

Minutes of Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, August 10, 2022

A meeting of the Colorado River Board of California (Board) was held on Wednesday, August 10, 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)  
Jim Madaffer (SDCWA)  
Peter Nelson, Chairman (CVWD)

Glen D. Peterson (MWD)  
David R. Pettijohn, Vice Chairman (LADWP)  
Jack Seiler (PVID Alternate)  
David Vigil (DFW Alternate)  
Gary Croucher (SDCWA Alternate)

Board Members and Alternates Absent:

Castulo Estrada (CVWD Alternate)  
James Hanks (IID Alternate)

Christopher Hayes (DFW Designee)  
Delon Kwan (LADWP Alternate)

Others Present:

Steve Abbott  
Nick Bahr  
Robert Cheng  
Dennis Davis  
JR Echard  
Chris Harris  
Ned Hyduke  
Laura Lamdin  
Tom Levy  
Aaron Mead  
Jessica Neuwerth  
G. Patrick O'Dowd

Shana Rapoport  
David Rheinheimer  
Kelly Rodgers  
Shanti Rosset  
Tom Ryan  
Alexi Schnell  
Tina Shields  
Gary Tavetian  
Petya Vasileva  
Margaret Vick  
Meena Westford  
Jerry Zimmerman

## **CALL TO ORDER**

Chairman Nelson announced the presence of a quorum and called the meeting to order at 10:03 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 May 11, 2022, and June 15, 2022, Board meeting minutes. Mr. Fisher moved that the minutes be approved, seconded by Mr. Madaffer. By roll-call vote, the minutes were unanimously approved.

### **Application for Water Subcontract from the Lower Colorado Water Supply Project**

Mr. Harris presented information on a proposed new subcontract for future water use of Colorado River water under the Lower Colorado River Water Supply Project. Board member Madaffer asked what the proposed project was for. Mr. Harris responded that it was for domestic use. Board member Peterson asked if there were other potential applications with an existing well like the proposed application. Mr. Harris responded that there probably was not a lot of other existing wells that are not already covered by the project because the Board reached out to uncontracted domestic users back in the early 2000s. Chairman Nelson asked how far from the Colorado River can a property be located and still require a contract. Mr. Harris responded that the requirement depends on if the property is located within the United States Geological Survey's water accounting surface for the River. Chairman Nelson asked how unauthorized use is determined. Mr. Harris responded that the Board works with Reclamation to determine which users are not covered by an existing Section 5 contract.

Chairman Nelson asked for a motion to approve Resolution 2022-3 on the application for the Lower Colorado River Water Supply Project in San Bernardino County. Mr. Madaffer moved that the resolution be approved, seconded by Mr. Hamby. By roll-call vote, the resolution was unanimously approved.

## **COLORADO RIVER BASIN WATER REPORTS**

### **Colorado River Basin Report**

Mr. Juricich reported that as of August 8<sup>th</sup>, the water level at Lake Powell was 3,5335.24 feet with 6.15 million-acre feet (MAF) of storage, or 26% of capacity. The water level at Lake Mead was 1,041.46 feet with 7.08 MAF of storage, or 27% of capacity. The total system storage was 20.07 MAF, or 34% of capacity, which is 3.89 MAF less than system storage at this time last year.

Mr. Juricich reported that as of August 2<sup>nd</sup>, for Water Year-2022 (WY-2022), the observed July inflow to Lake Powell was 0.49 MAF, or 51% of normal. The August inflow forecast to Lake Powell is 0.25 MAF, or 66% of normal. The forecasted unregulated inflow into Lake Powell for WY-2022 is 5.96 MAF, or 62% of normal and the preliminary observed WY-2022 April to July inflow to Lake Powell is 3.75 MAF, or 59% of normal. Mr. Juricich reported that overall precipitation conditions in the Upper Colorado River Basin were 99% of normal.

Mr. Juricich reported on the current and 2020 southwestern monsoon seasons. He stated that the 2022 monsoon season has been strong, adding that in 2020, the monsoon season was very dry. He noted that there have been some slight increases in side inflows to Lake Mead. He also displayed maps from the Climate Prediction center showing the forecasted precipitation and temperature outlook for August, noting that more precipitation is forecasted for the southwest, which matches the monsoonal pattern.

Mr. Juricich reported that through the end of July, the Brock and Senator Wash regulating reservoirs captured 64,644 AF and 48,916 AF, respectively. He also reported that the excess deliveries to Mexico were 1,887 AF, compared to 17,854 AF this time last year. Finally, the total amount of saline drainage water bypassed to the Cienega de Santa Clara in Mexico was 88,615 AF, through August 2<sup>nd</sup>. He noted that bypass flow to the La Cienega is higher than normal. Mr. Peterson inquired about whether the recent monsoonal activity contributed to the increase in saline drainage. Mr. Harris stated that it may be a result of Reclamation managing the saline drainage in the Yuma Valley. He stated that normally saline drainage is 125,000 AF per year but is on track to increase to 150,000 AF this year. He stated that it may be related to Welton-Mohawk Irrigation and Drainage District operations in the Gila Project and/or it may be directly related to Yuma Valley pumping of the Drain Pump Outlet Channel (DPOC) wells and managing the Yuma area saline drainage and for some reason Reclamation is putting more into the bypass drain and sending it down to the Cienega.

## *2023 Colorado Annual Operating Plan, Second Consultation*

Mr. Juricich reported that the second consultation for the 2023 AOP was held on August 2<sup>nd</sup>, via webinar. He stated that the draft AOP is based on information from the July 24-Month Study Report. He stated that the August 24-Month Study projections will be released in mid-August. He stated that based on the July 24-Month Study Report, the Lower Elevation Balancing Tier is the projected operational tier for Lake Powell with a most probable release of 7.0 MAF. Lake Mead will be operated in a shortage condition with Drought Contingency Plan contributions and reduced deliveries to Mexico. Mr. Juricich also confirmed that Reclamation will schedule an additional fourth AOP consultation on October 12<sup>th</sup>. He explained that Reclamation is hosting another consultation to address the additional comments and concerns expressed by the Upper Basin.

Mr. Juricich described the assumptions that used in the July 24-Month Study. He stated that the assumptions included the 480,000 AF reduction in Glen Canyon Dam release to Lake Mead to 7.0 MAF for WY-2022, noting that the system will be operated as if the volume of water had been delivered to Lake Mead. In addition, the assumptions also included the Upper Basin DROA release of 500,000 AF to Lake Powell from May 2022 to April 2023.

Mr. Juricich reported that the July 24-Month study most probable scenario projects physical elevation of Lake Powell and Lake Mead to be 3,502.25 feet and 1,039.54 feet, respectively, on December 31, 2022. He reiterated that for the purpose of operational tiers, it is assumed that 480,000 AF was delivered to Lake Mead. Mr. Juricich stated a 7.0 MAF release from Glen Canyon Dam is projected for 2023.

Board member Fisher inquired whether, with back-to-back 7.0 MAF releases from Glen Canyon Dam in 2022 and 2023, the Upper Basin would fall in arrears with delivering the required Compact apportionment. Mr. Harris stated that if there is a 7.0 MAF release from Glen Canyon Dam for the remainder of the interim period, the Upper Basin will not meet its compact delivery obligation. He stated that the Lower Basin should consider when it should ask to return the 480,000 AF that is sitting in Lake Powell, and it would benefit the Basin to end the use of operationally neutral operations.

Mr. Harris stated that during the Annual Operating Plan (AOP) consultations, the Lower Basin should begin to engage with Reclamation and the Upper Basin States about returning the 480,000 AF in Water Year 2023. He explained that the Lower Basin needs to review modeling from Reclamation about how to firmly protect elevation 3,525 feet in Lake Powell with the return

of the Lower Basin's water. Mr. Harris also noted that the Lower Basin may need to begin expressing concern about the Upper Basin's Article 3D and 3C obligations.

Mr. Fisher asked about whether the work on Glen Canyon Dam's infrastructure will be completed by the end of 2024. Mr. Harris reported that Reclamation believes that the upgrades to the river outlet works will be complete by the end of 2024. Mr. Fisher asked whether the Lower Basin should insist on normal operations of the system at this time. Mr. Harris stated that the Lower Basin would like to work proactively with Reclamation to protect Lake Powell's 3,525 feet elevation until the upgrades to Glen Canyon Dam are complete. He stated that Lake Mead's condition will continue to need close monitoring and adaptive management.

Mr. Madaffer requested the Board consider holding an executive session during the September 14<sup>th</sup> Colorado River Board meeting to have a strategic discussion about these issues.

### **State and Local Report**

Board member Jones, representing the California Department of Water Resources (DWR), reported that a small portion of the State is benefiting from the southwest monsoon season, while most of the state is experiencing dry precipitation conditions. She reported that Shasta and Oroville reservoirs remain lower than the statewide average due to this season's storms heading further south, noting that Folsom reservoir benefited from the storm activity.

Ms. Jones reported that DWR will be contracting with Open ET. Open ET is a project that began as a research project for NASA. It is a modeling tool for the western U.S. that allows you to estimate at a real scale, evapotranspiration (ET) for water management purposes. She added that DWR has spent millions of dollars on behalf of the Sustainable Groundwater Management Act (SGMA) program to support ground water sustainability agencies. She added that this tool will be complimented with software to support local groundwater trading. She stated that the ET data will be available statewide, regardless of whether it is a SGMA basin. She stated that the contract for Open ET is expected to be executed within three months. Chairman Nelson asked whether this contract is replacing the DWR's contract with Land IQ. Ms. Jones explained that the Land IQ contract also maps land use, and it is an ongoing contract that supports the State's water plan. Mr. Juricich added that the Land IQ data was used in the salinity program to estimate the economic benefits of the program.

Mr. Peterson, representing The Metropolitan Water District of Southern California (MWD) reported that as of August 1<sup>st</sup>, MWD's combined reservoir storage is 67% of capacity, noting that Diamond Valley Lake stores State Water Project water and that is being drawn down.

Mr. Peterson stated that the Colorado River aqueduct is on an 8-pump flow through August. He added that MWD's emergency water conservation measures have brought down MWD's water deliveries and some agencies have been required to reduce demand by 72 percent. He reported that MWD is continuing discussion on additional conservation measures with its agencies for next year.

## **STATUS OF COLORADO RIVER BASIN PROGRAMS**

### **Colorado River Basin States Activities**

Mr. Harris reported that the Colorado River Basin States have been meeting regularly over the past several months to discuss operations for 2023. Mr. Harris reported that these discussions were initiated by Reclamation Commissioner Touton's comments before the Senate's Energy & Natural Resources Committee on June 14<sup>th</sup>, indicating that between 2-4 MAF of water use reductions would be needed to protect critical elevations in Lakes Powell and Mead. The Commissioner reported that if a consensus agreement wasn't in place in a timely fashion, Interior would take necessary steps to protect the reservoir system.

Mr. Harris reported that, concurrent with the Basin States meetings, a series of meetings between the State of California, California's Colorado River water users, and the federal government had taken place regarding Salton Sea management and impacts from proposed water use reductions. Mr. Harris noted that these discussions have been productive and that the federal team has been very committed to working with California on reaching agreement on a Salton Sea package.

Mr. Harris reported that the Basin States have also begun direct outreach and engagement with the Basin's Native American tribes regarding development of the post-2026 guidelines. He noted that the group has discussed shared goals and objectives, mitigation activities associated with the current drought and climate change, the proposed interim period protection volumes effort, and how best to engage with tribes in the development of the post-2026 guidelines. Mr. Harris stated that these meetings have been helpful in building relationships and a shared understanding of issues and perspectives.

Mr. Harris also noted that outreach is underway with Mexico on how they can contribute to the protection volumes effort.

Mr. Harris reported that a Lower Basin deal on protection volumes was not yet complete, but that the expectation was that these agreements can be developed and put together before the end of the year, with conservation beginning in 2023.

In response to a question from Mr. Peterson, Mr. Harris noted that there is no estimate for how much water the Upper Basin's system conservation might yield, which is a cause for concern.

Chairman Nelson reported that negotiations have been challenging, with many water users unwilling to commit until seeing what others have offered. He emphasized the need to focus on what is possible to achieve in 2023. Chairman Nelson noted that the engagement of federal partners on the Salton Sea has been very encouraging, and the process seems headed in the right direction. He also stated that the recent \$4 billion Senate funding plan for Colorado River activities would be helpful moving forward.

Mr. Fisher noted that he had found the process to be frustrating, with inconsistent levels of buy-in across the Basin. He stated that the Upper Basin's plan does not demonstrably generate water for the system, leaving Arizona and California as the only states meaningfully contributing to the protection volumes effort. Within Arizona, areas such as Yuma have premised their participation on unreasonable water prices. In response to a comment from Mr. Fisher, Chairman Nelson noted that the Coachella Valley Water District agreed to contribute under the DCP and was discussing implementing additional activities in 2023.

Mr. Harris reported that stakeholders have been working very hard to reach a deal, especially stakeholders within California and Arizona. He stated that once a deal is secured between these states, it will provide leverage for negotiations with other stakeholders.

Mr. Fisher stated that the timeline and magnitude of the original federal goal made it almost impossible to develop a consensus-based plan and has instead caused stakeholders to retreat into their respective corners. Mr. Harris noted that the California stakeholders have been working together exceptionally well and he was impressed by the effort the agencies have brought to the effort.

Mr. Peterson stated that intentionally created surplus (ICS) stored in Lake Mead constitutes real water savings which has significantly benefited the system and should not be treated as paper water.

Mr. Harris noted that California has lived up to every agreement it has entered into, meeting its obligations and going above and beyond to store water in Lake Mead, delaying the onset of shortage to the benefit of Arizona, Nevada, and Mexico. He stated that California had met its previous obligations in implementing the 2003 Quantification Settlement Agreement, resulting in 800,000 AF of annual water use reductions. California stepped up again in the 2019 Drought Contingency Plan and is now planning to go further.

### Colorado River Basin Salinity Control Program Implementation

#### *Colorado River Basin Salinity Control Advisory Council Meeting*

Mr. Juricich provided a summary of the Colorado River Salinity Control Advisory Council's July 7, 2022, virtual meeting to discuss program implementation and approve cost-share dollars

for new studies, investigations, and research. The Advisory Council's role is to advise the federal agencies in program administration including the Secretary of the Department of the Interior, the Secretary of the Department of Agriculture, and the Administrator of the EPA. During the meeting, the Advisory Council approved to cost share a study by the U.S. Geological Survey to reassess hydrologic conditions and salinity loading associated with agricultural areas around Green River, Utah. The Advisory Council also approved a study by the U.S. Geological Survey to assess salinity loading to the Colorado River in Spanish Valley, Utah near Moab, Utah.

### *Paradox Valley Unit*

Mr. Juricich provided an update on the status of brine injection at the Paradox Valley Unit. As mentioned at the Board's June 15<sup>th</sup> meeting, on June 1st, Reclamation restarted injection of brine at the PVU as part of a six-month test injection plan. PVU has not operated since March 2019 in response to a significant seismic event. When fully operational, the PVU removed about 100,000 tons of salt per year that would have otherwise entered the Colorado River. Under the test injection plan, PVU is injecting brine at a rate of 115 gallons per minute, equivalent to approximately 5500 tons of salt control per month (about 66% of the most recent injection capacity). Two months into the test there have been no significant operational issues or seismic events. Information presented on the salt load and flow for the Dolores River during 2022 showed an evident downward trend in the observed salt load since the injection resumed in June.

## **GENERAL ANNOUNCEMENTS**

### *Reclamation initiates public input on the development of future Colorado River operations*

Mr. Harris presented information about Reclamation's June 24, 2022, federal register notice for a "Request for Input on Development of Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead Under Historically Low Reservoir Conditions". Board staff participated in public webinars on July 12 and July 14, where Reclamation provided additional clarification on the requested input. The Federal Register notice asks for specific suggestions on the process and the substance of how best to analyze future operations and what those operations should include. It also highlights the changing circumstances in the Colorado River Basin since 2007, including declining hydrology, drought and low-runoff conditions impacted by a warmer, changing climate, inclusivity in Colorado River decision-making and the need for continued operational alignment and partnership with the Republic of Mexico. Written comments on the proposed development of Post-2026 Colorado River Operational Strategies can be submitted by September 1, 2022.



### *Updated Lake Powell Bathymetry*

Board Water Resources Engineer David Rheinheimer described the recent work by Reclamation to update its CRMMS and CRSS computer models of the Colorado River system with updated bathymetric data for Lake Powell, which was released by the USGS last year. He noted that Lake Powell is becoming "skinnier", with Lake Powell now 1.833 million acre-feet smaller than in 1963, and that reservoir levels change faster for any given release than previously assumed. Mr. Harris further noted that the updated storage data, about 500,000 acre-feet, is about the same as the 480,000 acre-feet withheld in water year 2022. Chairman Nelson asked about plans to update bathymetry for Lake Mead and Mr. Harris responded that there were no plans to update Lake Mead. Mr. Juricich noted that Lake Mead was updated recently. Mr. Juricich, Mr. Harris, and Mr. Rheinheimer also briefly discussed the lifespans of Lakes Mead and Powell due to sedimentation.

### *Water Utility Climate Alliance Training*

Mr. Rheinheimer reported that in mid-July Board staff participated in a nine-hour training over three days by the Water Utility Climate Alliance (WUCA) about how to consider climate change in water resource planning. He stated that WUCA is a nationwide alliance of urban water utilities working to include climate change into water system planning. He stated that goals of the training were to teach participants about the signs of climate change and how to address it in water system planning.

### **Washington, DC Updates**

Mr. Harris reported that Senator Padilla is working on the Salton Sea Improvements Act, which would broaden federal authorities and authorize \$250 million to address the environmental impacts of decreased water availability to the Salton Sea. Congressman Ruiz is working on companion legislation in the House.

Mr. Harris provided a summary of several potential fiscal benefits to the Colorado River Basin. He stated that Reclamation has \$250 million for Colorado River Basin drought relief activities. In addition, there is the potential that the Basin will receive \$4 billion for drought relief from the Inflation Reduction Act (IRA) that just passed in the Senate and is now moving to the House. Mr. Harris added that the funding will go to parts of the Basin that experience significant drought conditions and provide compensation for water conservation and wastewater recycling and reuse efforts. Mr. Harris stated that House is working on a \$500 million wildfire and drought funding package, noting that some of the funding would go to upgrades for its facilities in the

Basin, including the Glen Canyon Dam. He stated that the package also has a path for the Colorado River Indian Tribes (CRIT) leasing program and addresses the Indian Nonintercourse Act and movement of conserved tribal water supplies off the reservation, which would be very beneficial to the Colorado River Basin. Lastly, Mr. Harris reported that Senator Padilla and Congressman Ruiz's companion legislation would provide funding to the Salton Sea for \$250 million over five years.

### **ADJOURNMENT**

With no further items to be brought before the Board, Chairman Nelson adjourned the meeting at 11:16 a.m.