

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, May 11, 2022

A meeting of the Colorado River Board of California (Board) was held on Wednesday, May 11, 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)

Board Members and Alternates Absent:

Castulo Estrada (CVWD Alternate)
Mark Watton (SDCWA Alternate)
James Hanks (IID Alternate)

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

Others Present:

Jessica Arm
Steve Abbott
Robert Cheng
Dennis Davis
Chris Harris
Bill Hasencamp
Larry Lai
Tom Levy
Dwight Lomayesva
Robert Page

Angela Rashid
David Rheinheimer
Kelly Rodgers
Shanti Rosset
Tom Ryan
Alexi Schnell
Tina Shields
Gary Tavetian
Petya Vasileva
Jerry Zimmerma

CALL TO ORDER

Chairman Nelson announced the presence of a quorum and called the meeting to order at 10:09 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

Executive Director Harris presented the draft Colorado River Board of California for Fiscal Year 2022-2023.

Mr. Harris presented the Fiscal Year 2021-2022 Accomplishment Report and the FY-2022-2023 Planned Activities Report.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Report

Mr. Harris reported that as of May 9th, the water level at Lake Powell was 3,523.06 feet with 5.81 million-acre feet (MAF) of storage, or 24% of capacity. The water level at Lake Mead was 1,052.94 feet with 7.90 MAF of storage, or 30% of capacity. The total system storage was 20.30 MAF, or 34% of capacity, which is 5.07 MAF less than system storage at this time last year.

Mr. Harris reported that as of May 4th, for Water Year-2022 (WY-2022), the observed April inflow to Lake Powell was 0.59 MAF, or 66% of normal. The May inflow forecast to Lake Powell is 1.45 MAF, or 70% of normal. The forecasted unregulated inflow into Lake Powell for WY-2022 is 5.98 MAF, or 66% of normal and the WY-2022 forecasted April to July inflow to Lake Powell is 3.8 MAF, or 64% of normal. Mr. Harris reported that overall precipitation conditions in the Upper Colorado River Basin were 94% of normal and the current Basin snowpack is 68% of normal. Mr. Harris noted that continued drought conditions in the Basin have made it difficult for percolation of the spring run-off into the soil column.

Mr. Harris reported on the Basin's monthly precipitation and snowpack. He stated that the Green River Basin, which provided a significant amount of the Upper Basin's precipitation during previous dry winters, has been experiencing dry conditions. He also noted that the San Juan River Basin has experienced incredibly dry conditions.

Mr. Harris reported that through the end of April, the Brock and Senator Wash regulating reservoirs captured 33,877 AF and 29,855 AF, respectively. He also reported that the excess deliveries to Mexico were 1,129 AF, compared to about 15,800 AF this time last year. Finally, the total amount of saline drainage water bypassed to the Cienega de Santa Clara in Mexico was 59,940 AF. He added that Bypass flows are on-track to be between 120,000 AF and 130,000 AF.

Mr. Harris remarked that the Lower Basin States plan to press the Bureau of Reclamation (Reclamation) to implement additional measures to reduce the amount of water bypassed to the Cienega, noting that the Lower Basin States developed a bypass flows replacement report several years ago. He stated that it is time for Reclamation to review these options which include pumping the 242 Well Field more and more blending of the saline drainage in the Yuma area, as well as reoperating the Yuma Desalting Plant (YDP) at some level. He stated that there needs to be a discussion between Mexico and NGOs about identifying how much water the Cienega needs, noting that 120,000 to 130,000 AF of the water bypassed is coming out of Lake Mead every year and the Lower Basin States need to aggressively push this issue with Reclamation.

Mr. Harris presented figures showing the dramatic decline of Lakes Powell and Mead from December 1999, when the reservoirs were 88% and 96% of capacity respectively, to April 25, 2022, with a capacity of 24% and 31%, respectively. He noted that the figures were shared with the Mexican delegation in Mexico City at a recent binational meeting discussing additional conservation measures that could be done in Mexico. Mr. Harris stated that the figures illustrate how far we have come in twenty-three years and the gravity of the current situation.

Mr. Harris provided an update on the ongoing Water-Year 2022 reservoir operations. He stated that the first prong of the operations plan is the final approved Upper Basin Drought Operation Plan (DROA) for 2022, which is drought operations plan for the period of May 2022 to April 2023. He stated that the plan was approved by Assistant Secretary Trujillo, and it will shift 500,000 AF of water from Flaming Gorge reservoir, with the potential for more from either the Aspinall Unit or Navajo Reservoir, to Lake Powell.

Board member Madaffer inquired whether the development of DROA plan was collaborative or an action made by Reclamation. Mr. Harris reported that the development of DROA was a collaborative effort pursuant to the 2019 Upper Basin Drought Contingency Plan (DCP), between the Upper Division States and Reclamation. He added that the determination of the DROA volume was a collective effort between the four Upper Division States and was approved by the Upper Colorado River Commission (UCRC). He noted that Reclamation would probably have had to make this decision anyway if the Upper Division States had not helped to

develop a plan. Mr. Harris reported that originally, they contemplated shifting 650,000 AF but dialed it down to 500,000 AF once there was more clarity associated with the impact of reducing releases out of Glen Canyon Dam.

Mr. Harris explained that three letters detailing these actions have been released. The first letter from the Secretary of the Interior was sent out to the Seven States requesting input regarding the downward adjustment to the releases out of Glen Canyon Dam for the remainder of Water Year-2022 from 7.48 MAF, as called for in the Annual Operation Plan (AOP), down to 7 MAF. He added that it has now been finalized and is being built into Glen Canyon Dam's monthly operations going forward. Between May of 2022 and the end of September they will have reduced the release out of Glen Canyon Dam thus retaining 480,000 acre-feet in Lake Powell. He added that the combined effect of these two activities in Water Year-2022 results in 980,000 acre-feet remaining in Powell, noting that there is the potential that the 480,000 will ultimately be returned to Lake Mead. Mr. Harris reported that Lake Mead will be credited as though the water was delivered. Mr. Harris stated that for the upcoming 2023 AOP, the tier determination and operating conditions based on August 24-Month Study for Lake Powell and Lake Mead will be blind to the water staying in Lake Powell and Lake Mead will act as though the water was released to it.

Mr. Harris explained that there will be very close coordination and consultation between the seven states and Reclamation with respect to the condition of the two reservoirs. He added that there have not been any tier determinations set for Lake Powell for CY-2023 and there will be an informed discussion based upon conditions at the time. Board member Madaffer inquired whether there is a statistical analysis of the impact of the reduced runoff from the snowpack. He added that there is a possibility that the water left in Lake Powell will not return to Lake Mead if Lake Powell elevation continues to decline. Mr. Harris stated the 24-Month Study reports will provide more information about runoff conditions to the reservoirs, but this concern is shared by Reclamation and the other states. He stated that NOAA researchers are projecting a third La Nina year for this coming winter. He reported that they all have to collectively agree how to approach the 2023 AOP and what the implications will be for both reservoirs. He added that if Lake Powell's elevation falls below 3,490 feet, the implications for Lake Mead will be profound. Board member Jones added that the probability of the third year of La Nina is just over 50%, so it is not a strong probability yet, but we will have a better idea in the summer.

STATUS OF COLORADO RIVER BASIN PROGRAMS

State and Local Report

Ms. Jones, representing the California Department of Water Resources (DWR), reported that the statewide precipitation was 74% of average and varies throughout the State. The hydrologic region doing the best is the northeastern corner of the state, which is almost normal. The Colorado River Hydrologic Region is currently 44% percent of average for the water year-to-date, adding that the State's precipitation season has ended.

Ms. Jones compared the conditions of the Shasta Lake and Lake Folsom reservoirs. She stated that Lake Folsom has a capacity of 1 MAF, and currently storage is more than 100% of the historical average. Shasta Lake is the largest reservoir in the state and, unfortunately, the current storage is just 48% of historical average, which has impacted the Central Valley Project (CVP) allocation, including the first-ever health and safety only allocation for the CVP Municipal and Industrial (M&I) users. She reported that there have also been large cuts to the Sacramento Water Rights settlement contractors, with transfers down to 100,000 AF from 400,000 AF.

Ms. Jones reported on the runoff forecasts based on the statewide snow survey as of May 1st. The runoff forecasts for most of the watersheds were less than 50% of average, noting that Yuba watershed's runoff forecasts fared slightly better. She reported that in the Colorado River Basin watershed there is a significant difference between the average precipitation and how it translates to runoff, noting that it is a result of long-term warming in the climate system.

Board member Peterson, representing The Metropolitan Water District of Southern California (MWD), reported that as of May 1st, MWD's system storage is 70% of capacity and the Colorado River aqueduct is on an 8-pump flow through September. He added that as of May 6th the diversion target is 1.117 MAF, and MWD has currently diverted 303,000 AF. He stated that water use has increased a bit due to dry conditions over the past few months. He stated that the storage target for the Desert Water Agency is 15,000 AF, which is lower than it has been in the past.

Mr. Peterson reported that MWD declared a water shortage emergency for the State Water Project (SWP) dependent areas, which included the Las Virgenes and Calleguas water district. He stated that the eastern side of these water districts have been developing some fixes that have allowed them to use Colorado River water, but the western side of the water district has limited access to Colorado River Water. He added that the Greg Avenue pumping plant is the source of water, which is in the City of Los Angeles. Mr. Peterson reported that MWD's Emergency Water Conservation Plan for State Water Project (SWP) dependent areas have

created two options for compliance. He stated that first option is one day a week of outdoor water irrigation beginning on June 1st, with expectations to hand water trees, and affirmed local decisions for watering sports fields and public parks. He added that several of public parks in the area irrigate with reclaimed water, but with less water use there will also be less sewer water available for the reclaimed water system. Mr. Peterson stated that the second option for compliance with the Emergency Water Conservation Plan is to adopt ordinances that mandate specific volumetric limits for each agency with fines of \$2000 per acre-foot on monthly volume above supply limit of the SWP.

Vice Chairman Pettijohn, representing LADWP, reported that current precipitation conditions are tracking closely with conditions from 2020-2021. He stated that the additional snowpack that was deposited from storms in December and January did not translate into additional run-off, which is not good news for the Los Angeles Aqueduct. He stated that the Los Angeles Aqueduct will only produce close to 50,000 AF of flow to Los Angeles this year.

Vice Chairman Pettijohn stated that mayor of Los Angeles made a determination to go to volumetric allocations from MWD. That decision was made because it is believed that the LADWP can continue to meet its shortage allocation without MWD directing LADWP retail customers. He stated that LADWP is continuing to manage retail response and live within its allocation from MWD.

Minute No. 323

Mr. Harris reported that on April 27th, the Minute Oversight Group held a meeting in Mexico City. He stated that the meeting was attended by representatives from Arizona, California, Nevada, and the Upper Colorado River Commission (UCRC), Reclamation and the U.S International Boundary and Water Commission (IBWC) and Mexican counterparts.

Mr. Harris explained that the purpose of the meeting was to provide a thorough update on the water supply conditions in the Basin, hydrology runoff forecasts and a discussion of the impact of the two proposed drought operational efforts, which include the downward adjustment in the release from Glen Canyon Dam and Upper Basin Drought Operations.

Mr. Harris reported that Mexico and the United States have been working very closely over the past few months on the development of the "Proactive Measures Ad hoc Group." He explained that the U.S. is working with Mexico to see if they are willing to stand up additional water conservation in the Mexicali Valley that can be stored in Lake Mead to bolster the 500-plus plan. He stated it is an additive measure, to which Mexico has been receptive. He added that

Mexico fully understands the short and long-term implications of the on-going drought and is willing to conserve additional water supplies, noting that Mexico is even considering developing system conservation. He stated that Mexico has a toolbox of options they are considering including fallowing, system efficiency improvements, wastewater reclamation and reuse in the Mexicali Valley. Mexico is also open to the option of forbearing Colorado River Water and leaving it in their reserve.

Mr. Harris stated that he will be able to quantify the expected volumes of water conservation for 2022 and 2023 at an upcoming meeting. He stated that Reclamation will incorporate these figures into subsequent 24-Month Study projections.

Mr. Harris added that the Director General of Conagua and the Deputy Director, who was the CILA Commissioner, attended the meeting. He added the Mexican delegation will be touring the Lake Mead and Lake Powell and may meet with water users sometime in the summer. Mr. Harris stated that he will work with Bill Hasencamp at MWD and Tina Shields at IID to coordinate a visit with the delegation.

Mr. Harris reported that the Minute Oversight Group also received updates on the various work groups, adding that the work groups have been ramping back up post-COVID. He added that Projects work group is behind the curve with regular water conservation activities associated with Minute 323, but the expectation is that the influx of federal funds will help accelerate the projects. Mr. Harris reported that the Environmental work group has made significant progress. There are new conservation areas in the Limitrophe Division and further down the Delta to develop additional habitat restoration areas.

Colorado River Basin Salinity Control Program

Colorado River Basin Salinity Control Program Implementation

Mr. Harris provided an update on the Colorado River Basin Salinity Control Program. The Salinity Control Forum Work Group held a scheduled hybrid in-person / virtual meeting on April 11-13, 2022, with in-person participation at the at the Washington County Water Conservancy District Offices in St. George, Utah. Key topics under discussion included updates from Reclamation, the U.S. Geological Survey, and Natural Resources Conservation Service on program funding, research, and implementation. The Work Group also discussed salinity control scenarios and data to be used to develop the 2023 Triennial Review of Water Quality Standards for Salinity in the Colorado River System. Section 303 of the Clean Water Act amendments to the Federal Water Pollution Control Act require that water quality standards are reviewed every three years

by the Forum.

Mr. Harris report that during the Work Group meeting, Reclamation indicated the Commissioner has approved the implementation of a Test Injection Plan at the Paradox Valley Unit (PVU) that will restart injection of brine at a rate of 115 gallons per minute, equivalent to approximately 5500 tons of salt control per month. It will take Reclamation up to 8 weeks to get the PVU facility up and running again after the extended closure because new contractors will need to be hired and trained. PVU operations will figure prominently at the May meeting of the Salinity Control Forum to be held May 11-12 in Moab, Utah. Forum members will tour the PVU facilities in Paradox Valley and tour the facilities of Intrepid Potash located in Moab. Intrepid Potash operates a salt evaporation pond facility which is supplied salt through underground solution mining of the Paradox Formation. Intrepid Potash has expressed some interest in the potential to participate in a long-term solution of brine disposal at PVU.

Board member Madaffer asked if the observed increases in salinity in the Dolores River was a result of natural conditions or the shutdown of operations at PVU. Mr. Harris responded that it was probably a combination of the two factors.

Board member Madaffer endorsed the concept of working with Intrepid Potash to take salt generated at PVU, and the ability to develop additional supplies of potash.

Mr. Cheng from CVWD asked if the benefits of restarting the PVU operations have been quantified with respect to improving salinity conditions in the river. Mr. Harris responded that Reclamation will be looking into this using the CRSS Salt Model.

Glen Canyon Dam Adaptive Management Program

Mr. Harris reported that as Lake Powell declines, there is an increased probability of smallmouth bass from Lake Powell passing through Glen Canyon Dam and into the Grand Canyon where there are humpback chub. Mr. Harris reported that several years ago, green sunfish established a population below Glen Canyon Dam after likely passing through the dam intakes, so there is precedent for nonnative species surviving travel through the dam to establish a downstream population. Mr. Harris reported that smallmouth bass are a voracious predator that could have a significant effect on native fish populations. Mr. Harris reported that the Glen Canyon Dam Adaptive Management Program is evaluating options to prevent the passage of smallmouth bass and limit any population success downstream.

Mr. Harris reported that bug flows are underway for summer 2022. Mr. Harris reported

that bug flows aim to provide low, steady weekend flows to increase egg survival for insects, which should provide additional food supplies for fish.

Lower Colorado River Multi-Species Conservation Program

Mr. Harris reported that Reclamation released a draft implementation report and proposed budget for FY 2023 for the Lower Colorado River Multi-Species Conservation Program (LCR MSCP). The annual budget for the LCR MSCP has decreased in recent years from approximately \$35 million to \$25 million as habitat restoration is completed and the program moves towards maintenance.

Mr. Harris reported that the LCR MSCP is seeking increased permit coverage for flow reductions. The LCR MSCP submitted a Biological Assessment to the U.S. Fish and Wildlife Service (USFWS). USFWS is working on a new Biological Opinion that is expected in August.

GENERAL ANNOUNCEMENTS

Chairman Nelson introduced representatives of the Colorado River Indian Tribes (CRIT) and the tribal vice chairperson, Mr. Dwight Lomayesva. Mr. Robert Page with CRIT stated that CRIT's first priority is the utilization of its water, noting that they have water in Arizona and California. He stated that the CRIT is actively working to get a piece of conservation legislation in front of Congress, which would allow the tribe to transfer conserved water off of its reservation. He also stated that the CRIT is amenable to working with agencies to help with conservation efforts and improving reservoir levels in Lake Mead and Lake Powell. Mr. Harris added that he met with the general manager of MWD, Adel Hagekhalil, at the Colorado River Water Users meeting in December and MWD plans to follow up with the CRIT over this coming year.

Washington DC Updates

Mr. Harris reported that the Water Resources Development Act (WRDA) is moving through the Senate and House of Representatives, noting that there are good infrastructure projects being proposed for Reclamation and the Corps of Engineers (Corps).

Mr. Harris reported that the House Energy and Water Appropriations held a hearing to review budget proposals for the Corps and Reclamation for Fiscal Year 2023. He stated that western lawmakers, including Representative Anne Kirkpatrick (D-AZ), are working closely with

the Assistant Secretary of Water and Science, Tanya Trujillo, and her staff on shortage condition issues in the Basin. He stated that Acting Commissioner David Palumbo also provided testimony about how to ensure sufficient water levels are kept in the reservoir.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Nelson adjourned the meeting at 11:10 a.m.