

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, September 9, 2015.

A meeting of the Colorado River Board of California was held on Wednesday, September 9, 2015.

Board Members and Alternates Present

Stephen Benson	David Pettijohn
Brian Brady	Michael Touhey
Dana Bart Fisher, Jr., Chairman	David Vigil
Henry Kuiper	Doug Wilson
Peter Nelson	Jeanine Jones
Glen Peterson	

Board Members and Alternates Absent

James Hanks	Chris Hayes
John Powell Jr.	

Others Present

Steve Abbott	Mark Stuart
Tim Blair	Tanya Trujillo
Robert Cheng	Joe Vanderhorst
Dan Denham	Donnell Wilcox
Christopher Harris	
Ned Hyduke	
Lisa Johansen	
Lori Jones	
Tom Levy	
Kara Mathews	
Jan Matusak	
Jessica Neuwerth	
Vic Nguyen	
Autumn Plourd	
Angela Rashid	
Tom Ryan	
Jack Seiler	
John Simpson	
Joanna Smith	
Philip Southland	

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:12 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 on the agenda or matters related to the Board. Hearing none, Chairman Fisher moved to the next agenda item.

ADMINISTRATION

Executive Director Trujillo informed the Board that the August monthly meeting minutes were not ready for approval, but would be brought to the Board for approval at its regular October meeting.

Colorado River Basin Water Reports and State and Local Water Reports

Ms. Trujillo reported that the Bureau of Reclamation's August 24-month study to determine the 2016 operating tiers for Lakes Powell and Mead was released on August 17, 2015. Pursuant to the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, the Upper Elevation Balancing Tier will govern the operations of Lake Powell and will have an initial release of 8.23 million acre-feet from Lake Powell. However, the Guidelines also provide for a mid-year review in April that would determine if a release amount of up to 9 million acre-feet is allowed. For Lake Mead, the August 24-month study projected that the operating tier will be the Normal or ICS Surplus condition and there is no possibility of a shortage condition in the Lower Basin in 2016. The final consultation for the Annual Operating Plan was held in Las Vegas, NV, on September 3, 2015. The final approval process is ongoing at the Department of the Interior and the Secretary of the Interior is expected to finalize the AOP by December 31, 2015.

Ms. Trujillo described the 5-year outlook modeling results performed by Reclamation. As noted earlier, there is no chance for a shortage in 2016, but there is an 18% probability of a shortage in 2017. The probability increases to 52% in 2018, or 42% at the first tier and 10% at the second tier shortage level. In years further out such as 2019 and 2020, there is a higher probability of shortage, but also greater uncertainty in the hydrology.

Ms. Trujillo reported that as of August 31, 2015, the water level at Lake Powell was 3,609 feet with 12.65 million acre-feet of storage, or 52% of capacity, while the water level at Lake Mead was at 1,078 feet with 9.87 million acre-feet of storage, or 38% of capacity. The total system storage was 30.88 million acre-feet, or 52% of capacity, and about 650,000 acre-feet more than that of last year. The April-July 2015 unregulated

inflows into Lake Powell were observed at 6.71 million acre-feet, or 94% of average, and the forecasted inflow into Lake Powell for the Water Year 2015 is 10.34 million acre-feet, or 95% of average. It was noted that the Upper Basin reservoirs (except Lake Powell) are at full or near full capacity and some of them have been spilling for flood control requirements.

Beginning this month, additional information related to Lower Basin storage facilities will be presented at the Board meetings. Brock Reservoir has had a cumulative total of 99,700 acre-feet as of September 2, 2015. Senator Wash has stored a cumulative total of about 83,000 acre-feet. Ms. Trujillo also reported on the forecasted water use in the Lower Basin and noted that the agricultural uses in California and Arizona have been trending downward due to recent precipitation that has resulted in decreased water orders.

State and Local Water Reports

Mr. Mark Stuart reported that Los Angeles Civic Center cumulative precipitation, to date, is 8.85 inches, or 58% of average, while Blythe's precipitation is 3.06 inches, or 89% of average. Mr. Stuart reported that as of September 2, 2015, the Northern Sierra Precipitation Eight-Station Index was at 75% of average. The San Joaquin Precipitation Index was at 47% of average. The Southern Sierras Precipitation Index was at 47% of average.

Mr. Stuart reported on the status of storage in the State Water Project, with Lake Oroville at 1.1 million acre-feet, or 31% of capacity, which is slightly less than last year. The San Luis reservoir was at 361,789 acre-feet, or 31% of average. The total storage in the State Water Project was 1.9 million acre-feet, or 35% of capacity. Reservoir storage conditions across the State are below average.

Mr. Peterson reported that MWD's combined reservoir storage was at 45% of capacity. Vice Chairman Wilson reported that water use in the Padre Dam region has reduced on a cumulative basis by 33%, which is greater than the State mandated goal of 20%. Water use within the San Diego County Water Authority service area, was reduced by 26% in June and 32% in July. Mr. Wilson noted that about 40,000 acre-feet has been added to storage in San Vicente Dam. Mr. Wilson also reported that the San Diego County Water Authority's Carlsbad Desalination Plant will be coming online in a few months. The desalination plant will provide about 50,000 acre-feet of water per year.

Mr. Benson provided the Board with IID's 2015 Forecasted Water Use handout, which displays data such as IID's QSA water transfer schedule, water orders and fallowing schedule. Mr. Benson stated that IID will stop delivering mitigation water to the Salton Sea in 2017, noting that the mitigation fallowing program will cease in 2018. In 2015/2016, 17,000 acres were fallowed, at a cost of \$9 million, with 100,000 acre-feet of water conserved, noting that the conserved water will be transferred to San Diego. IID will transfer 34,000 acre-feet to Coachella and deliver 110,000 acre-feet to the Salton Sea. In 2016, water transfers to Coachella will ramp up to 41,000 acre-feet, while San Diego will receive 20,000 acre-feet and 130,000 acre-feet will be delivered to the Salton

Sea. Mr. Benson reported that IID's on-farm efficiency program is underway, with over 700 contracts executed with growers. It is anticipated that the program will conserve 60,000 acre-feet of water in 2015 and 2016. A final accounting of the water conserved by this program will be available at the end of the season. Mr. Benson also mentioned that that IID is monitoring the effects of recent summer storms, as they greatly affect how agricultural water users make crop choices.

Mr. Benson reported that IID is looking for additional storage options and reminded the Board of IID's action last year to store 50% of their unused water with MWD and 50% as ICS in Lake Mead. Mr. Benson also reported on recent investments IID has made to upgrade tracking of their canal system which will ensure that users are receiving adequate amounts of water. Mr. Benson also stated that IID will be working on a series of small reservoirs to catch unused water in their system. Executive Director Trujillo noted that the November CRB meeting will be held in IID, where we will learn more about IID's equitable apportionment system.

Board member Nelson reported that Coachella Valley Water District reduced its water use by 41% in July and 27% in August for an average of 34%, which is less than the State's mandated conservation goal of 36% for Coachella. Mr. Nelson stated that the CVWD Board approved \$1.9 million of additional conservation funding, noting that CVWD has also incorporated drought penalties on a tiered rate system. In July, CVWD brought in \$1.9 million in penalty fees and \$1.6 million in August. CVWD is also working on a program to convert flood irrigation to drip, which was funded through the system conservation program by Southern Nevada Water Authority, MWD, CAP, Denver Water and the Bureau of Reclamation. Mr. Nelson also reported that the Governor recently signed SB 385, which is follow-up legislation to the chromium-6 standard, which allows CVWD five years to implement their chromium-6 remediation program, which will cost \$250 million.

Vice Chairman Wilson asked about the impact to farmers from summer storms. Chairman Fisher stated that the storms affect the delicate growing cycle of newly planted vegetable seeds, such as broccoli, interfering with their ability to germinate. Mr. Nelson explained that when fields are irrigated with micro sprinklers and drip for a long time, salts in the soils are pushed to the perimeter of the root zone. However, big rain events push the salts back into the root zone, requiring additional irrigation to push the salts back out.

Mr. Pettijohn reported that LADWP is continuing to meet its conservation goals every month and in some cases slightly exceeded them. LADWP is continuing their turf removal program, providing customers with \$1.75 per square foot of turf. Mr. Pettijohn also noted that LADWP has recently added shade balls into one of their reservoirs to preserve the water quality but limiting the sun's rays from reacting with the chlorine in the water. LADWP is also in the process of moving from a two-tier rate structure to a more conservation based four-tier rate structure. LADWP is also implementing a WaterSmart pilot study that will provide about 10,000 customers with water user reports that were specifically designed for their home. By 2017, LADWP hopes to provide the

water use reports to all their residential customers. Studies have shown that water use reports help customers achieve a 5% overall reduction in their water use.

Chairman Fisher provided an update on Palo Verde Irrigation District, noting that PVID usually diverts nearly a million acre-feet of water a year, returning almost 600,000 acre-feet by way of drainage and deep-percolation back to the Colorado River. Chairman Fisher reported that PVID will not be diverting as much water because they are at a maximum following call to satisfy the following agreement with MWD. This will result in 29% of the PVID agricultural land being fallowed.

Update Regarding the California Drought

The California drought continues to persist with 46% of the state remaining in the Exceptional Drought category. Ms. Trujillo provided background information on the U.S. Drought Monitor Map and described its Drought Condition categories and their potential applications to respond to concerns raised at last month's Board meeting that the Drought Monitor Map may not be an accurate characterization of actual water supply conditions in California. The U.S. Drought Monitor Map was presented as one of many tools that could be included to provide a more complete picture of drought and water supply conditions in California.

The State Water Resources Control Board continues to track and implement the mandatory reductions pursuant to the Governor's April 1, 2015 Executive Order. Conservation was in excess of 31% on a statewide basis during July 2015. The Association of California Water Agencies had compiled a video of water conservation advertisements that featured member agencies. The Public Policy Institute of California also recently published a report entitled "What if California's Drought Continues?" that described what drought conditions and impacts may be if the drought continues. One of the key messages was that we have not only experienced record-low water and precipitation and snowpack levels, but also record-high temperatures. Ms. Trujillo noted the compilation of federal and state funding dedicated to drought mitigation efforts.

Ms. Jones noted that the majority of the state drought emergency response has been directed towards addressing the problems of small water systems in rural areas where supplies are often unreliable. Another area of interest has been in monitoring of land subsidence, particularly in the San Joaquin Valley where high groundwater extraction is occurring as a result of the drought.

Review Status of the Basin States Drought Contingency Programs

Ms. Trujillo reported on the status of Arizona's Intentionally Created Surplus proposal to create up to 95,000 acre-feet per year for 2015 and 2016. The ICS proposal is under consideration for approval by IID, City of Needles, and the Metropolitan Water District, while the Palo Verde Irrigation District and the Coachella Valley Water District have already taken action to approve the forbearance agreement for Arizona. In addition, Reclamation is continuing to implement the Pilot System Conservation Program.

Reclamation and the funding agencies have undertaken a process of selecting and funding applicants of water conservation projects through the Pilot Program, which is funded by Reclamation and various agencies. As a condition of the funding agreement, CVWD has agreed that conserved water would remain in the system for the benefit of the system. Reclamation will evaluate the success of the Pilot Program by the end of 2018. Initial reports indicate that the Pilot Program has been a success and that the demand has outpaced the existing funds. The Pilot Program may be expanded upon agreement by the funding agencies. One of the keys to making the program work is to have a forbearance agreement so that other users do not divert the stored water. The Upper Colorado River Commission (UCRC) is implementing the Pilot Program in the Upper Basin. The response from the Request for Proposals process has been positive, and UCRC is currently contracting with the selected applicants.

Ms. Trujillo noted recent congressional advocacy actions by Arizona's delegation including some draft amendments to the California drought bills currently pending in Congress. The initial feedback provided was that certain proposals were problematic because they would remove the Secretary's discretion to allocate unused water from one state to another—and California has historically relied on this unused apportionment. California will continue to monitor these amendments to assure there will be no adverse provisions added onto the drought bills, and advocacy either through the Board or from individual agencies may be necessary.

Review status of the implementation of Minute 319

Ms. Trujillo reported that, similar to the report at the last meeting, a successor minute may include provisions that extend portions of the current minute. A small group from U.S. will meet with a small team from Mexico on Thursday, September 10 to continue discussion of the potential for a subsequent minute. There will be workgroups relating to operational issues, conservation projects and environmental issues to help with the negotiations with Mexico.

Review status of the Salinity Control Forum, Workgroup, and Advisory Council Revised Agenda

The Work Group will meet in two weeks in Colorado and a detailed presentation on the outcome of that meeting will be given at the next Board meeting. A Salinity Economic Damages Model Work Group will update the damages associated with higher salinity levels for agricultural and municipal uses. Ms. Liu will be reaching out to the agencies for information for the Work Group to accurately describe the benefits of the Salinity Control Program and the risks of discontinuing some of those existing projects. The model is now being expanded to include water uses and users from Arizona and Nevada, as well as additional entities within California.

Ms. Trujillo reported that the Paradox Valley Unit EIS is ongoing and the cooperating agencies will meet on September 21 to receive reports on the latest status of

the EIS process. The Salinity Control Forum is scheduled to meet in late-October in Tucson, Arizona.

Review Status of the Yuma Bypass Flows Work Group Process

Mr. Harris provided an overview of the current status of the Yuma Area Bypass Flows Work Group process that has been underway since March 2015. Mr. Harris provided the Board with background and history related to bypass drain and the bypassing of approximately 125,000 to as much as 140,000 acre-feet of saline pumped drainage water from the Wellton-Mohawk Irrigation and Drainage District (WMIDD) and Yuma area to the large wetland in Mexico known as the Cienega de Santa Clara. Mr. Harris indicated that the original reason for constructing and operating the bypass drain was to ensure that the salinity differential could be met in the context of Treaty water deliveries to Mexico. The 1974 Colorado River Basin Salinity Control Act authorized the construction of the Yuma Desalting Plant (YDP) for the purposes of treating the bypassed WMIDD saline drainage water and then including the treated product water as part of the annual Treaty delivery to Mexico. The saline flows that are not treated at YDP and are bypassed to the Cienega de Santa Clara does not count toward the U.S. Treaty delivery obligation, and an equivalent amount of water must be released from Lake Mead annually to make up the difference.

Mr. Harris reported that the Yuma Area Bypass Flows Work Group, established by Arizona and Reclamation, has been charged with exploring and evaluating options for off-setting or replacing the bypass flows and thus reducing the amount of water that needs to be released from Lake Mead to make the annual Treaty delivery to Mexico. Currently the work group has developed a catalog of a number of options that fall into several broad categories, including (1) various permutations associated with operation of YDP; (2) utilization of local groundwater supplies; (2) increased or expanded pumping of the Minute 242 wellfield along the Southerly International Boundary; and (4) engagement with Mexico on a range of binational water supply and accounting options. Most, if not all, of the options will involve significant dialog and negotiation with IBWC and Mexico in the context of the broader binational process.

Mr. Harris indicated that the work group will be holding a conference call in late-September to refine the ranking criteria that will be utilized to evaluate the options that have been identified in the catalog. A meeting has been scheduled for October 26th, in Yuma, Arizona, to continue to refine the options and begin the development of recommendations and a report describing the process.

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

Staff-member Neuwerth reported that the Adaptive Management Work Group met on August 26 and 27 in Tempe, Arizona and approved recommendations to the Secretary for the 2016 hydrograph and the 2016 budget and work plan. Ms. Neuwerth stated that the group also received updates from scientists on the status of resources in the

area. The Gold King Mine Spill, a spill of toxic water released in southwestern Colorado, had been so diluted by the time it reached the Utah border that it could not be detected. Researchers reported that the trout population was still in decline and that the humpback chub population showed poor condition in three of the last surveying trips, with humpback chub detections unusually low this year. Low detections could be the result of different patterns in movement or spawning this year, rather than an actual decrease in population. Researchers reported that humpback chub translocations seemed to be effective, with humpback chub successfully living and reproducing in the tributaries to which they had been moved.

Ms. Neuwerth reported that, as of late August, sediment deposition in Glen Canyon was insufficient to carry out a high flow experiment. However, sediment from fall storms was expected and could create the conditions that could trigger an HFE. Additionally, green sunfish, a high-risk predatory fish, were detected below Glen Canyon Dam in unusually large numbers. Managers removed about a thousand green sunfish during a nonnative fish removal trip in early August and were planning additional fish removal trips.

Finally, Ms. Neuwerth reported that a cooperating agency draft of the Long-Term Experimental and Management Plan (LTEMP) EIS for the management of Glen Canyon Dam was released in late-June, and that cooperating agency comments are due on September 30. The LTEMP EIS includes 7 alternatives, including several developed by the Department of the Interior (DOI), one developed by CREDA, and one developed by the Basin States. The “hybrid” alternative, which combines elements of a DOI alternative with elements of the Basin States’ alternative, is likely to be designated the “preferred alternative” in the public review draft of the LTEMP EIS slated to be released in mid-December. The final EIS and Record of Decision is expected to be issued in spring or summer 2016.

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

Ms. Neuwerth also reported that the Planet Ranch property that the Lower Colorado River Multi-Species Conservation Program (MSCP) has been attempting to acquire is currently tied up in litigation in Arizona Superior Court and that the Arizona Supreme Court recently scheduled an expedited hearing on the appeal of the Superior Court’s decision. Oral arguments have been scheduled for some time in October. Finally, Ms. Neuwerth reported that the LCR MSCP work group is scheduled to meet in Las Vegas, Nevada on September 30.

Vice Chairman Wilson asked whether a recent fire at Havasu National Wildlife Refuge had damaged any of the LCR MSCP habitat restoration sites. Deputy Director Harris responded that the fire had not damaged any of the LCR MSCP habitat, but had burned some adjacent areas known to support nesting southwestern willow flycatchers. Mr. Harris reported that this may present an opportunity for the LCR MSCP to contribute to restoration of some of the burned habitat with native riparian plant species.

Board Member Nelson inquired what legal issues were affecting the Planet Ranch property acquisition. Ms. Trujillo responded that Mohave County, in which a portion of the property is located, has claimed that it could be adversely impacted by the purchase and that when the State of Arizona, through the Department of Water Resources, issued a sever and transfer of the Planet Ranch water rights, it was an improper administrative action that did not consider potential harm to the county. Mr. Harris added that Mohave County also had other significant issues associated with the larger Bill Williams River-Hualapai Indian Water Rights Settlement Act, and that the LCR MSCP and the potential Planet Ranch acquisition were entangled in these other issues.

ADJOURNMENT

With no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn the meeting. Upon the motion of Mr. Peterson, seconded Mr. Pettijohn, and unanimously carried, the meeting was adjourned at 11:40 A.M.