

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

May 9, 2016

ADMINISTRATION

Minutes of the March 9, 2016 Meeting of the Colorado River Board

A draft of the Minutes from the Board meeting held on March 9, 2016 has been circulated for review.

COLORADO RIVER BASIN WATER REPORT

As of May 2, 2016, the water level at Lake Mead was at 1,076 feet with 9.69 million acre-feet of storage, or 37% of capacity. At Lake Powell, the water level was at 3,592 feet with 11.03 million acre-feet of storage, or 45% of capacity. The total system storage as of May 1 is 28.56 million acre-feet, or 48% of capacity, which is about 251,000 acre-feet greater than where the system storage was at this time last year. As of May 3, 2016, the Upper Colorado River basin reservoirs other than Lake Powell ranged from 95% of capacity at Morrow Point in Colorado to 51% of capacity at Fontenelle in Wyoming. As of April 18, 2015, the April-July runoff forecast for the Upper Colorado River basin is estimated to be 83% of average and the Upper Basin snowpack was 103% of average. As of April 18, 2016 the forecasted unregulated inflow into Lake Powell for WY 2016 is 8.44 million acre-feet, or 78% of normal.

Recently, Reclamation released the results from the April 2016 Mid-Term Operations Model that projects the potential system conditions over the next five years. The model results currently show a 10% chance of a first tier shortage pursuant to the 2007 Interim Guidelines for the Coordinated Operations of Lake Mead and Lake Powell in 2017. (In August 2016, the elevation at Lake Mead would be projected to be less than 1,075 feet on January 1, 2017) For 2018, the April 2016 results project a 56% chance of a first tier Lower Basin shortage in 2018, and a 64% chance of a first tier Lower Basin shortage in 2019 and 2020. In 2021, the projections indicate a 10% chance of Lake Mead being as low as 1,025 feet in elevation. In accordance with the 2007 Interim Guidelines, a shortage determination in any given year will be determined based on the August projection of where Lake Mead's elevation will be by the following January.

The Bureau of Reclamation has continued to track the 2016 water use levels for each of the Lower Basin States and contractors. As of May 3, the total Lower Basin water use is forecast to be 7.056 million acre-feet. California's total water uses are forecast to be 4.153 million acre-feet, based on an assumption that MWD will create 200,000 acre-feet of ICS and IID will create 25,000 acre-feet of Intentionally Created Surplus. The uses will be continually monitored as the year progresses and water use forecast assumptions will be adjusted based on operational issues and demands. Reclamation is in the process of preparing the water use accounting report for 2015, with the final accounting report expected to be completed by May 15, 2016.

Basin States Technical Information Sharing meeting

Colorado River Basin stakeholders met in Las Vegas, Nevada, on April 21st for the spring Basin States Information Sharing meeting. At this meeting Reclamation and the Colorado Basin River Forecast Center provided a number of updates associated with current precipitation and reservoir storage conditions in the Basin, run-off projections, and current and proposed reservoir operations.

The USGS made a presentation associated with some new research being done to develop remote-sensing tools for estimating consumptive use (CU) across the United States as part of its Water Census program. The USGS is looking at different remote sensing technologies and models with an emphasis on Landsat and MODIS color-infrared satellite imagery. The USGS plans to continue conducting some pilot projects to help ground-truth model results. In a related vein, Reclamation reported on the pilot project associated with utilizing remote sensing to assess and improve consumptive use determinations in the upper basin. Reclamation's efforts are two-phased, with the first phase evaluating whether remote sensing technology could be used to determine CU; and the second phase would include some pilot projects to aid in comparing methodologies. Ultimately, Reclamation anticipates a 50-station evapotranspiration monitoring network near agricultural locations in the upper basin. Reclamation is working with the Upper Colorado River Commission and the Upper Basin states to develop a memorandum of agreement associated with this program.

There were also a number of brief updates provided by various states or stakeholder groups associated with the Pilot System Conservation Program, Drought Contingency Planning, California Drought Conditions, Salton Sea Planning, Minute 32x, Basin Study Moving Forward Phase 2, and the preparation of the Glen Canyon Dam LTEMP EIS.

With respect to the Pilot System Conservation Program, Reclamation reported that six projects in the lower basin will result in 63,000 acre-feet of conserved water in Lake Mead; and for the upper basin, it was reported that 2,000 acre-feet was conserved in 2015 and an additional 9,000 acre-feet will be conserved in 2016. Reclamation also indicated that in the upper basin it was challenging to determine water savings, system benefits and that the field verification process was difficult.

In the context of Drought Contingency Planning, the Upper Basin reported that its efforts were focused on augmentation, demand management, and reservoir operations. With respect to reservoir operations, the upper basin is evaluating the practicality of planning for the "minimum probable" and acting upon the "most probable." The Lower Basin reported that efforts were underway that addressed sustainability and flexibility and that the three Lower Basin States were working closely together.

With respect to California issues, Imperial Irrigation District provided an overview of the current status of the efforts to address the management of the Salton Sea. MWD provided an overview of the current statewide drought conditions in California and the impacts to MWD's water supply portfolio.

The Upper Colorado River Commission gave a brief update on the proposed Lake Powell Pipeline project. The project would convey about 86,000 acre-feet of water from Lake Powell to

the St George, Utah region. The pipeline would be nearly 140 miles in length and would require a lift of approximately 2,500 feet. The lead agency for the project is the Federal Energy Regulatory Commission.

Reclamation also provided brief status updates regarding both the binational Minute 32x negotiations and the preparation of the Glen Canyon Dam LTEMP EIS. Reclamation indicated that completing both of these processes by the end of 2016 are considered high priorities by the Administration.

California Drought Update

On May 9, 2016, Governor Brown issued Executive Order B-37-16, "Making Water Conservation a California Way of Life", extending some of the provisions of the prior drought-related Executive Orders, and acknowledging the need to adjust the emergency water conservation regulations to recognize the differing water supply conditions across State through the end of 2017. The Order requires the Water Resources Control Board to permanently prohibit actions such as hosing off sidewalks, watering lawns within 48 hours of a rain event and irrigating turf on public street medians. The Order also contains provisions directed toward strengthening local drought resiliency efforts and improving agricultural water use efficiency and drought planning.

The National Drought Monitor Map indicates that as of April 26, 2016, 21% of the State continues to be in the "exceptional drought" category of drought conditions, but this is a significant decrease from this time last year when 47% of the State was in the exceptional drought category. As of May 4, 2016, reservoir storage was increasing, with storage in reservoirs Shasta, Lake Oroville and Folsom Lake more than 100% of capacity.

On May 3, 2016 the State Water Board issued its water savings report for March, indicating that an average conservation rate of 24.3% was achieved as compared to water uses in March 2013. As of March 17, 2016 the Department of Water Resources increased the State Water Project allocations for certain contractors from 30% to 45%.

COLORADO RIVER BASIN PROGRAM REPORTS

Basin States Drought Contingency Planning

As has been previously reported, the Basin States have been meeting over the past few years in coordination with the Department of the Interior to address the potential for continued declining elevation levels at Lake Powell and Lake Mead. With respect to the Lower Basin discussions, as a follow up to the December 2014 Memorandum of Understanding among the Lower Basin States and major water users, the Lower Basin States have been working to develop additional agreements that can supplement the 2007 Interim Guidelines to enable more water to be saved in Lake Mead in order to decrease the likelihood that Lake Mead will drop below elevation 1,020 and increase flexibility for water users during low reservoir conditions. No agreements have been reached among the States at this point and discussions are expected to continue throughout the rest of the year.

Part of the drought contingency planning efforts include increased Federal activity directed toward more efficiently operating the Colorado River Basin system and reducing the amount of deliveries to Mexico in excess of the amounts required pursuant to the 1944 Treaty. During the March Board meeting, staff presented a detailed overview of the Yuma Bypass Flows Workgroup recommendations conserve at least 100,000 acre-feet annually to aid in offsetting the volume of water that is currently bypassed on an annual basis to the Cienega de Santa Clara in Mexico. The bypass flows are made up of the brackish drainage pumpage collected within the Wellton Mohawk Irrigation and Drainage District as well as brackish drainage pumped in the Yuma area. Because of the increased salinity of these collected brackish water supplies, the bypass flows do not count toward the annual Mexican Water Treaty delivery obligation, and therefore an equivalent amount of water must be released each year from Lake Mead.

The Yuma Bypass Flows Workgroup issued its final report and proposed recommendations on May 2 which identifies thirteen options that can collectively help to conserve or replace water that is currently being bypassed to the Cienega. The options are categorized as “infra-structure focused,” “binationally focused,” and a third category that combines several of the options. The infrastructure-related options could include various permutations of Yuma Desalting Plant operation, and increased pumping at the Minute 242 wellfield near the Southerly International Boundary. An example of a binationally focused option might include receiving some measure of Treaty delivery obligation credit for water supplies delivered to the Cienega as a habitat and environmental enhancement benefit. Many of the recommendations will likely require consultation with both the U.S. and Mexican Sections of the International Boundary and Water Commission. Some of the options being proposed in the report may be considered for inclusion in the ongoing Minute 32x negotiations.

Also as reported in March, Reclamation is initiating a process to expand pumping at the Minute 242 wellfield by an amount up to 25,000 acre-feet per year. Currently, the Minute 242 wellfield pumps approximately 28,000 acre-feet annually that is delivered as part of the Mexican Water Treaty delivery made at Southerly International Boundary. In conjunction with increased wellfield pumping, Reclamation will construct a pipeline connecting the Minute 242 Lateral Canal with the Yuma Mesa Conduit to route the additional wellfield pumping water supplies north, via the Yuma Mesa Conduit, for discharge into the mainstream for delivery at Northerly International Boundary (NIB) as part of the Mexican Water Treaty delivery obligation.

As part of Reclamation’s current annual water use and accounting determinations and reporting, expansion of the pumping in the Minute 242 wellfield will also have the effect of increasing the return flow credits assigned to both the Yuma Mesa Irrigation and Drainage District and the Unit B Irrigation and Drainage District. Consequently, in order to ensure conservation of mainstream water supplies in the reservoir system, the Central Arizona and Water Conservation District (CAWCD) will enter into a letter agreement with Reclamation that CAWCD will not divert the additional water made available pursuant to the wellfield expansion project. The CAWCD Board approved the letter agreement during its meeting on May 5 and it will be distributed during the CRB meeting on May 11. The term of the letter agreement is for five years, with an automatic renewal for a subsequent five-year term. One of the conditions in the agreement is a provision that Reclamation and CAWCD will consult to determine future operations under the terms of the agreement if Lake Mead’s water surface recovers to an elevation of 1,145 feet during the term of the agreement.

Colorado River Basin Supply and Demand Study

On April 5, 2016, Reclamation held a preliminary planning meeting to discuss the development of Phase 2 of the Basin Study's Moving Forward effort. The goal of Phase 2 will be to implement pilot projects that test innovative ways to address the water supply/demand imbalance challenges identified in the Basin Study that promote water supply sustainability and demonstrate a high degree of stakeholder partnerships. Phase 2 will be conducted in the same coordinated and collaborative manner as Phase 1. Additional meetings will be scheduled over the next few months and will include the Phase 1 Coordination Team.

Development of a Tribal Basin Study has been underway since the original Basin Study was completed in 2012. The Tribal Basin Study will include a review of undeveloped and unquantified tribal water rights and evaluate the impact of supply and demand imbalances on meeting tribal needs in the future. The study will include an evaluation of historical, current, and future tribal water uses in the Basin. It is anticipated that the Tribal Basin Study will be completed by the end of the year. The Basin States will ask for an opportunity to review and comment on the Study before it is completed.

Colorado River Basin Salinity Control Program

The Salinity Control Program's Work Group met on April 11-13, 2016 in Salt Lake City, Utah. During the meeting, Reclamation gave an update on the operations and management of the Paradox Valley Unit and the related EIS/Alternative Study process. There has been little change in the well's surface injection pressure in the last 12 months. There is, however, a slight increase in the frequency of seismic activities and Reclamation will closely monitor this trend. For the EIS process, Reclamation continues to identify and rank potential sites for a second injection well and expects this effort to be completed by February 2017. The four studies are being conducted per recommendations by the Evaporation Pond Consultant Review Board: hydrogen sulfide management study, pond optimization study, ecological risk assessment for the migratory birds, and a review of salt disposal options, which would determine whether there is a market for the by-products, including an analysis of brine crystallization technologies. Reclamation will hold a Cooperating Agency meeting in early June to provide an update on the EIS progress.

The Work Group is continuing its effort to produce a video to describe the Colorado River Basin Salinity Control Program, including the causes of salt load increases in the River, the impacts of high salinity levels, and the success and continuing need for the program. The video will include photos of salinity damages to agriculture, municipal/industrial use, and the environment in both the Upper Basin and the Lower Basin. A draft video will be produced for comments at the June Forum meeting.

As in past years, the Forum and the Colorado River Board prepared appropriations testimony for the Salinity Control Program to various Congressional Appropriations Subcommittees to support Congressional funding for NRCS's EQIP program, Reclamation's Basinwide Program, and BLM's salinity control efforts under its Soil, Water and Air Program and has been tracking the progress of the appropriations bills that are moving through Congress. The testimony tracks recommendations by the Forum and the Advisory Council at the fall meetings designed to ensure that the highest level of salt control can be achieved with the funding that is available. Executive Director Trujillo attended meetings in Washington, DC on May 2-5 to answer

questions about the Salinity Control Forum and to advocate for continued federal funding and robust participation on behalf of the program.

The Forum and the Advisory Council will meet on June 8-9 in Keystone, Colorado.

Status of the implementation of Minute 319

The bi-national negotiating group that is evaluating options for the potential successor to Minute 319 will meet next on May 24-26 in Mexico City, Mexico. The bi-national workgroups that will help guide the negotiations have reported their progress to the bi-national negotiating group and will continue to refine recommendations for elements to be included in a subsequent Minute. Board staff presented a detailed update regarding the status of the negotiations during the Board's March meeting. An additional element during the recent negotiations has been a discussion of the potential for Mexico to increase the shortage levels it agreed to in Minute 319 in order address continuing potential for Lake Mead declines.

Status of the Glen Canyon Dam Adaptive Management Program

The Technical Work Group of the Glen Canyon Dam Adaptive Management Program met on April 19-20 in Phoenix, AZ. The group discussed the reestablishment of the Science Advisors program, which allows for scientific panels to be convened to discuss complex or contentious issues if directed to do so by the AMWG, and the FY17 budget and work plan process. Given the discovery last fall of a large population of predatory nonnative green sunfish below the dam, presumably started by fish that passed through Glen Canyon Dam from Lake Powell, researchers discussed the likelihood of other nonnative fish moving through the dam. Additionally, the group discussed the Long-Term Experimental and Management Plan EIS, which was released for public comment in January. The Board's staff submitted comments on the draft, and joined a comment letter of the Basin States and Upper Colorado River Commission.

The Technical Work Group plans to meet on June 14-15 in Salt Lake City, UT and the Adaptive Management Work Group will meet on August 24-25.

Status of the Lower Colorado River Multi-Species Conservation Program

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) held its regularly scheduled spring Steering Committee meeting in Las Vegas, Nevada, on April 27. At the meeting the Board's Deputy Director, Chris Harris, was re-elected as the Steering Committee's Chair, and Ms. Perri Benemelis with the Central Arizona Project, was re-elected as the Steering Committee's Vice-Chair.

The LCR MSCP Program Manager, Mr. John Swett, also provided the Steering Committee with an overview of the status of the Program and the proposed budget for the upcoming Fiscal Year. For FY-2017, the Program is anticipated to require \$30,874,452 associated with implementation activities. Of this amount, California's share is anticipated to be about \$7,351,921.

Mr. Swett also provided an overview of the proposed FY-2017 Work Plan, and reviewed the status of the FY-2015 Accomplishments Report. These reports will also be the subject of an in-

depth technical review at the LCR MSCP workgroup meeting scheduled for May 11-12, 2016, at the Arizona Department of Water Resources offices in Phoenix, Arizona.

ANNOUNCEMENTS

(a) On May 2, the Utah Department of Water Resources submitted a license application on the Lake Powell Pipeline to the Federal Energy Regulatory Commission (FERC). The application begins the management of an Environmental Impact Statement (EIS) on the project by the FERC. The Lake Powell Pipeline would withdraw approximately 86,000 acre-feet of Utah's Colorado River apportionment from Lake Powell at full utilization (estimated to be 2052) to serve communities in southwestern Utah. The NEPA process is estimated to be completed in 2018, with construction beginning as early as 2020. The application is available online under docket number P-12966 at <http://elibrary.ferc.gov/idmws/search/fercgensearch.asp>. One issue to be raised in connection with comments regarding the proposal is a requirement that Utah should obtain Congressional approval for the use of Upper Basin water in the Lower Basin, similar to the provision that was enacted in connection with the approval of New Mexico's Navajo Nation water rights settlement agreement.

(b) The Senate Energy Committee's Water and Power Subcommittee will hold a hearing on May 17 on several bills, including Senator Feinstein's pending drought bill (S.2533) - <http://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=A7AE5EAB-EB16-4CAF-A918-68A1A5D5BEB7>. Section 104 of S. 2902 (Flake, Barrasso, McCain, Risch, Heller, Daines) contains Colorado River Basin related provisions to extend the authority for the Pilot System Conservation Agreement and restrict the Secretary's ability to allocate water stored in Lake Mead pursuant to the System Conservation Program or the MOU to any water users in the Lower Basin during the year the water was originally conserved. Section 103 contains a provision asking for a National Academy of Sciences study on the effectiveness of saltcedar removal in the Colorado River Basin, similar to the recent study that was conducted by USGS and the Bureau of Reclamation on the subject. Board's staff has previously stated an objection to Section 104 as being an unnecessary interference with the Basin States agreements and an infringement on elements of California's water rights and will prepare testimony for the record on the relevant provisions in the pending bills.

Tanya M. Trujillo
Executive Director