

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

March 8, 2016

ADMINISTRATION

Minutes of the February 10, 2016 Meeting of the Colorado River Board

A revised draft of the Minutes from the Board meeting held on February 10, 2016 have been circulated with this report.

Approval of a Funding Agreement with the USGS to Cost-Share Funding for Certain Stream Gages along the Lower Colorado River

The Colorado River Board has been asked to become a cost-share partner with the USGS for stream gaging along the Lower Colorado River in the amount of \$20,290 for the period of October 1, 2015 through October 1, 2016. The funding would supplement the USGS's existing funding for 6 gages along the river pursuant to the USGS's National Streamflow Information Program. A proposed form of agreement is included in the Board packet.

COLORADO RIVER BASIN WATER REPORT

As of February 29, 2016, the water level at Lake Mead was at 1,084.21 feet with 10.36 million acre-feet of storage, or 40% of capacity. The water level at Lake Powell was at 3,594.48 feet with 11.23 million acre-feet of storage, or 46% of capacity. As of February 28, 2016, the total system storage was at 29.163 million acre-feet, or 49% of capacity, which was almost the same as this time last year. As of February 29, 2016, the Upper Colorado River Basin reservoirs, other than Lake Powell, ranged from 43% of capacity at Fontenelle Reservoir to 83% of capacity at Flaming Gorge Reservoir in Wyoming, 67% of capacity at Blue Mesa in Colorado and 83% of capacity at Navajo in New Mexico. As of February 16, 2016, the forecasted unregulated inflow into Lake Powell for April-July was 91% of average, and the Upper Basin snowpack was 96% of average, but as of a revised forecast on March 1, 2016, Lake Powell is forecast to receive 5.7 million acre-feet of water during the April-July runoff period, which is 80% of average..

The Bureau of Reclamation has begun tracking the 2016 water use levels for each of the Lower Basin states. The total Lower Basin water use is forecast to be 7.1 million acre-feet. California's total water uses are forecast to be 4.175 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 ICS. The uses will be continually monitored as the year progresses. 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.

Reclamation's most current CRSS projections for the system operations over the next 5 years project a 17-37% chance of a first tier Lower Basin shortage in 2017, with projections of 59%, 60% and 59% in 2018, 2019, and 2020. In accordance with the 2007 Interim Guidelines, a shortage determination will be based on an August projection of the following January's elevation level at Lake Mead. The range of outcomes is based on a variety of assumptions used for determining the amount of inflows into Lake Powell and within the Lower Basin.

The March 1, 2016 report from the Colorado River Basin Forecast Center indicated that a very dry and warm February has resulted in a decrease in the April-July streamflow runoff volume forecasts over the entire Colorado River Basin, with forecast runoff volumes decreasing by 10-20% of average across much of the Colorado River Basin. As of March 1, 2016, Lake Powell is forecast to receive 5.7 million acre-feet of water during the April-July runoff period, which is 80% of average. In addition, above average temperatures have resulted in much of the snowpack melting out very early where it has fallen in the Lower Basin. Although January was wet, December and February have been dry, and the anticipated wet conditions typically associated with an El Nino year have failed to materialize. The Forecast Center will continue to hold monthly updates through May to track the status of the snowpack and runoff seasons.

California Drought Update

The National Drought Monitor map indicates that as of February 23, 2016, 38% of the State continues to be in the "exceptional drought" category of drought and although reservoir levels are improving, they continue to be well below average. As of March 1, 2016, the statewide snowpack was reported at 83% of average. As of February 25, 2016, urban water suppliers have reported a cumulative water savings of 24.8% over the 8 months that the State's mandatory conservation requirements have been in place. Over 1.1 million acre-feet of water was conserved between June 2015 and January 2016 toward the total goal of 1.2 million acre-feet. These conservation rates have been achieved while the State has been experiencing much warmer temperatures in 2015-16 than compared to the temperatures on record during 2013. On February 3, 2016, the State Water Resources Control Board extended the mandatory conservation requirements through October, with some modifications to the methodologies used to create individual agencies' reduction amounts. The Board may revisit the requirements based on a review of the statewide water supply and drought status in March and April and will include a review of reservoir levels, snow pack levels, and conservation achievements throughout the State.

On February 24, 2016, the Department of Water Resources increased the State Water Project allocation from 15% to 30% for most of the project contractors.

COLORADO RIVER BASIN PROGRAM REPORTS

Basin States Drought Contingency Planning

Since 2013, the Basin States have met in coordination with the Department of the Interior to address the potential for continued declining elevation levels at Lake Powell and Lake Mead. As a follow up to the December 2014 Memorandum of Understanding among the Lower Basin States and major water users, the Lower Basin States are concentrating on additional tools 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.

Reclamation and the Arizona Department of Water Resources have continued to lead a workgroup focused on developing ideas for utilization of a portion of the bypass flows from the Welton-Mohawk drainage system to create more water savings within the US. An initial report from the workgroup is expected to be released in March. Board staff will present an update regarding some of the proposals during the Board meeting.

Colorado River Basin Salinity Control Program

The Salinity Control Program Work Group met on February 17-19, 2016 in Phoenix, Arizona. A highlight of the meeting was a report from Reclamation regarding the operations and management of the Paradox Valley Unit and the EIS/Alternatives Study process. The maximum surface injection pressure has not increased much since July 2013 when the injection pressure was around 4,740 psi. Reclamation is monitoring a slight increase in the frequency of seismic events over the last few months.

The EIS/Alternatives Study is still on schedule to be completed with a Record of Decision in 2018. The EIS/Alternatives Study is evaluating three alternatives including an evaporation pond, a new injection well, and commercial use of the brine. Reclamation reported that the studies recommended by the Evaporation Pond Consultant Review Board (CRB) are expected to be completed by July 2016. The studies include hydrogen sulfide removal, brine disposal alternatives, pond optimization, and an ecological risk assessment for potential impact on migratory birds. Reclamation is also working to identify and evaluate potential technologies for brine crystallization. A few companies responded to Reclamation's Request for Information and Reclamation anticipates evaluating the proposals by the end of March and recommending at least one technology for pilot testing. Reclamation is progressing on identifying a second well site for the new injection well alternative. They continue to evaluate geologic, seismic, exploration well log and other data to characterize the subsurface geology. Appraisal studies such as drilling feasibility and surface facilities and O&M feasibility are being planned. The next cooperating agencies meeting will be in the June/July 2016 timeframe after Reclamation receives draft reports associated with the EIS process.

Reclamation reported a good response from last summer's Funding Opportunity Announcement (FOA) for agricultural conservation projects in Utah, Colorado and Wyoming. About 30 applications were received with 15 projects recommended to be funded totaling about \$40 million. Of the projects recommended for funding, the average cost effectiveness for those to be funded under Reclamation is about \$50/ton of salt removed. It is anticipated that the projects will implement 35,000 tons of additional annual salinity control over the next several years.

The Salinity Economic Impact Model Subcommittee continues to work with Reclamation on updating the model with better data and making it more user-friendly. MWD hosted a webinar on February 22 to demonstrate new features of its model, including an interactive map of service areas and streamlined worksheets. Board staff continues to work with Reclamation on adding non-MWD service areas from California into the model.

The Work Group is in the process of updating the 2017 Triennial Review by working with Reclamation to develop salt loading scenarios for model runs, and expects preliminary results by the Forum meeting in June. A Forum Policies Subcommittee was formed to review and update the

NPDES policies of the Triennial Review. The Subcommittee has drafted a questionnaire to be answered by each state's NPDES permit writers in an effort to review the efficiency of the policies. The Subcommittee plans to send the questionnaire out to the relevant state agencies in the near future and compile the responses by June.

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 is preparing 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. 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. As in prior years, Board staff will submit similar letters to the subcommittees in support of the federal appropriations for salinity control.

The next Work Group meetings will be in Salt Lake City, Utah, on April 11-13, and the Forum will meet on June 8-9 in 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 on March 11-12 in Ensenada, Mexico. The bi-national workgroups that will help guide the negotiations have continued to meet to develop recommendations for elements to be included in a subsequent Minute. Board staff will present an update regarding the status of the negotiations during the Board meeting.

Status of the Glen Canyon Dam Adaptive Management Program

The Adaptive Management Work Group (AMWG) of the Glen Canyon Dam Adaptive Management Program (GCDAMP) met February 24-25 in Tempe, AZ. The group discussed the results of the recent Technical Work Group meeting that were reported on during last month's Board meeting, reviewed a new humpback chub Recovery Plan that is under development and is anticipated to be released in 2017, and received an update on the current Colorado River Basin hydrology. The Hopi Tribe presented an overview of the monitoring program that they have in place to evaluate conditions within the Grand Canyon and explained the special connection that the Grand Canyon has for the Hopi people. The Upper Colorado River Commission presented a "stakeholder" perspective regarding issues that are relevant to the Upper Basin States. The AMWG also received an update on the status of the endangered razorback sucker population in Lake Mead, which has been expanding its range into the Lower Grand Canyon over the past several years. Researchers plan to increase their surveying efforts to determine the extent of this population. The requisite conditions are not present for a Spring High Flow Experiment, which would be designed to move sediment around in the system, but the conditions will continue to be

monitored throughout the summer to determine whether an HFE may be recommended in the fall.

The public comment period for the draft of the Long-Term Experimental and Management Plan (LTEMP) EIS released on January 8 extends through April 7. The LTEMP EIS will guide experimental management of the Colorado River below Glen Canyon Dam through flow and non-flow actions for the next 20 years. A series of public meetings and webinars were held on February 16, 22, 25 and March 1. Information regarding the Draft EIS can be found at:

<http://ltempis.anl.gov>

The AMWG's Technical Work Group plans to meet again in April 19-20 in Phoenix, AZ.

Status of the Lower Colorado River Multi-Species Conservation Program

The Financial Work Group of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) held a conference call on February 25 to address FY15, FY16, and FY17 budgets and expenditures. LCR MSCP staff reported that FY15 expenditures were around \$2 million under budget, primarily due to lower than anticipated construction costs. The budget for FY16 is \$30.7 million, with an additional withdrawal of \$8.3 million from the Program's Land and Water Conservation Fund for the purchase of the Planet Ranch property. The FY17 budget is estimated to be \$30.9 million, with a \$15.4 million contribution from non-Federal parties.

The LCR MSCP Steering Committee will meet on April 27 in Las Vegas, NV and the Work Group will meet May 11-12 in Phoenix, AZ to discuss the FY17 work plan and budget.

ANNOUNCEMENTS

(a) The California Natural Resources Department has established a website for its Salton Sea Management activities - <http://resources.ca.gov/salton-sea/>. The site identifies the Advisory Committees that have been established to date and a calendar for upcoming meetings. The site also provides links to other information relating to the Salton Sea. The Department of Natural Resources is expected to release a report regarding the "shovel-ready" projects at the Salton Sea by March 31, 2016.

(b) Several funding opportunities are currently being offered by the Bureau of Reclamation for water efficiency projects and research:

Up to \$2 million in funding is currently available for water reclamation and reuse research projects under Reclamation's Title XVI Program. Individual projects can receive up to \$300,000 in funds, with applications due by April 20. More information is available at:

<http://www.grants.gov/web/grants/search-grants.html?keywords=R16-FOA-DO-011>.

Reclamation is offering two grant opportunities under their Drought Response Program; one provides funds for those developing or updating drought contingency plans, while the other provides funds for projects aimed at increasing drought resiliency through better water management, increasing reliable supply, or environmental mitigation. \$6 million in funding is available and applications are due by April 11. More information is available at:

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=281448>

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=281469>.

Up to \$5 million in funding is available in agricultural water conservation and efficiency grants for projects seeking to save water, improve water management, create new supplies for agricultural irrigation, or benefit endangered species. Individual projects can receive a cost-share up to \$1 million, with applications due April 26. More information is available at:

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=281813>.

(c) The Bureau of Reclamation's Lower Colorado Regional office will continue to move forward with plans to spend the appropriations received through the Consolidated Appropriations Act of 2016 of \$11.5 million to be used to further the Lower Basin's drought response actions (e.g. Yuma Desalting Plant, Minute 242 wellfield), \$5 million for the next phase of the system conservation pilot program, and \$3 million for Salton Sea research.

(d) Congressional hearings have begun to examine the FY 2016-17 Federal Budget that was released on February 9, 2016. Reclamation's portion of the budget includes a request for \$27,433,000 for Lower Colorado Region Operations (operation, administration, accounting, bi-national work and MSCP, etc), \$15,453,000 for Salinity Control Title I projects that covers maintenance of the Yuma Desalting Plant and funding of additional components for the Minute 242 well field construction. Reclamation's Upper Colorado Region requested \$11,660,000 for the Salinity Control Program's Title II salinity control projects, and Reclamation has requested a total of \$61,494,000 for WaterSMART programs, that include WaterSMART grants, (\$23,365,000) Title XVI projects (\$21,500,000) and a fairly new program called Drought Response and Comprehensive Drought Plans (\$4,000,000) which is expected to include funding for the Lower Basin's drought programs and the system conservation pilot program and continued funding for the WaterSMART programs. It will be up to Congress to appropriate funding for the requested programs in higher or lower levels than the Budget has requested. The Budget includes some new proposals such as a request for \$25 million for a Department of Energy Desalination Hub, and \$88 million for new National Science Foundation research, but the fate of those new programs is uncertain.

(e) The White House Office of Science, Technology and Policy is planning a Water Summit on March 22 in conjunction with World Water Day to highlight innovations in water use efficiency, scientific research, technology development entrepreneurship and the use of science-based tools to inform decision making. The goal of the workshop is to offer water management agencies from around the country the opportunity to describe their ongoing efforts and share ideas about better water management options.

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