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

February 12, 2020

Minutes of the December 11th Meeting of the Colorado River Board

A draft of the meeting minutes from the December 11, 2019, Board meeting held in Las Vegas, Nevada, has been prepared and is included in the Board folder for review and proposed adoption during the February 12, 2020, Board meeting.

Passing of the Board's Former Chief Engineer Myron B. Holburt

The Board's former Chief Engineer, Myron B. Holburt, passed away in Mission Viejo, California, on February 3, 2020, at the age of 94. Mr. Holburt served as the Board's Chief Engineer from 1968 through 1982. Mr. Holburt was instrumental in helping shape many of the primary program elements and responsibilities associated with the Board's representation and protection of California's rights and interests in its Colorado River water and hydroelectric power resources. Mr. Holburt was a member of the Basin States Committee of 14 that worked with representatives of the United States during the development of Minute No. 242, as well as working with Congress to obtain the passage of the 1974 Colorado River Basin Salinity Control Act. Following his tenure with the Board, Mr. Holburt also served as an assistant general manager at the Metropolitan Water District of Southern California (MWD) until his retirement in March 1990. At MWD, Mr. Holburt also worked on Colorado River issues, including the development and oversight of MWD's groundbreaking water conservation program with the Imperial Irrigation District. Mr. Holburt is survived by his wife Idell; sons Ernest and Jonathon; daughter Sharon Kuritzky; five grandchildren and three great-grandchildren.

Funeral services for Mr. Holburt were held February 5, 2020, in Los Angeles. A memorial service is being planned at The Towers at Laguna Woods Village, 24055 Paseo Del Lago, Laguna

Woods. Please call the Towers at (949) 597-4278 for additional details. On behalf of the Board and its agencies, the Board's staff all extend our condolences to Mr. Holburt's family and friends.

COLORADO RIVER BASIN WATER REPORT

As of February 10, 2020, the water level at Lake Powell was 3,604.67 feet with 12.20 million-acre feet (MAF) of storage, or 50% of capacity. The water level at Lake Mead was 1,095.09 feet with 11.30 MAF of storage, or 43% of capacity. As of February 9th, the total system storage was 31.13 MAF, or 52% of capacity, which is about 4.30 MAF more than system storage at this same time last year.

As of February 2nd, the Upper Colorado River basin reservoirs, excluding Lake Powell, ranged from 51% of capacity at Fontenelle Reservoir in Wyoming; 87% of capacity at Flaming Gorge Reservoir in Wyoming and Utah; 91% of capacity at Morrow Point and 67% of capacity at Blue Mesa Reservoir in Colorado; and 67% of capacity at Navajo Reservoir in New Mexico.

As of February 2nd, the forecast water-year 2020 unregulated inflow into Lake Powell is 8.64 MAF (80% of normal). The forecasted April to July 2020 runoff into Lake Powell is 5.7 MAF (80% of normal). The January observed Lake Powell inflow was 0.28 MAF (77% of normal), and the February Lake Powell inflow forecast is 0.34 MAF (87% of normal). To date, the Water Year-2020 precipitation is 96% of normal and the current Basin snowpack is 117% of normal.

Colorado Basin River Forecast Center Water Supply Webinar

On February 7th, the Colorado Basin River Forecast Center (CBRFC) held a webinar to review the Basin's current water supply conditions and forecasts. Precipitation conditions for January and the beginning of February were near to slightly below average. Although, storms in January brought above average precipitation to the Great Basin, Upper Basin headwaters and the Yampa River Basins, weak storm activity in the Lower Basin resulted in below average precipitation. For Water Year-2020 precipitation conditions in the Upper Basin have been at and slightly below average, while the Lower Basin conditions have been slightly above average. Figure 1 provides a graphical portrayal of precipitation conditions in the Basin for the month of January, as well as the cumulative conditions for the period October 2019 through January 2020.

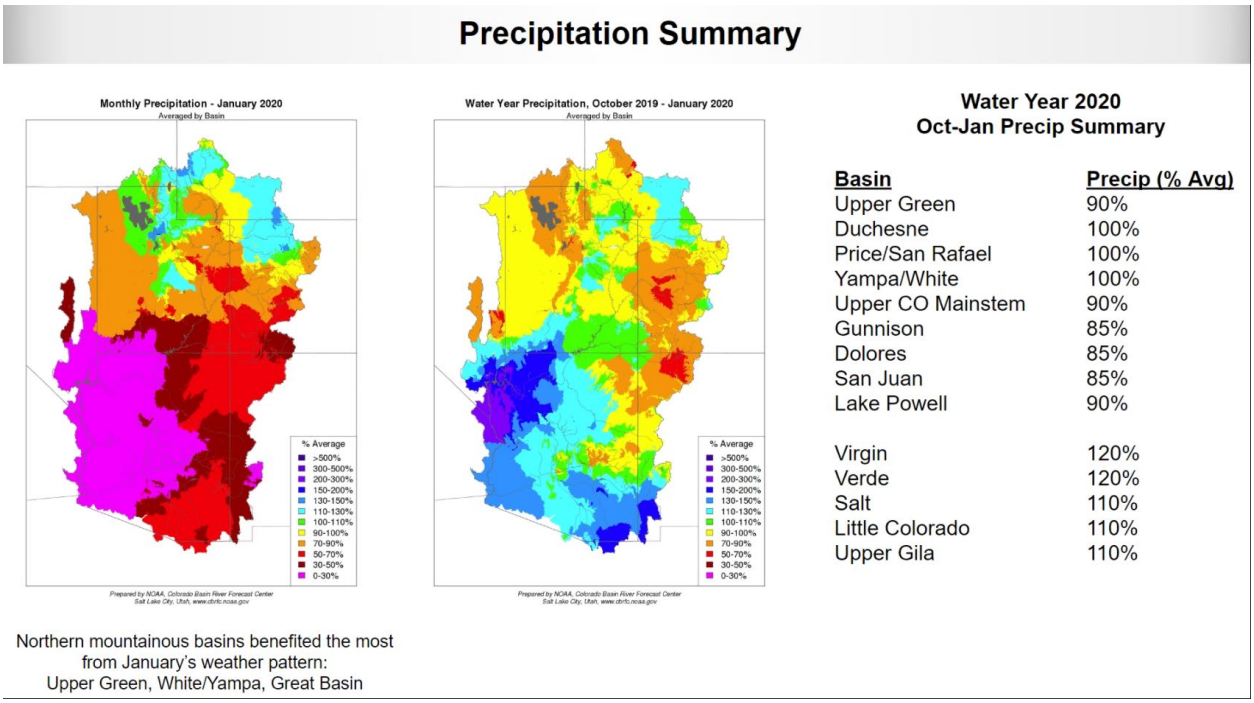

Figure 1—January 2020 Precipitation and Water Year-2020 Precipitation

Currently, the modeled soil moisture conditions are near to below average throughout most of the Upper Basin, while modeled soil moisture conditions in the Lower Basin are near to above average, following a relatively poor monsoon season in 2019.

As of February 6th, the snow water equivalent (SWE) conditions in most of the Upper Basin were slightly above median. Lower Basin SWE conditions in early January were above the median, ranging from 100% to 185% of median. However, by early February, SWE conditions have declined and are below the median, with the exception of the Virgin River Basin (140% of median). Over the next few days, the climate models suggest that the Upper Basin may receive large amounts of precipitation over the next week or so. The next webinar and update from the Colorado Basin River Forecast Center is scheduled for March 6, 2020.

COLORADO RIVER BASIN PROGRAM UPDATES

Colorado River Basin Salinity Control Program

Paradox Valley EIS

As has been reported, on December 6th, 2019, Reclamation published the Public Draft Paradox Valley Unit (PVU) Environmental Impact Statement (EIS) for a 60-day public review and comment period, which ended on February 4th, 2020. The Basin States have had several meetings during December, January, and early February to discuss consensus recommendations for a preferred Paradox Valley project alternative. The Colorado River Basin Salinity Control Forum sent a letter on January 27, 2020, requesting a fifteen-day extension to finalize review of the draft EIS and provide comments. Specifically, the Forum requested the extension to allow additional time to reach a consensus-based decision regarding a preferred alternative and to provide comprehensive comments on the draft EIS. Reclamation subsequently granted an extension for public comments to February 19, 2020. The Final EIS is scheduled for release in July 2020, with a Record of Decision in August 2020. A draft of the Forum's PVU EIS comment letter has been provided to the Board as an attachment to this Executive Director's Report.

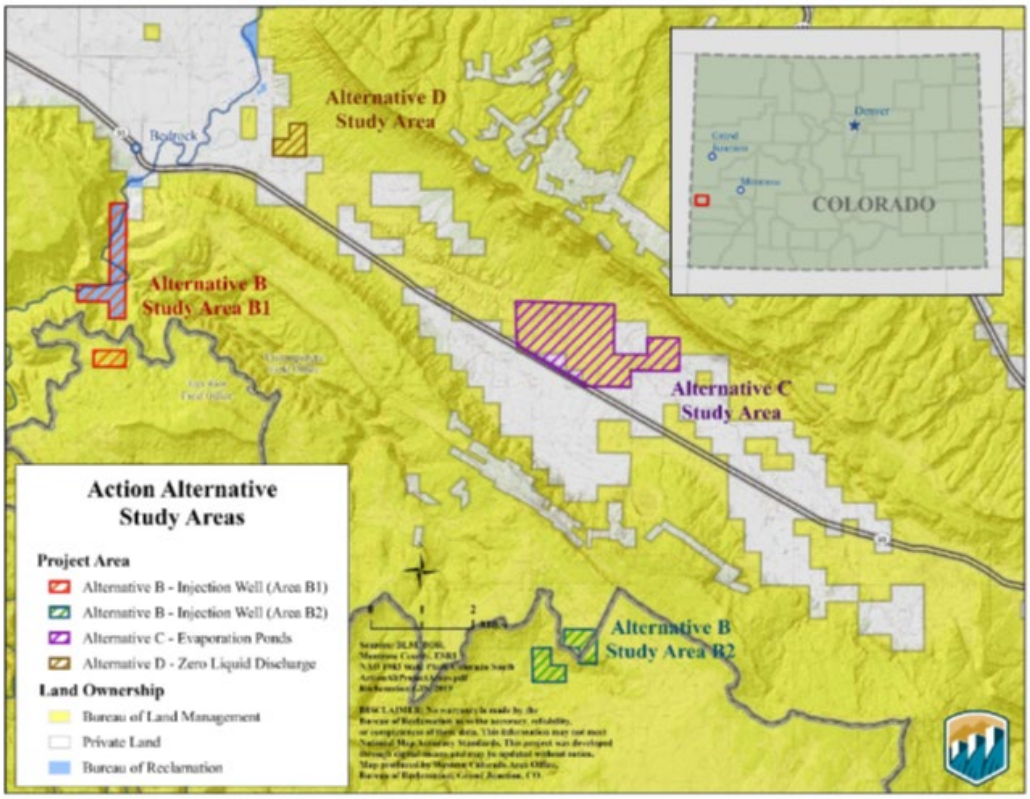

Figure 2—Paradox Valley Unit EIS Alternatives Location Map.

The Paradox Valley Unit 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 EIS including: A) No Action, B) New Injection Well, C) Evaporation Ponds, and D) Zero Liquid Discharge. The proposed locations for the various alternatives described in the draft EIS are shown in Figure 2.

Salinity Control Forum Work Group Meeting

The Salinity Control Forum's Work Group met February 3-5, 2020, at the West Basin Municipal Water District's Edward C. Little Water Recycling Plant facilities in El Segundo, California, to support several activities of the Salinity Control Program. Monday, February 3, 2020, was a States-only meeting, without federal agency participation, and was used to coordinate and consolidate comments on the draft PVU EIS for approval by the Forum. The Work Group also walked through a draft of the 2020 Triennial Review report for Water Quality Standards for Salinity in the Colorado River System. Additionally, the Work Group received federal agency updates from Reclamation, U.S. Geological Survey, Bureau of Land Management, Natural Resources and Conservation Services, and the U.S. Fish and Wildlife Service. The Work Group received welcoming remarks from West Basin's General Manager, Patrick Sheilds, and a tour of West Basin's water recycling plant.

Basin States Letter Regarding Long-Term Salinity Control Funding

One potential impediment in reaching a consensus-based preferred alternative for the draft PVU EIS is a concern expressed by the seven Basin States regarding long-term funding for the Salinity Control Program, and if the Program can afford additional salinity control projects. The Basin States have developed a draft letter to Reclamation highlighting the funding issue and expressing an interest to identify and implement a long-term funding solution. Some solutions may require federal legislation and others may require making administrative changes to the operations of the program. A draft of the letter is included in the Board Packet with a recommendation that the Board authorize the Board Chairman to sign the Basin States letter provided it remains generally consistent with the draft letter.

<u>Glen Canyon Dam Adaptive Management Program</u>

The Technical Work Group (TWG) of the Glen Canyon Dam Adaptive Management Program met on January 13-15 in conjunction with the program's Annual Reporting meeting. The TWG received updates on the status of resources within the Grand Canyon, including sediment and beach erosion, native and nonnative fish populations, hydropower generation, and the results

of recent experimental actions.

From 1996 to 2019, eleven high flow experiments (HFEs) have been conducted at Glen Canyon Dam, with the most recent one occurring in fall 2018. These experiments are triggered by sediment inputs from tributaries and are intended to reduce the erosion of sandbars important primarily for recreation. Researchers reported that while HFEs have been effective in maintaining sandbar size, they have not resulted in progressively larger sandbars. HFEs do not have a noticeable effect on nonnative trout or native fish populations, although recent increases in nonnative brown trout in the Lees Ferry area have coincided with the frequent implementation of HFEs. HFEs typically cost approximately $2-3 million in lost hydropower revenues, although the 2018 fall HFE was shorter in duration and resulted in a loss of $0.95 million in power revenues.

During the summer 2018 and summer 2019, "bug flow" releases were conducted at Glen Canyon Dam. These low, steady weekend flows were originally hypothesized to increase aquatic insect production by reducing variability in water stage below the dam. While the 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 with the USGS Grand Canyon Monitoring and Research Center continue to recommend conducting these weekend flows for a third year to collect additional data.

Researchers reported that the number of nonnative brown trout in the Lees Ferry area continued to exponentially increase in 2019. The species first began to be regularly detected in the reach below Glen Canyon Dam in 2014 and it has since established a firm foothold. Brown trout are expected to have a more significant impact on native fish than nonnative rainbow trout, which have been present in relatively large numbers for decades and are currently considered a stable population.

Native fish distribution and condition in the Grand Canyon appear to be stable or improving, with the area below the confluence of the Little Colorado River now dominated by native fish. While the flannelmouth sucker is the native fish with the largest population in the area, the endangered humpback chub populations in the lower Grand Canyon have increased significantly since 2014. The main population of humpback chub in the Grand Canyon, located at the confluence of the Little Colorado River, appears to be relatively stable with an apparent increase in juvenile abundance in 2019. The National Park Service continues to translocate humpback chub to other Grand Canyon tributaries that might otherwise be inaccessible to the fish, in an effort to increase and diversify the population.

Under the 2016 Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP), spring 2020 is the first opportunity when a spring HFE could be conducted, but researchers reported that so far, sediment input has been far below the level required to trigger

such an experiment. If increased sediment resources triggered a spring HFE, the LTEMP specifies that the release would be scheduled for March or April 2020.

The TWG also provided initial guidance on the development of the FY2021-2023 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 TWG aims to finalize the budget for approval by its June 2020 meeting.

The Adaptive Management Work Group (AMWG) will meet February 12-13 in Tempe, Arizona. The TWG will next meet on April 15-16 in Phoenix, Arizona. Finally, Secretary of the Interior David Bernhardt recently reappointed Ms. Jessica Neuwerth to another three-year term as California's representative to the AMWG, and Mr. Harris was appointed to another three-year term as the alternate member of the AMWG.

Lower Colorado River Multi-Species Conservation Program

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) will be conducting a tour on March 24-26 to celebrate the 15-year anniversary of the Program. The tour will begin on the morning of March 24th in Yuma, Arizona and travel north along the river, stopping at LCR MSCP conservation areas and other sites before ending near Las Vegas on the afternoon of March 26th. Participants have the option to travel to the Las Vegas McCarran Airport or back to Yuma upon the conclusion of the tour. Invitations for the tour are included in the February Board Packet. Please contact Carrie Ronning at cronning@usbr.gov by February 28, 2020, for more information and to reserve a spot for participation in the tour.

Finally, the LCR MSCP Financial Work Group will meet via teleconference on February 20th to discuss the FY-19/FY-20, and FY-21 budgets.

GENERAL ANNOUNCEMENTS AND UPDATES

Draft California 2020 Water Resilience Portfolio Released for Public Comment

As reported in the January Executive Director's Report, on January 3, 2020, The California Natural Resources Agency, California Environmental Protection Agency and Department of Food and Agriculture released a public draft of the California 2020 Water Resilience Portfolio. The draft report outlines more than 100 integrated actionable recommendations in four broad areas to help regions build water resilience as resources become available, while at the same time providing state leadership to improve infrastructure and protect natural ecosystems. The draft report was developed to fulfill Governor Gavin Newsom's April 29, 2019, executive order calling for a portfolio of actions to ensure the state's long-term water resilience and ecosystem health. A final

version of the Water Resilience Portfolio will be released in early 2020. A copy of the draft Water Resilience Portfolio is available at the link below.

http://waterresilience.ca.gov/wp-content/uploads/2020/01/California-Water-Resilience-Portfolio-2019-Final2.pdf

USFWS Proposed Downlisting of the Humpback Chub

On January 22nd, the U.S. Fish and Wildlife Service (USFWS) published a rule that proposes to reclassify the humpback chub from an endangered species to a threatened species. The humpback chub is a native fish that is found primarily in rocky, canyon-bound stretches of the Colorado River. The fish has been listed as federally endangered since 1967. In 1994, critical habitat was designated for the species along 379 miles of the Colorado River, including five areas in the Upper Basin and the Grand Canyon area in the Lower Basin.

A 2019 species status assessment conducted by the USFWS concluded that the species is still present in five of these six areas, and its population is generally stable, with small populations (between 450-1750 fish) at sites in the Upper Basin and a large population in the Lower Basin (10,000-12,000 fish). The assessment concluded that the resources required to support the fish are "generally in fair to poor condition" and will require ongoing management.

In its January proposal, the USFWS stated that the species' condition is currently such that it is not at risk of extinction throughout its range in the foreseeable future and should therefore be downlisted from endangered to threatened. Under an analysis of different future conditions, the USFWS reports that if the currently established management actions continue, the conditions needed by the species are likely to remain adequate for the next 16 years, although longer-term species conditions depend on how effectively management actions can mitigate the impacts of drought, future water development, nonnative fish, and other threats.

As a threatened species, the prohibitions against harming the humpback chub can be less restrictive than those for an endangered species. The downlisting proposal includes a rule that would continue to prohibit take of the humpback chub, except under circumstances related to the creation or maintenance of refuge populations, stocking activities, or nonnative fish removal activities. The rule would also allow angling targeting the humpback chub in newly established locations and the incidental catch-and-release of humpback chub associated with angling within the six core populations. Figure 3 provides a graphical overview of the distribution of the main populations of the endangered humpback chub species and the location of the designated critical habitat. The comment period for the proposed downlisting of the species closes on March 23, 2020.

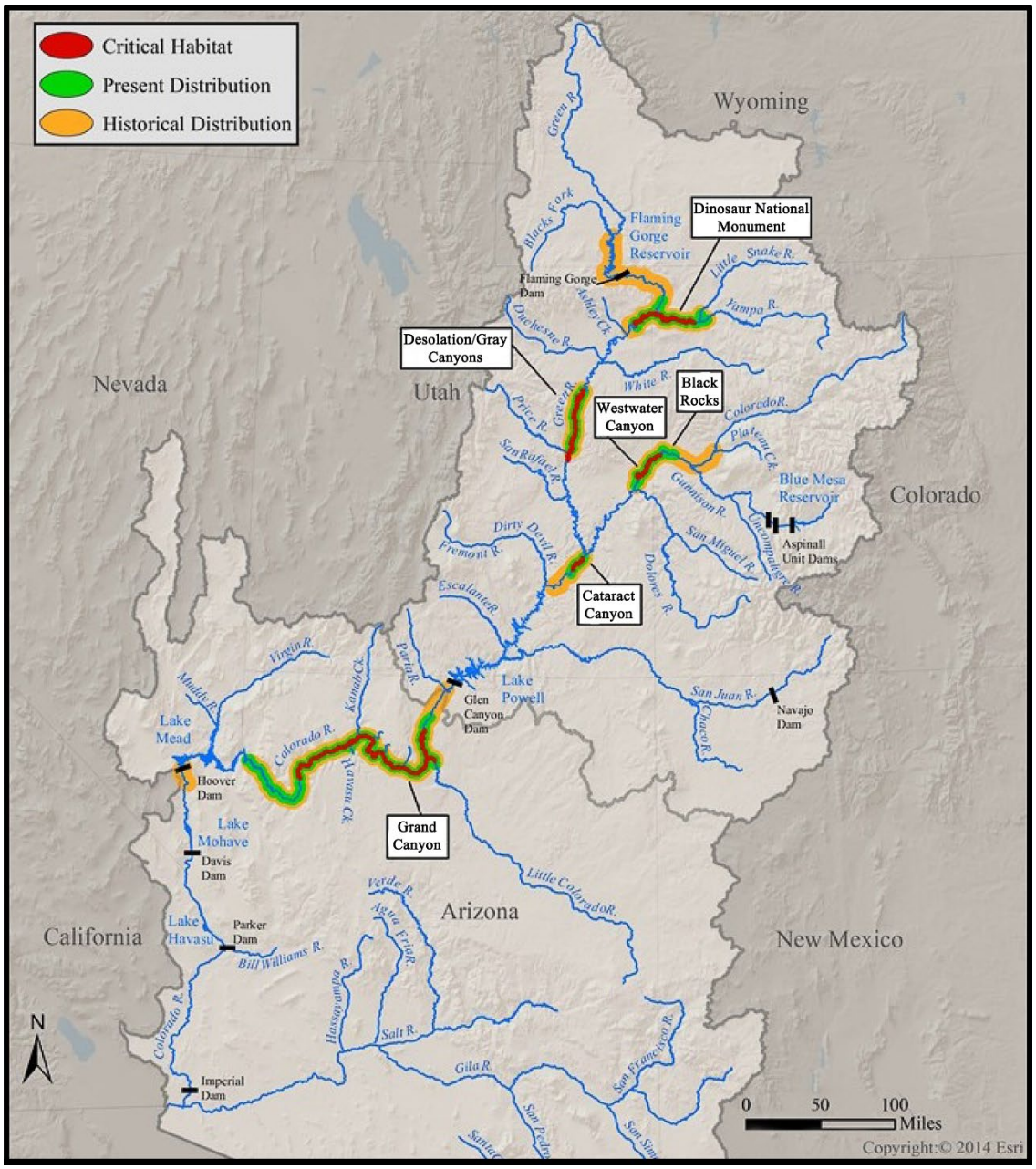

Figure 3—Distribution and critical habitat of the humpback chub in the Colorado River System, with the six main populations identified in text boxes.

Lake Powell Pipeline

As reported in the January Executive Director's Report, on January 10, 2020, Board staff submitted a scoping comments letter to Reclamation related to the development of an EIS for the Lake Powell Pipeline Project (LPP) proposed by the Utah Board of Water Resources (UBWR). A copy of the Board's letter was included with January's Executive Director's Report. The proposed

LPP is a 140-mile, 69-inch-diameter water delivery pipeline that begins at Lake Powell, located in the Upper Basin of the Colorado River, and ends at Sand Hollow Reservoir near St. George, Utah, located in the Lower Basin of the Colorado River. The UBWR proposes building the LPP in order to convey additional water supplies to Washington and Kane Counties in Utah to meet future water demands, diversify the regional water supply portfolio, and for water supply reliability enhancement. The Board's comment letter highlighted the need for the EIS to contain an analysis and determination of water supply availability and legal justification for the proposed project. Board staff believe that Congressional authorization will be required to implement the LPP. A recent news article about the LPP is included for your information.

Washington, D.C. Updates

2021 Appropriations Kick-Off

The President's budget was released on Monday, February 10th. This marks the beginning of the annual appropriations process leading up to the 2021 fiscal year. The President's budget proposes $1.1 billion in Fiscal Year 2021 for Reclamation. The proposed FY 2021 budget includes $979 million for Reclamation's principal operating account (Water and Related Resources), which will fund operation, maintenance and rehabilitation activities—including dam safety—at Reclamation facilities. This account will also fund planning, construction, water conservation, management of Reclamation lands and efforts to address fish and wildlife habitat needs. The FY 2021 budget request includes a total of $112.1 million for Indian water rights settlements. This includes $43.6 million for the Navajo-Gallup Water Supply Project to continue important construction work; and the Colorado Ute Settlement Act within the Animas La Plata Project ($3.4 million). While Congress does not have to follow the President's budget, these numbers often create a baseline for Congressional Appropriators to work from and they often signal many of the Administration's priorities for the coming year. A summary of Reclamation's FY 2021 budget is included in the Board's handouts.

Two weeks ago, House Democrats unveiled a $760 billion infrastructure proposal. Most of the money would go towards transportation but $50.5 billion would be set aside for wastewater treatment and reuse, and $25 billion for drinking water. These funds would be routed through the EPA's Drinking Water and Wastewater state revolving loan programs.

Water Legislation

In mid-January, Representative Jared Huffman, Chairman of the House Natural Resources Subcommittee on Water, Oceans, and Wildlife, introduced the FUTURE Drought Resiliency Act to help address water shortage challenges in the West. This legislation would create a Water Resource Development Act-like process for authorizing new Reclamation projects, boost funding

for groundwater and surface water storage, and provide for investments in desalination and reuse technologies. This bill would increase the authorization for Reclamation's water recycling program to $500 million, which is expected to increase capacity by an additional 650,000-acre feet per year. The existing desalination program would be increased to $240 million per year, potentially creating 100,000 acre-feet of water per year. Lastly, the bill would increase funding for groundwater and surface water storage projects to $750 million and incentivize the use of green infrastructure to boost aquifer recharge.

Clean Water Act Update

The U.S. Environmental Protection Agency (EPA) finalized its update to the Water of the United States Clean Water Act Rule that will reduce protections for streams and wetlands. The Navigable Waters Protection Rule establishes four categories of protected water bodies: navigable waters like the Mississippi River, tributaries that flow year-round or part of the year, wetlands that are adjacent to protected waters, and certain lakes and ponds. Groundwater, farm ditches, isolated wetlands, stormwater control structures and ephemeral streams are not protected under the new rule. Western states like Arizona will be affected most by this new rule because many of its intermittently flowing waters will no longer be federally regulated. States will still maintain their right to implement stricter standards if they desire.

White House Council on Environmental Quality Update to the National Environmental Policy Act (NEPA)

On January 13th, the White House Council on Environmental Quality (CEQ) issued a notice of proposed rulemaking to update the National Environmental Policy Act (NEPA) regulations that were originally issued in 1978. Among the proposed updates are a two-year time limit to complete Environmental Impact Statements and one-year time limit to complete Environmental Assessments. The new proposal also seeks to limit the number of pages that environmental impact reports can be as well as require joint reviews with lead agencies when multiple agencies are involved in the review process. Comments on the proposed rule are due by March 10, 2020 and must be submitted via regulations.gov, docket CEQ-2019-0003.

Water Resources Development Act Update

On January 9th, the House Transportation and Infrastructure subcommittee on Water Resources and Environment held a hearing with R.D. James, Assistant Secretary of the Army for Civil Works, in anticipation of a new Water Resources Development Act to authorize new projects. This hearing digressed to a conversation regarding the Administration's NEPA Rulemaking proposal and the Corp's consideration for climate change in project implementation. Water

Resource Development bills have been enacted biannually since 2014 and are typically bipartisan in nature.

Upcoming Speaking Events

- 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 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.