviewed activities related to the down-listing of the humpback chub and potential down-listing of the razorback sucker from endangered to threatened. Represented California through the GCDAMP Planning/Implementation Team of the GCDAMP in making recommendations to the Secretary of the Interior regarding the implementation of flow experiments to benefit the ecosystem below Glen Canyon Dam;

- Represented California's interests in the Colorado River Basin Salinity Control Program where, for the first time in many years, California has three appointed Forum members, including Ms. Jessica Neuwerth representing the Colorado River Board of California, Mr. Joaquin Esquivel representing the California State Water Resources Control Board, and Mr. William Hasencamp representing the Metropolitan Water District of Southern California. Mr. Rich Juricich continues to serve as Work Group Chair; Board staff are working closely with the Basin states to identify a pathway with Reclamation for continued long-term salinity control in Paradox Valley, including the development and approval of a test plan in April 2022 to restart injection of brine from the existing Paradox Valley Unit facilities; Initiated work collaboratively with Reclamation and the Salinity Control Forum to develop the 2023 Triennial Review of Water Quality Standards for Salinity, Colorado River Basin; Continued participation in and contributed annual cost-share funding of approximately \$45,000 for the Colorado River Basin Salinity Control Program and the monitoring of other important water quality programs and initiatives including the Topock Hexavalent Chromium, Las Vegas Wash Perchlorate, and Moab Uranium Mill-Tailings remediation efforts;
- Participated in the planning and implementation of ongoing weather modification activities in Colorado, Utah, and Wyoming during the 2021/2022 winter season under the Basin States programmatic funding agreement. California's cost share in FY-21/22 was approximately \$325,000 provided through the Six Agency Committee;
- Continued ongoing annual cost-sharing support for maintenance and operation of Lower Colorado River Basin stream gaging station network with the U.S. Geological Survey;
- Provided California representation on the Colorado River Climate and Hydrology Workgroup to consider climate and hydrology research & modeling projects to benefit decision making in the basin;
- Continued development of the Board's strategy for updating the guidelines for lower basin shortages and coordinated operations for Lake Powell and Lake Mead including development of several technical papers on Colorado River management issues, and continuing focused technical meetings with California agency technical staff;
- Participated in numerous technical- and policy-level Basin states meetings addressing activities and measures to protect critical elevations in the reservoir system and

development of additional drought mitigation projects, and provided support to California's Colorado River Commissioner;

- Provided regular updates, briefings, and presentations to staff from the California Natural Resources Agency, Department of Water Resources, and Governor's Office regarding Colorado River Basin issues and activities;
- Filled a new Water Resources Engineer position in January 2022 to assist with the Board's technical activities.
- Regularly hosted virtual meetings with technical staff from the California agencies to share agency perspectives and activities associated with ongoing Colorado River issues and activities;
- Collaborated with the California agencies, states of Arizona and Nevada, and Reclamation on the development and finalization of the 500+ Plan, which is intended to incentivize additional conservation in 2022 and 2023 to boost the declining levels of Lake Mead; and
- Continued to review and track activities associated with the Upper Basin development of the 2022 drought operations plan, and the State of Utah's proposed Lake Powell Pipeline Project.

## **Fiscal-Year 2022/2023 Planned Activities**

### COVID-19 Operations

It is currently unclear what level of COVID-19 operations will need to be maintained and/or continued during FY-2022/2023 (FY-22/23), but the expectation is that staff will continue to adhere to and implement all applicable public health and safety guidance provided by state, county, and local public health agencies. Currently, CRB is in the process of developing long-term post-pandemic teleworking policies and guidance for agency implementation. It is expected that CRB staff will maintain some level of teleworking going forward. For the foreseeable future, it is expected that CRB monthly Board meetings will be held in-person.

### CRB Planned Activities for FY-2022/2023

With the Governor's proposed FY-22/23 budget of \$2,514,000 for the period July 1, 2022 through June 30, 2023, Colorado River Board of California staff anticipates participating in the following major programs and activities:

- Continue to participate in ongoing binational U.S./Mexico activities associated the implementation of Minute No. 323 and associated workgroups;
- Continue staff participation in programs and activities associated with Colorado River operations, including implementation of the 2007 Interim Guidelines and the Basinwide Drought Contingency Plans; as well as monitoring and evaluating annual water use accounting of mainstream Colorado River water supplies in the Lower Basin;
- Continue participation in the ongoing implementation of the Glen Canyon Dam Adaptive Management Program;
- Continue participation in the Lower Colorado River Multi-Species Conservation Program, including a projected annual contribution of approximately \$16,000 for FY-22/23;
- Continue participation in and cost-share funding of the Colorado River Basin Salinity Control Program and the monitoring of other ongoing water quality programs and activities;
- Continue participation in the Basin States cost-sharing of winter season weather modification efforts in Colorado, Utah, and Wyoming;
- Continue providing annual financial support to the U.S. Geological Survey to provide effective stream gaging stations in the Lower Colorado Basin;
- Continue participation in the Colorado River Climate and Hydrology Workgroup, which includes planning of the next Climate and Hydrology Symposium, and ongoing development of proposed climate and hydrology research projects;
- Continue to develop and provide effective technical support and modeling expertise to the Board member agencies;
- Continue providing effective direction, participation and technical support related to the development of the next set of interim operating guidelines for the Colorado River System, including development of draft California Guiding Principles, outreach to California agencies and stakeholders, leading and organizing technical and policy webinars for the California agencies;
- Continue participation in Basin states principal and technical meetings and continue to provide support to California's Colorado River Commissioner; and
- Continue participation by Board staff in advocating and representation of California's positions at conferences and symposia.





**COLORADO RIVER BOARD OF CALIFORNIA**  
**FY 2022-23 BUDGET**  
**as of 05/03/2022**

[illegible]

## 3460 Colorado River Board of California

The Colorado River Board protects California's rights and interests in the water and power resources of the Colorado River system. The Board works with: other Colorado River Basin states (Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming), federal agencies, other state agencies, six local agencies (Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley Water District, Metropolitan Water District of Southern California, San Diego County Water Authority, Los Angeles Department of Water and Power), Congress, the courts, and Mexico. Its activities include analyses of engineering, legal and economic matters concerning the Colorado River resources of the seven basin states and the 1944 United States-Mexico Water Treaty obligation to deliver Colorado River water to Mexico.

### 3-YEAR EXPENDITURES AND POSITIONS

		Positions			Expenditures		
		2020-21	2021-22	2022-23	2020-21*	2021-22*	2022-23*
2410	Protection of California's Colorado River Rights and Interests	11.6	13.2	13.2	\$2,101	\$2,510	\$2,514
<b>TOTALS, POSITIONS AND EXPENDITURES (All Programs)</b>		<b>11.6</b>	<b>13.2</b>	<b>13.2</b>	<b>\$2,101</b>	<b>\$2,510</b>	<b>\$2,514</b>
<b>FUNDING</b>		<b>2020-21*</b>			<b>2021-22*</b>		
0995	Reimbursements	\$2,101			\$2,510		
<b>TOTALS, EXPENDITURES, ALL FUNDS</b>		<b>\$2,101</b>			<b>\$2,510</b>		

### LEGAL CITATIONS AND AUTHORITY

#### DEPARTMENT AUTHORITY

California Water Code, Division 6, Part 5, Sections 12500-12553.

### DETAILED BUDGET ADJUSTMENTS

		2021-22*			2022-23*		
		General Fund	Other Funds	Positions	General Fund	Other Funds	Positions
<b>Workload Budget Adjustments</b>							
<b>Other Workload Budget Adjustments</b>							
• Salary Adjustments		\$-	\$70	-	\$-	\$70	-
• Benefit Adjustments		-	29	-	-	33	-
• Authorized Positions, Salaries, and Wages Realignment		-	-	5.0	-	-	5.0
• Retirement Rate Adjustments		-	-2	-	-	-2	-
<b>Totals, Other Workload Budget Adjustments</b>		<b>\$-</b>	<b>\$97</b>	<b>5.0</b>	<b>\$-</b>	<b>\$101</b>	<b>5.0</b>
<b>Totals, Workload Budget Adjustments</b>		<b>\$-</b>	<b>\$97</b>	<b>5.0</b>	<b>\$-</b>	<b>\$101</b>	<b>5.0</b>
<b>Totals, Budget Adjustments</b>		<b>\$-</b>	<b>\$97</b>	<b>5.0</b>	<b>\$-</b>	<b>\$101</b>	<b>5.0</b>

### DETAILED EXPENDITURES BY PROGRAM

		2020-21*	2021-22*	2022-23*
<b>PROGRAM REQUIREMENTS</b>				
<b>2410</b>	<b>PROTECTION OF CALIFORNIA'S COLORADO RIVER RIGHTS AND INTERESTS</b>			
<b>State Operations:</b>				
0995	Reimbursements	2,101	2,510	2,514
<b>Totals, State Operations</b>		<b>\$2,101</b>	<b>\$2,510</b>	<b>\$2,514</b>
<b>TOTALS, EXPENDITURES</b>				
State Operations		2,101	2,510	2,514
<b>Totals, Expenditures</b>		<b>\$2,101</b>	<b>\$2,510</b>	<b>\$2,514</b>

\* Dollars in thousands, except in Salary Range. Numbers may not add or match to other statements due to rounding of budget details.

## 3460 Colorado River Board of California - Continued

### EXPENDITURES BY CATEGORY

1 State Operations	Positions			Expenditures		
	2020-21	2021-22	2022-23	2020-21*	2021-22*	2022-23*
PERSONAL SERVICES						
Baseline Positions	8.2	8.2	8.2	\$767	\$888	\$888
Authorized Positions, Salaries, and Wages Realignment	-	5.0	5.0	-	505	535
Other Adjustments	3.4	-	-	377	70	70
<b>Net Totals, Salaries and Wages</b>	<b>11.6</b>	<b>13.2</b>	<b>13.2</b>	<b>\$1,144</b>	<b>\$1,463</b>	<b>\$1,493</b>
Staff Benefits	-	-	-	583	650	654
<b>Totals, Personal Services</b>	<b>11.6</b>	<b>13.2</b>	<b>13.2</b>	<b>\$1,727</b>	<b>\$2,113</b>	<b>\$2,147</b>
OPERATING EXPENSES AND EQUIPMENT				\$374	\$397	\$367
<b>TOTALS, POSITIONS AND EXPENDITURES, ALL FUNDS (State Operations)</b>				<b>\$2,101</b>	<b>\$2,510</b>	<b>\$2,514</b>

### DETAIL OF APPROPRIATIONS AND ADJUSTMENTS

1 STATE OPERATIONS	2020-21*	2021-22*	2022-23*
0995 Reimbursements			
APPROPRIATIONS			
Reimbursements	\$2,101	\$2,510	\$2,514
<b>TOTALS, EXPENDITURES</b>	<b>\$2,101</b>	<b>\$2,510</b>	<b>\$2,514</b>
<b>Total Expenditures, All Funds, (State Operations)</b>	<b>\$2,101</b>	<b>\$2,510</b>	<b>\$2,514</b>

### CHANGES IN AUTHORIZED POSITIONS

	Positions			Expenditures		
	2020-21	2021-22	2022-23	2020-21*	2021-22*	2022-23*
<b>Baseline Positions</b>	8.2	8.2	8.2	\$767	\$888	\$888
Authorized Positions, Salaries, and Wages Realignment	-	5.0	5.0	-	505	535
<b>Salary and Other Adjustments</b>	3.4	-	-	377	70	70
<b>Totals, Adjustments</b>	<b>3.4</b>	<b>5.0</b>	<b>5.0</b>	<b>\$377</b>	<b>\$575</b>	<b>\$605</b>
<b>TOTALS, SALARIES AND WAGES</b>	<b>11.6</b>	<b>13.2</b>	<b>13.2</b>	<b>\$1,144</b>	<b>\$1,463</b>	<b>\$1,493</b>

\* Dollars in thousands, except in Salary Range. Numbers may not add or match to other statements due to rounding of budget details.

**SUPPLEMENTAL INFORMATION  
FY-2022/2023 BUDGET  
COLORADO RIVER BOARD OF CALIFORNIA**

Governor's Proposed budget for the Colorado River Board of California for FY-2022/2023

\$2,514,000

Personal Services	\$2,147,000
Operating Expenses and Equipment	<u>\$367,000</u>
Total:	\$2,514,000

Embedded within the Operating Expenses & Equipment category are the following specific programs and their approximate expenses:

CRB Information Technology Support Services contract	\$60,000
CRB Support of USGS Lower Colorado River Stream Gaging	\$30,000
CRB Support for the LCR MSCP	\$16,000
CRB Support for the Salinity Control Program	\$44,000
CRB Support for California Employee Assistance Program	\$2,000
CRB contract for Human Resources Services	\$21,000



RESOLUTION  
of the  
COLORADO RIVER BOARD OF CALIFORNIA  
Regarding  
Potential Applicant to Receive  
Lower Colorado Water Supply Project Water  
2022-2

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

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

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

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

**WHEREAS**, 1.0 acre-feet per year of current use and 1.0 acre-feet per year of future use were approved for Parcel Number 0660-161-13-0000 under subcontract #331; and

**WHEREAS**, parcel number 0660-161-13-0000 was subdivided into several parcels in September of 2021 including new parcel number 0660-161-20-0000; and

**WHEREAS**, the owner of parcel number 0660-161-20-0000 applied for a new contract of 1 acre-feet per year of future use; and

**WHEREAS**, the staff of the Colorado River Board on June 15, 2022, submitted the eligible applicant to the Board for its recommendation;

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

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

County	Numbers of Parcels	Current Use (AF/YR)	Future Use (AF/YR)	Total Use (AF/YR)
San Bernardino	1	0	1	1

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

**THE FOREGOING RESOLUTION** is approved and adopted by the Colorado River Board, this 15<sup>th</sup> day of June 2022.

---

Peter Nelson, Chairman



# APPLICATION FOR LOWER COLORADO WATER SUPPLY PROJECT WATER

(Please print or type. Complete the information requested, or place an "X" in the appropriate box.)

- Property Assessor Parcel Number : ( 0660 - 161 - 20-0000 ), San Bernardion County
- Are you submitting an application for other parcels? ☐ Yes ☒ No  
If "Yes," please attach a list of all parcels.
- Parcel Address: Needles Hwy Needles CA 92363  
Number Street City State Zip Code
- Parcel Legal Description: PARCEL MAP 19932 PARCEL 1 BOOK 252 PAGE 51
- Owner Information:  
Name: Chad Hill  
First Middle Last  
Address: [REDACTED]  
Number Street City State Zip Code  
Telephone Number (with area code): [REDACTED] Fax No.: \_\_\_\_\_  
Is there a co-owner? ☒ Yes ☐ No  
If Yes, please provide co-owner's name and address:  
Name: Ron Hill  
First Middle Last  
18712 Vale Ave Santa Ana CA 92705  
Number Street City State Zip Code  
Telephone Number (with area code): 7146087147 Fax No.: \_\_\_\_\_  
**NOTE:** Please provide a complete listing of co-owners. Attach additional sheets if necessary.
- Owner Occupied or Owner Used: ☒ Yes ☐ No ☐ Not Developed  
If "No," please provide the information requested below: ☐ Tenant ☐ Lessee ☐ Operator  
Name: \_\_\_\_\_  
First Middle Last  
Mailing address: \_\_\_\_\_  
Number Street City State Zip Code  
Telephone Number: \_\_\_\_\_, Fax Number: \_\_\_\_\_  
Area Code First Area Code First
- Date Property Acquired: 09/03/2021  
Month / Day / Year
- Date Property Developed: \_\_\_\_\_  
Month / Day / Year
- Source of Water (Month and Year): Prior to Nov. 15, 1986 11/15/86 - 11/13/01 After 11/13/01  
• Diverted from River \_\_\_\_\_  
• Well \_\_\_\_\_  
• Other \_\_\_\_\_  
If "Other," please explain: No water used on this property

\*\*\*\*\*  
FOR OFFICIAL USE ONLY

Date Received: \_\_\_\_\_ Date Reviewed: \_\_\_\_\_ Reviewed by: \_\_\_\_\_ Approved: ☐ Yes ☐ No

**10. Type of Use (Check Where Appropriate):** Prior to Nov. 15, 1986    11/15/86 - 11/13/01    After 11/13/01

• Residential	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Commercial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Recreational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Vacant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**11. Annual Water Use:** Prior to Nov. 15, 1986    11/15/86 - 11/13/01    After 11/13/01

a). Pumped or diverted volume (Use acre-feet, gallons, or other accepted unit of measure.)	0	0	0
b). Percentage of pumped or diverted water consumptively used (Use percentage, i.e., %)	0	0	0

**12. Location of each Diversion Facility** (A map, illustration, and/or drawing may be attached.):

**13. Parcels served by each Diversion Facility** (if more than one, list on a separate sheet):

0660-161-20-0000

**14. Maximum capacity of each diversion facility (well and/or pump).** (Use gallons per minute, or other accepted unit of measure.)

**NOTE:** Documentation for **Items 8 through 13** should be attached; you should include, as applicable, copies of one or more of the following items: city or county approved subdivision plan or state subdivision white paper; county or city installation/building permit for diversion or pumping facilities; well log reported to California Department of Water Resources; construction or installation agreement/receipt with a valid California licensed well driller or contractor; equipment purchase receipt; or other document that will show starting date of diversion or pumping.

**15. Natural or propane gas service on site?** ☐ Yes ☒ No

**16. Electricity service on site?** ☐ Yes ☒ No

**17. Any water service to the site?** ☐ Yes ☒ No

If "No," on what date will future water use begin? 6/15/22  
Month / Day / Year

**18. Any sewer service on site?** ☐ Yes ☒ No

**19. Any septic tank on site:** ☐ Yes ☒ No

If "Yes," how far away from the River bank? \_\_\_\_\_

**20. I would like a subcontract for Project water on the parcel identified in Item 1 above as follows:**

a). within the next calendar year:	1	1	annually, and
	Number	Volume (in acre-feet, gallons, etc.)	
b). future additional water:	0	0	annually.
	Number	Volume (in acre-feet, gallons, etc.)	

Submitted by: Chad Hill Date: 4-19-22  
Print Name Signature

Mail to: Colorado River Board of California, 770 Fairmont Avenue, Suite 100, Glendale, CA 91203-1035  
(NOTE: An incomplete application will delay the processing of your request.)



# San Bernardino County Assessor-Recorder-Clerk

## - Senator Bob Dutton (Ret.)

Report generated: Tuesday, May 24, 2022

### Parcel Report



### Parcel

**Parcel:** 0660161200000  
**Parcel Status:** A = ACTIVE  
**Parcel Type:** 0 = REAL PROPERTY  
**Property ID:**  
**Tax Status:** 1 = ASSESSED BY COUNTY  
**Use Code:** VACANT  
**Land Access:** PUB/PV PUBLIC PAVED  
**Size:** 05 = 1.501 TO 3.500 ACRES  
**Land Type:** 05 = SINGLE FAMILY  
 RESIDENTIAL  
**District:** JOSHUA TREE  
**Resp Group:** D = REAL PROPERTY  
**RespnUnit:** RES = RES ZONE(MAX 14  
 UTS)&USE EX HPC/MHM(1-14  
 UTS,CHURCH)

### Owner

**Owner 1:** HILL, CHAD ET AL  
**Owner 2:** HILL, RONALD L  
**Effective Date:** 09/03/2021

### Current Owners

Name	R/I	% Int	Type	Acquisition Date	Document Date	Inactive Date	Document Nbrs
HILL, COREY (CS-CHAD)	TC = TENANCY IN COMMON	25.0000	O = OTHER OWNER	09/03/2021	09/03/2021	NONE	20210403127
HILL, RONALD L	TC = TENANCY IN COMMON	25.0000	J = JOINT MAIL OWNER	09/03/2021	09/03/2021	NONE	20210403127
STERN, LAURIE B (CS-RONALD)	TC = TENANCY IN COMMON	25.0000	O = OTHER OWNER	09/03/2021	09/03/2021	NONE	20210403127
HILL, CHAD	TC = TENANCY IN COMMON	25.0000	B = BILLED OWNER	09/03/2021	09/03/2021	NONE	20210403127

### Legal Tract Map

Tract	Lot	Block	Unit	Book	Page
				252	51

### Legal Description

#### Legal Description

PARCEL MAP 19932 PARCEL 1 BOOK 252 PAGE 51



**Roll Values History**

Roll Year	TRA	Supplement	Corrected Date	Corrected Code	Billed Owner	Joint Owner	Land Value	Improvement Value	Improvement Penalty
2021	3001	NO			HILGERT FAMILY TRUST 05/18/18		\$353,626	\$0	0
2020	3001	NO			HILGERT FAMILY TRUST 05/18/18		\$350,000	\$0	0

**Parcel History**

Event Date	Event Group/Type	Multi Parcel	Multi Parcel List
09/03/2021	TRANSFER - 100% PER RECORDED DOCUMENT	NO	
11/05/2019	TRANSFER - 100% PER RECORDED DOCUMENT	NO	
08/01/2019	INACTIVATE - SUBDIVIDED	YES	0660161130000 OLD-SUB
08/01/2019	CREATE - SUBDIVISION	YES	0660161200000 NEW-SUB
08/01/2019	CREATE - SUBDIVISION	YES	0660161210000 NEW-SUB
08/01/2019	CREATE - SUBDIVISION	YES	0660161220000 NEW-SUB

**Owner History**

Name	R/I	% Int	Type	Acquisition Date	Document Date	OrigInactive Date	Document Number
STERN, LAURIE B (CS- RONALD)	TC = TENANCY IN COMMON	25.0000	O = OTHER OWNER	09/03/2021	09/03/2021	NONE	20210403127
HILL, RONALD L	TC = TENANCY IN COMMON	25.0000	J = JOINT MAIL OWNER	09/03/2021	09/03/2021	NONE	20210403127
HILL, COREY (CS- CHAD)	TC = TENANCY IN COMMON	25.0000	O = OTHER OWNER	09/03/2021	09/03/2021	NONE	20210403127
HILL, CHAD	TC = TENANCY IN COMMON	25.0000	B = BILLED OWNER	09/03/2021	09/03/2021	NONE	20210403127
HILGERT FAMILY TRUST 05/18/18	TU = TRUST UNKNOWN	100.0000	B = BILLED OWNER	11/06/2019	11/06/2019	09/02/2021	20190400921
PHILLIPS, ASHLEY NICOLE	CS = COMMUNITY PROPERTY SURVIVORSHIP RIGHTS	50.0000	J = JOINT MAIL OWNER	08/01/2019	08/01/2019	11/05/2019	20190261853
PHILLIPS, LUCAS SHANE	CS = COMMUNITY PROPERTY SURVIVORSHIP RIGHTS	50.0000	B = BILLED OWNER	08/01/2019	08/01/2019	11/05/2019	20190261853

**Land Characteristics**

**Effective Date From:** 08/01/2019  
**Effective Date to:** Present  
**Zoning:** CRR  
**Lot Width:** 0.00  
**Lot Depth:** 0.00  
**Footage:** 74,052  
**Gross Acre:** 1.7  
**Net Acre:** 0  
**Access:** 1 = PUBLIC PAVED  
**Slope Dir:** 0 = NONE  
**Slope Degree:** 0 = LEVEL  
**View Quality:** 4 = GOOD  
**View Type:** 7 = RIVER  
**Sewer:** 1 = PUBLIC  
**Water:** 1 = PUBLIC  
**Elec.:** 2 = OVERHEAD  
**Gas:** 0 = NONE  
**Offsite:** 0 = NONE  
**Enc/Eas:** 0 = NONE  
**Nuisance1:** 0 = NONE  
**Nuisance2:** 0 = NONE  
**Spc Infl1:** 0 = NONE  
**Spc Infl2:** 0 = NONE  
**Dock Rts:** 0 = NONE  
**Lease Exp:**

San Bernardino County Assessor-Recorder-Clerk Parcel Information Management System





Parcel Info

[Dock](#) [Measure](#) [Report](#)

**Parcels: 0660161200000**

Parcel: **0660161200000**

Owner: **HILL, CHAD ET AL**

Joint Owner: **HILL, RONALD L**

Parcel Type: **0 = REAL PROPERTY**

Parcel Status: **A = ACTIVE**

Additional County Parcel Resources

[Assessor Page Map](#)





Parcel Info

[Dock](#) [Measure](#) [Report](#)

**Parcels:** 0660161200000

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Parcel: **0660161200000**  
Owner: **HILL, CHAD ET AL**  
Joint Owner: **HILL, RONALD L**  
Parcel Type: **0 = REAL PROPERTY**  
Parcel Status: **A = ACTIVE**

**Additional County Parcel Resources**  
[Assessor Page Map](#)



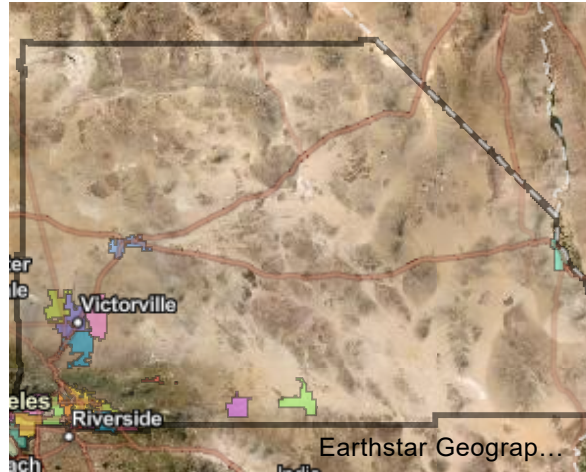


# San Bernardino County Assessor-Recorder-Clerk

## -Senator Bob Dutton (Ret.)

Report generated: Tuesday, May 24, 2022

### Parcel Report



Unable to find these features on the map.

### Parcel

**Parcel:** 0660161130000  
**Parcel Status:** I = INACTIVE  
**Parcel Type:** 0 = REAL PROPERTY  
**Property ID:**  
**Tax Status:** 1 = ASSESSED BY COUNTY  
**Use Code:** SFR  
**Land Access:** PUB/PV PUBLIC PAVED  
**Size:** 06 = 3.501 TO 7.000 ACRES  
**Land Type:** 05 = SINGLE FAMILY  
 RESIDENTIAL  
**District:** JOSHUA TREE  
**Resp Group:** D = REAL PROPERTY  
**RespnUnit:** RES = RES ZONE(MAX 14  
 UTS)&USE EX HPC/MHM(1-14  
 UTS,CHURCH)

### Owner

**Owner 1:** PHILLIPS, LUCAS SHANE  
**Owner 2:** PHILLIPS, ASHLEY NICOLE  
**Effective Date:** 12/28/2016

### Current Owners

Name	R/I	% Int	Type	Acquisition Date	Document Date	Inactive Date	Document Nbrs
PHILLIPS, ASHLEY NICOLE	CS = COMMUNITY PROPERTY SURVIVORSHIP RIGHTS	50.0000	J = JOINT MAIL OWNER	12/29/2016	12/29/2016	07/31/2019	20160571580
PHILLIPS, LUCAS SHANE	CS = COMMUNITY PROPERTY SURVIVORSHIP RIGHTS	50.0000	B = BILLED OWNER	12/29/2016	12/29/2016	07/31/2019	20160571580

### Legal Tract Map

Tract	Lot	Block	Unit	Book	Page
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**Legal Description****Legal Description**

S 1/4 SE 1/4 SE 1/4 SEC 13 TP 9N 4 22E EX ELY 990 FT EX  
PTN LYING ELY OF C/L COLORADO RIVER CHANNEL AS  
ESTABLISHED BY PUBLIC LAW 89 531 AND SLY 200 FT SW  
1/4 SE 1/4 SEC 13 TP 9N R 22E LYING E OF CO HWY EX  
PTN LYING WITHIN A STRIP 25 FT IN WIDTH BEING 12.5 FT  
ON EACH SIDE FOLL DESC LI COM AT PT IN S LI SD SEC  
WHICH IS S 89 DEG 58 MIN 30 SECONDS E 911.14 FT FROM  
SW COR SD SE 1/4 TH N 37 DEG 37 MIN 30 SECONDS W  
1492.40 FT TO WLY LI SD SW 1/4 SE 1/4 SEC 13 (PER  
COMBINATION REQUEST LETTER DATED 08/02/84)

**Roll Values History**

Roll Year	TRA	Supplement	Corrected Date	Corrected Code	Billed Owner	Joint Owner	Land Value	Improvement Value	Improve Penalty
2019	3001	NO			PHILLIPS, LUCAS SHANE	PHILLIPS, ASHLEY NICOLE	\$452,574	\$104,040	0
2018	3001	NO			PHILLIPS, LUCAS SHANE	PHILLIPS, ASHLEY NICOLE	\$443,700	\$102,000	0
2017	3001	NO	04/27/2018	540D	PHILLIPS, LUCAS SHANE	PHILLIPS, ASHLEY NICOLE	\$435,000	\$100,000	0
2016	3001	YES			RASKIN, ROBERT W		\$499,313	\$94,661	0
2015	3001	NO			RASKIN, ROBERT W		\$491,813	\$93,239	0
2014	3001	NO			RASKIN, ROBERT W		\$482,179	\$91,413	0
2013	3001	YES			KERBRAT, BERNARD D ESTATE OF		\$500,000	\$90,000	0
2012	3001	YES			FENDER, JOHN S	FENDER, CHERRYL	\$600,000	\$90,000	0
2011	3001	NO			FENDER, JOHN S	FENDER, CHERRYL	\$700,000	\$90,000	0

Event Date	Event Group/Type	Multi Parcel	Multi Parcel List
08/01/2019	CREATE - SUBDIVISION	YES	0660161220000 NEW-SUB
08/01/2019	CREATE - SUBDIVISION	YES	0660161210000 NEW-SUB
08/01/2019	CREATE - SUBDIVISION	YES	0660161200000 NEW-SUB
08/01/2019	INACTIVATE - SUBDIVIDED	YES	0660161130000 OLD-SUB
12/28/2016	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660162040000 TOT-TRF
12/28/2016	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660161130000 TOT-TRF
03/14/2013	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660162040000 TOT-TRF
03/14/2013	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660161130000 TOT-TRF
12/30/2012	REVIEW - PROP 8 INITIATED BY ASSESSOR	NO	
12/12/2012	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660162040000 TOT-TRF
12/12/2012	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660161130000 TOT-TRF
12/30/2011	REVIEW - PROP 8 INITIATED BY ASSESSOR	NO	
12/30/2010	REVIEW - PROP 8 INITIATED BY ASSESSOR	NO	
12/30/2009	REVIEW - PROP 8 INITIATED BY ASSESSOR	NO	
12/30/2008	REVIEW - PROP 8 INITIATED BY TAXPAYER	NO	
05/05/2005	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660162040000 TOT-TRF
05/05/2005	TRANSFER - 100% PER RECORDED DOCUMENT	YES	0660161130000 TOT-TRF

Event Date	Event Group/Type	Multi Parcel	Multi Parcel List
06/22/2002	TRANSFER - PARTIAL PER RECORDED DOCUMENT	NO	
02/28/1994	TRA EVENT - ADDED FROM PREVIOUS PARCEL	NO	
03/01/1984	CREATE - COMBINATION	YES	0660161130000 NEW-COM
03/01/1984	INACTIVATE - COMBINED	YES	0660161070000 OLD-COM
03/01/1984	INACTIVATE - COMBINED	YES	0660161040000 OLD-COM
03/01/1984	TRANSFER - WORKED IN OLD SYSTEM (100% OR PARTIAL)	NO	

### Owner History

Name	R/I	% Int	Type	Acquisition Date	Document Date	OrigInactive Date	Document Number
PHILLIPS, ASHLEY NICOLE	CS = COMMUNITY PROPERTY SURVIVORSHIP RIGHTS	50.0000	J = JOINT MAIL OWNER	12/29/2016	12/29/2016	07/31/2019	20160571580
PHILLIPS, LUCAS SHANE	CS = COMMUNITY PROPERTY SURVIVORSHIP RIGHTS	50.0000	B = BILLED OWNER	12/29/2016	12/29/2016	07/31/2019	20160571580
RASKIN, ROBERT W	SO = SOLE OWNER	100.0000	B = BILLED OWNER	03/14/2013	03/14/2013	12/28/2016	20130106205; 20130106204
KERBRAT, BERNARD D ESTATE OF	SO = SOLE OWNER	100.0000	B = BILLED OWNER	12/13/2012	12/19/2012	03/13/2013	20120540198
FENDER, CHERRYL	SP = SPOUSAL	50.0000	J = JOINT MAIL OWNER	05/05/2005	05/05/2005	12/12/2012	20050320686
FENDER, JOHN S	SP = SPOUSAL	50.0000	B = BILLED OWNER	05/05/2005	05/05/2005	12/12/2012	20050320686
KERBRAT, BERNARD D	SO = SOLE OWNER	50.0000	O = OTHER OWNER	06/22/2002	05/05/2005	05/04/2005	20050320685
KERBRAT, ELISE E	SP = SPOUSAL	50.0000	J = JOINT MAIL OWNER	05/10/1978	03/01/1984	06/21/2002	8500000000000
KERBRAT, BERNARD D	SP = SPOUSAL	50.0000	B = BILLED OWNER	05/10/1978	03/01/1984	05/04/2005	8500000000000

**Supplement History**

<b>Supplement Date</b>	<b>Roll Type</b>	<b>Supplement Type</b>	<b>Revised IND</b>	<b>Corrected Date</b>	<b>Correction Code</b>	<b>Supplement Year</b>	<b>Legal Status</b>	<b>TRA</b>
12/29/2016	REG = REGULAR SUPPLEMENT	TRF = OWNERSHIP TRANSFER				2016	Secured	3001
03/14/2013	REG = REGULAR SUPPLEMENT	TRF = OWNERSHIP TRANSFER				2013	Secured	3001
03/14/2013	INT = INTERIM SUPPLEMENT	TRF = OWNERSHIP TRANSFER				2013	Secured	3001
12/13/2012	REG = REGULAR SUPPLEMENT	TRF = OWNERSHIP TRANSFER				2012	Unsecured	3001
05/05/2005	REG = REGULAR SUPPLEMENT	TRF = OWNERSHIP TRANSFER				2005	Secured	3001
05/05/2005	INT = INTERIM SUPPLEMENT	TRF = OWNERSHIP TRANSFER				2005	Secured	3001

**Land Characteristics**

**Effective Date From:** 03/02/1984  
**Effective Date to:** Present  
**Zoning:** CRR  
**Lot Width:** 0.00  
**Lot Depth:** 0.00  
**Footage:** 159,429  
**Gross Acre:** 3.66  
**Net Acre:** 0  
**Access:** 1 = PUBLIC PAVED  
**Slope Dir:** 0 = NONE  
**Slope Degree:** 0 = LEVEL  
**View Quality:** 5 = EXCELLENT  
**View Type:** 7 = RIVER  
**Sewer:** 1 = PUBLIC  
**Water:** 1 = PUBLIC  
**Elec.:** 2 = OVERHEAD  
**Gas:** 1 = PUBLIC  
**Offsite:** 2 = PARTIAL  
**Enc/Eas:** 0 = NONE  
**Nuisance1:** 0 = NONE  
**Nuisance2:** 0 = NONE  
**Spc Infl1:** 1 = WATER FRONT  
**Spc Infl2:** 0 = NONE  
**Dock Rts:** 5 = FULL DOUBLE  
**Lease Exp:**

**SFR Characteristics**

**Effective Date From:** 03/02/1984  
**Effective Date to:** Present  
**Sequence:** 1  
**Const Type:** D  
**Quality:** D055B = FRAME 055 B  
**Shape:** B  
**Cost Table:** 1 = CONVENTIONAL  
**MH Make:** -  
**Size:** 1,194  
**Const Year:** 1958  
**Eff Year:** 1958  
**Nbr Bath:** 2.00  
**Nbr Bdrm:** 2  
**Family Den:** 0  
**Total Rooms:** 4  
**Roof Type:** 4 = ROLLED COMPOSITION  
**Landscape Quality:** 0 = NONE  
**Func Obs:** 0 = NONE  
**TMS Season:** -  
**Cost Mod:** 100  
**Fun Obs pct:** 0  
**Eco Obso Pct:** 0  
**Defr Maint:** 0  
**Floor1 Size:** 1,034  
**Floor2 Size:** 0  
**Floor2 Factor:** 0  
**Floor3 Size:** 0  
**Floor3 Factor:** 0  
**Bas1 Size:** 0  
**Bas1 Factor:** 0  
**Bas2 Size:** 0  
**Bas2 Factor:** 0  
**Add1 Size:** 160  
**Add1 Factor:** 100  
**Add2 Size:** 0  
**Add2 Factor:** 0  
**Add3 Size:** 0  
**Add3 Factor:** 0  
**Pch1 Size:** 0  
**Pch1 Factor:** 0  
**Pch2 Size:** 0  
**Pch2 Factor:** 0  
**Pch3 Size:** 0  
**Pch3 Factor:** 0  
**Deck SQF:** 0  
**Deck Factor:** 0  
**Deck Stall:** 0  
**Port SQF:** 0  
**Port Factor:** 0  
**Port Stall:** 0  
**Garage SQF:** 0  
**Garage Class:** -  
**Garage Stall:** 0  
**AC Rcn:** 960  
**Heat:** 2 = WALL/FLOOR  
**Cool:** 2 = REFRIGERATIVE, NON-CENTRAL  
**Fireplace Rcn:** 0  
**Nbr Fireplaces:** 0  
**Yard Imp Rcn:** 0  
**Misc. Rcn:** 0  
**Pool Rcn:** 0  
**Pool Type:** 0 = NONE  
**spc Imp Rcn:** 0

<b>Spc Imp1:</b>	00 = NONE
<b>Spc Imp2:</b>	00 = NONE
<b>Spc Imp3:</b>	00 = NONE
<b>MH Sliding:</b>	-
<b>MH Fnd Lf:</b>	0
<b>MH Fnd Typ:</b>	-
<b>MH Skirt Lf:</b>	0
<b>MH Skrt Typ:</b>	-

San Bernardino County Assessor-Recorder-Clerk Parcel Information Management System



6/6/2022

# LOWER COLORADO WATER SUPPLY REPORT

River Operations  
Bureau of Reclamation

Questions: [BCOOWaterops@usbr.gov](mailto: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	27%	6,494	3,533.99	9,800
* LAKE MEAD	29%	7,453	1,046.79	16,200
LAKE MOHAVE	94%	1,707	643.30	14,800
LAKE HAVASU	95%	589	448.47	11,300
TOTAL SYSTEM CONTENTS **	35%	20,580		
As of 6/5/2022				
SYSTEM CONTENT LAST YEAR	42%	24,993		

\*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	68%	1,561		
Painted Rock Dam	0%	0	530.00	0
Alamo Dam	8%	84	1,107.56	25

Forecasted Water Use for Calendar Year 2022 (as of 6/6/2022) (values in kaf)

NEVADA	258	
SOUTHERN NEVADA WATER SYSTEM		227
OTHERS		32
CALIFORNIA	4,641	
METROPOLITAN WATER DISTRICT OF CALIFORNIA		1,114
IRRIGATION DISTRICTS		3,511
OTHERS		17
ARIZONA	2,179	
CENTRAL ARIZONA PROJECT		1,037
OTHERS		1,142
TOTAL LOWER BASIN USE		7,078
DELIVERY TO MEXICO - 2022 (Mexico Scheduled Delivery + Preliminary Yearly Excess <sup>1</sup> )		1,469

## OTHER SIGNIFICANT INFORMATION

UNREGULATED INFLOW INTO LAKE POWELL - JUNE FINAL FORECAST DATED 6/3/2022

	MILLION ACRE-FEET	% of Normal
FORECASTED WATER YEAR 2022	5.610	58%
FORECASTED APRIL-JULY 2022	3.500	55%
MAY OBSERVED INFLOW	1.382	67%
JUNE INFLOW FORECAST	1.200	49%

	Upper Colorado Basin	Salt/Verde Basin
WATER YEAR 2022 PRECIP TO DATE	93% (20.9")	65% (11.5")
CURRENT BASIN SNOWPACK	95% (1.2")	NA% (NA)

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





## LOWER COLORADO BASIN REGION

CY 2022

ARIZONA, CALIFORNIA, NEVADA, MEXICO

FORECAST OF END OF YEAR CONSUMPTIVE USE

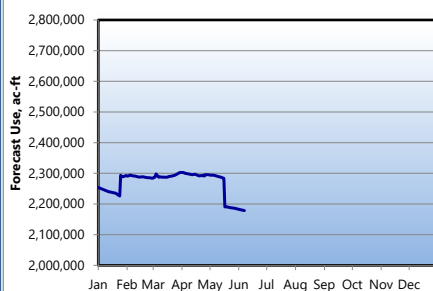
FORECAST BASED ON USE TO DATE AND APPROVED ANNUAL WATER ORDERS <sup>1</sup>

(ACRE-FEET)

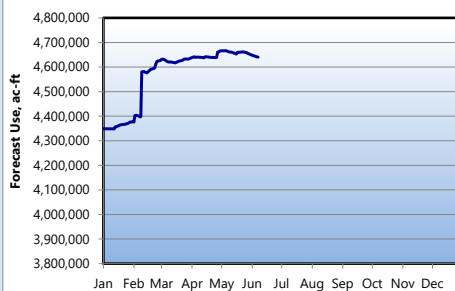
	Use To Date CY 2022	Forecast Use CY 2022	Approved Use <sup>2</sup> CY 2022	Excess to Approval CY 2022
<b>WATER USE SUMMARY</b>				
Arizona	1,131,733	2,178,500	2,074,551	103,949
California	1,967,428	4,640,293	4,349,055	291,238
Nevada	88,386	258,353	258,353	0
<b>States Total<sup>3</sup></b>	<b>3,187,547</b>	<b>7,077,146</b>	<b>6,681,959</b>	<b>395,187</b>
Total Deliveries to Mexico in Satisfaction of Treaty Requirements <sup>4</sup>	724,018	1,454,714	1,454,714	
Creation of Mexico's Recoverable Water Savings <sup>5</sup>	0	30,000	30,000	
Creation of Mexico's Water Reserve <sup>6</sup>	263	263	263	
Delivery of Mexico's Water Reserve <sup>7</sup>	(9,456)	(34,977)	(34,977)	
Total to Mexico in Satisfaction of Treaty Requirements <sup>8</sup>	714,825	1,450,000	1,450,000	
To Mexico in Excess of Treaty <sup>9</sup>	1,506	14,329	25,039	
Water Bypassed Pursuant to IBWC Minute 242 <sup>10</sup>	65,044	129,725	116,633	
<b>Total Lower Basin &amp; Mexico<sup>11</sup></b>	<b>3,978,115</b>	<b>8,675,914</b>	<b>8,278,345</b>	

<sup>1</sup> Incorporates 80 daily reporting stations which may be revised after provisional data reports are distributed by the USGS. Use to date is estimated for users reporting monthly and annually.<sup>2</sup> These values reflect adjusted apportionments. See Adjusted Apportionment calculation on each state page.<sup>3</sup> 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.<sup>4</sup> Includes deliveries to Mexico at the Northerly International Boundary (including delivery from Mexico's Water Reserve), Southerly International Boundary, Limitrophe, and DiversionChannel 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.<sup>5</sup> 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).<sup>6</sup> Water deferred by Mexico pursuant to Section V of IBWC Minute 323.<sup>7</sup> Delivery from Mexico's Water Reserve pursuant to Section V.E.13 of IBWC Minute 323.<sup>8</sup> In accordance with Section XI.G.2.D.1.a of the 2007 Interim Guidelines, a Tier 1 Shortage Condition will govern the operation of Lake Mead and the Lower Colorado River in 2022. In accordance with Section III.A of Minute 323, Mexico's scheduled deliveries incorporate the required reduction of 50,000 AF from its 1.5 million AF Colorado River water allotment. "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.<sup>9</sup> Mexico excess forecast is based on the 5-year average for the period 2016-2020.<sup>10</sup> Bypass forecast is based on the average for the period 1990-2020.<sup>11</sup> Includes States Total, Deliveries to Mexico in Satisfaction of Treaty, To Mexico in Excess of Treaty, and Water Bypassed Pursuant IBWC Minute 242.

Arizona Forecast



California Forecast



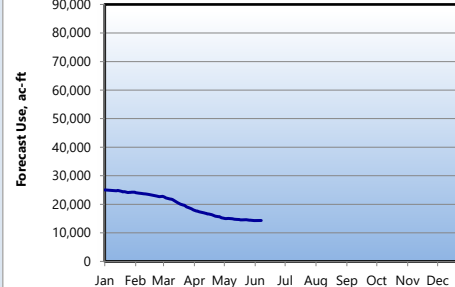
Nevada Forecast



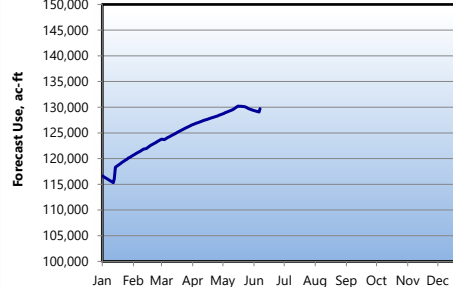
Lower Basin Forecast



Mexico in Excess Forecast



Bypass Forecast



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.



# LOWER COLORADO BASIN REGION CY 2022

## 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 end of year diversion/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 2022	Forecast Use CY 2022	Estimated Use CY 2022	Excess to Estimated Use CY 2022	Diversion To Date CY 2022	Forecast Diversion CY 2022	Approved Diversion CY 2022	Excess to Approved Diversion CY 2022
Arizona Pumpers	2,956	6,382	6,382	---	4,548	9,818	9,818	0
Lake Mead NRA, AZ - Diversions from Lake Mead	21	69	69	---	21	69	69	0
Lake Mead NRA, AZ - Diversions from Lake Mohave	92	223	223	---	92	223	223	0
Bureau of Reclamation - Davis Dam Project	1	2	2	---	7	16	16	0
Bullhead City	3,107	8,645	8,699	---	4,835	13,527	13,730	-203
Mohave Water Conservation District	321	692	692	---	477	1,030	1,030	0
Mohave Valley I.D.D.	5,402	14,022	15,059	---	10,002	25,960	27,879	-1,919
Fort Mojave Indian Reservation, AZ	18,750	44,454	44,550	---	34,722	82,322	82,500	-178
Golden Shores Water Conservation District	132	286	286	---	199	429	429	0
Havasas National Wildlife Refuge	2,095	3,940	3,564	---	17,461	39,111	41,835	-2,724
EPCOR Water Arizona, Inc. - CSA No. 1	8	542	493	---	17	986	997	-11
Lake Havasu City	3,179	8,809	9,052	---	5,128	14,208	14,600	-392
Central Arizona Water Conservation District	630,765	1,037,666	---	---	630,765	1,037,666	---	---
Town of Parker	156	424	424	---	352	918	917	1
EPCOR Water Arizona, Inc. - CSA No. 2 (formerly Brooke Water, LLC)	6	309	324	---	9	465	486	-21
Colorado River Indian Reservation, AZ	116,866	255,876	227,841	---	234,411	541,177	508,619	32,558
Ehrenberg Improvement District	117	252	252	---	163	352	352	0
Arizona State Land Department	2,077	4,485	4,485	---	3,196	6,900	6,900	0
Cibola Valley I.D.D.	2,470	6,216	5,868	---	3,454	8,692	8,205	487
Red River Land Co.	59	211	214	---	83	296	300	-4
Western Water, LLC	118	379	379	---	164	530	530	0
Hopi Tribe	1,086	3,166	3,061	---	1,519	4,427	4,278	149
GSC Farms, LLC	790	2,408	2,084	---	1,105	3,368	2,913	455
Arizona Game & Fish	644	2,102	2,031	---	899	2,937	2,838	99
Cibola National Wildlife Refuge	4,209	14,264	14,264	0	6,789	23,005	23,005	0
Imperial National Wildlife Refuge	1,628	3,799	3,799	0	2,625	6,128	6,128	0
BLM Permittees (Parker Dam to Imperial Dam)	578	1,247	1,247	0	889	1,919	1,919	0
Cha Cha, LLC	485	1,349	1,365	---	746	2,075	2,100	-25
Beattie Farms Southwest	14	668	668	---	21	1,030	1,030	0
Yuma Proving Ground	162	500	524	---	162	500	524	-24
Gila Monster Farm	2,002	4,363	4,888	---	3,456	7,563	8,500	-937
Wellton-Mohawk Irrigation and Drainage District	134,068	284,131	278,000	6,131	185,881	420,826	424,350	-3,524
BLM Permittees (Below Imperial Dam)	50	109	109	0	78	168	168	0
City of Yuma	6,182	15,387	15,833	-446	10,589	26,627	27,500	-873
U.S. Marine Corps Air Station Yuma	456	1,248	1,300	---	456	1,248	1,300	-52
Union Pacific Railroad	12	29	29	---	21	48	48	0
University of Arizona	337	850	852	---	337	850	852	-2
Yuma Union High School District	50	146	150	---	66	195	200	-5
Desert Lawn Memorial	12	26	26	---	17	37	37	0
North Gila Valley Irrigation District	4,403	9,827	10,674	---	18,306	42,046	43,500	-1,454
Yuma Irrigation District	18,785	39,579	39,569	---	32,958	71,798	73,000	-1,202
Yuma Mesa Irrigation and Drainage District	32,554	108,482	110,859	---	79,155	232,707	244,280	-11,573
Unit "B" Irrigation and Drainage District	4,139	13,293	13,129	---	9,874	27,914	29,400	-1,486
Fort Yuma Indian Reservation	719	1,553	1,553	---	1,107	2,389	2,389	0
Yuma County Water Users' Association	129,252	274,652	275,560	---	173,634	369,834	367,400	2,434
Cocopah Indian Reservation	328	1,243	1,725	---	399	1,803	2,650	-847
Reclamation - Yuma Area Office	90	195	195	---	90	195	195	0
<b>Total Arizona</b>	<b>1,131,733</b>	<b>2,178,500</b>	<b>2,144,951</b>		<b>1,481,285</b>	<b>3,036,332</b>	<b>3,022,538</b>	
Central Arizona Project (CAP)	630,765	1,037,666				1,037,666		
All Others	500,968	1,140,834	1,112,352			1,998,666	1,989,939	
Yuma Mesa Division, Gila Project	55,742	157,888	161,102	-3,214		346,551		
Total 242 Well Field Pumping <sup>1</sup>	22,959	51,210	56,129					

Footnotes: See next page.

## ARIZONA ADJUSTED APPORTIONMENT CALCULATION

Arizona Basic Apportionment	2,800,000
Reduction for Tier 1 Shortage <sup>2</sup>	(320,000)
Arizona DCP Contribution <sup>3,4</sup>	(192,000)
Creation of Extraordinary Conservation ICS - CRIT (Estimated) <sup>4,5</sup>	(4,685)
Creation of Extraordinary Conservation ICS - GRIC (Estimated) <sup>4,6</sup>	(78,565)
System Conservation Water - Pilot System Conservation Program <sup>7</sup>	(500)
System Conservation Water - CRIT <sup>8</sup>	(50,000)
System Conservation Water - CAP <sup>9</sup>	(35,156)
System Conservation Water - FMYN <sup>10,11</sup>	(13,933)
System Conservation Water - GRIC <sup>10,12</sup>	(50,937)
System Conservation Water - MVIDD <sup>10,13</sup>	(9,592)
System Conservation Water - Reclamation <sup>10,14</sup>	(20,081)
Delivery of ICS (CAWCD)	50,000
<b>Total State Adjusted Apportionment</b>	<b>2,074,551</b>
Excess to Total State Adjusted Apportionment	103,949

## Estimated Allowable Use for CAP

**967,823**

<sup>1</sup> In accordance with the Colorado River Water Conservation Letter Agreement 16-XX-30-W0603, Revision No. 1 (Revised Letter Agreement) between Reclamation and the Central Arizona Water Conservation District (CAWCD), pumping above the Historical Average Baseline (31,129 AF), up to 32,000 AF per year, will remain in Lake Mead as Colorado River System water.

<sup>2</sup> In accordance with Section XI.G.2.D.1.a of the 2007 Interim Guidelines, a Tier 1 Shortage Condition will govern the operation of Lake Mead and the Lower Colorado River in 2022, resulting in a 320,000 AF reduction to the state of Arizona's Colorado River basic apportionment.

<sup>3</sup> In accordance with Sections III.B.1.a and III.E.4 of *Lower Basin Drought Contingency Operations* (LBOs), the state of Arizona is required to make a DCP Contribution of 192,000 AF in 2022. 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 CAWCD through the simultaneous creation and conversion of Extraordinary Conservation (EC) ICS to DCP ICS and the creation of Non-ICS Water (reductions in consumptive use). CAWCD has an approved ICS Plan for the creation of up to 100,000 AF of EC ICS in 2022. The actual amount of EC ICS created by CAWCD and credited toward the DCP Contribution will be based on final accounting and verification.

<sup>4</sup> 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 in 2022 is 183,250 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 of the 2007 Interim Guidelines and Section IV.B of LBOs, the total amount of EC ICS that may be created by the states of Arizona, California, and Nevada in 2022 will be limited to 625,000 AF. Additionally, the total amount of EC ICS, Binational ICS and DCP ICS accumulated in Arizona's ICS Accounts will be limited in accordance with Section IV.C. of LBOs.

<sup>5</sup> The Colorado River Indian Tribes (CRIT) has an approved ICS Plan for the creation of up to 4,685 AF of EC ICS in 2022. The actual amount of EC ICS created by CRIT will be based on final accounting and verification.

<sup>6</sup> CAP water being conserved by the Gila River Indian Community (GRIC) in 2022 to create EC ICS. The actual amount of EC ICS created by GRIC will be based on final accounting and verification.

<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup> CAP water being conserved by certain CAP subcontractors pursuant to executed Compensated Conservation Agreements. Water conserved under these agreements will be left in Lake Mead for the benefit of system storage. In accordance with the Project Funding Agreement No. 1, the Bureau of Reclamation will contribute 15 percent of the funding and intends to apply 15 percent of the water conserved towards addressing the Secretary of the Interior's commitment pursuant to Section 3.b of the *Lower Basin Drought Contingency Plan Agreement* (LB DCP Agreement).

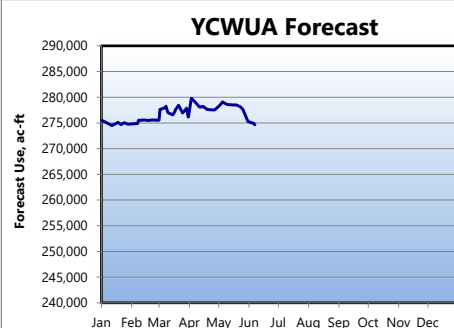
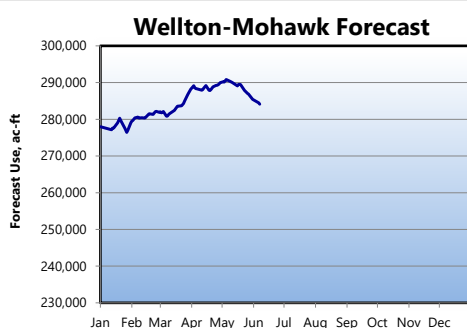
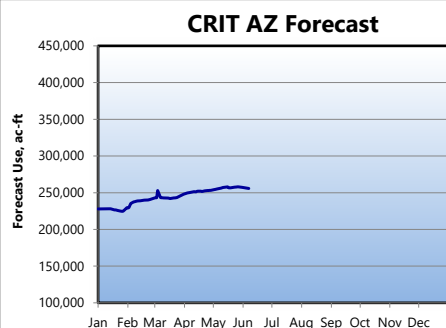
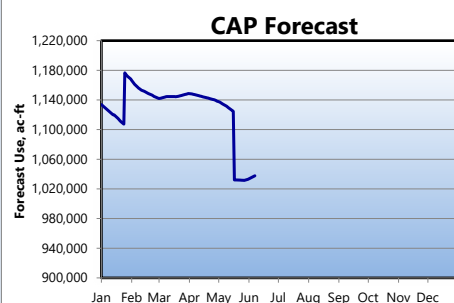
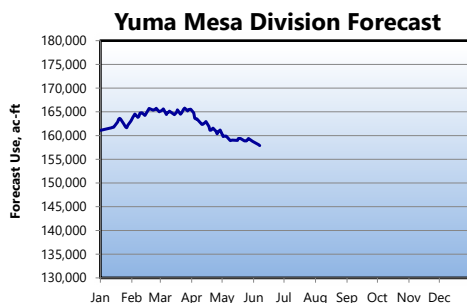
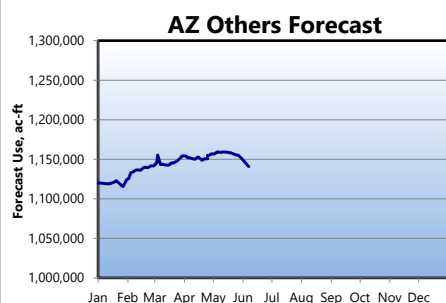
<sup>10</sup> In accordance with the applicable system conservation agreements and Section 3.b of the LB DCP Agreement, the Bureau of Reclamation intends to apply this water towards the Secretary of the Interior's commitment to create or conserve 100,000 AF per annum or more of Colorado River System water to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the Lower Basin.

<sup>11</sup> CAP water being conserved by FMYN pursuant to SCIA No. 20-XX-30-W0688, which will remain in Lake Mead to benefit system storage.

<sup>12</sup> CAP water being conserved by GRIC pursuant to SCIA No. 22-XX-30-W0724, which will remain in Lake Mead to benefit system storage.

<sup>13</sup> System Conservation Water being created by MVIDD pursuant to SCIA No. 22-XX-30-W0725, which will remain in Lake Mead to benefit system storage.

<sup>14</sup> System Conservation Water being created by additional pumping from the 242 Well Field Expansion pursuant to the Revised Letter Agreement.



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



**LOWER COLORADO BASIN REGION  
CY 2022**

**CALIFORNIA WATER USERS**

Forecast end of year diversion/consumptive use

Forecast based on use to date and approved annual water orders

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

	Use To Date CY 2022	Forecast Use CY 2022	Estimated Use CY 2022	Excess to Estimated Use CY 2022	Diversion To Date CY 2022	Forecast Diversion CY 2022	Excess to Approved Diversion CY 2022	Approved Diversion CY 2022
<b>WATER USER</b>								
Fort Mojave Indian Reservation, CA	3,329	7,106	8,996	---	6,187	13,207	16,720	-3,513
PPR No. 30 (Stephenson)	11	23	23	---	19	42	42	0
PPR No. 38 (Andrade)	11	23	23	---	19	42	42	0
City of Needles (includes LCWSP use)	482	1,458	1,605	-147	855	2,229	2,261	-32
Chemehuevi Indian Reservation	85	183	183	---	5,252	11,340	11,340	0
The Metropolitan Water District of Southern California	423,875	1,113,806	---	---	425,147	1,116,547	---	---
Colorado River Indian Reservation, CA	2322	5,014	5,014	---	3,848	8,307	8,307	0
Palo Verde Irrigation District	147,082	393,330	420,696	---	329,365	835,365	857,000	-21,635
Lake Enterprises	0	1	1	---	0	1	1	0
Yuma Project Reservoir Division	22,379	45,408	48,606	---	43,435	93,121	96,725	-3,604
Yuma Project Reservoir Division - Bard Unit	---	---	---	---	17,089	45,189	51,500	-6,311
Yuma Project Reservoir Division - Indian Unit	---	---	---	---	26,346	47,932	45,225	2,707
Fort Yuma Indian Reservation - Ranch 5 (Surface Delivery)	355	903	1,013	---	644	1,634	1,832	-198
Fort Yuma Indian Reservation - Other Ranches (Pumpers)	561	1,211	1,211	---	1,013	2,188	2,188	0
Yuma Island Pumpers	755	1,629	1,629	---	1,365	2,947	2,947	0
Imperial Irrigation District <sup>1</sup>	1,227,273	2,701,155	2,620,300	<b>80,855</b>	1,249,856	2,792,176	2,719,536	---
Coachella Valley Water District	138,619	368,419	384,000	-15,581	146,034	387,110	399,950	---
Other LCWSP Contractors	261	563	563	---	420	907	907	0
City of Winterhaven	28	61	61	---	41	88	88	0
<b>Total California</b>	<b>1,967,428</b>	<b>4,640,293</b>	<b>4,607,402</b>		<b>2,213,500</b>	<b>5,267,251</b>	<b>5,236,065</b>	

**CALIFORNIA ADJUSTED APPORTIONMENT CALCULATION**

California Basic Apportionment	4,400,000
System Conservation Water - Pilot System Conservation Program <sup>2</sup>	(145)
System Conservation Water - PVID Following Program <sup>3</sup>	(50,800)
Creation of Extraordinary Conservation ICS by IID - Stored in Lake Mead (Estimated) <sup>4</sup>	0
Creation of Extraordinary Conservation ICS by MWD (Estimated) <sup>5</sup>	0
<b>Total State Adjusted Apportionment</b>	<b>4,349,055</b>
Excess to Total State Adjusted Apportionment	291,238

**Estimated Allowable Use for MWD**

903,423

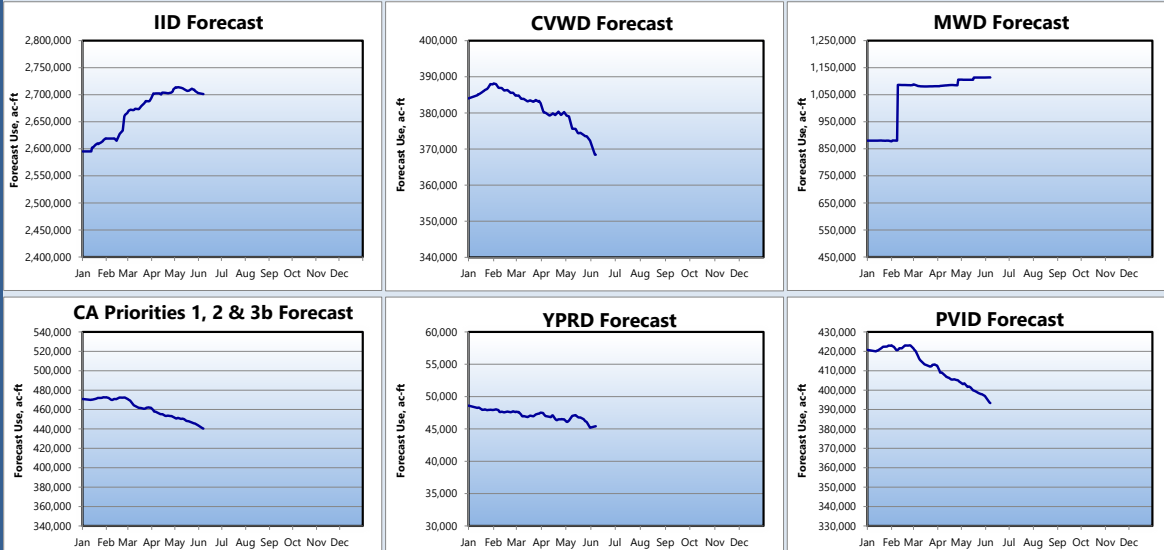
<sup>1</sup> As shown here, IID's Approved Diversion and Estimated Use values reflect the maximum amount of Colorado River water available to IID in 2022. Note: This forecast may be updated to reflect up to 25,000 AF of water conserved and stored by IID pursuant to the IID-MWD Settlement and Release Agreement dated September 16, 2021.

<sup>2</sup> 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.

<sup>3</sup> 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*.

<sup>4</sup> IID has an approved ICS Plan for the creation of up to 62,000 AF of Extraordinary Conservation (EC) ICS in 2022; however, pursuant to Section 3 of the *California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus*, as amended, IID may accumulate a maximum of 50,000 AF of EC ICS in its Lake Mead ICS Account, and has reached this limit. The actual amount of EC ICS created by IID in 2022, if any, will be based on final accounting and verification.

<sup>5</sup> MWD has an approved ICS Plan for the creation of up to 450,000 AF of EC ICS in 2022. The actual amount of EC ICS created by MWD in 2022 will be based on final accounting and verification, and will be limited to the amount that, when combined with the amount of EC ICS created by IID, does not exceed the maximum EC ICS creation capacity available to the state of California. In accordance with Section XI.G.3.B.4 and Section IV.B of *Lower Basin Drought Contingency Operations* (LBOs), the total amount of EC ICS that may be created by the states of Arizona, California, and Nevada in 2022 will be limited to 625,000 AF. Additionally, the total amount of EC ICS, Binational ICS and DCP ICS accumulated in California's ICS Accounts will be limited in accordance with Section IV.C. of LBOs.



NOTES: Click on [California Schedules and Approvals](#) above for incoming diversion schedules and approvals.



## LOWER COLORADO BASIN REGION CY 2022

## 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 end of year diversion/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	Excess to
	To Date	Use	Use	Use	To Date	Diversion	Approved
	CY 2022	CY 2022	CY 2022	CY 2022	CY 2022	CY 2022	Diversion
Robert B. Griffith Water Project (SNWS)	177,760	456,667		---	177,760	456,667	---
Lake Mead NRA, NV - Diversions from Lake Mead	260	1,262	1,500	---	260	1,262	1,500
Lake Mead NRA, NV - Diversions from Lake Mohave	113	416	500	---	113	416	500
Basic Management, Inc.	2,203	7,058	8,208	---	2,203	7,058	8,208
City of Henderson (BMI Delivery)	5,831	14,230	15,878	---	5,831	14,230	15,878
Nevada Department of Wildlife	1	8	12	-4	143	790	1,000
Pacific Coast Building Products, Inc.	367	894	928	---	367	894	928
Boulder Canyon Project	81	175	175	---	139	300	300
Big Bend Water District	887	4,081	4,765	---	1,951	8,237	10,000
Fort Mojave Indian Tribe	1,100	3,660	4,623	---	1,644	5,464	6,900
Las Vegas Wash Return Flows	-100,217	-230,098	-228,466	---			
<b>Total Nevada</b>	<b>88,386</b>	<b>258,353</b>	<b>260,000</b>	<b>-4</b>	<b>190,411</b>	<b>495,318</b>	<b>497,091</b>
Southern Nevada Water System (SNWS)	77,543	226,569				456,667	
All Others	10,843	31,784				38,651	
Nevada Uses Above Hoover	86,399	250,612				481,617	
Nevada Uses Below Hoover	1,987	7,741				13,701	

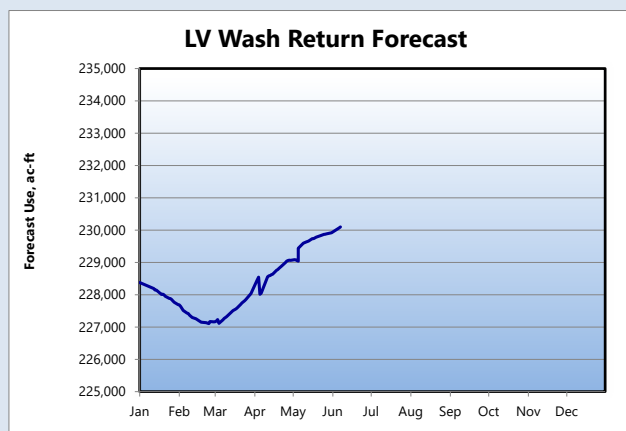
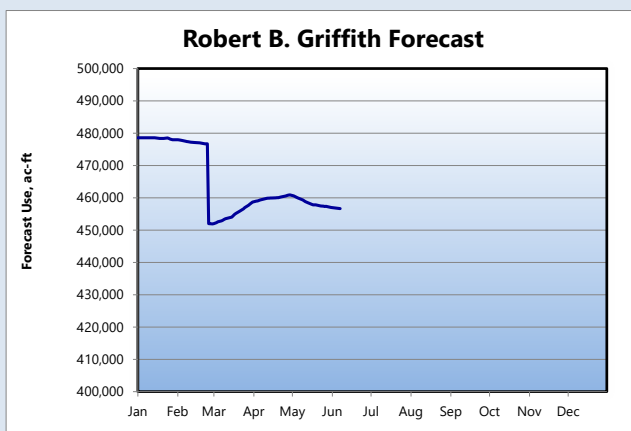
**Tributary Conservation (TC) Intentionally Created Surplus (ICS)**Southern Nevada Water Authority (SNWA) Creation of TC ICS (Approved) <sup>1</sup> 43,000**NEVADA ADJUSTED APPORTIONMENT CALCULATION**

Nevada Basic Apportionment	300,000
Reduction for Tier 1 Shortage <sup>2</sup>	(13,000)
Creation of Extraordinary Conservation ICS - SNWA (Estimated) <sup>3</sup>	(28,647)
<b>Total State Adjusted Apportionment</b>	<b>258,353</b>
Excess to Total State Adjusted Apportionment	0

<sup>1</sup> SNWA has an approved ICS Plan for the creation of up to 43,000 AF of TC ICS in 2022. The actual amount of TC ICS created by SNWA in 2022 will be based on final accounting and verification.

<sup>2</sup> In accordance with Section XI.G.2.D.1.a of the 2007 Interim Guidelines, a Tier 1 Shortage Condition will govern the operation of Lake Mead and the Lower Colorado River in 2022, resulting in a 13,000 AF reduction to the state of Nevada's Colorado River basic apportionment.

<sup>3</sup> SNWA has an approved ICS Plan for the creation of up to 100,000 AF of Extraordinary Conservation (EC) ICS in 2022. The actual amount of EC ICS created by SNWA in 2022 will be based on final accounting and verification. In accordance with Section XI.G.3.B.4 of the 2007 Interim Guidelines and Section IV.B of *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 2022 will be limited to 625,000 AF. Additionally, the total amount of EC ICS, Binational ICS and DCP ICS accumulated in Nevada's ICS Accounts will be limited in accordance with Section IV.C. of LBOps.



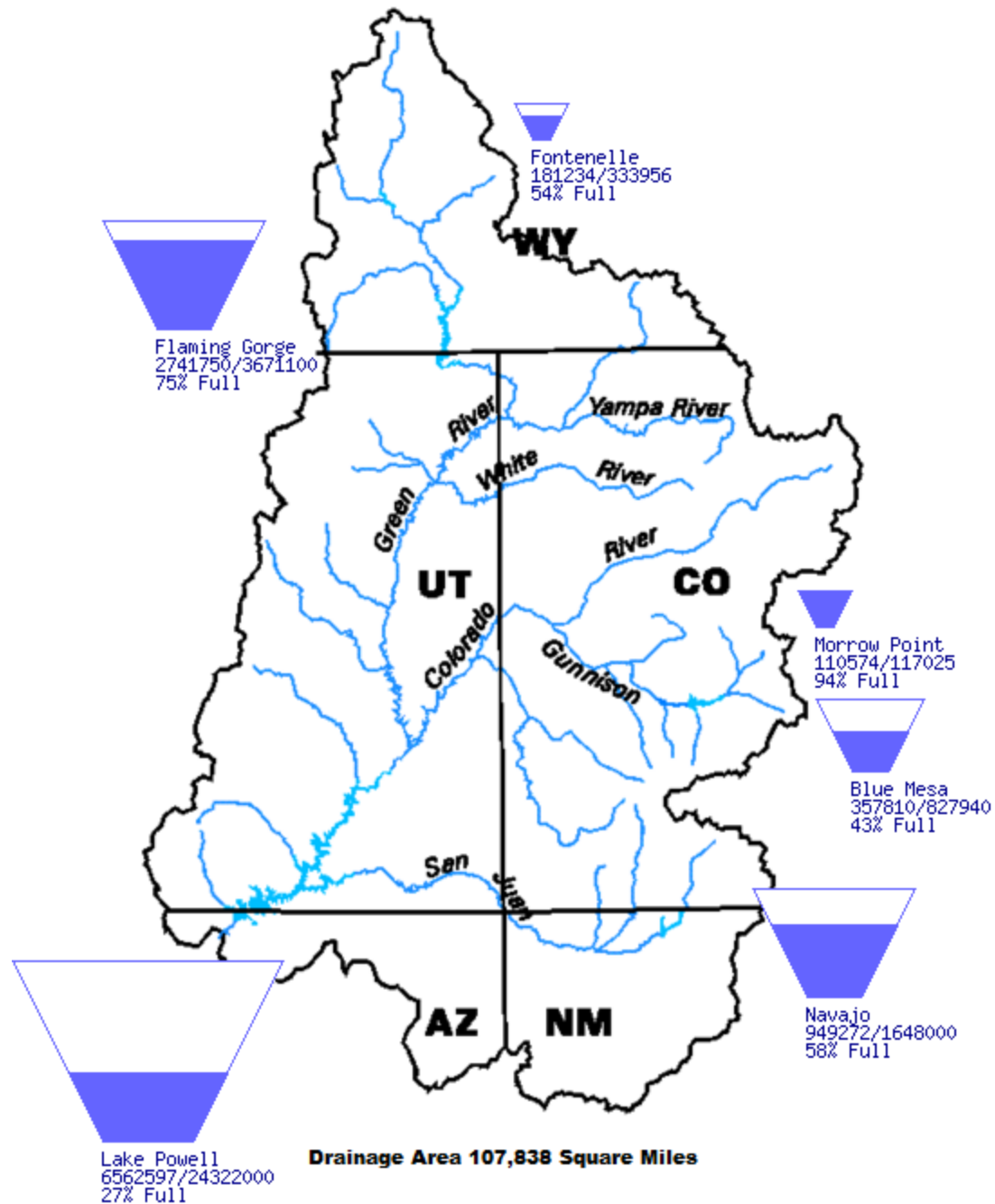
NOTES: Click on Nevada Schedules and Approvals above for incoming diversion schedules and approvals.

# Upper Colorado Region Water Resources Group

## River Basin Tea-Cup Diagrams

Data Current as of:  
06/08/2022

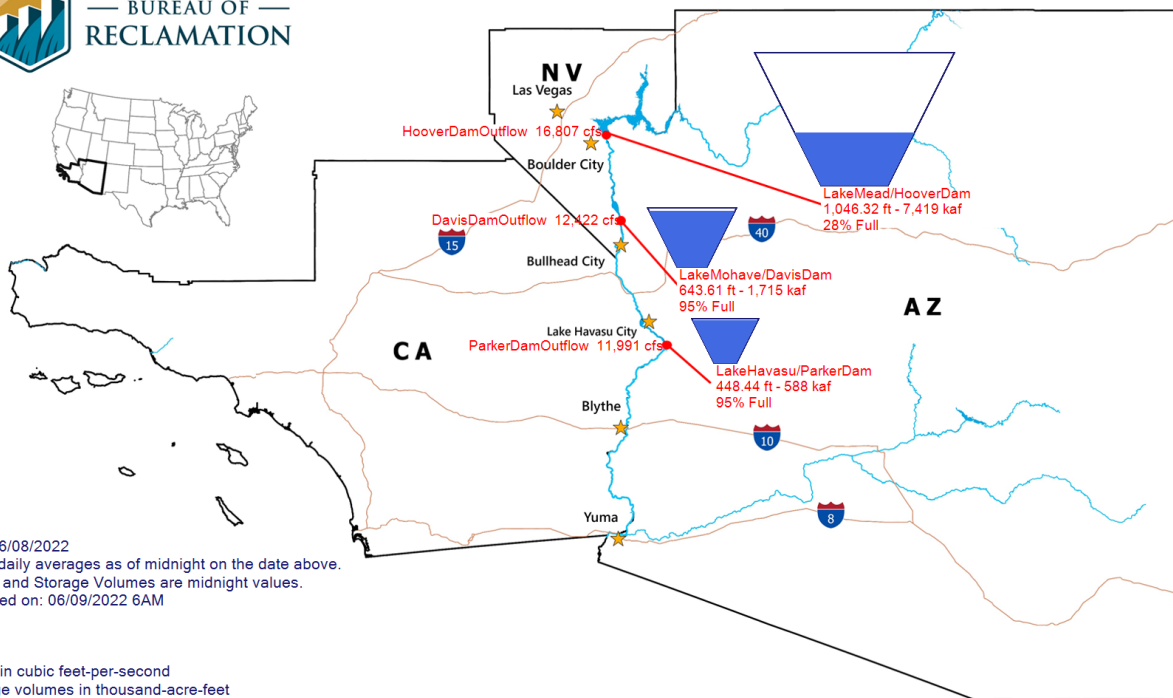
### Upper Colorado River Drainage Basin



# Lower Colorado River Teacup Diagram

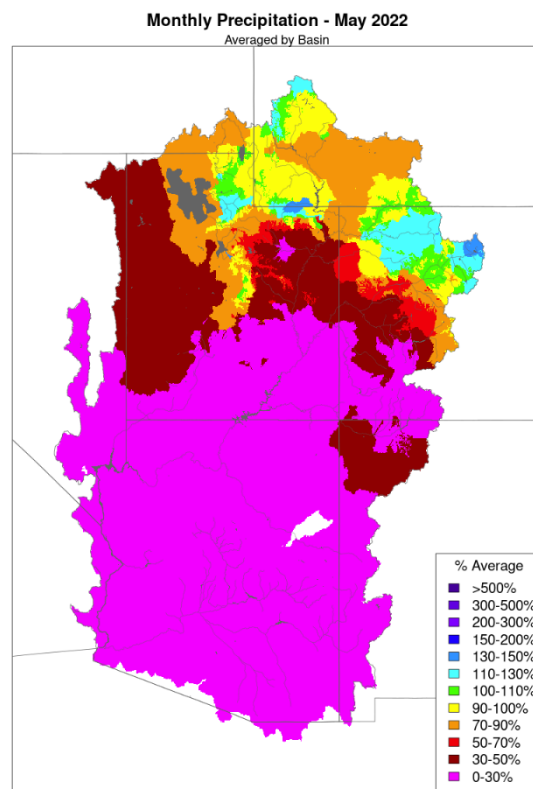
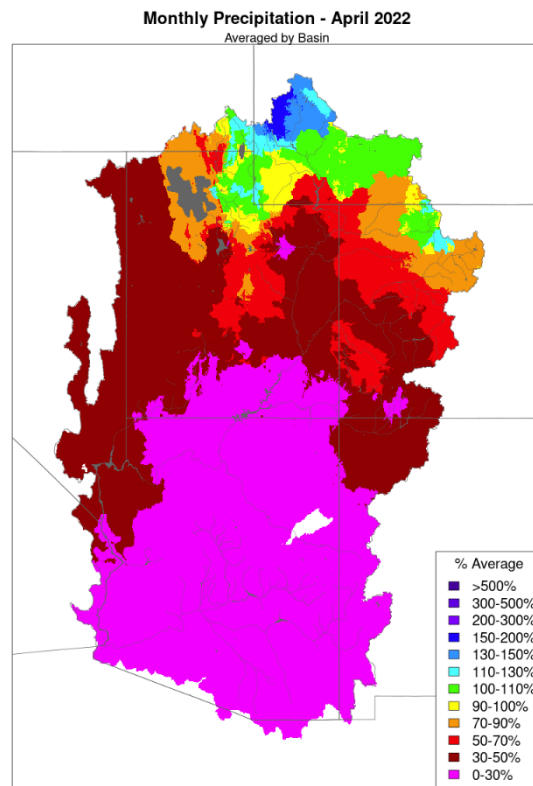


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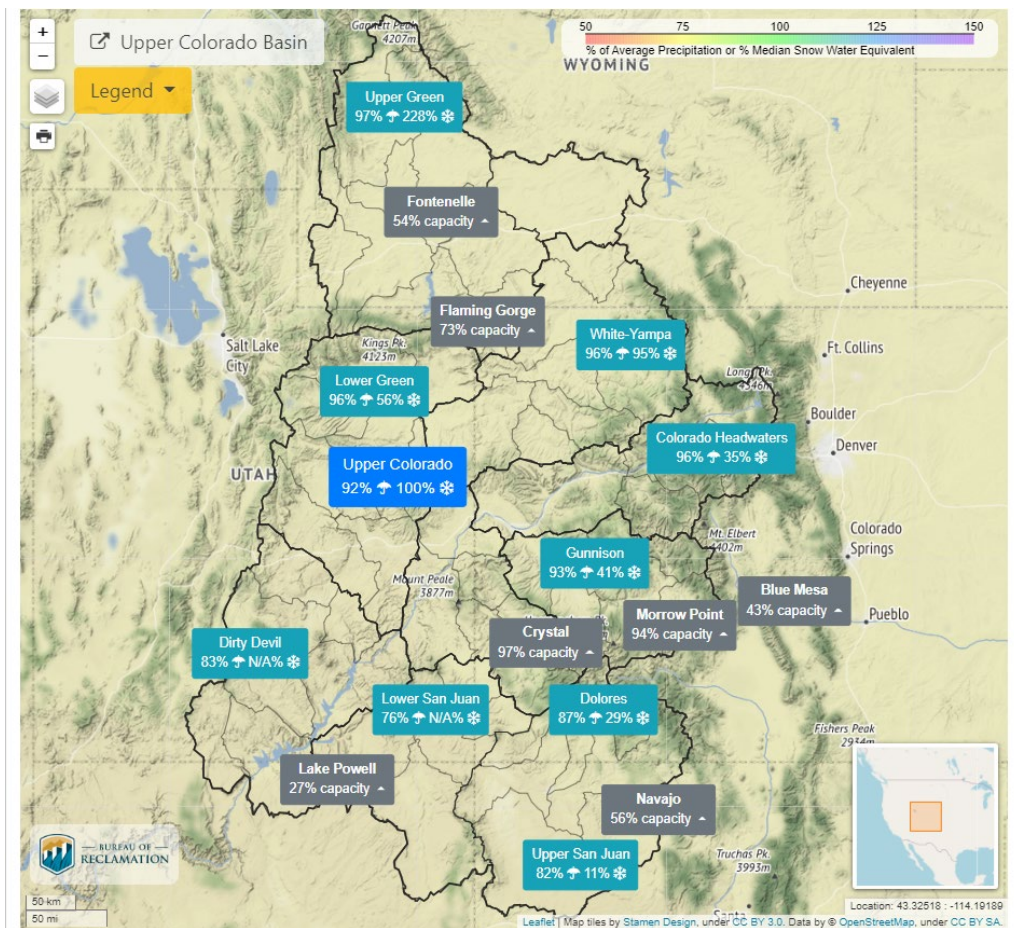
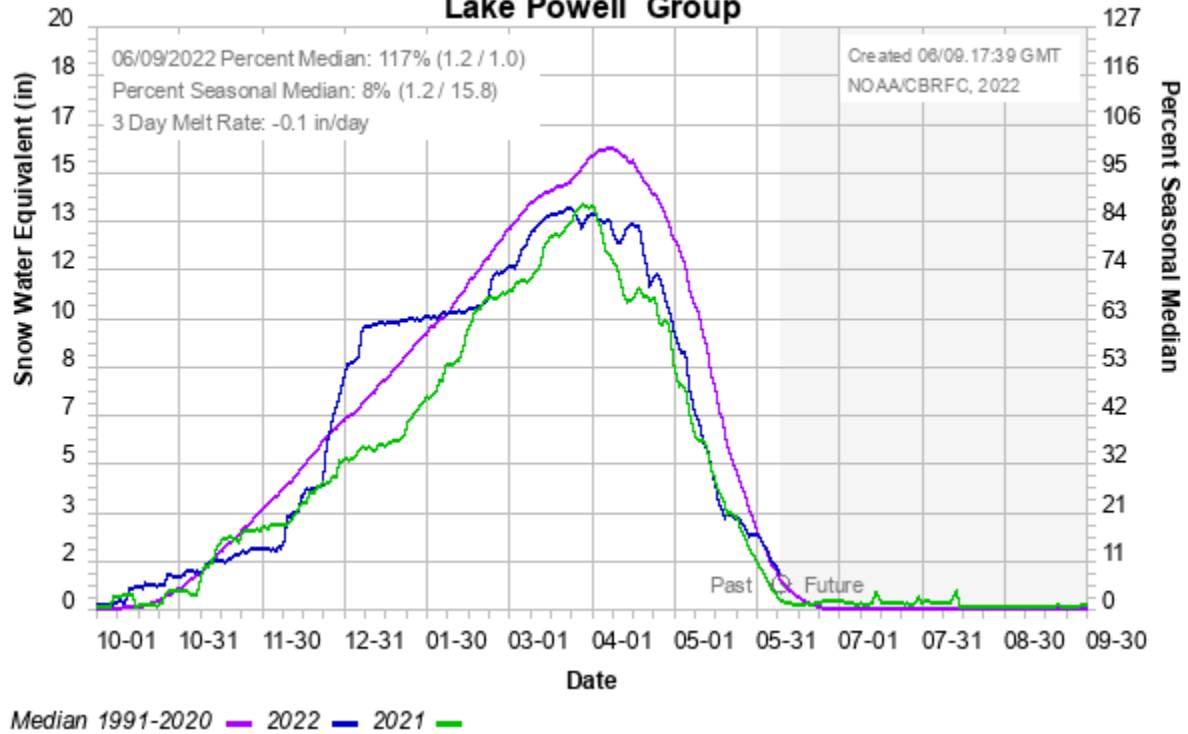


## NOAA National Weather Service Monthly Precipitation Map April and May 2022





# Colorado Basin River Forecast Center Lake Powell Group



# U.S. Drought Monitor West

**June 7, 2022**

(Released Thursday, Jun. 9, 2022)

Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	7.52	92.48	85.15	69.99	44.06	12.05
<b>Last Week</b> <i>05-31-2022</i>	7.44	92.56	86.49	74.43	43.63	11.43
<b>3 Months Ago</b> <i>03-08-2022</i>	6.21	93.79	89.31	72.56	26.78	3.50
<b>Start of Calendar Year</b> <i>01-04-2022</i>	4.43	95.57	87.78	64.63	25.30	4.75
<b>Start of Water Year</b> <i>09-28-2021</i>	1.32	98.68	93.35	81.07	58.72	21.77
<b>One Year Ago</b> <i>06-08-2021</i>	2.64	97.36	88.50	75.07	54.88	26.77

## Intensity:

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

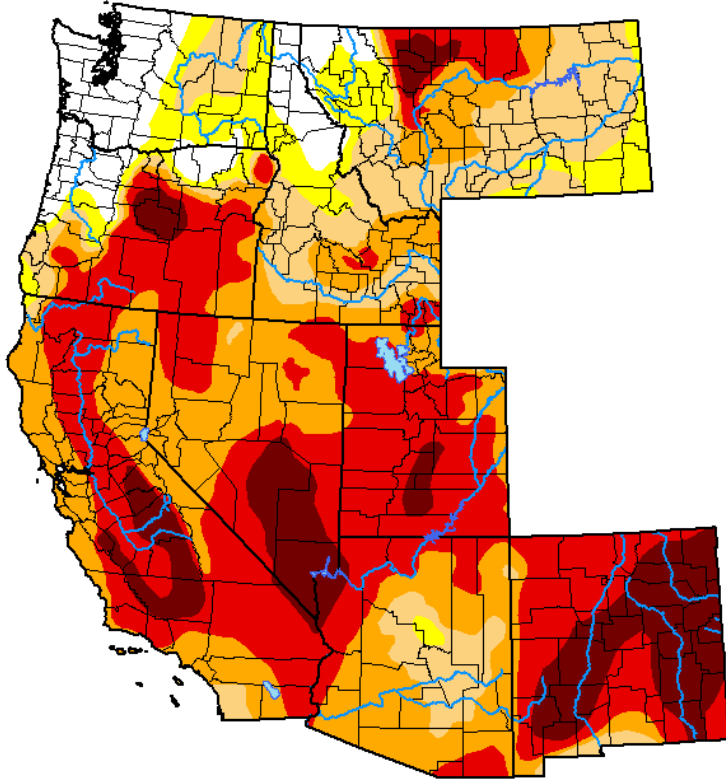
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

## Author:

Brad Pugh  
CPC/NOAA



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)





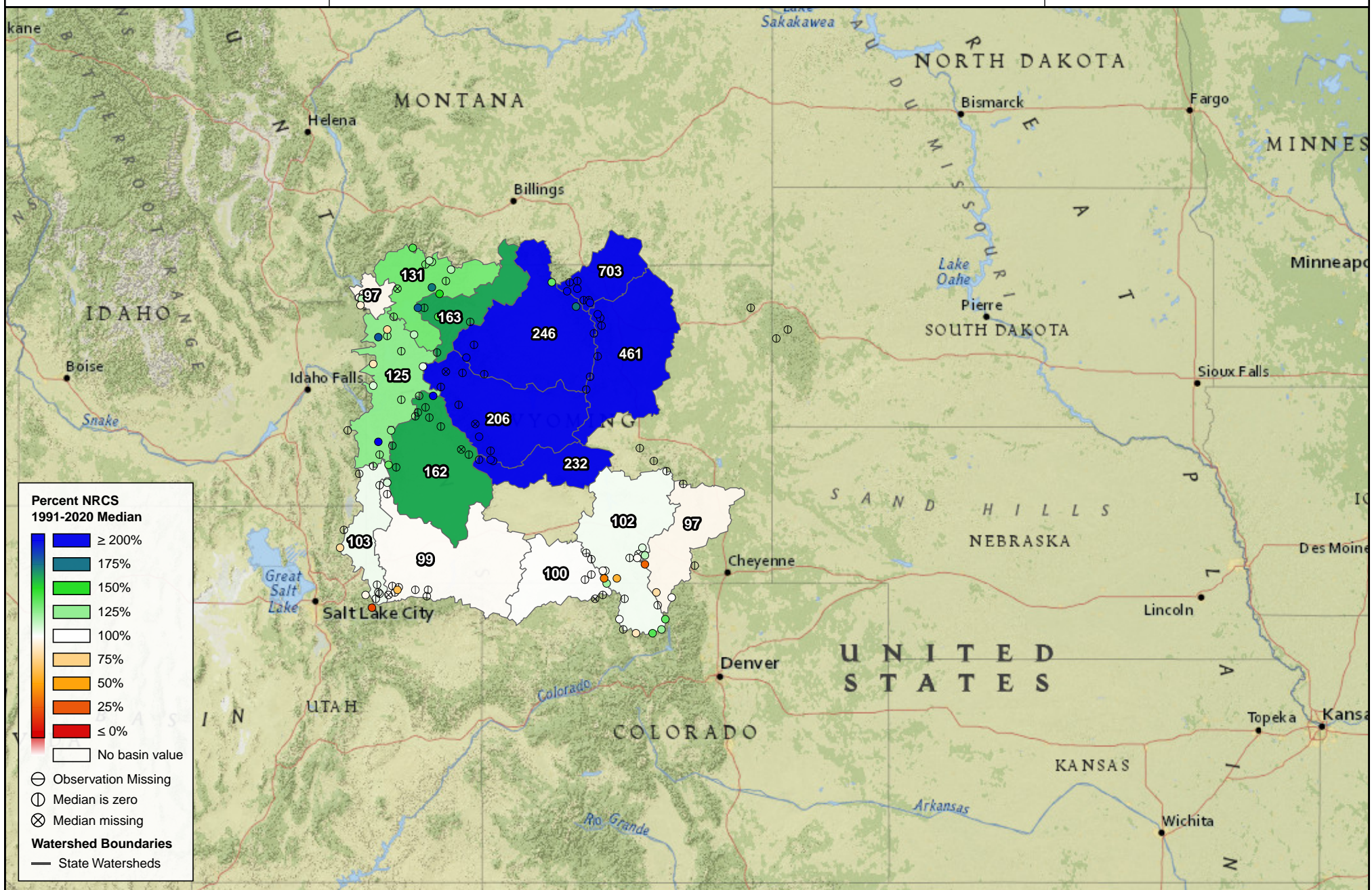




Snow Water Equivalent

Percent NRCS 1991-2020 Median

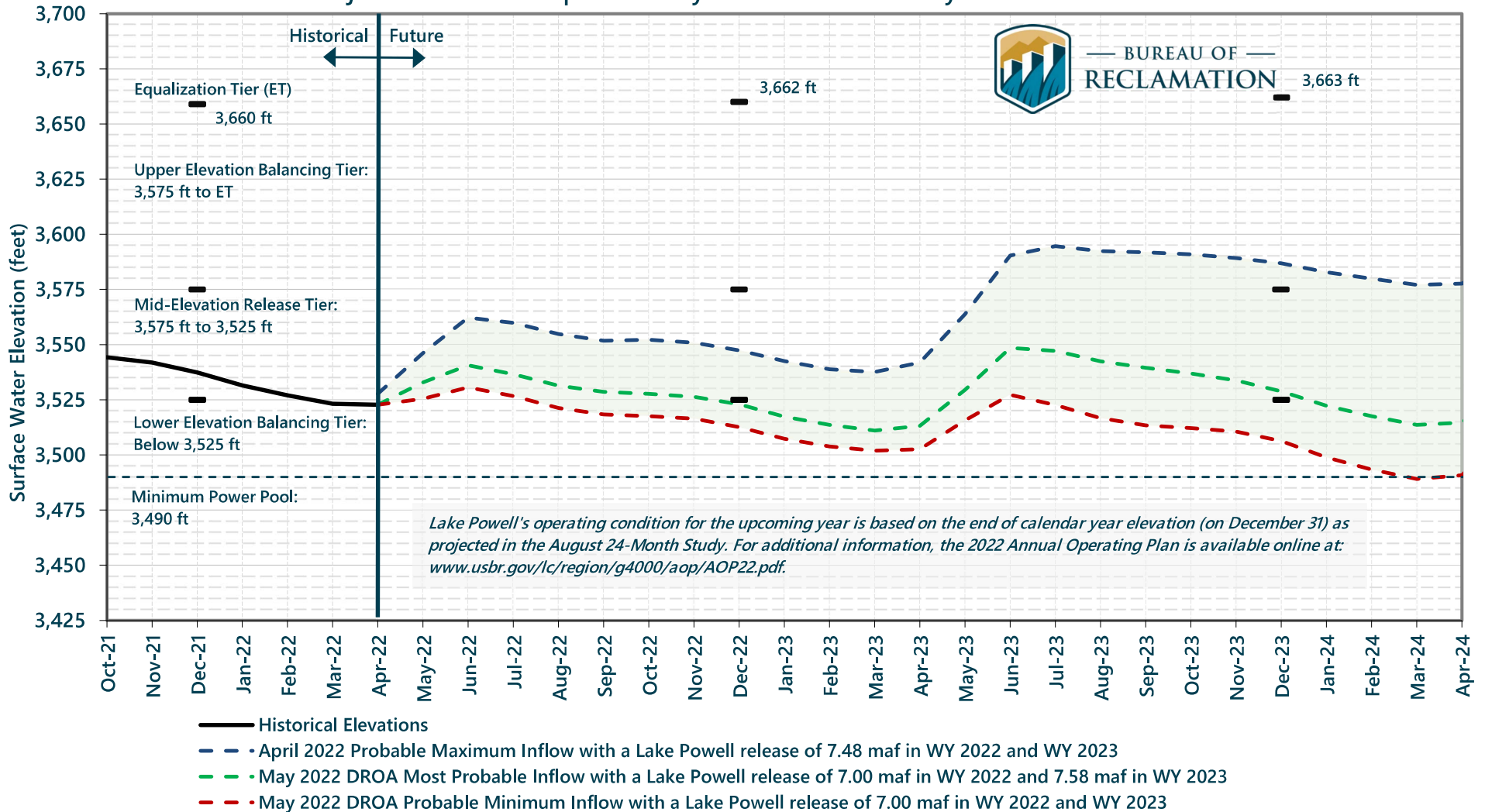
June 1st, 2022





# Lake Powell End of Month Elevations

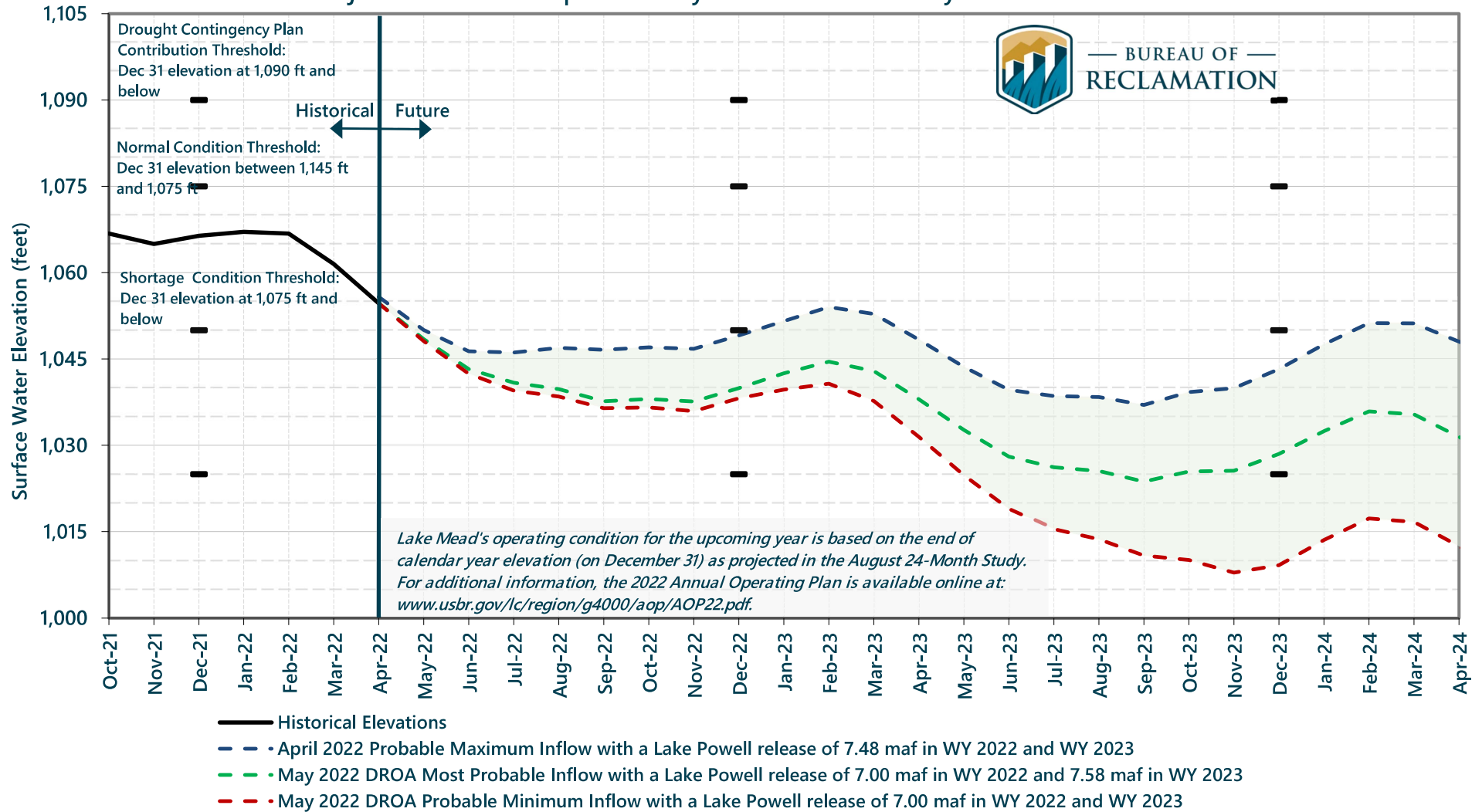
Projections from the April and May 2022 24-Month Study Inflow Scenarios



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

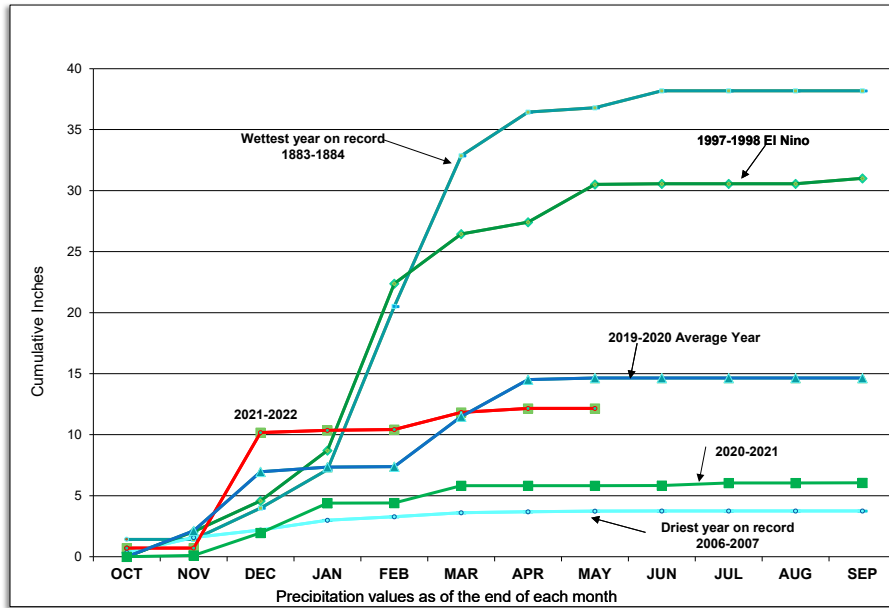
# Lake Mead End of Month Elevations

Projections from the April and May 2022 24-Month Study Inflow Scenarios



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

### Los Angeles Civic Center Precipitation



1

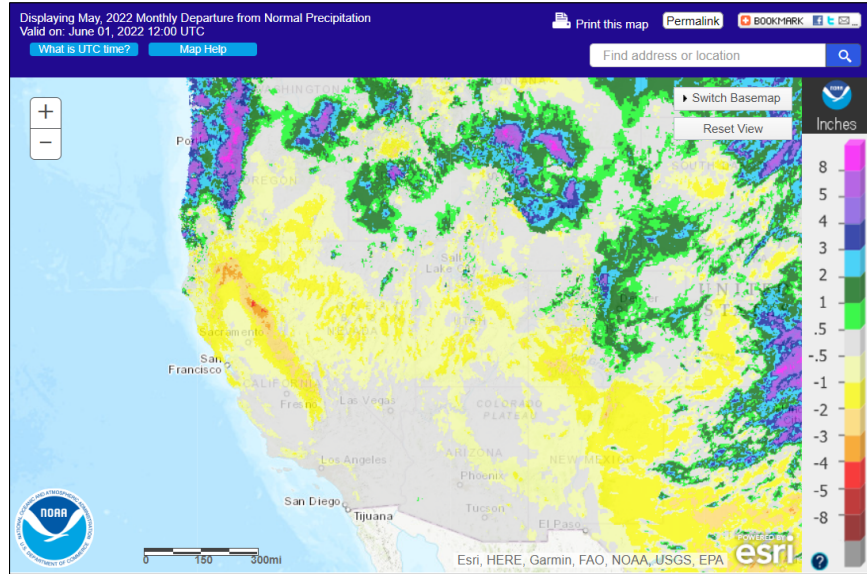
### Precipitation at Six Major Stations in Southern California

From October 1, 2021 to May 31, 2022

Station	Precipitation in inches		Average to Date	Percent of Average
	May	Oct 1 to May 31		
San Luis Obispo	0.00	9.11	22.00	41%
Santa Barbara	0.03	7.79	17.44	45%
Los Angeles	0.00	12.16	14.84	82%
San Diego	0.02	6.10	9.85	62%
Blythe	0.00	0.23	2.57	9%
Imperial	0.00	0.02	2.18	1%

2

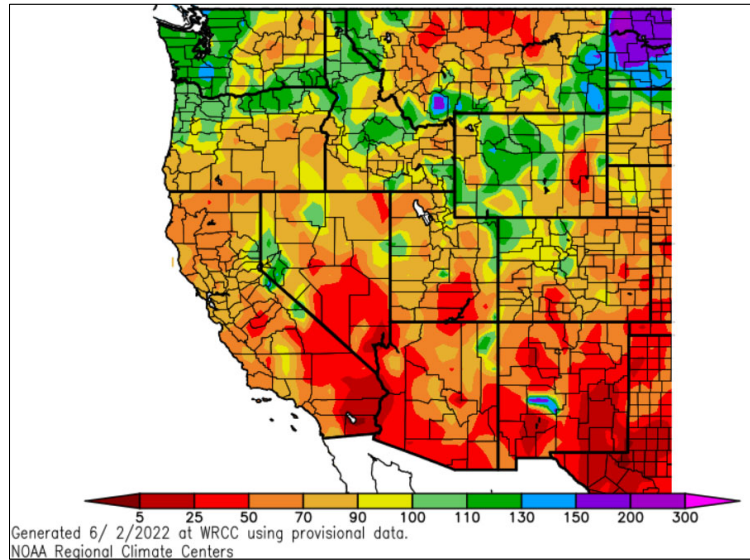
## Monthly Departure From Normal Precipitation (inches) May 2022



NOAA - National Weather Service  
<https://water.weather.gov/precip/>

3

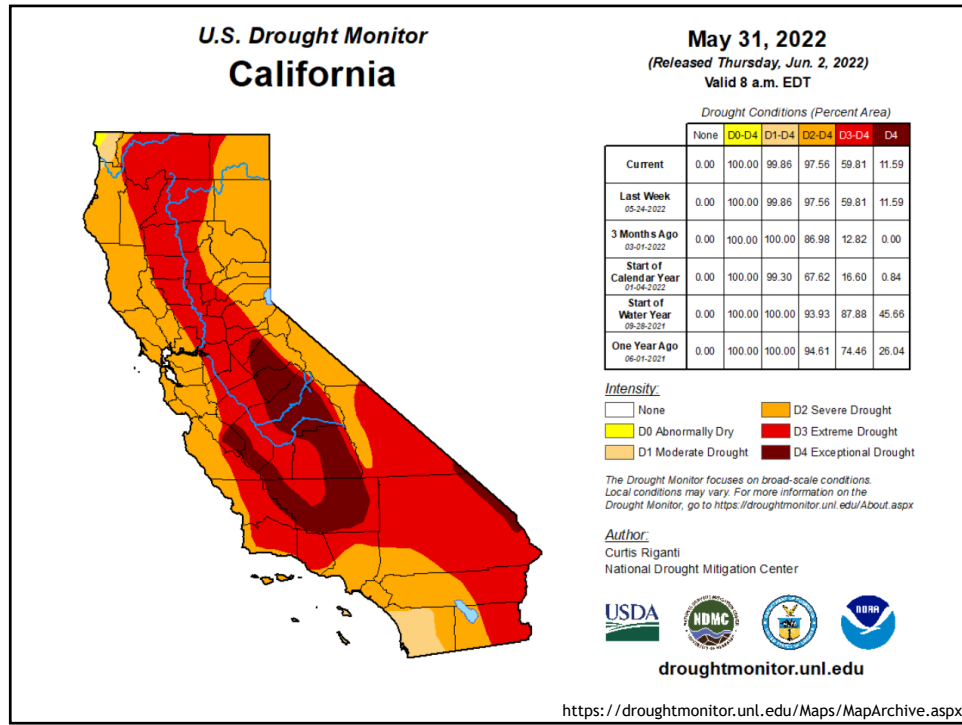
## Percent of Average Precipitation (%) 10/01/2021 - 06/01/2022



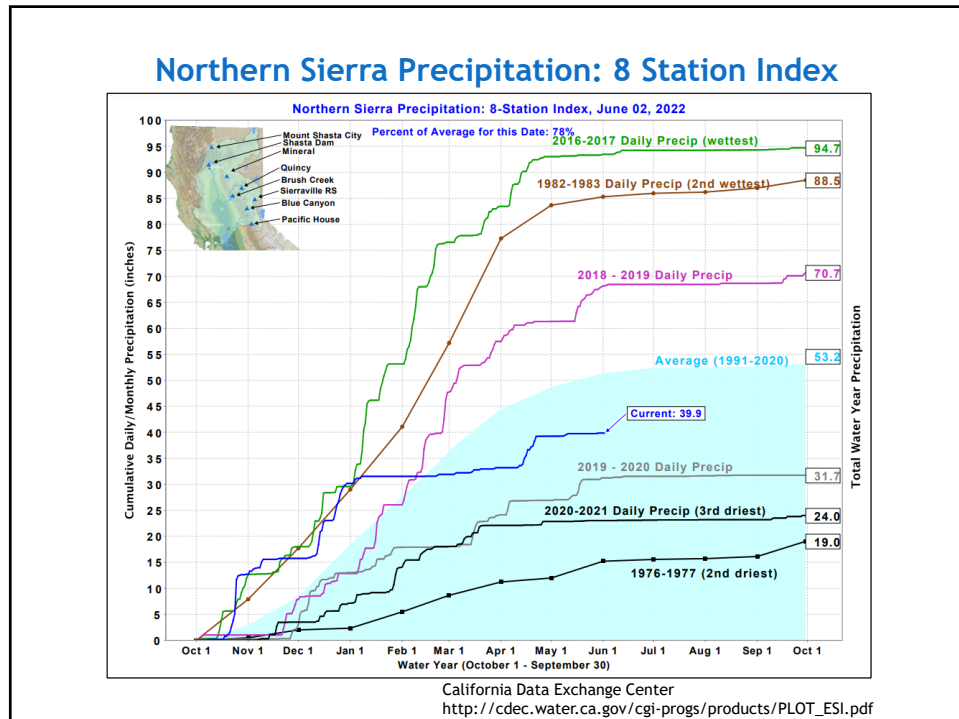
Western Regional Climate Center  
<https://wrcc.dri.edu/cgi-bin/anomimage.pl?wrc6mPpct.png>

4



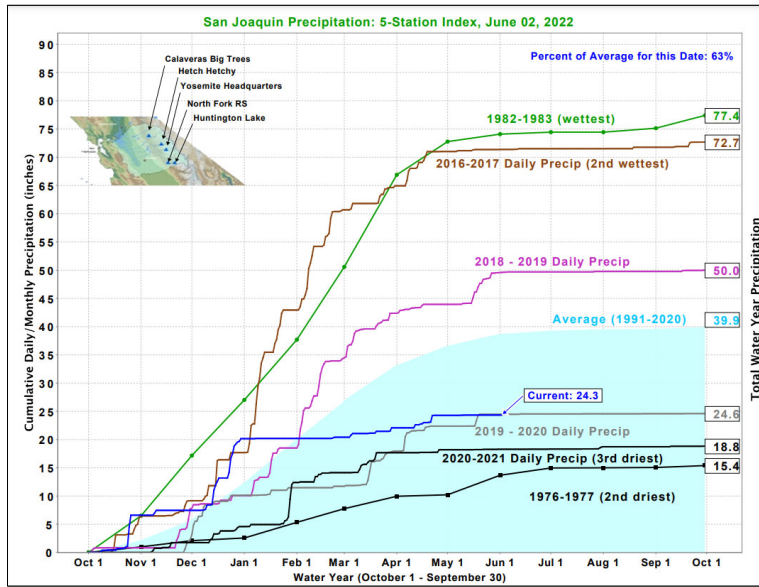


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6

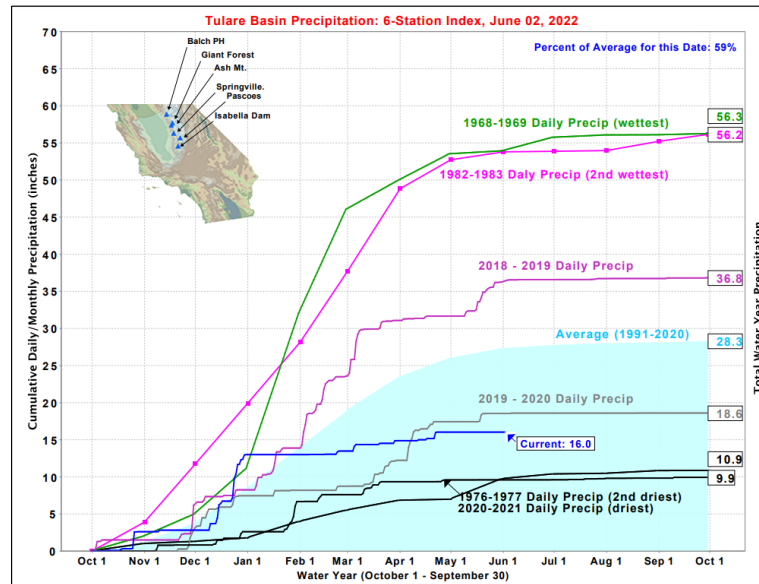
## San Joaquin Precipitation: 5 Station Index



California Data Exchange Center  
[http://cdec.water.ca.gov/cgi-progs/products/PLOT\\_FSI.pdf](http://cdec.water.ca.gov/cgi-progs/products/PLOT_FSI.pdf)

7

## Tulare Basin Precipitation: 6 Station Index



California Data Exchange Center  
[http://cdec.water.ca.gov/cgi-progs/products/PLOT\\_TSI.pdf](http://cdec.water.ca.gov/cgi-progs/products/PLOT_TSI.pdf)

8

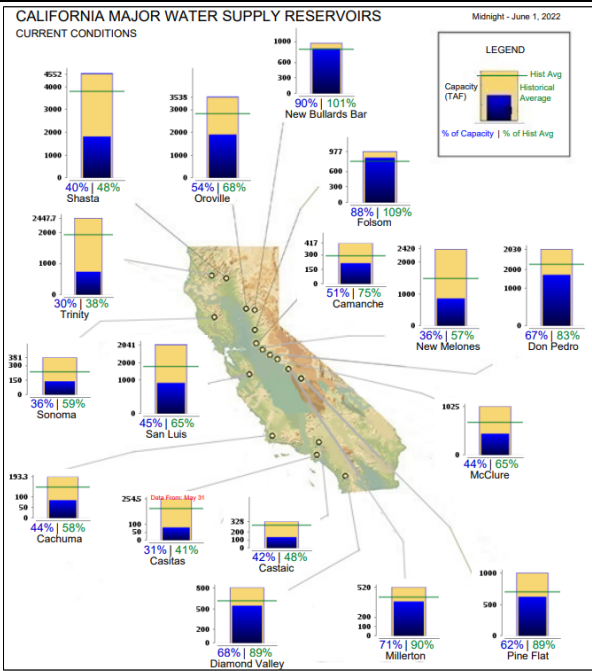
Comparison of SWP Water Storage

Reservoir	Capacity	2021 Storage (acre-feet)		2022 Storage (acre-feet)	
		As of 1-Jun	% of Cap.	As of 1-Jun	% of Cap.
Frenchman	55,475	34,176	62%	37,899	68%
Lake Davis	84,371	50,336	60%	49,497	59%
Antelope	22,564	16,375	73%	22,536	100%
Oroville	3,553,405	1,338,679	38%	1,904,056	54%
TOTAL North	3,715,815	1,439,566	39%	2,013,988	54%
Del Valle	39,914	39,155	98%	39,794	100%
San Luis	2,027,835	880,483	43%	913,876	45%
Pyramid	169,901	165,511	97%	163,514	96%
Castaic	319,247	211,554	66%	136,490	43%
Silverwood	74,970	67,199	90%	67,974	91%
Perris	132,614	117,309	88%	101,562	77%
TOTAL South	2,764,481	1,481,211	54%	1,423,210	51%
TOTAL SWP	6,480,296	2,920,777	45%	3,437,198	53%

As of March 18, 2022, the Table A allocations for SWP contractors is 5%.

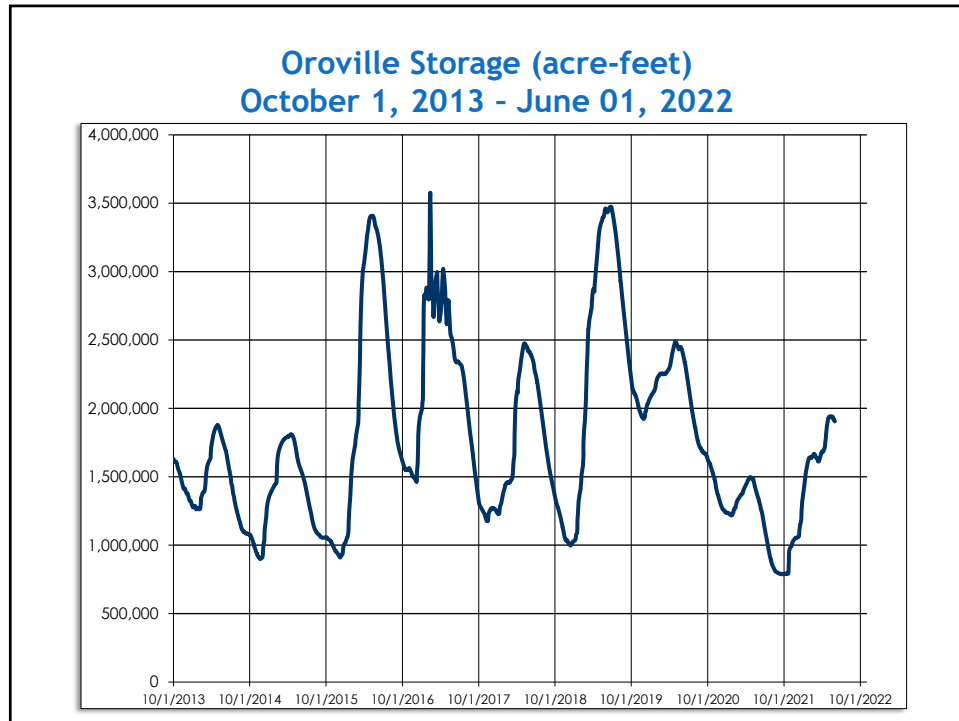
9

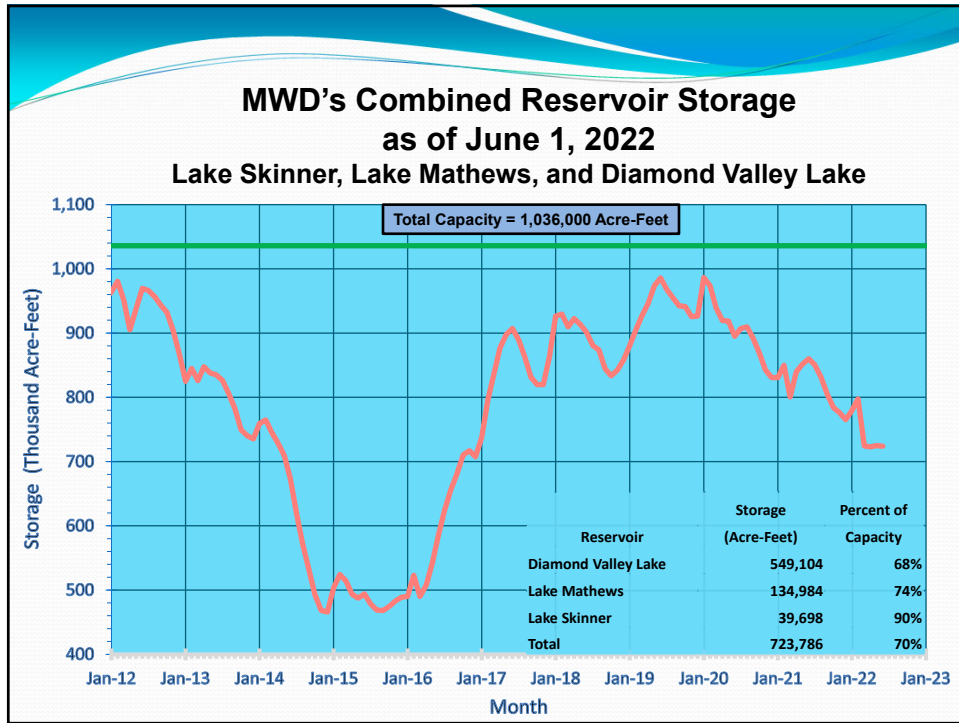
Reservoir Current Conditions as of 06/01/2022



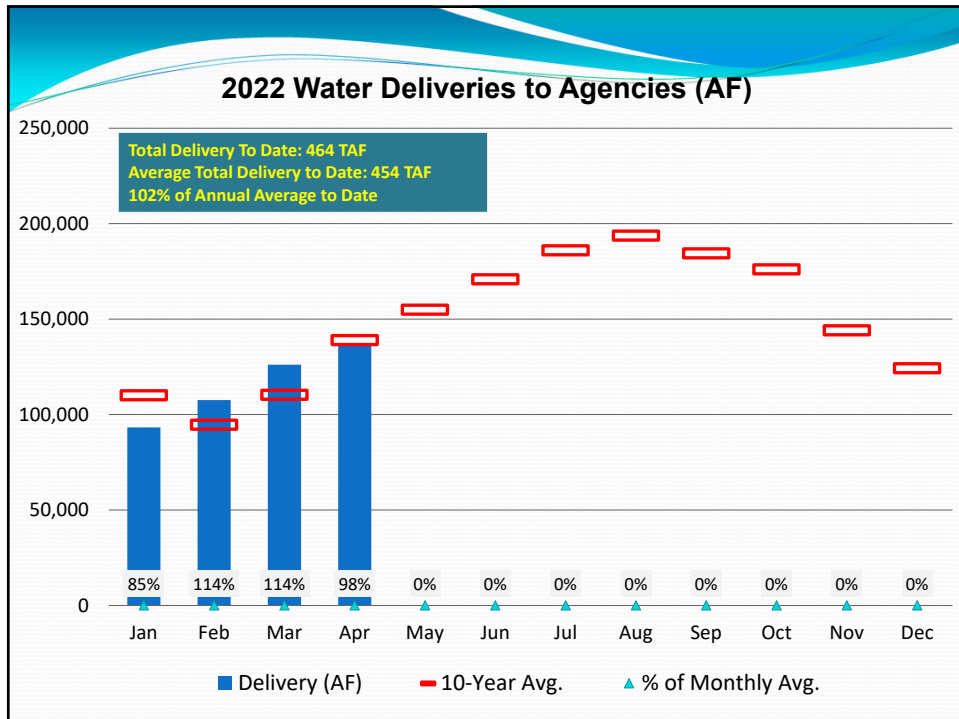
California Data Exchange Center  
<https://cdec.water.ca.gov/reportapp/javareports?name=rescond.pdf>

10

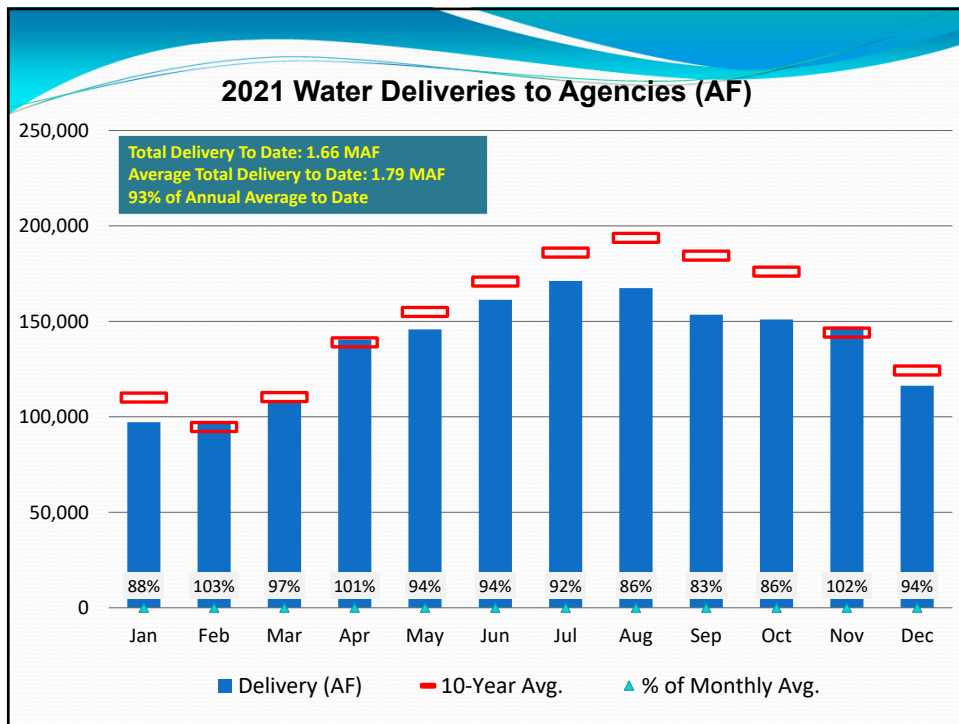




1



2



3