

Minutes of Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, January 13, 2016

A meeting of the Colorado River Board of California was held on Wednesday, January 13, 2016, in Ontario, California.

Board Members and Alternates Present

Dana Bart Fisher, Jr., Chairman  
Brian Brady  
James Hanks  
Henry Kuiper  
David Pettijohn  
Glen Peterson  
Jack Seiler

Michael Touhey  
David Vigil, Alternate Designee  
Department of Fish and Wildlife  
Doug Wilson  
Jeanine Jones, Designee  
Department of Water Resources

Board Members and Alternates Absent

Stephen Benson  
Peter Nelson  
John Powell, Jr.

Chris Hayes, Designee  
Department of Fish and Wildlife

Others Present

Steve Abbott  
Tim Blair  
Robert Cheng  
Karen Donovan  
Jack Hartman  
Bill Hasencamp  
Michael Hughes  
Ned Hyduke  
Lisa Johansen  
Lindia Liu  
Peter Louie  
Kara Mathews  
Jan Matusak  
Doug McPherson

Jessica Neuwerth  
Vic Nguyen  
Najwa Obeid  
Angela Rashid  
Eric Ruckdaschel  
Tom Ryan  
Tina Shields  
Joanna Smith Hoff  
Philip Southard  
Lauren Steely  
Mark Stuart  
Tanya Trujillo  
Mark VanVlack  
Jerry Zimmerman

**CALL TO ORDER**

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:08 A.M.

## **OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD**

Chairman Fisher asked if there was anyone in the audience who wished to address the Board on items in the agenda or matters related to the Board. Hearing none, Chairman Fisher moved to the next agenda item.

## **ADMINISTRATION**

### Consideration and Approval of the Minutes

Chairman Fisher asked for a motion to approve the December 16, 2015 meeting minutes. Mr. Pettijohn moved that the minutes be approved, seconded by Mr. Peterson, and by unanimous support, the meeting minutes were approved.

### Board Meeting Schedule

Ms. Trujillo announced that the next Board meeting on February 10, 2016 will take place at the Coachella Valley Water District to coincide with the Urban Water Institute meeting.

## **COLORADO RIVER BASIN WATER REPORTS**

### Colorado River Basin Water Reports and State and Local Water Reports

Ms. Trujillo reported that as of January 4, 2016, the system storage was 50% of capacity, similar to where it was around this time last year. The Lake Mead water elevation was at 1,081 feet with 10.12 million acre-feet (MAF), or 39% of capacity, and the Lake Powell water elevation was at 3,600 feet with 11.76 MAF, or 48% of capacity. As of January 3, 2016, the Upper Basin reservoirs, other than Lake Powell, were 56% of capacity at Fontenelle and 86% of capacity at Flaming Gorge in Wyoming, 75% of capacity at Blue Mesa and 96% of capacity at Morrow Point in Colorado, and 82% of capacity at Navajo in New Mexico. The unregulated inflow into Lake Powell for January has been 86% of average, and Upper Basin snowpack is currently estimated to be 107% of average. The Water Year 2016 precipitation to date is 104% of average.

Ms. Trujillo described the Colorado River accounting review process that is expected to occur in the coming months. A draft report will be issued first on a state-by-state basis in the Lower Basin, and the final decree accounting report will be finalized in May. The forecast sheet published on the U.S. Bureau of Reclamation's website provides an estimate of Lower Basin water uses but the verification process will occur over the next few months. The overall Lower Basin water use is estimated to be below the total apportionment of 7.5 MAF and the water usage by Arizona and Nevada will be below their apportionments. California, however, will be above its normal apportionment of 4.4 MAF in accordance with the legal entitlements and agreements it has in place. The excess flows above the 1.5 MAF delivery requirement to Mexico is expected to be about 14,000 acre-feet (AF). The Brock Reservoir storage is anticipated to be about 149,000 AF and Senator Wash stored about

109,000 AF. These quantities will be verified through the accounting review process over the next several months.

The State Water Resources Control Board is in the process of determining whether there will be modifications to the conservation requirements that are currently in effect. The Governor's proposed 2016-2017 budget included \$323 million for drought response. The cumulative statewide savings have been 913,000 AF out of a 1.2 MAF conservation goal that was set in 2015.

Mr. Mark Stuart, of the Department of Water Resources, reported that accumulated precipitation at the Los Angeles Civic Center is still below normal for this time of the year. Of the six major stations in Southern California, the precipitation to date for the Water Year has been below normal, with the Blythe station tracking the highest at 80% of normal. The water storage in Lake Oroville, as of January 1, 2016, is at about 1 MAF, or 29% of capacity. Water storage in the San Luis reservoir was about 370,000 AF, and is about 170,000 AF less than last year. The total water storage in the State Water Project system is slightly less than 1.9 MAF, or 31% of capacity. The snow water equivalents in the Northern, Central, and Southern Sierras are 97%, 107%, and 77%, respectively, as of January 4, 2016 with a statewide total of 97% of normal.

Board Member Jeanine Jones, of the Department of Water Resources, stated that because there are many misconceptions of El Nino always resulting in a wet year, DWR has placed an El Nino tracker/fact sheet on its drought website page. She explained that 1977 was a drought year, but was also an El Nino year, and that there is no predictive capability of El Nino from a water supply perspective.

Board Member Peterson, of MWD, reported that the Colorado River diversion was at 1.17 MAF in 2015. The Colorado River Aqueduct will be shut down for three weeks next month for repairs. In addition, the State Water Project has been shut down due to a breach and is currently undergoing repairs. Mr. Peterson reported that there is enough water in Lake Mathews and Diamond Valley Lake to make it through the shutdown. He noted that water deliveries were higher in December 2015 as a result of deliveries to San Vicente Reservoir and deliveries to some of the groundwater replenishment areas. Mr. Peterson announced that MWD and Bard Water District's Boards of Directors have approved entering into a two-year pilot fallowing program.

Board Member Pettijohn, representing the L.A Department of Water and Power, reported below normal snowpack conditions but indicated it was still early in the season.

Vice Chairman Wilson reported on behalf of the San Diego County Water Authority that all the retail agencies within San Diego County combined had a 20% conservation target from the State, but that cumulatively the agencies have saved 24%. For the month of December, the SDCWA has stored 25,000 AF of water in the newly raised San Vicente Dam.

Chairman Fisher reported on activities at PVID. Like MWD, PVID also schedules outages in order to perform maintenance. Mr. Hyduke confirmed that the construction and repairs are almost complete.

Board Member Hanks, of IID, reported that staff is currently planning for the next round of conservation projects. As fallowing projects are coming to an end, on-farm conservation projects are expected to significantly increase, and IID has received more than 1,000 applications for participation. The Salton Sea mitigation requirement will also begin to ramp up. Mr. Hanks explained that IID also has an obligation to address third party impacts from the fallowing program.

## **STAFF REPORTS REGARDING THE COLORADO RIVER BASIN PROGRAMS**

### Review status of the Basin States Drought Contingency Programs

Ms. Trujillo provided additional background information associated with the drought contingency planning efforts of the Basin States and Reclamation. The Basin States have been in discussions for the past couple of years in response to the multi-year drought in the Colorado River Basin. She reminded the Board that in 2000, the storage system was full but that currently, the system storage is 50% of capacity. The level of inflow has been below the long-term average over the past decade. Ms. Trujillo added that the current most probable inflow forecast for Water Year 2016 is 81% of average.

Ms. Trujillo stated that during the 2005-2006 timeframe, the Basin States worked together to develop the 2007 Interim Guidelines, which are in place through 2026. The development of the 2007 Interim Guidelines was a significant accomplishment for the Basin States and Reclamation. The Interim Guidelines provide for the coordinated operations of Lake Powell and Lake Mead, and contain provisions to manage Lower Basin shortages. The 2007 Interim Guidelines also contain mechanisms for managing Intentionally Created surplus (ICS) volumes. Ms. Trujillo added that recent changes have been authorized by the IID and MWD boards of directors to the Intra-California ICS agreement that allocates California's apportionment amongst MWD and IID. The proposed changes would increase the amount of water that IID can store with MWD under the ICS agreement for a three-year term.

Ms. Trujillo explained that the 2007 Interim Guidelines do not contain express provisions dealing with how Lower Basin shortages would be apportioned to Mexico, but these provisions were addressed in Minute 319, which is a five-year interim agreement that was finalized in 2012.

Ms. Trujillo explained that pursuant to the Interim Guidelines, August projections of reservoir levels on January 1 of the upcoming year are used to determine the reservoir's operating tiers. The official projections for 2016 anticipated that Lake Powell will be operating in the Upper Elevation Balancing Tier level, and that a shortage will not be declared for the Lower Basin.

Ms. Trujillo stated that the first level of shortage would require shortages to Arizona and Nevada that total 330,000 AF. In addition, reductions would also be applied to Mexico in accordance with Minute 319 in the amount of 50,000 AF. Ms. Trujillo stated that if the January 1 reservoir level at Lake Mead is below 1,050 feet, the next tier of shortages would be triggered and larger volumes of reductions would be applied to Arizona, Nevada, and Mexico. The August forecast showed an 18% chance for a 1<sup>st</sup> tier shortage in 2017, a 52% chance in 2018, and a 65% chance in 2019.

Ms. Trujillo reported that the current average inflows in the Colorado River Basin have been similar to droughts in our historical paleo records, which date back to 1,200 years or some of the more recent climate projections. Ms. Trujillo explained that this has created a level of uncertainty that has driven the Basin States, water users, and Reclamation to develop and implement a drought contingency plan. Ms. Trujillo reminded the Board that the Basin had very dry years in 2012 and 2013 and in 2013, Lake Powell released 7.48 MAF, which was the lowest ever release to Lake Mead. Despite the low release from Lake Powell, no Lower Basin shortages were declared.

In 2014, the Pilot System Conservation Agreement was developed by the municipal suppliers in the Lower Basin States and Denver Water. Later in 2014, the Lower Basin Contractors and States developed the Drought Response Memorandum of Understanding (MOU) that contains provisions for MWD, Central Arizona Project, and Southern Nevada Water Authority to create protection volumes in Lake Mead to help reduce the risk of shortage. The overall goal in the MOU is to develop approximately 1.5 to 3 MAF of water that could be conserved in Lake Mead.

Chairman Fisher commented that if Lake Mead elevation ever drops to the lowest shortage elevation level at 1,025 feet (Tier 3), the Basin States and Reclamation had agreed to reconvene. He stated at 1,025 feet, Lake Mead would contain approximately 5.2 MAF of water, which is insufficient to meet the demands in the Lower Basin. Chairman Fisher also noted that during the 2007 Guidelines negotiations, the projections only showed a 3% probability of Lake Mead dropping to a Tier 3 level, while current projections show a greater chance of Lake Mead elevation dropping to those critical levels. Chairman Fisher added that in hindsight, the 2007 Guidelines should have included higher trigger elevations. Chairman Fisher added that it is important for water managers to address these issues now that there is greater probability that it may occur.

Ms. Trujillo explained that there is uncertainty how the 2007 Interim Guidelines ICS provisions will operate during a shortage declaration. The 2007 Interim Guidelines do not contain explicit operating rules during shortage. Ms. Trujillo noted that it would be helpful to MWD and IID if the rules were better defined. Chairman Fisher noted that it is important for agencies in California to participate to find solutions to address this uncertainty rather than leaving decisions to be made by the State Water Board or the Secretary of the Interior.

Ms. Trujillo stated that the goals of the drought contingency effort have also been to encourage the United States to improve the operational efficiency of the system. Ms. Trujillo noted that improved operations at Brock and Senator Wash reservoirs have helped reduce

excess deliveries to Mexico, which translates directly back to more water savings in Lake Mead. She added that efforts to utilize more of the bypass flows from the Wellton-Mohawk Irrigation & Drainage District would also help save water in Lake Mead.

Ms. Trujillo reported that the 2016 federal appropriations bill includes \$100 million for drought response for Reclamation. They have 45 days as of the date of enactment to develop a spending plan. It is anticipated that the spending plan will include Colorado River funding to continue progress with the System Conservation Program. The Lower Basin System Conservation program is expected to create approximately 37,000 AF of water, while the Upper Basin program will create 11,000 AF. Ms. Trujillo stated that funding for the program in 2016 is uncertain at this time and added that the Six Agency Committee is considering allocating funding for the System Conservation Program. In 2018, Reclamation will release a report outlining the results of the System Conservation Program.

Ms. Trujillo reported on additional water conservation efforts related to utilization of bypass flows that are currently delivered to Mexico and other operational efforts in Reclamation's Yuma Area Office. Ms. Trujillo stated that Reclamation is planning on constructing a pipeline to transport additional groundwater pumped from the Minute 242 well field for delivery at the Northerly International Boundary to count toward Mexico's delivery allocation. Construction of the pipeline is a priority for Reclamation. Similarly, operation of the Yuma Desalting Plant (YDP) has potential to create additional water savings. Ms. Trujillo reminded the Board that municipal agencies and Reclamation previously funded a pilot project to operate the YDP a few years ago. Ms. Trujillo noted that staff will continue to track the progress of these various efforts and will keep the Board updated.

Responding to Board Member Hanks question requesting more information about Reclamation's system storage policies, Ms. Trujillo reiterated that uncertainty exists with how and when the previously stored water will be released during a shortage declaration. Ms. Trujillo added that the position of Arizona and Nevada has been that release of previously stored ICS is not allowed during a shortage. Mr. Fisher added that California would like to negotiate with the other Basin States to clarify the rules to retrieve its ICS water during a shortage. Ms. Trujillo stated that the Lower Basin States are thinking of ways to incentivize more storage in Lake Mead and each agency is thinking about how to accomplish that.

Vice Chairman Wilson commented that it appears that Reclamation's involvement in the drought contingency planning efforts were kicked off in 2013 when it appeared that there was a higher probability of shortages, and asked for updates on the more recent discussions. Ms. Trujillo stated that over the last few years the discussions have ebbed and flowed from a small group of technical modeling experts to a larger team that included agency technical staff, to subgroups involving just the municipalities. The most recent discussions have involved agency managers and the discussions have been led by the Commissioner of Reclamation. The discussions have involved how to incentivize storage, how to create more operational flexibility, and how to move the process forward.

Board Member Peterson commented that the discussion also needs to address the over allocation of the river and suggested that California should be a leader on this issue. Ms. Trujillo reiterated that California has been a leader, noting the agencies' collective implementation of the 4.4 plan.

Mr. Zimmerman stated that the 2007 Interim Guidelines are interim and negotiations for new guidelines for operation of the entire system will start by 2020. He stated that the current drought contingency efforts could be incorporated into the new guidelines. He also stated that the ICS programs have been extremely beneficial, not only to the contractors, but to the entire reservoir system and encouraged continued progress.

#### Review status of the Colorado River Basin Water Supply and Demand Study

Board staff Angela Rashid reported on Reclamation's regional Basin Study Program. Reclamation's Basin Study Program was authorized under the Secure Water Act passed by Congress in 2009. The Act directed the Secretary of the Interior to develop a sustainable water management policy, which includes the Basin Study program. Ms. Rashid explained that Reclamation collaborates with non-federal partners, in a 50/50 cost share, to develop a Basin Study that evaluates current and future water supplies, estimates demand and supply imbalances, and identifies adaptation strategies.

Ms. Rashid reported that there are twenty-two on-going and/or completed Basin Study reports across the country, with four studies in the Southern California region. The studies include the Southeast California Regional Basin Study, the L.A. Basin Stormwater Conservation Study, the Santa Ana River Watershed Basin Study, and the San Diego Basin Study.

Ms. Rashid provided a summary of each report. The Southeast California Regional Basin Study began in 2011 and was completed in 2015. The study area includes the Borrego, Coachella, and Imperial Valleys and includes 5,200 square miles with a population of over 750,000 people. The goal of this report is to analyze structural and nonstructural options of providing water to isolated areas in the region. These options ranged from construction of a pipeline from Imperial and Coachella Valleys to Borrego Valley to formation of the Borrego Water Coalition to better manage their groundwater supplies. The report found that the structural options were too costly and that the nonstructural options were more viable.

The L.A. Basin Stormwater Conservation Study began in 2012 and the final report is due in 2016. The study area includes 1,900 square miles, and is populated by ten million people, 18 dams, 27 spreading grounds, and five major channel outlets. The goals of this report were to evaluate existing water conservation methods, and analyze structural and nonstructural options that could resolve the water supply and demand imbalances. The report evaluated a range of options that ranged from capturing local stormwater to raising dam heights.

Ms. Rashid reported that the San Diego Basin Study began in 2014 and will be completed in 2016. The partner of the study is the City of San Diego's Public Utilities

Department. The study area includes 11 watersheds, 2,900 square miles, and 3.1 million people. Ms. Rashid stated the goals of the report are similar to the other reports and will provide an update once the report is completed.

The Santa Ana Watershed Basin Study began in 2011 and was completed in 2013. The partners to this study include the Santa Ana Watershed Project Authority and over 350 water-related agencies and other stakeholders. The study area includes 2,650 square miles with a population of 6 million people. The goals of the study were to assist in the update of the basin's regional water management plan, as well as refine the region's water supply and demand projections, and address potential climate change impacts. The study identified several strategies to meet these goals, which ranged from expanding flood control infrastructure to expanding natural wetlands.

Ms. Rashid reported that it is uncertain whether these studies will undergo a Next Steps process similar to the Colorado River Basin Study. Ms. Rashid also reported that the development of Phase 2 of the Colorado River Basin Study is underway.

Ms. Shields of IID stated that her agency provided comments to the Southeast California Basin Study and that it appeared that the report was being driven by Borrego Valley to help find solutions to their water supply issues. Mr. Cheng of CVWD concurred with Ms. Shields and added that his agency also had provided comments.

#### Review Status of the Implementation of Minute 319 and Preparation for 32X

Ms. Trujillo reported that several Minute 319 components are still being implemented. The pulse flow has been completed and a draft report from the Technical Work Group that analyzes the pulse flow effects can be expected in the coming months. Work Groups have been established to both implement the existing requirements of Minute 319 and to seek additional opportunities for a subsequent Minute. The Salinity Work Group is evaluating operational flexibility for binational deliveries and ways to address Mexico's continued request for decreased salinity levels. Ms. Trujillo reported that the Environmental Flows Work Group is concentrating on lessons learned from the previous pulse flow event to evaluate hypothetical scenarios using various quantities of water for restoration work in Mexico. Ms. Trujillo will be attending the next binational negotiating group meeting on Thursday and Friday of this week in Juarez, Mexico.

#### Review Status of the Salinity Control Forum, Workgroup, and Advisory Council

The Federal Accomplishments Report highlights each of the federal agency's actions for Fiscal Year 2015 and is a mechanism for keeping track of progress of activities by Reclamation and U.S. Department of Agriculture. The highlight sheet from the FAR is included in the Board packet. The Board will continue to closely monitor the Paradox EIS process, in coordination with U.S. Fish and Wildlife Service and USGS, who are also providing technical support. Ms. Trujillo reported that the projects put in place by Reclamation and NRCS will continue to be implemented throughout the year. The next Work Group meeting will be held in February in Phoenix, Arizona, and Board staff Lindia

Liu will report on that progress at the March Board meeting. The next Forum meeting will take place in June and will be hosted by the state of Colorado.

### Review Status of the Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental and Management Plan EIS

Board Staff Jessica Neuwerth reported that a public draft of the Long-Term Experimental and Management Plan (LTEMP) EIS for the management of Glen Canyon Dam had been released on January 8. The area affected by the EIS includes Lake Powell, Lake Mead, and the river corridor between them. Seven alternatives were analyzed in the EIS, and the alternative chosen as the preferred alternative combines elements of the alternative proposed by the Basin States with elements proposed by Department of the Interior (DOI). Ms. Neuwerth reported that the EIS intends to incorporate science developed since the last EIS was finalized twenty years ago. The preferred alternative includes hydropower values that have been collaboratively developed by DOI and the Western Area Power Administration, as well as several types of high flow experiments (HFE) to build beaches, such as fall and spring HFEs, extended duration HFEs, and proactive spring HFEs. Other experimental flows in the preferred alternative include low summer flows, intended to aid native fish during summer breeding and growth, “bug flows” to increase insect production, and trout management flows to curb nonnative trout reproduction. Ms. Neuwerth noted that the preferred alternative also included a decision-making framework to allow for stakeholders to participate more fully in the implementation of experimental actions.

Ms. Neuwerth reported that the LTEMP EIS has a 90-day comment period, with comments due April 7. DOI plans to hold a series of public meetings, with webinars scheduled for February 16 and March 1, and public meetings planned for February 22 and February 25 in Flagstaff and Tempe, AZ, respectively. Ms. Neuwerth reported that a final EIS and Record of Decision are expected in summer 2016.

### Review Status of the Lower Colorado River Multi-Species Conservation Program

Ms. Neuwerth reported that the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) Work Group plans to meet on January 25. Ms. Neuwerth noted that, in 2016, the LCR MSCP intends to continue with the acquisition and restoration of properties. Restoration plans will be developed for new conservation areas such as Parker Dam Camp, Three Fingers Lake, and Planet Ranch. Restoration work will begin at Mojave Valley Conservation Area. In particular, efforts to acquire land in California in satisfaction of CESA permit requirements will continue in 2016.

## **ANNOUNCEMENTS / NOTICES**

Ms. Trujillo reported that the State Water Resources Control Board held a public workshop on January 5, 2016. Presentations and testimonies were given on Salton Sea activities. A follow-up meeting of the Salton Sea stakeholder group was held on January 20. Ms. Trujillo reported that Governor Brown’s proposed budget included \$80 million in funding for the Salton Sea restoration efforts.

Ms. Shields announced that the January 20 stakeholder meeting will be held at IID. Ms. Shields also reported that at its last board meeting, IID authorized the first phase of infrastructure development to create a water distribution system for various projects envisioned at the Salton Sea.

Ms. Trujillo reported that the Executive Director's report provides links for funding opportunities available through Reclamation for conservation and research grants.

## **ADJOURNMENT**

With no further items to be brought before the Board, Chairman Fisher adjourned the meeting at 11:51 A.M.