Minutes of Meeting COLORADO RIVER BOARD OF CALIFORNIA

Wednesday, May 12, 2021

A meeting of the Colorado River Board of California (Board) was held virtually on Wednesday, May 12, 2021, using the Zoom Webinar meeting platform.

Board Members and Alternates Present:

David DeJesus (MWD Alternate) Peter Nelson, Chairman (CVWD)

Dana B. Fisher, Jr. (PVID)

James Hanks (IID)

Jeanine Jones (DWR Designee)

Henry Kuiper (Public Member)

Glen D. Peterson (MWD)

David R. Pettijohn (LADWP)

David Vigil (DFW Alternate)

Mark Watton (SDCWA Alternate)

Board Members and Alternates Absent:

Norma Sierra Galindo (IID Alternate)

Jim Madaffer (SDCWA)

Christopher Hayes (DFW Designee)

John Powell, Jr. (CVWD Alternate)

Delon Kwan (LADWP Alternate)

Jack Seiler (PVID Alternate)

Others Present:

Steven Abbott Victor Lujan

Brian Alvarez Emmanuel Martinez

Jim Barrett Aaron Mead Bert Bell Cary Meister **Brian Melley** Robert Cheng JR Echard Dylan Mohamed Castulo Estrada Jessica Neuwerth Melissa Haley Jessica Rangel JB Hamby Shana Rapoport **Christopher Harris** Angela Rashid Bill Hasencamp Ivory Reyburn Joanna Hoff Kelly Rodgers Michael Hughes Shanti Rosset Ned Hyduke Tom Ryan

Lisa Johansen Roberta Saligumba

Lori Jones Tina Shields
Rich Juricich Andrew Slagan
Eric Katz Cherie Watte
Larry Lai Jay Weiner
Laura Lamdin Meena Westford
Tom Levy 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 March 10, 2021, meeting minutes. Mr. Peterson moved that the minutes be approved, seconded by Mr. Kuiper. By roll-call vote, the minutes were unanimously approved.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Report

Mr. Juricich reported that as of May 10^{th,} the water level at Lake Powell was 3,561.27 feet with 8.42 million-acre feet (MAF) of storage, or 35% of capacity. The water level at Lake Mead was 1,077.49 feet with 9.80 MAF of storage, or 38% of capacity. The total system storage was 25.35 MAF, or 43% of capacity, which is 5.38 MAF less than system storage at this time last year. Mr. Juricich added that the storage level for both Lake Powell and Lake Mead is in the 10th percentile relative to the average from 1981 and 2019.

Mr. Juricich reported that as of May 4th, the unregulated inflow into Lake Powell for Water Year-2021 (WY-2021) is 3.64 MAF, or 34% of normal and the WY-2021 forecasted April to July inflow to Lake Powell is 2.0 MAF, or 28% of normal. For WY-2021, the observed April inflow to Lake Powell was 0.30 MAF, or 27% of normal. The May inflow forecast to Lake Powell is 0.5 MAF, or 21% of normal. To date, the WY-2021 precipitation in the Upper Colorado River Basin is 73% of normal and the current Basin snowpack is 53%.

Mr. Juricich reported that overall precipitation conditions are slightly below normal but noted that the precipitation is not translating to runoff due to dry soil conditions and warmer than normal temperatures. Mr. Juricich reported that precipitation conditions in March were mixed,

with below average conditions in the Lower Basin and slightly below to above normal conditions in the Upper Basin. However, in April precipitation conditions were below average, ranging from 0% to 50%, throughout most of the Basin.

Mr. Juricich reported that through April 30th, the Brock and Senator Wash regulating reservoirs captured 39,746 AF and 27,582 AF, respectively. He also reported that the excess deliveries to Mexico were 16,046 AF, compared to 48,325 AF last year. Finally, the total amount of saline drainage water bypassed to the Cienega de Santa Clara in Mexico was 40,485 AF.

Mr. Juricich reported on a chart displaying the historical consumptive use of the Lower Division States and Mexico. He stated the chart includes data from the Bureau of Reclamation's (Reclamation) Lower Basin Accounting Report, along with projected water use from the April 24-Month Study report. He stated that the Lower Basin has been using less than its maximum apportionment, in part due to conservation activities.

Mr. Juricich reported on the results of the April 24-Month Study. He stated that the most probable operating tier for Lake Powell is the Mid-Elevation Release Tier for Calendar-Year 2021. The most probable release from Lake Powell for Water Year-2021 is 8.23 MAF and 7.48 MAF releases in WY-2023 and WY-2024. Mr. Juricich noted that conditions in Lake Powell are declining and its elevation is expected to drop to 3,555 feet, by October 2021 and then continue to decline. He added that Lake Mead's elevation is expected to drop below the threshold elevation of 1,075 feet, which will trigger a Tier 1 shortage conditions for Calendar Year 2022.

Board member Peterson, representing The Metropolitan Water District of Southern California (MWD), noted that monsoonal activity in Arizona was non-existent last year and inquired about whether the Basin has tracked the impact of this situation. Mr. Harris responded that the impacts of monsoonal activity can be tracked in the 24-Month Study report in the reach on the main stem between Glen Canyon and Lake Mead. He also added that it would be counted as intervening side inflows and the rolling average of the intervening side inflows would be impacted by one or two years of poor monsoonal activity.

Board member Watton, representing the San Diego County Water Authority inquired about whether the Las Vegas Water Authority's pumps can retrieve water at low elevations in Lake Mead. Mr. Harris stated that pumps were installed in the deepest portions of Lake Mead reservoir to pump water at low elevations in Lake Mead.

Chairman Nelson inquired about the Upper Basin's response to the ongoing drought and its plans to move forward with demand management programs. Mr. Harris stated that the Upper Basin continues to evaluate the feasibility of developing a larger demand management program, such as was identified in the 2019 Drought Contingency Plan (DCP). He noted that the Upper Basin will undergo shortages if dry conditions persist in the Upper Basin as many of the smaller

creeks and subbasins begin to dry up. He added that each state had its own water rights' administration scheme but if water is not available to be diverted from a streambed, many farmers and irrigators will not receive all the water that is entitled to them.

Mr. Harris reported that the Upper Basin DCP states that if the 24-Month Study report shows Lake Powell's elevation below 3,525 feet, it triggers a new set of consultations between the Reclamation's and the Upper Division States about how to monitor Lake Powell and implement the Upper Basin Drought Operations agreement, which calls for moving supplies from Flaming Gorge or Aspinall Unit down to Lake Powell to protect critical elevations. He added that Reclamation has a minimum probable projection that shows Lake Powell going below 3,525 feet which prompted Reclamation to invoke the consultation provision and reach out to all seven Basin States. Mr. Harris stated that CRB staff will continue to monitor this situation closely in coordination with the Upper Division States and the Upper Colorado River Commission.

Board member Fisher, representing the Palo Verde Irrigation District (PVID), noted that the 24-Month Study report also shows Lake Mead's projected elevation close to 1,050 feet in August 2022. Board member Watton remarked that the current and projected hydrology conditions will test the effectiveness the 2007 Guidelines and the DCP. Mr. Harris concurred and added that if Lake Mead's elevation declines to 1,025 feet, an immediate consultation will be convened with the Secretary of the Interior.

Mr. Juricich reported that on May 4th, the National Oceanic and Atmospheric Administration (NOAA) released new U.S. climate normals representing average climate conditions experienced during 1991 to 2020. Mr. Juricich explained that the climate normals are updated every ten years and represent 30-year averages of climate observations. He stated that updated climate normals are warmer and drier than the previous period of 1981 to 2010. Mr. Harris remarked that the warmer and drier climate normals support the notion from Brad Udall and Jonathan Overpeck about the existence of "hot droughts" and how they are different from droughts in the 1930s and 1950s that had cooler temperatures.

Mr. Juricich reported that on May 4th, Reclamation released updated 5-year projections of reservoir operation conditions for Lakes Powell and Mead. The results show a high probability that Lake Powell will remain in the Mid-Elevation Balancing tier (elevation between 3,575 feet and 3,525 feet) through 2023 with a greater probability of recovering to the Upper Elevation Balancing tier (elevation greater than 3,575 feet) in 2024 and 2025. For Lake Mead, there is a high probability that Lake Mead will remain in Tier 1 Shortage condition (elevation less than 1,075 feet) through 2025, with the possibly of falling to a Tier 2 Shortage Condition (elevation less than 1,050 feet) in 2024 and 2025.

State and Local Report

Ms. Jones, representing the California Department of Water Resources (DWR), reported that the State's precipitation is 50% of normal. She added that the North Coast is experiencing exceptional dry conditions due to a combination of current dry conditions and the dry conditions experienced last year. Ms. Jones reported that the State's reservoir storage is 50% of capacity for some of the key federal Central Valley Project and State Water Project reservoirs. She added that carryover storage will be low going into the next water year.

Ms. Jones reported that Governor Newsom expanded the drought emergency proclamation adding Klamath Basin and Central Valley counties. She noted that the basis of the proclamation was to respond to areas impacted by dry stream flows. Ms. Jones explained that runoff in the Northern California watersheds, where most of the water supply originates, has been tracking below the runoff averages in 2014, which experienced historically low runoff. She stated that the proclamation will give the State Water Resources Control Board the authority to take emergency action to request a temporary change petition for the state and federal water projects which would allow for more water to be held in upstream reservoirs and allow for the installation of a temporary salinity barrier in the Delta. She noted the salinity barrier will be installed in July. Ms. Jones stated when the first version of the emergency proclamation was written, water supply forecasts were more hopeful but took a turn for the worse over time, noting that 500,000 AF of inflow was expected in Sacramento Valley basin, but it did not materialize. She explained that the snowpack either sublimated or was soaked up by the very dry soils.

Ms. Jones reported that NOAA analyzed the ratio of average temperatures to precipitation in the Sacramento Valley and found that more than half of the years of the 21st century have either been a drought year or a very dry year, noting that this phenomenon was not experienced in the prior century. She noted that a similar analysis was performed for Southern California and found that during the 21st century the region has been warming and impacting runoff. She added that it is anticipated that next year's runoff will also be dry because it will take a large amount of precipitation to overcome the deficit that the State is in. Ms. Jones explained that the analysis confirms a shift to warmer and drier conditions, and it is a reminder to improve runoff forecasting capabilities. She noted that DWR released the official Bulletin 120 runoff forecast on May 1st and DWR was shocked in the change in the forecast from April 1st to May 1st.

Mr. Peterson, representing The Metropolitan Water District of Southern California (MWD), reported that MWD's service area was excluded for the emergency drought proclamation. He stated that MWD's total system storage is 82% of capacity and the Colorado River Aqueduct is on an 8-pump flow, which is the greatest volume that can be put into the aqueduct without spilling. He noted that the aqueduct can be run at a 9-pump flow, but spilling will occur.

Mr. Peterson reported that MWD's diversion target for 2021 is 1,071,000 AF and as of May 10th, 301,526 AF has been diverted. He noted that the aqueduct was shut down in February 2021. He stated that deliveries during the first quarter of the year were 96% of average, noting that the delivery target for the Desert Water Agency is 50,000 AF.

Vice Chairman Pettijohn, representing the Los Angeles Department of Water and Power (LADWP), reported that the snowpack in the Eastern Sierra is gone and low flows are expected in the L.A. aqueduct. He noted that this may put areas that are exclusively receive State Water Project water in risk, such as western San Fernando Valley, Las Virgenes and Calleguas.

Mr. Pettijohn noted that LADWP is considering participating in MWD's program to move Colorado River water across LADWP's system to support the State Water Project exclusive areas. He noted that there are still questions whether MWD will be able to accomplish this economically.

STATUS OF COLORADO RIVER BASIN PROGRAMS

Status of the Salinity Control Program

Mr. Juricich provided an update on the Colorado River Salinity Control Program and reported on recent program meetings and preparations for upcoming meetings to further program objectives. It was reported that discussion topics will include preparation of the 2023 Triennial Review of Water Quality Standards for Salinity of the Colorado River System, status of the Paradox Valley salinity control project, and providing recommendations to Reclamation and U.S. Geological Survey on areas of future salinity control study and program funding. The Salinity Control Forum Work Group will meet on June 4th and 7th followed by Salinity Control Forum and Advisory Council Meetings on June 9th and 10th. Mr. Juricich also provided an update on the preparation of Congressional subcommittee appropriation testimony letters for FY 2022 budget authorizations for the Colorado River Salinity Control Program. Testimony letters are provided to both the House and Senate subcommittees to support program appropriations for Reclamation's Basinwide Program, the Bureau of Land Management's salinity control efforts under the Aquatic Habitat Management Program, and the Natural Resources Conservation Service's EQIP program.

Chairman Nelson asked if the United States was meeting its obligation to provide a certain quality of water to Mexico as required by treaty. Mr. Juricich reported that so far this year there has not been a repeat of the issue experienced last year. Reclamation is continuing to study the issue and working with the U.S. Geological Survey to install additional instrumentation in the lower river. The goal is to try to understand what led to the higher salinity conditions in the previous year. Chairman Nelson mentioned that he is interested in being kept informed of the salinity monitoring in the Lower River.

Glen Canyon Dam Adaptive Management Program

Board Staff Ms. Neuwerth reported that the Technical Work Group (TWG) of the Glen Canyon Dam Adaptive Management Program met via webinar on April 13-14. Ms. Neuwerth reported that the juvenile humpback chub population near the Little Colorado River confluence hit a trigger in the Long-Term Experimental and Management Plan (LTEMP) Biological Opinion and that the next steps involve coordination between Reclamation and the U.S. Fish and Wildlife Service. Ms. Neuwerth also reported on the incentivized harvest of brown trout, which has thus far seen limited participation by anglers. The National Park Service is trying different approaches to increase participation in the program including more outreach to anglers.

Ms. Neuwerth reported that a spring disturbance flow at Glen Canyon Dam was conducted from March 15-26. The experimental flow consisted of a low flow to facilitate repair of the dam apron followed by a high flow intended to mimic pre-dam flooding. Results of the sampling data from the experimental flow are forthcoming.

Ms. Neuwerth reported that, after evaluation by stakeholders, an experimental flow designed to benefit aquatic invertebrates would not be conducted this summer. An evaluation of the results of previous experiments is underway to determine if the flows are doing what was expected and if the expense is justified. Results of the evaluation will be utilized to determine if and how to conduct similar experimental flows in the future.

Finally, Ms. Neuwerth noted that the Adaptive Management Work Group for the GCDAMP would be meeting on May 19 followed by a TWG meeting in June, both via webinar.

Lower Colorado River Multi-Species Conservation Program

Ms. Neuwerth reported that the Steering Committee for the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) met via webinar on April 28 and is meeting May 12-13 to review annual reporting on program accomplishments in the previous fiscal year (FY 20), the status of efforts underway in the current fiscal year, and what is planned for the coming fiscal year.

Ms. Neuwerth reported that the U.S. Fish and Wildlife Service released critical habitat designations for two species that are listed as threatened under the Endangered Species Act: the yellow-billed cuckoo and the northern Mexican garter snake. Since the LCR MSCP includes conservation measures intended to help these species, the MSCP planning area was excluded from both of those habitat designations.

ANNOUNCEMENTS

Washington, D.C. Updates

Mr. Harris reported on various agency appointments and confirmations. Mr. Harris stated that Ms. Janet McCabe has been confirmed by the Senate as EPA Deputy Administrator; and Mr. Jason Miller as the Deputy Director for Management, Office of Management and Budget. Mr. Harris also noted that President Biden formally nominated Ms. Tanya Trujillo as the DOI Assistant Secretary for Water and Science.

Mr. Harris reported on water infrastructure legislation. Mr. Harris noted that the Drinking Water and Wastewater Infrastructure Act passed the Senate. Mr. Harris stated that this legislation will authorize funding for various water quality improvement efforts.

Mr. Harris stated that the U.S. Geological Survey found that salt levels in the Colorado River have declined in the last 90 years with large reductions occurring after implementation of salinity control projects in the 1980s. Mr. Harris noted that the study also found that salinity reductions have slowed or even reversed over the last two decades.

Mr. Harris noted that the Biden Administration announced the formation of an interagency Working Group to address worsening drought conditions in the West. Mr. Harris stated that the Working Group will support farmers, tribes, and communities impacted by on-going water shortages.

Mr. Harris reported on the Canal Conveyance Restoration Act. Mr. Harris noted that California congressmen, Costa and Harder, and California's Senator Feinstein, introduced bills that would fund the repair of canals in California that have been damaged by land surface subsidence due to groundwater pumping.

Next Scheduled Board Meeting

Finally, Mr. Harris noted that the next meeting of the Colorado River Board would be held on June 9, 2021 and would also be held virtually using the Zoom Webinar meeting platform.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Nelson adjourned the meeting at 11:25 a.m.