Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, November 13, 2019

A meeting of the Colorado River Board (Board) of California was held on Wednesday, November 13, 2019 at the Sheraton Ontario Airport Hotel, 429 North Vineyard Avenue, Ontario, California 91764.

Board Members and Alternates Present:

David DeJesus (MWD Alternate)
James Hanks (IID)
Jeanine Jones (DWR Designee)
Henry Kuiper (Public Member)
Peter Nelson, Chairman (CVWD)
Glen D. Peterson (MWD)
David Vigil (DFW Alternate)
Mark Watton (SDCWA Alternate)

Board Members and Alternates Absent:

Nicole Neeman-Brady (Public Member)
Evelyn Cortez-Davis (LADWP Alternate)
Dana B. Fisher, Jr. (PVID)
Norma Sierra Galindo (IID Alternate)
Christopher Hayes (DFW Designee)
Jim Madaffer (SDCWA)
David R. Pettijohn (LADWP)
John Powell, Jr. (CVWD Alternate)
Jack Seiler (PVID Alternate)

Others Present:

Steve Abbott
Melissa Baum Haley
Christopher Harris
Michael Hughes
Ned Hyduke
Rich Juricich
Laura Lamdin
Tom Levy
Kara Mathews
Aaron Mead
Dylan Mohamed
Jessica Neuwerth
Ivory Reyburn
Kelly Rodgers
Shanti Rosset
Gary Tavetian
Jerry Zimmerman

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

Chairman Nelson asked for a motion to approve the October 9, 2019, Board meeting minutes. Mr. Kuiper moved that the minutes be approved, seconded by Mr. Peterson. By roll-call vote, the minutes were unanimously approved.

COLORADO RIVER BASIN WATER REPORTS

Colorado River Basin Report

Mr. Harris reported that as of November 4th, the water level at Lake Powell was 3,612.85 feet with 13.02 million-acre feet (MAF) of storage, or 54% of capacity. The water level at Lake Mead was 1,082.74 feet with 10.23 MAF of storage, or 39% of capacity. Mr. Harris reported that the total system storage was 31.2 MAF, or 52% of capacity, which is about 3.5 MAF more than system storage at this same time last year.

Mr. Harris reported that the Observed Water Year-2019 Lake Powell inflow was 12.95 MAF, or 120% of normal. The Observed April to July 2019 Lake Powell inflow was 10.41 MAF, or 145% of normal. The October 2019 observed Lake Powell inflow was 0.27 MAF, or 52% of normal, and the November forecasted Lake Powell inflow is 0.35 MAF, or 74% of normal. To date, the Water Year-2020 precipitation is 66% of normal.

Mr. Harris reported that precipitation conditions in September throughout the Basin were very dry with exception to the Upper Green River Basin in Wyoming, and southern Arizona, due to good monsoonal activity. He noted that dry precipitation conditions persisted in October.

Mr. Harris reported that as of November 3rd, the Upper Basin reservoirs were close to capacity. He also reported on the regulatory storage conditions in the Lower Basin. In calendar year 2019, through October 31st, Brock and Senator Wash reservoirs captured 107,022 AF and

88,219 AF, respectively. Mr. Harris reported that as of October 2nd, excess flows to Mexico were 12,660 AF, and at this time last year the excess flows were about 6,500 AF.

As of October 2nd, the total bypassed to the Cienega de Santa Clara in Mexico was 70,984 AF, noting that Bypass flows have been discontinued for maintenance to the Main Outlet Drain Extension (MODE) canal. Mr. Harris reported that the MODE flows are being discharged into the Limitrophe division just below the Morelos Dam while Reclamation replaces concrete panels and perform other maintenance on the U.S. section of the MODE. He noted that Mexico is also performing maintenance activities on their section of the MODE down to the Cienega de Santa Clara. It is expected that most of the maintenance work should be completed by the first quarter of 2020. Mr. Harris explained that the Main Outlet Drain (MOD) and MODE canals are part of the Wellton-Mohawk Irrigation and Drainage District (WMIDD) saline drainage collection system and consist of a concrete canal that collects drainage in the WMIDD and conveys it along the river channel and then down past Morelos Dam on its way south to the Cienega de Santa Clara. The MODE also collects and conveys saline drainage from the Yuma County Water Users, Yuma Irrigation District, North Gila District, and Yuma Mesa Irrigation and Drainage District. Mr. Harris added that brine from the Yuma Desalting Plant is also discharged into the MODE, when the desalination is in operation.

State and Local Report

Mr. Harris noted that as of November 5th, the drought conditions continue to persist in Arizona and the Four Corners Region. Ms. Jones, representing the California Department of Water Resources (CA DWR), reported that on November 6-8, CA DWR and the Scripps Institution of Oceanography, held its annual winter outlook workshop to discuss continued funding for long-term precipitation forecasting. She stated that to date, they have been able to fund several projects but noted that it takes a long time to get them up and running. Ms. Jones explained that one current project is focusing on experimental forecasting of high-pressure ridging patterns, like the "Ridiculously Resilient Ridge" that blocked precipitation from reaching California a few years ago. She noted that the forecast can extend up to six weeks and the results show that southern California is likely to be dry. Ms. Jones reported that Water Year-2020 has started off dry, noting the existence of a new "Blob", which is characterized as a mass of unusually warm water in the Pacific Ocean off the coast of North America, that may impact weather patterns in the U.S.

STATUS OF COLORADO RIVER BASIN PROGRAMS

Minute No. 323 Implementation

Mr. Harris provided an overview of the Mexican organizations involved in the implementation of Minute No. 323 which includes involvement of Mexican governmental participants, NGOs and academic institutions. Mr. Harris stated that CONAGUA, which is

equivalent to the Bureau of Reclamation, is headquartered in Mexico City and has field offices in Mexicali, Tijuana and Hermosillo. CONAGUA holds and manages the water rights of District No. 14, an irrigation district in the Mexicali Valley. Mr. Harris explained that CONAGUA has the authority to enter into water conservation and environmental programs, as well as water transfers. Board member Watton noted that CONAGUA works closely with District No. 14 in water delivery and management decisions. Mr. Harris added that the District No. 14 maintains a water trust that agricultural producers can utilize for the purchase and selling of water, noting that the Mexican NGO, Restauremos el Colorado, can purchase water on behalf of the "Delta Trust" to be utilized for environmental purposes.

The Mexican Section of the International Boundary and Water Commission (IBWC), CILA, is headquartered in Ciudad Juarez and is responsible for implementation and management of the U.S./Mexico 1944 Water Treaty. SEMARNAT is headquartered in Mexico City and is equivalent to the U.S. Department of the Interior and serves as a policy-level advisor to the Mexican delegation during Minute No. 323 meetings, particularly the Oversight Group meetings.

Mr. Harris stated that CONANP is the Mexican National Commission for Protected Areas, which is generally equivalent to the U.S. National Park Service. He noted that CONANP participates when there are implementation issues associated with the Biosphere Reserve and other sensitive environmental aspects of Minute No. 323 implementation, noting that a CONANP representative periodically attends some of the various workgroup meetings. CFE is the Mexican Federal Electricity Commission. It operates some federal power generation facilities and markets federal power for retail, with a similar role as the U.S. federal power marketing administrations (e.g., Western, Bonneville, etc.). CEA Baja and CEA Sonora are the state water commissions for the Mexican states of Baja California and Sonora and are equivalent to the CA DWR or Arizona Department of Water Resources. Both agencies are typically involved in many of the Minute No. 323 Workgroups.

Mr. Harris reported that Pronatura Noroeste, Audubon, and the Sonoran Institute are among the most active environmental NGOs operating in Mexico, noting that the Sonoran Institute is also a bi-national organization with interests in the U.S. and Mexico. Restauremos el Colorado is charged with interacting with the water trust in District No. 14 and acquiring, and then conveying discrete blocks of water for various conservation areas in the Delta region. Mr. Harris stated that the University of Baja California and El Colegio de la Frontera Norte provide academic support and research for the Environmental Workgroup.

Mr. Harris provided an additional update on the repair of the MODE canal. He stated that drainage water is being delivered to the Colorado River mainstem and that the saline drainage flows had recently reached the bridge crossing over the Colorado River near San Luis Rio Colorado at Southerly Internationally Boundary (SIB).

STATUS OF COLORADO RIVER BASIN PROGRAMS

Status of the Salinity Control Forum

Mr. Harris reported that the current chairman of the Salinity Control Forum and the Work Group chairman are now both from the state of California with Mr. William Hasencamp from Metropolitan serving as Forum Chair and Board Staff Mr. Rich Juricich serving as Work Group Chair. California is in a good spot as the Program moves forward. Mr. Juricich reported on the October meetings in Phoenix, Arizona among the Work Group, Forum and the Advisory Council.

Mr. Juricich reported that one of the main topics at the October meetings was the 2020 Triennial Review, which sets the salinity standards on the Colorado River. The Forum is looking at four different scenarios, ranging from 1.3 million tons of salinity removal to 2.3 million tons. The low end represents no additional projects beyond 2020 and the high end represents the maximum potential salinity control through 2040 assuming no funding limitations. The Review is expected to be completed in November of next year.

Mr. Juricich reported on the status of the Paradox Valley Unit EIS. The alternatives are 1) a new deep injection well, 2) evaporation ponds, or 3) zero-liquid discharge technology, which is a thermal process that separates water from the salt. In September, the cooperating agencies provided comments on the Administrative Draft EIS. The Draft EIS for public review is expected early December. Mr. Juricich added that the Basin States will have discussions to come up with a consensus on the preferred alternative. A special Forum meeting is expected as part of the upcoming CRWUA conference in December and another meeting in January to discuss the alternatives. A final EIS is expected in May of next year and a Record of Decision in June.

Mr. Juricich reported that the Paradox Valley Unit injection well has been shut down since March due to an earthquake while Reclamation continues their analysis of the seismic risks of restarting the project. Reclamation may wait to see what happens with the EIS on the new alternative before making a decision on the operation of the current injection well.

The Advisory Council received the annual briefing on accomplishments and activities of the federal agencies. The Forum and the Advisory Council adopted funding recommendations for the next several fiscal years, with the Basinwide Program at $10.1 million per year, BLM's program at $2 million per year, and NRCS at $13 million per year.

Proposed Total Maximum Daily Load Listing for the Colorado River

Mr. Juricich provided an update on the proposed listing recommendations from the Colorado River Basin Regional Water Quality Control Board (Regional Board). On September 27th, Regional Board proposed new total maximum daily load (TMDL) listings for the California

section of the Colorado River including total dissolved solids (TDS), specific conductivity (EC), manganese, and sodium. Mr. Juricich reported that Board staff and member agencies provided information to the Regional Board about the Colorado River Salinity Control Forum standards for TDS and the programs in place to control salinity. Mr. Juricich worked with Reclamation to provide Regional Board staff with the data they need to feel comfortable that the standards are set for the Colorado River, resulting in the removal of TDS, EC, and sodium from their proposed listing. A concern for some of the member agencies is that manganese and turbidity are still being included in the listing. Mr. Juricich reported that the Regional Board feels the secondary Maximum Contaminant Levels are appropriate standards for these two contaminants, but Board staff will continue to monitor the listing proposal.

Status of the 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 October 21-22 in Phoenix, Arizona. Ms. Neuwerth noted that the National Park Service had recently completed its Expanded Non-Native Aquatic Species Management Plan, which includes tools such as incentivized angler harvest, to manage populations of nonnative species such as green sunfish and brown trout. Ms. Neuwerth also reported that detections of larval razorback sucker in the Grand Canyon have declined significantly since peaking in 2014. Researchers believe this may be the result of a waterfall at the inlet to Lake Mead, which may serve as a barrier to upstream movement of fish from Lake Mead. Ms. Neuwerth noted that modifications to the habitat or augmentation of the razorback sucker population have been preliminarily discussed.

Ms. Neuwerth also reported that the TWG discussed potential experimental management actions available at Glen Canyon Dam in 2020 under the Long-Term Experimental and Management Plan (LTEMP). Depending on resource conditions and stakeholder input, 2020 experiments could include a spring high flow experiment (HFE), fall HFE, trout management flows, and "bug flows" to help the aquatic food chain.

Finally, Ms. Neuwerth noted that the Glen Canyon Dam Program would hold its Annual Reporting meeting in conjunction with a TWG meeting on January 14-16 in Phoenix, Arizona, where researchers will provide updates on the past year's monitoring and research activities.

Lower Colorado River Multi-Species Conservation Program

Ms. Neuwerth reported that the Steering Committee of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) met via teleconference on October 23rd. The group discussed an upcoming tour to celebrate the 15-year anniversary of the program, which will be held March 24-26, 2020, starting in Yuma, Arizona. Ms. Neuwerth noted that LCR MSCP researchers reported that several successful nests of the endangered southwestern willow

flycatcher were detected at Topock Marsh, producing 12 fledglings, and that over 14 northern Mexican gartersnakes had been detected over the past year, most of them at one of the program's conservation areas. Finally, Ms. Neuwerth reported that the LCR MSCP would hold its annual research meetings in January in Laughlin, Nevada.

In response to a question from Chairman Nelson, Ms. Neuwerth reported that southwestern willow flycatchers have not been detected nesting at LCR MSCP conservation areas, but that the birds do successfully nest along the Lower Colorado River, often in tamarisk. Ms. Neuwerth noted that the Colorado River Authority is currently funding a study to assess the status of tamarisk and the tamarisk beetle along the Lower Colorado River. Ms. Neuwerth reported that the tamarisk beetle has recently expanded south along the river to Imperial National Wildlife Refuge and has been known to defoliate areas occupied by the southwestern willow flycatcher. Mr. Harris noted that the beetles take several years to cause mortality to tamarisk.

ANNOUNCEMENTS

Washington D.C. Updates

Mr. Harris reported on the Salton Sea Summit hosted by the Pacific Institute & UC Riverside on October 17-18 in Palm Desert. The Summit addressed several challenges facing the Salton Sea, including ecosystem, water quality, air quality issues, and also explored opportunities and partnerships.

Mr. Harris reported that the Coachella Valley Water District (CVWD) received the 2019 Platinum Award for Utility Excellence from the Association of Metropolitan Water Agencies (AMWA). Mr. Harris noted that CVWD ranks high on AMWA's Ten Attributes of Effective Utility Management.

Mr. Harris reported on the Appropriation bills and the Senate Energy and Natural Resources Subcommittee on Water and Power. Mr. Harris noted that the USACE and EPA finalized the repeal of the Obama Administration's Waters of the U.S. rule. Mr. Harris also reported on the USFWS & NMFS updated Biological Opinions for the operation of the Central Valley Project.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Nelson adjourned the meeting at 11:05 a.m.