Minutes of Meeting COLORADO RIVER BOARD OF CALIFORNIA Wednesday, October 14, 2020

A meeting of the Colorado River Board of California (Board) was held virtually on Wednesday, October 14, 2020, using the Zoom Webinar meeting platform.

Board Members and Alternates Present:

David DeJesus (MWD Alternate) James Hanks (IID) Jeanine Jones (DWR Designee) Henry Kuiper (Public Member) Jim Madaffer (SDCWA) Peter Nelson, Chairman (CVWD)

Board Members and Alternates Absent:

Evelyn Cortez-Davis (LADWP Alternate) Dana B. Fisher, Jr. (PVID) Norma Sierra Galindo (IID Alternate)

Others Present:

Jim Abatti Steven Abbott Brian Alvarez Jim Barrett Bert Bell John Buttz Robert Cheng Dan Denham JR Echard Howard Elmore Melissa Baum-Haley Emily Halvorsen **Christopher Harris Bill Hasencamp** Michael Hughes Ned Hyduke Sarai Jimenez Lisa Johansen

Glen D. Peterson (MWD) David R. Pettijohn (LADWP) John Powell, Jr. (CVWD Alternate) David Vigil (DFW Alternate) Mark Watton (SDCWA Alternate)

Christopher Hayes (DFW Designee) Jack Seiler (PVID Alternate)

Lori Jones **Rich Juricich** Laura Lamdin Tom Levy Lindia Liu Kara Mathews Kate McCutcheon Aaron Mead Dylan Mohamed Sutton Morgan Jessica Neuwerth Jeff Plourd Kay Pricola Angela Rashid Ivory Reyburn Kelly Rodgers Shanti Rosset Roberta Saligumba Tina Shields Darren Simon Andrew Slagan Gary Tavetian Cherie Watte Jay Weiner Meena Westford Jerry Zimmerman

CALL TO ORDER

Chairman Nelson announced the presence of a quorum and called the meeting to order at 10:01 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 September 9, 2020, meeting minutes. Mr. Pettijohn moved that the minutes be approved, seconded by Mr. Kuiper. By roll-call vote, the minutes were unanimously approved.

Chairman Nelson asked for a motion to approve the adoption of Board Resolution Acknowledging Federal Service of Mr. Terrance J. Fulp, Ph.D., Regional Director, U.S. Bureau of Reclamation. Mr. Madaffer moved that the Board Resolution be approved, seconded by Mr. Peterson. By roll-call vote, the Board Resolution was unanimously approved.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Report

Mr. Juricich reported that October 1st marked the beginning of Water Year-2021. As of October 1st, the water level at Lake Powell was 3,595.43 feet with 11.32 million-acre feet (MAF) of storage, or 47% of capacity. The water level at Lake Mead was 1,083.22 with 10.28 MAF of storage, or 39% of capacity. The total system storage was 28.81 MAF, or 48% of capacity, which is 2.78 MAF less than system storage at this time last year.

Mr. Juricich reported that as of October 1st, the preliminary observed unregulated inflow into Lake Powell for Water Year 2020 was 5.85 MAF, or 54% of normal and the Water Year-2020 observed April to July inflow to Lake Powell was 3.76 MAF, or 52% of normal. For Water Year-2020, the observed September inflow to Lake Powell was 0.05 MAF, or 11% of normal. The October inflow forecast to Lake Powell is 0.25 MAF, or 49% of normal. At the end of WY-2020, the overall Upper Colorado River Basin precipitation was 76% of normal.

Mr. Juricich reported that precipitation conditions in August and September were very dry throughout the Basin. He noted that monsoonal activity, typical in the Lower Basin for this time of year, never really materialized.

Mr. Juricich reported that as of October 1st, the Brock and Senator Wash regulating reservoirs captured 108,762 AF and 61,218 AF, respectively. He also reported that the excess deliveries to Mexico through October 1st, were 51,322 AF. He noted that there have not been any major increases in excess flows over the last several months. Mr. Juricich reported that as of October 1st, the total amount of saline drainage water bypassed to the Cienega de Santa Clara in Mexico was 95,759 AF.

State and Local Report

Ms. Jones, representing the California Department of Water Resources (DWR), reported that WY-2020 precipitation in Northern California was below average, while precipitation conditions in Southern California fared much better. She noted that the statewide reservoir storage for WY-2020 is 95% of average, thanks to the above average storage conditions in the State's reservoirs for WY-2019.

Ms. Jones reported that the National Weather Service Climate Prediction Center's Three-Month Outlook Precipitation Probability maps produced in September 2020, project dry conditions across the southern tier of the United States. She added that this precipitation pattern is related to La Nina conditions. Ms. Jones reported that although the National Oceanic and Atmospheric Administration (NOAA) relies heavily on ENSO conditions, California ENSO conditions are not a relevant predictor of water conditions for the State, particularly Northern California. However, she noted scatter plots developed by the Western Regional Climate Center have shown that there is a small correlation between La Nina conditions and dry precipitation in the south coast and interior of Southern California. She added that, like Northern California, precipitation conditions in the Upper Colorado River Basin have no clear correlation to La Nina conditions.

Ms. Jones reported that CA DWR is very interested in developing experimental forecasting capability for sub-seasonal to seasonal (S2S) precipitation and has partnered with the University of California Los Angeles (UCLA) to develop statistical modeling products. She explained that due to budget cuts, NOAA has dropped its statistical modeling approach to produce long-range predictions and is relying on dynamical modeling, which has less forecasting skill. Ms. Jones stated that CA DWR is interested in working on projects that NOAA is no longer able to fund with the hopes of providing seed money and teeing-up projects that NOAA could develop in the future once Congress provides them additional funding. Ms. Jones explained that UCLA researchers use two different statistical models, a neural network model and a simple stepwise linear regression to analyze some climate data sets that showed drier than average conditions for the Basin for this winter. She added that results from a technique called canonical correlation analysis, a more

complex statistical model, will be available next month. Ms. Jones reported that the purpose of performing experimental forecasting is to improve forecasting overall. She added that state funding for this particular modeling process is ending this winter and, due to COVID-19, additional funding for this effort is not expected at this time.

Mr. Peterson, representing the Metropolitan Water District of Southern California (MWD), reported that Chairwoman Grey was reelected for the next two years during MWD's Board meeting. He reported that sales appear low but are higher than this time last year. He added that MWD only sold about 100,000 AF of storage water and it has 3.1 MAF of water in storage. He added that three out of five of MWD's treatment plants are running solely on Colorado River water.

SAN DIEGO COUNTY WATER AUTHORITY, REGIONAL CONVEYANCE SYSTEM STUDY

Mr. Dan Denham, the deputy general manager of the San Diego County Water Authority (SDCWA), provided an overview of the Regional Water Conveyance System Study under consideration by the SDCWA. Mr. Denham reported that the study was comprised of two phases, the first of which was technical in nature, the second of which focused on economics and partnership opportunities. The first phase, Phase A, of the study has been completed, and the SDCWA Board would consider moving forward with the second phase, Phase B, at its November meeting.

Mr. Denham reported that SDCWA receives as much as 280,000 AF of water a year through the Quantification Settlement Agreement (QSA), which is currently delivered through the Colorado River Aqueduct via an exchange agreement with the Metropolitan Water District (MWD). This exchange agreement expires in 2047. The initial term of the conserved water transfer with the Imperial Irrigation District (IID) under the QSA also expires in 2047, although it can be extended to 2077 by mutual consent of IID and SDCWA. The regional conveyance system under consideration would move these QSA supplies to the San Diego region through the Imperial Valley.

Mr. Denham reported that Phase A of the study evaluated three potential alignments for a new pipeline that would split from IID's All-American Canal or Westside Main Canal, then travel west to San Diego. Through Phase A, the southern-most alignment was screened out due to cost. The two remaining alignments would consist of an 80-mile, 102-inch diameter pipe or tunnel. Mr. Denham reported that either alignment would cost approximately \$5 billion with about \$150 million in operations and maintenance costs. Mr. Denham noted that under either of these alternatives, no major changes would be required of SDCWA's water distribution system.

Mr. Denham reported that the SDCWA Board would consider moving forward with Phase B at its November meeting. If approved, Phase B would focus on economic considerations and potential partnerships, and it would take approximately 18 months to complete. Mr. Denham noted a number of synergistic potential projects that could be undertaken in concert with the conveyance project, including a treatment facility at the southwest end of the Salton Sea that could be used to create habitat projects, the use of geothermal resources to mitigate pipeline pumping costs, and operational storage opportunities for the Imperial Valley.

In response to a question from Chairman Nelson, Mr. Denham noted that SDCWA would likely want to treat water delivered by the regional conveyance facility to a target of about 500-525 total dissolved solids (TDS). Mr. Denham noted that if this treatment is conducted in the Imperial Valley, the brine stream would be significantly less saline than the Salton Sea and could be utilized for habitat creation, playa dust mitigation, or other purposes.

STATUS OF COLORADO RIVER BASIN PROGRAMS

Minute No. 323 Implementation

Minute Oversight Group

Mr. Harris reported that the Minute Oversight Group met via webinar on October 7-8. Mr. Harris noted that approximately 95% of the water conservation projects under Minute No. 319 have been completed and the remaining project, a canal lining effort, should be completed by early 2021. A comprehensive report detailing these water conservation projects will be prepared by the end of 2021. Mr. Harris further reported that the first tier of water conservation projects under Minute No. 323 have been identified. These proposed projects will be evaluated by the Projects Work Group, which will assess their feasibility and potential water savings.

Mr. Harris reported that Mexico had released a preliminary draft document looking at potential water quality treatment improvement projects that could be done in the Mexicali Valley, including the New and Alamo Rivers. Mr. Harris also reported that Mexico has expressed some renewed interest in potential desalination opportunities along the Pacific Coast of Baja California.

Finally, Mr. Harris reported that Mexico planned to add approximately 100,000 AF of water to their "Water Reserve" in Lake Mead in 2020. This would bring Mexico's cumulative storage in Lake Mead to about 160,000 AF. Mr. Harris noted that Mexico's conservation plans in 2021 remain to be determined.

Environmental Work Group

Board Staff Ms. Neuwerth reported that the Minute No. 323 Environmental Work Group (EWG) met via webinar on October 1st. The group discussed the water delivery plan for Water Year 2021. Ms. Neuwerth noted that Minute 323 directs 210,000 AF of water to be supplied in equal parts by non-governmental organizations (NGOs), the Mexican federal government, and the U.S. federal government. The EWG has developed a proposed water delivery plan for 2021 that would make use of 35,000 AF of Mexican federal water, approximately half of Mexico's commitment under the Minute. Ms. Neuwerth noted that this would be about one-third of the size of the 2014 pulse flow. However, research has indicated that a significant portion of the water released during the 2014 pulse flow infiltrated into the groundwater table around the Southernly International Boundary, before reaching habitat sites downstream. Ms. Neuwerth reported that the EWG has discussed delivering the 2021 flows directly to habitat sites via regional canals to maximize the environmental benefits of the water. Ms. Neuwerth noted that this proposed water delivery will require additional technical analysis and a determination by CILA and CONAGUA.

Mr. Harris noted that there have been significant personnel changes in both CILA and CONAGUA as the new Mexican administration has settled in. Humberto Marengo, the new commissioner for CILA, the Mexican section of the International Boundary and Water Commission (IBWC), participated in the recent Minute Oversight Group meeting.

In response to a question from Mr. Peterson, Mr. Harris noted that the 160,000 AF Mexico intends to have stored in Lake Mead by the end of 2020 comes is the result of multiple different efforts. Mr. Harris reported that some of the water is deferred delivery under Minute 318, while some is the result of conservation activities or obligations under Minute 323.

Status of the Salinity Control Program

Mr. Juricich provided a highlight of the Work Group meeting held on September 28-30. He reported that the USGS expects to conduct a pump test at the Pah Tempe Springs area in early 2021 for a potential salinity control project. Mr. Juricich reported that when Reclamation and Natural Resource Conservation Service fund projects, there is a habitat replacement requirement as part of the mitigation effort for the projects. Reclamation is finding that once a project is in place, they are generally left with fragmented habitat projects local water users are required to maintain, resulting in different levels of success. Reclamation is exploring ways to improve the habitat mitigation requirement, such as pooling areas into larger tracks instead of on a project-by-project basis. Reclamation and USGS are partnering on a study of the salinity conditions in the Yuma area. For the 2019 Funding Opportunity Announcement, Reclamation awarded thirty-seven million dollars to eleven different salinity control projects in the states of Colorado and Wyoming.

Mr. Juricich provided an update on the status of the Paradox Valley Unit project. During the Work Group meeting, Reclamation gave a presentation on the seismic analysis that looks at scenarios of operations including the possibility of reducing the brine injection rate during late spring and summer while maintaining adequate salinity control. The current injection well is not operational but is expected to be restarted in November.

Mr. Juricich announced that the next Salinity Forum and Advisory Council meetings will be held in the week of October 26-29, including a couple of days of Work Group meetings. These meetings will be virtually held for the foreseeable future.

Lower Colorado River Multi-Species Conservation Program

Ms. Neuwerth noted that one of the activities covered by the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) is changes in flow, which can occur as the result of water transfers, shortage reductions, or other activities. Ms. Neuwerth reported that the LCR MSCP permittees submit an annual report to the U.S. Fish and Wildlife Service (USFWS) describing any changes in flow that occurred in the previous year. For 2019, the LCR MSCP permittees also provided a supplemental memo describing the 2019 reductions in flow in greater detail. The USFWS responded to this supplemental memo in September and concurred that the memo clarified changes in flow in 2019.

Effectiveness Review of the 2007 Colorado River Interim Operating Guidelines

Mr. Juricich provided an update to the Board on Reclamation's "effectiveness review" of the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations of Lake Powell and Lake Mead (2007 Interim Guidelines). The effectiveness review is required pursuant to Part G, Section 7, Subsection D of the 2007 Interim Guidelines.

The review is intended to evaluate the effectiveness of the guidelines with respect to the purposes and operational elements of the 2007 Interim Guidelines. For example, one of the stated purposes of the guidelines is to improve Reclamation's management of the Colorado River by considering trade-offs between the frequency and magnitude of reductions of water deliveries, and considering the effects on water storage in Lake Powell and Lake Mead, and on water supply, power production, recreation, and other environmental resources.

Mr. Juricich reported that some of the activities that Reclamation will show in the review include the incidence of Lower Basin shortages in terms of specific elevations of Lake Mead, and the overall coordinated operation between Lake Powell and Lake Mead. Reclamation has shared an outline of the Effectiveness Review report to stakeholders in virtual meetings where Board staff and other stakeholders have provided comments.

Mr. Juricich also reported that Reclamation will be releasing a draft of the Effectiveness Review report and will schedule follow-up meetings later in October. The final effectiveness review report is expected to be released in December 2020.

ANNOUNCEMENTS

Proposed Lake Powell Pipeline Project

Mr. Harris provided an update to the Board on the proposed Lake Powell Pipeline Project. The State of Utah is proposing to construct and operate a pipeline that would divert up to 86,000 acre-feet per year from Lake Powell and convey it to the extreme southwestern corner of Utah for use in the St. George metropolitan region. A draft environmental impact statement (DEIS) for the proposed project was released on June 8, 2020, and the DEIS comment deadline closed on September 8, 2020. Reclamation received over 14,000 comments on the DEIS, including a joint letter from the other six Colorado River Basin States to the Secretary of the Interior. The primary issues raised in the Basin States' letter included: (1) Law of the River issues; (2) reservoir system operational issues; and (3) water use and accounting, and water quality issues.

Mr. Harris reported that on September 24, 2020, the State of Utah and the Washington County Water Conservancy District formally requested that Reclamation extend the timeline for completion of the National Environmental Policy Act (NEPA) assessment process and not issue a Final EIS until the issues identified by the Basin States could be addressed and resolved. Toward this end, representatives in both basins are now working to develop lists of those specific issues that will then be consolidated into one list that can be provided to Utah and can serve as a framework for discussions among the Basin States. Currently, the Lower Basin States are working to develop a list of issues associated with the proposed project, and hope to share the draft list soon with representatives in Colorado, New Mexico, and Wyoming.

Washington, D.C. Updates

Mr. Harris reported that Congress is exploring COVID-19 relief. Mr. Harris also noted that on September 15th, the Army Corps of Engineers published a rulemaking notice titled, "Proposal to Reissue and Modify Nationwide Permits."

Mr. Harris reported that on September 18th, DOI finalized two projects title transfers to local water user organization in Utah: (1) Emery County Project to the Emery County Water Conservancy District; and, (2) Uintah Basin Replacement Project to the Moon Lake Water Users Association.

Next Scheduled Board Meeting

Finally, Mr. Harris noted that the next meeting of the Colorado River Board would be held on November 18th 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 11:15 a.m.