

**EXECUTIVE DIRECTOR'S REPORT  
TO THE  
COLORADO RIVER BOARD OF CALIFORNIA**

March 11, 2020

Minutes of the February 12<sup>th</sup> Meeting of the Colorado River Board

A draft of the meeting minutes from the February 12<sup>th</sup> Board meeting held in Ontario, California, has been prepared and is included in the Board folder for review and proposed adoption during the March 11, 2020, Board meeting.

**COLORADO RIVER BASIN WATER REPORT**

As of March 2<sup>nd</sup>, the water level at Lake Powell was 3,602.69 feet with 12.0 million-acre feet (MAF) of storage, or 49% of capacity. The water level at Lake Mead was 1,096.38 feet with 11.41 MAF of storage, or 44% of capacity. As of March 1<sup>st</sup>, the total system storage was 31.0 MAF, or 52% of capacity, which is about 4.29 MAF more than system storage at this same time last year.

As of March 3<sup>rd</sup>, the Upper Colorado River basin reservoirs, excluding Lake Powell, ranged from 12% of capacity at Fontenelle Reservoir in Wyoming; 86% of capacity at Flaming Gorge Reservoir in Wyoming and Utah; 92% of capacity at Morrow Point and 65% of capacity at Blue Mesa Reservoir in Colorado; and 76% of capacity at Navajo Reservoir in New Mexico.

As of February 18<sup>th</sup>, the forecast for the unregulated inflow into Lake Powell for Water Year 2020 is 8.56 MAF (79% of normal). The forecasted April to July 2020 runoff into Lake Powell for Water Year-2020 is 5.7 MAF (80% of normal). For WY-2020, the January observed Lake Powell inflow was 0.28 MAF (77% of normal), and the February Lake Powell inflow forecast is 0.31 MAF (79% of normal). To date, the Water Year-2020 precipitation is 90% of normal and the current Basin snowpack is 106% of normal.

Colorado Basin River Forecast Center Water Supply Webinar

On March 6, 2020, the Colorado Basin River Forecast Center (CBRFC) held a webinar to review the water supply conditions and forecast for Water Year 2020. In early February, the Basin experienced significant storm activity which benefited the Upper Green, Upper Colorado River

and the Upper Gila River basins. However, below average precipitation conditions existed in the Dolores, San Juan and Virgin River basins.

Overall, Water Year 2020 precipitation conditions in the Upper Basin are near normal except for below average conditions in the Gunnison River and Dolores River basins. Conditions in the Lower Basin are near to below average. Current snowpack conditions are above average to near average in the Upper Basin, and near to below average in the Lower Basin.

Precipitation conditions during the first week of March were dry with warm temperatures. It is anticipated that within the next week or so, precipitation conditions will improve, especially in the southern part of the Basin. It is anticipated that precipitation conditions in March will be near normal.

The CBRFC Peak Flow Forecast is scheduled on Wednesday, March 18th at 10 am. The next webinar to discuss water supply conditions is scheduled on Tuesday, April 7th.

## COLORADO RIVER BASIN PROGRAM UPDATES

### Colorado River Basin Salinity Control Program

#### *Paradox Valley EIS*

The Paradox Valley salinity control unit (PVU) is one of the original salinity control projects authorized under Title II of the 1974 Colorado River Basin Salinity Control Act (P.L. 93-320, as amended). The PVU is comprised of a series of brine collection wells and a deep injection disposal well that has prevented approximately 100,000 tons of salt each year from entering the waters of the Colorado River until its closure in March 2019 due to seismic activity. Reclamation has identified four PVU replacement alternatives in the Draft EIS released on December 6, 2019, including: A) No Action, B) New Injection Well, C) Evaporation Ponds, and D) Zero Liquid Discharge at locations shown in Figure 1.

The public comment period for the Draft PVU EIS ended on February 19<sup>th</sup>, 2020. After a flurry of activity among the seven Colorado River Basin States during December, January, and February, the Salinity Control Forum submitted final

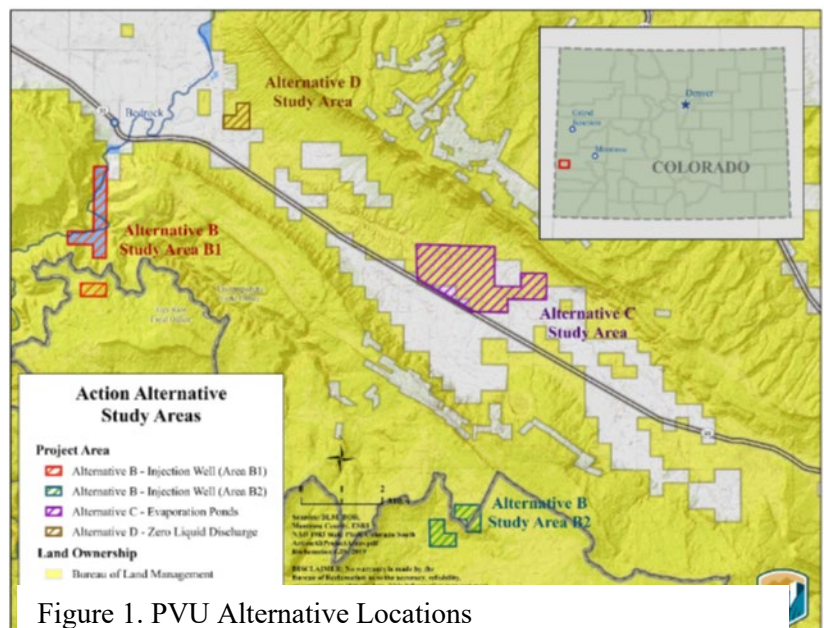


Figure 1. PVU Alternative Locations

consensus-based comments on the Draft EIS on February 19, 2020. The Forum's comments support selection of the evaporation pond alternative described in the Draft EIS as the preferred alternative due to its higher certainty of achieving the project goals and objectives described in the Draft EIS. Additionally, the Forum's comments expressed support for the continued operation of the existing PVU deep injection well and expressed the Forum's interest to continue its role to work collaboratively with Reclamation during the implementation of a long-term solution for salinity control at PVU. The Board and several Board member agencies also submitted comments by the February 19, 2020, comment deadline that support the Forum's positions. Copies of letters from the Forum, Board, and Advisory Council are included in the Board packet. The Final EIS is scheduled for release in July 2020, with a Record of Decision in August 2020.

#### *Basin States Letter*

One potential barrier in selecting a preferred alternative for PVU is the concern expressed by the Basin States regarding long-term funding for the Salinity Control Program as a whole, and if the Program can currently afford additional salinity control projects. The Basin States submitted a letter to Reclamation on February 25, 2020, highlighting the funding issue and expressing an interest to identify and implement a long-term funding solution. It is likely that all of the potential options will require federal legislation and others may require making administrative changes associated with implementation of the program. A copy of the Basin State's letter is included in the Board Packet

#### Weather Modification Program

On September 11, 2019, the Six Agency Committee approved California's share of expenses for the Weather Modification Program for WY-2020 in the amount of \$314,166.67. The funds are being utilized to extend operations and support programs for existing weather modification projects in Colorado, Utah, and Wyoming. In Wyoming, as of February 24, 2020, a total of 731 hours of operational cloud seeding have been performed. In Utah, as of February 29, 2020, a total of 4,133 hours of operational cloud seeding have been performed. A copy of a recent news article confirming the benefits of weather modification programs is included in the Board packet. As described in the article, in winter 2017, researchers with the National Center for Atmospheric Research (NCAR), University of Colorado Boulder, University of Wyoming, and University of Illinois at Urbana-Champaign, teamed up with the Idaho Power Company to conduct a field study called SNOWIE (Seeded and Natural Orographic Wintertime Clouds — the Idaho Experiment). The study provides the most comprehensive evidence to date that cloud seeding can generate rain or snow.

## Minute No. 323 Implementation

### *Environmental Work Group*

The Environmental Work Group (EWG) for Minute No. 323 met February 26<sup>th</sup> in Tijuana, Baja California, Mexico. The EWG is responsible for overseeing the use of \$18 million for research and restoration and 210,000 acre-feet (af) of water, to be supplied in equal parts by the United States, Mexico, and non-governmental organizations (NGOs). Through WY-2019, approximately 22,000 af of water has been delivered by NGOs to restoration sites in the Delta. An additional 8,700 af is scheduled for delivery in WY-2020. NGOs are also seeking approval to store approximately 600 af of water in Mexico's Intentionally Created Mexican Allotment (ICMA) account in Lake Mead in WY-2020.

Water deliveries from local irrigation districts to restoration sites in 2018 and 2019 have varied significantly from water orders, both in annual and monthly volumes. The mismatch is most pronounced during the summer months, when agricultural use peaks and the biological benefit of water delivery is greatest. The EWG discussed potential solutions, including improvements to infrastructure, better coordination with local water providers, and more immediate water measurement data at habitat sites.

No federal water has yet been delivered under Minute No. 323, and the EWG discussed the process and timeline for securing federal water deliveries. Due to institutional barriers to quick and flexible delivery of federal water, it is most likely that water provided by NGOs will continue to support restoration sites, while federal water will provide instream flows. Although it is unlikely that federal water will be delivered in 2020, it may be available by 2021.

The EWG received updates on the status of the Cienega de Santa Clara, a large wetland complex in the Delta formed by saline drainage delivered from the Yuma area by the Main Outlet Drain Extension (MODE). In early September, the Bureau of Reclamation began repairs to the MODE which required dewatering the canal and redirecting flow to the main river channel below Morelos Dam. The discharges in the Limitrophe reach of the lower Colorado River raised the local groundwater levels by several meters in some areas, and surface water extended from the Northerly International Boundary past the Southerly International Boundary. With no water entering the Cienega during the MODE canal repair work, some areas of the wetland were dewatered, and remaining areas saw a significant increase in salinity. The repairs to the MODE canal were completed on January 5<sup>th</sup>, and discharge to the MODE and Cienega were resumed. Water levels at the Cienega increased in late January and February, but researchers are watching to see when water flow out of the Cienega is reestablished, which will flush salinity from the wetland and reduce the likelihood of biological impacts. The EWG will receive future updates on the biological resources and water quality at the site.

Finally, the Minute No. 323 EWG will hold its next meeting May 6-7 in Imperial Beach, California.

## Glen Canyon Dam Adaptive Management Program

The Adaptive Management Work Group (AMWG) of the Glen Canyon Dam Adaptive Management Program (GCDAMP) met February 12-13 in Tempe, Arizona. The group received an update from the U.S. Fish and Wildlife Service (USFWS) on the proposed downlisting of the humpback chub from the current endangered status to threatened status. This endangered fish species has five relatively small populations in the Upper Basin and one large population of over 10,000 fish in the Grand Canyon area in the Lower Basin. The Upper Basin populations are believed to be relatively stable, while the Lower Basin population appears to be stable or even expanding. USFWS noted that it has determined that the species is not in immediate danger of extinction based upon current conditions.

USFWS coordinated with state fish and wildlife agencies in its creation of an Endangered Species Act Section 4(d) rule for the humpback chub, which identifies what protections the species would be afforded if recategorized as a threatened species. Incidental take of the species will generally still be prohibited, except in the context of certain management activities and programs. The USFWS noted that a sustained commitment to recovery will be needed to maintain and advance the progress made through management of the species. USFWS also reported that a similar proposal seeking to reclassify the razorback sucker from endangered to threatened was expected in the near future. The endangered razorback sucker is stocked and managed in the Upper and Lower Basins, although is still considered very rare in the Grand Canyon reach of the River.

The AMWG discussed potential experimental actions available in WY-2020 under the Long-Term Experimental and Management Plan (LTEMP). No high flow experiment (HFE) release from Glen Canyon Dam was conducted in fall 2019, due to inadequate tributary sediment input, and although spring HFEs are possible starting in 2020, sediment input is currently inadequate to trigger one. A technical team will meet in mid-March to review current conditions and reach a recommendation on a spring HFE. In summer 2018 and summer 2019, “bug flows” were conducted at Glen Canyon Dam. These low, steady weekend flows were hypothesized to increase aquatic insect production by reducing variability in water stage. While 2018 results seemed to indicate that the flows were effective in increasing insect availability and distribution, the results from the 2019 bug flows were less conclusive. Researchers recommend conducting the flows for a third year in summer 2020 to collect additional data.

Reclamation reported that replacement of the transformers associated with the dam’s eight turbines had recently begun, which may limit power generation and release volume during large dam releases such as HFEs. The transformer replacement is expected to be complete by October 2021. Repair work is also needed on a piece of broken tailrace slab at the foot of the dam. This is likely to result in low daytime flows of about 4,000 cfs over 4-5 days of repair work, currently schedule for March 2021.

Prior to FY-2019, the GCDAMP was funded through Colorado River Storage Project (CRSP) power revenues. In lieu of delivering money to the Treasury to repay the initial project

costs of the CRSP, the Western Area Power Administration (WAPA) instead provided funding to support the GCDAMP and the Upper Basin native fish recovery programs. However, in fall of 2018, the Office of Management and Budget (OMB) directed this funding to instead be returned directly to the Treasury. Last minute efforts to secure Congressional appropriations enabled the program to be fully funded in FY-2019 by the Bureau of Reclamation. In FY-2020, Congress directed WAPA to once again provide program funding from power revenues, but funding in FY-2021 and out is still uncertain. Funding is included in the President's Budget for FY-2021, but its source was not identified.

The AMWG also provided initial guidance on the development of the FY-2021 through 2023 Triennial Budget and Work Plan. The Triennial Work Plan lays out the scientific, tribal, and administrative projects to be funded by the program. Initial work on the plan will be done through the Budget Ad Hoc Group, and the AMWG will need to approve the plan at its August 2020 meeting.

The Technical Work Group is scheduled to meet April 15-16 in Phoenix, Arizona, and the AMWG will next meet via webinar on May 20<sup>th</sup>.

#### Lower Colorado River Multi-Species Conservation Program

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) held a Financial Work Group call on February 20<sup>th</sup>. The group discussed the FY-2019 budget, which was \$38.4 million, including \$9.7 million to secure an easement on the Dennis Underwood Conservation Area in the Palo Verde Valley. Actual obligations in FY-2019 were below budget at \$34.4 million, largely due to scheduling changes for construction at new and existing conservation areas. The FY-2021 budget is estimated to be approximately \$30.3 million.

The LCR MSCP Work Group will meet on March 23<sup>rd</sup> in Yuma, Arizona. A tour to celebrate the 15-year anniversary of the Program will begin in Yuma on March 24<sup>th</sup>, ending in Las Vegas on March 26<sup>th</sup>.

### **GENERAL ANNOUNCEMENTS AND UPDATES**

#### Appreciation of Mark Watton

The Board and its staff wish to congratulate Mr. Mark Watton, Otay Water District General Manager, on his upcoming retirement. Mr. Watton has served the water industry for 37 years and serves as an Alternative Board representative for San Diego County Water Authority. A recent news article is included in the Board Packet describing Mr. Watton's accomplishments. The Board appreciates Mr. Watton's years of public service, particularly during his two tours of service on the Colorado River Board of California.

## Salton Sea Management Program

On February 24<sup>th</sup>, 2020, the California Natural Resources Agencies released the Salton Sea Management Program (SSMP) Calendar-Year 2020 Annual Report. The report provides a summary of recent and planned activities by the SSMP to address air quality and ecological threats at the Sea. The Program has developed a detailed timeline for project implementation, with up to 3,800 acres of dust suppression projects expected to be completed in 2020 on some of the most emissive lakebed around the Sea. The report also summarizes planning activities, partnerships and community engagement efforts. A copy of the CY-2020 SSMP Annual Report can be downloaded from the California Natural Resources Agency Salton Sea website at <http://saltonsea.ca.gov/>. Finally, the State Water Resources Control Board is scheduled to hold a public workshop at its regularly scheduled Board Meeting on Wednesday, March 18, 2020, to receive information and solicit public input regarding the status of Phase 1 of the Salton Sea Management Program (SSMP). The meeting is scheduled to be held at the Imperial Irrigation District's Board Room in El Centro, California.

## Washington, D.C. Updates

### *2021 President's Budget*

Last month, the White House and the Executive Agencies released their budgets to Congress for Fiscal Year 2021. While Congress does not have to adhere to Executive Branch budget proposals in the Appropriations process, these budgets do tend to serve as starting points for kicking off the annual appropriations process. The House of Representatives will begin holding Appropriations hearings this month.

Within these budget proposals, the Department of the Interior proposed \$971.2M for the U.S. Geological Survey (USGS), reserving \$180.8M for the Water Resource Mission Area. The budget supports development of the ground control system to keep pace with NASA's planned 2021 launch of Landsat 9, which will have thermal infrared imagery that water managers can employ to monitor water uses. Also included within a shared account between USGS and Reclamation is \$200M "for science to sustain and enhance ground and surface water quality and quantity, and to develop technologies to respond to the water resources challenges facing the Nation."

The Reclamation budget also requests \$1.1B to operate, maintain, and rehabilitate existing water resources infrastructure in the western U.S. and \$107.1M is included for dam safety, \$437.3M for construction and management of water supply projects, and \$18.2M to fund the WaterSMART program, a decrease of \$116M from last year.

### *GAO Report on Water Infrastructure and Climate Change*

Last month, the Government Accountability Office (GAO) issued a report telling Congress to consider requiring recipients of federal water infrastructure funding to account for climate change. In its report, which was based on interviews with federal agencies, water utilities, and



outside experts, the GAO examined ways to improve infrastructure resiliency as it pertains to climate resiliency for drinking water and sewer infrastructure projects. The GAO also recommended that the EPA provide technical assistance to water infrastructure project sponsors.

#### *Reclamation Water Contracts*

At the request of Congress, Reclamation finalized permanent water delivery contracts with 75 cities and farm districts in California that receive water from the federal Central Valley Project (CVP). The new contracts require that each contractor repay its debts owed to the federal government for the construction of the CVP.

#### *Water Reuse Action Plan*

Following the solicitation of public comment that ended on December 16, 2019, the U.S. Environmental Protection Agency (EPA) and other federal agencies released the National Water Reuse Action Plan to boost the country's use of grey water. Included in the plan are more than thirty-five actions that local governments and the federal government can work towards to achieve this goal. Those actions range from documentary (compile existing state and federal policies) to policymaking (review water reuse permitting) and analysis (develop health-based standards for reuse). This plan, if fully implemented, claims that it would recycle as much as 80% of all used water within 50 years.

#### Upcoming Speaking Events or Relevant Activities

- On Friday March 13, 2020, Mr. Harris will present on The Lower Colorado River Multi-Species Conservation Program at the Law of the Colorado River Conference, being held on March 12-13 in Scottsdale, Arizona. The conference will feature special presentations from Mr. Jeffrey Kightlinger, MWD's General Manager, as well as Reclamation's Commissioner Brenda Burman. The conference's long-time co-chair is Mr. William Hasencamp of MWD. More information can be found at <https://cle.com/ColoradoRiver>.
- On Monday April 13, 2020, Mr. Rich Juricich will moderate and present at a Colorado River Modeling session at the annual meeting of the California Water and Environmental Modeling Forum in Folsom, California, which runs April 13-15. More information can be found at <https://cwemf.org>.
- Mr. Rich Juricich will present on Colorado River Programs at the Environmental and Water Resources Institute's 2020 World Environmental & Water Resources Congress in Henderson, Nevada, which is scheduled for May 17-21, 2020. More information can be found at <https://ewricongress.org>.