

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, December 16, 2015

A meeting of the Colorado River Board of California was held on Wednesday, December 16, 2015, in Las Vegas, Nevada.

Board Members and Alternates Present

Dana Bart Fisher, Jr., Chairman	Jack Seiler
Stephen Benson	Michael Touhey
Brian Brady	Doug Wilson
Peter Nelson	Chris Hayes and David Vigil, Designees
Glen Peterson	Department of Fish and Wildlife
David Pettijohn	Jeanine Jones, Designee
John Powell, Jr.	Department of Water Resources

Board Members and Alternates Absent

James Hanks
Henry Kuiper

Others Present

Steve Abbott	Larry Fleming	Mike Pacheco
Don Barnett	Christopher Harris	Larry Purcell
Connie Beshears	Bill Hasencamp	Randy Record
James Bodnar	Michael Hughes	Elsa Saxod
Vikki Dee Bradshaw	Ned Hyduke	Augie Scalzitti
Daniel Bunk	David De Jesus	Joel Scalzitti
John Carter	Ted Kowalski	Marcia Scully
Robert Cheng	Robert Krieger	Rob Skordas
Michael Clinton	Ramsey Kropf	Rodney Smith
Michael Cohen	Estevan Lopez	Tanya Trujillo
Dan Denham	Jan Matusak	Jack Vessey
Ron Derma	Jennifer McCloskey	Meena Westford
Karen Donovan	John Morris	Mark Weston
Craig Elmore	Jessica Neuwerth	Michael Yu
John Fleck	Vic Nguyen	Dee Zinke

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 3:10 pm.

OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD

Chairman Fisher introduced Department of the Interior Assistant Secretary for Water and Science, Ms. Jennifer Gimbel, and Bureau of Reclamation Commissioner, Mr. Estevan Lopez, and asked if they would like to make any remarks to the Board.

Assistant Secretary Gimbel remarked that it has been a very busy year in the Colorado River Basin. She indicated that Deputy Secretary of Interior, Mike Connor, was going to highlight much of the work that had been accomplished during his keynote address on Friday. She pointed out that the Department and the Basin States continue to work diligently on the system conservation program, binational issues with Mexico, as well as the on-going California drought and Salton Sea issues.

Ms. Gimbel indicated that the Department recently created the National Resources Finance Center. The center is intended to provide financial expertise help with the development of water projects and related infrastructure, as well as rehabilitation and maintenance.

Reclamation Commissioner Estevan Lopez reported that Reclamation continues to work closely with the Basin States in managing the Colorado River System in light of the on-going drought. He highlighted the excellent cooperation and collaboration among the states in the context of the system conservation pilot program, the on-going Minute 32x binational discussions, as well as the difficult challenges in California with the Bay-Delta, the drought, and the Salton Sea. Commissioner Lopez stated that Reclamation looks forward to continuing its excellent relationship with California water users in addressing these challenges in the next year.

ADMINISTRATION

Consideration and Approval of the Minutes

Mr. Peterson moved that the November 18, 2015 meeting minutes be approved, seconded by Ms. Jones. Upon receipt of clarifications to Board comments, the November 18, 2015 meeting minutes were approved.

Consideration 2016 Board Meeting Schedule

Chairman Fisher reviewed the proposed 2016 Board meeting schedule to periodically travel to various agency venues through 2016. Ms. Trujillo noted that Board staff will be working with the Los Angeles Department of Water and Power on a tour of the Department's Owens Valley facilities in conjunction with the Board's monthly meeting. Mr. Wilson moved that the 2016 Board Meeting schedule be adopted, and Mr. Pettijohn seconded the motion. By unanimous support, the 2016 Board Meeting Schedule was adopted.

COLORADO RIVER BASIN "YEAR IN REVIEW" WATER REPORTS

Colorado River Basin Water Reports and State and Local Water Reports

Executive Director Trujillo gave a brief overview of hydrology for Water Year 2015. She pointed out that it had been unique in that the fall and winter months in the Colorado River Basin were well below normal, from a precipitation perspective, but that the late-Spring was well above normal, with some areas in the Basin receiving between 200-400% of normal amounts of precipitation. The end result was that the inflow into Lake Powell reached about 94% of average by the end of the Water Year.

Ms. Trujillo briefly reviewed the status of the combined reservoir system over the past 15 years, with system being essentially full in 2000, and by 2015, the contents of Lake Mead were at the lowest levels since Hoover Dam was constructed. Ms. Trujillo also reported, based upon the 2007 Guidelines, that there would be no Lower Basin shortage in 2016, but there is an 18% chance of the

first tier of shortage in 2017. Vice-Chair Wilson asked if these probability projections included the potential influences of a strong El Nino winter period. Ms. Trujillo indicated that the Colorado Basin River Forecast Center and Reclamation utilize available climatic and hydrologic data and projections in developing forecasts and in modeling analyses.

Ms. Trujillo provided an overview of the current water supply and hydrologic conditions in the Basin. She reported that as of December 7, 2015, the water level at Lake Mead was at 1,078.87 feet with 9.92 million acre-feet of storage, or 38% of capacity. The water level at Lake Powell was at 3,604.67 feet with 12.20 million acre-feet of storage, or 51% of capacity. As of December 6, 2015, the total system storage was at 29.86 million acre-feet, or 50% of capacity, which is 142,000 acre-feet more than this time last year. As of December 6, 2015, the Upper Colorado River Basin reservoirs, other than Lake Powell, ranged from 63% of capacity at Fontenelle Reservoir to 88% of capacity at Flaming Gorge Reservoir in Wyoming, 79% of capacity at Blue Mesa in Colorado and 82% of capacity at Navajo in New Mexico. The observed unregulated inflow into Lake Powell for October and November has been 94% of average, and Upper Basin snowpack is currently estimated to be 89% of average.

Ms. Trujillo indicated that Lower Basin water use forecasts continue to reflect decreased water uses by irrigation districts in California and Arizona, and all three states are projected to use a total of 7.3 million acre-feet out of a normal apportionment of 7.5 million acre-feet. Pursuant to the System Conservation Pilot Program, approximately 17,000 acre-feet of water from Arizona (7,000 from Yuma Mesa and 10,080 from the Tohono O'Odham Nation and approximately 7,500 acre-feet of water from Nevada is scheduled to be left in Lake Mead for 2015.

With respect Treaty deliveries and regulatory storage, Ms. Trujillo reported that as of December 7, 2015, deliveries to Mexico are forecast to be 16,335 acre-feet above the 1.5 million acre-feet Treaty obligation, and the amount of water forecasted to be conveyed to Mexico through the Wellton-Mohawk bypass drain pursuant to Minute 242 is 138,232 acre-feet. As of December 4, 2015, storage at Brock Reservoir had been 132,866 acre-feet and there had been 105,060 acre-feet of storage in Senator Wash Reservoir.

Ms. Trujillo reported that the Colorado River Basin Forecast Center held a webinar on December 10 to discuss the "2016 Water Supply – Early Season" forecast. Although it is still early in the season, the snowpack is currently below average. The Forecast Center outlined changes to its reporting process that will be utilized for the remainder of the season. The next briefing will be held on January 7, 2016 with follow up sessions scheduled monthly through May.

Ms. Trujillo provided the Board with an update on the current status of the California drought. She presented the latest National Drought Monitor map indicating that as of December 1, 2015, 44% of the State continues to be in the "exceptional drought" category of drought and that reservoir levels continue to be well below average. In December 2015, 55% of the State was in the exceptional drought category.

Ms. Trujillo also reported that on December 7, 2015, the State Water Resources Control Board held a workshop to receive input on how to improve the implementation of the Governor's 25% urban conservation mandate. The current conservation requirements were set to expire on February 13, 2016, but the Governor's November 13, Executive Order has extended the mandatory water use reductions through October 31, 2016 depending on precipitation and other factors. Some suggested changes to the current conservation rules included: adjusting the 2013 baseline water use to account for recent population growth; giving agencies "credit for drought-resilient water supplies", such as desalination or

potable reuse; introduction of voluntary programs allowing agencies to work together to target and achieve conservation goals; and adjusting conservation targets in response to recycled water use.

Jeanine Jones provided a brief overview of the State's hydrologic conditions and indicated the State is planning for above average precipitation events throughout much of the State. Ms. Jones indicated that the typical El Nino pattern tends to shift much of the winter precipitation into the latter portion of the season. Ms. Jones reported that there is close coordination between the State and Federal water projects to ensure that water conditions for salmonid species can be maintained. She noted that the Department had set an initial State Water Project allocation of 10%.

Mr. Peterson, of the Metropolitan Water District of Southern California, indicated that Lake Mathews is nearly full, and that the Colorado River Aqueduct is currently on a seven-pump flow. He also reported that due to the recent warm weather, the amount of conservation has declined slightly, but now that it is becoming cooler MWD anticipates that trend will reverse somewhat. Mr. Peterson noted the recent acquisition of significant acreage within the Palo Verde Irrigation District, and stated that MWD continues to work diligently on being a collaborative partner, and looks forward to maintaining that relationship in the future.

Board Member Pettijohn provided an overview of the 2015 Water Year for the City of Los Angeles, which was essentially the driest year of record. He indicated that while the season is early, it looks like the current precipitation in the Eastern Sierra seems to be tracking the El Nino year of 1997-1998. Mr. Pettijohn reported that the City has had a mandated conservation goal of 16% and that the City has met that goal each month, with the exception of last month where it was slightly under the goal. He reported that the City is preparing a recommendation for the City Council to reduce outside watering to two days per week, at 8 minutes per station. Mr. Pettijohn reported that the City, through its turf replacement program, has removed 27 million square feet of turf within Los Angeles, which is more than half of the total amount of turf removal requested by Governor Brown statewide. Mr. Pettijohn indicated that the current total gallons-per-capita-per-day water use in the City has declined to 180 gpcd; and that strictly residential use is down to 73 gpcd.

Board Member Wilson, reporting on behalf of the San Diego County Water Authority, indicated that the new Poseidon Carlsbad Desalination Plant was dedicated and opened on December 14. The plant at full operation will be able to produce 50,000 acre-feet annually and can meet approximately 8-10% of the County's water supply needs. He reported that the County conservation goal is 20%, but that the County continues to do better than that and is at about 24% currently. Mr. Wilson also indicated that raising San Vicente Dam has been an important component in the County's ability to store additional water supplies.

Chairman Fisher reported on activities in the Palo Verde Irrigation District. He indicated that General Manager Ned Hyduke replaced Mr. Ed Smith upon Mr. Smith's retirement. He also acknowledged the recent MWD land purchase in the Palo Verde Valley. Chairman Fisher also stated that currently MWD is following the maximum amount of district lands under the terms of the agreement at 29%, providing MWD with more than 100,000 acre-feet of Colorado River water. Chairman Fisher also reported that PVID has acquired the title to the diversion dam from the Bureau of Reclamation and stated that PVID is in the process of replacing the three large radial gates on the diversion dam which are more than 40 years old and could fail if not replaced.

Board Member Peter Nelson, representing the Coachella Valley Water District, reported that CVWD continues to work toward meeting the state-mandated Chromium-6 standard of no more than 10 parts-per-billion in its water supplies. He indicated that it may end up costing CVWD's rate-payers about \$250 million to meet this water quality standard. Mr. Nelson also stated that

CVWD was continuing to develop its system conservation program proposals and that although CVWD has not yet been able to meet the state conservation goal of 36%, it is doing better than the Governor's overall statewide goal of 25%. He reported that the tiered rate structure, in place since 2009, has been of great assistance in helping to reduce overall water use throughout the district. Mr. Nelson stated that CVWD's turf removal program has resulted in the removal of more than 6 million square feet of turf within the district.

Board Member Stephen Benson, Board President of the Imperial Irrigation District, thanked the Colorado River Board for coming to the Imperial Valley for its November Board meeting. Mr. Benson reported that IID has over-conserved approximately 45,000 acre-feet through its fallowing program, and is looking to store that conserved water in either Lake Mead or MWD's system. He stated that IID may pre-deliver water to Salton Sea this year. Mr. Benson described IID's current on-farm efficiency conservation program, and indicated that there are over 1,000 applications for participation in the program. Mr. Benson noted the progress in developing a Salton Sea management solution and indicated that the significant geothermal resources in and around the Salton Sea may be a significant catalyst to developing, implementing, and helping to fund long-term management at the Salton Sea. He reported that there are approximately 10,000 acres of solar energy development in the Imperial Valley, and over 20,000 acres of solar energy development across Imperial County.

Mr. Benson reported that Mr. Bruce Wilcox is now the Salton Sea Manager for the Natural Resources Agency, and that he has been tasked with coordinating all of the efforts to develop both short- and long-term management options for the Salton Sea. Mr. Benson stated that the State has put together a Salton Sea taskforce that continues to meet with stakeholders.

Board Member Jeanine Jones, of the Department of Water Resources, reported that there have been numerous Emergency Proclamations and Executive Orders related to the on-going drought, the comprehensive groundwater management legislation was enacted in 2014, and the new water bond is going forward. She noted the significant work that continues with respect to a long-term management plan for the Bay-Delta.

Board Member Christopher Hayes, with the California Department of Fish and Wildlife, reported that the Department continues to work closely with Reclamation and the California LCR MSCP participants in identifying and acquiring appropriate land parcels for habitat restoration through the LCR MSCP. He also indicated that the drought has led to a significant increase in "nuisance wildlife encounters" with people and in more urban areas. Mr. Hayes reported that the Department has been working to help streamline various environmental compliance obligations which can allow various jurisdictions to respond more quickly with emergency or infrastructure repairs during not only the drought but also during periods of flooding.

"YEAR IN REVIEW" UPDATES REGARDING COLORADO RIVER BASIN PROGRAMS

Review Status of the Basin States Drought Contingency Programs

Ms. Trujillo reported to the Board about the ongoing drought contingency planning efforts that focus on voluntary contributions of water to be stored in Lake Mead and started in 2013 based on seeing two years of the worst hydrology on record within the Colorado River Basin. At that time, the then new Secretary of the Interior, Sally Jewell, asked the Basin States to think about drought contingency planning efforts and to pull together additional tools that could build off of the existing, successful programs already in place within the Basin. Those discussions have continued for three years, and resulted in the Memorandum of Understanding being finalized in the Lower Basin last

December. During the past year, the discussions have continued and have focused on additional measures that might be able to build Lake Mead elevations. An issue for California has been to identify what the operational rules will be if we see low reservoir elevations reached, including the rules for recovery of Intentionally Created Surplus water that had been conserved out of a prior year's allocation. Ms. Trujillo emphasized that the discussions among the states were still very preliminary and that no decisions had been made regarding any specific actions. Chairman Fisher noted that the negotiations for the 2007 Interim Guidelines did not include details relating to low reservoir levels, but as the hydrology has progressed since then, there is a worry that the reservoir levels could drop very quickly, so it makes sense to start discussions with the other states about how to prevent Lake Mead from reaching the critically low elevations that could result in insufficient supplies available to meet Lower Basin demands.

The drought contingency planning efforts also include the System Conservation Program initiated last year that currently is targeted to generate up to 30,000 acre-feet of system water, efforts to reduce the amount of bypass flows to Mexico that the US does not get credit for under the 1944 Treaty delivery obligations, and other efforts Reclamation can take to conserve approximately 100,000 acre-feet of water annually. Ms. Trujillo noted that the Weather Modification Program is another example of a multistate project that is designed to generate system water. Ms. Trujillo added that the program demonstrates good coordination amongst the two Basins and within the Lower Basin.

Review Status of the Colorado River Basin Water Supply and Demand Study

Ms. Trujillo reported that Reclamation released the Phase 1 report of Moving Forward effort in April 2015. Phase 2 of the Moving Forward effort is anticipated to include the selection and development of a few pilot projects. Ms. Trujillo noted that the program demonstrates good collaboration amongst the Basin States, NGO's and Reclamation. Ms. Trujillo noted that a Tribal Basin Study is underway as well. Mr. Benson asked whether climate change hydrology had been included in the Basin Study's analysis, and Ms. Trujillo explained that the Basin Study analyzed a range of hydrology and included climate change scenarios in addition to the historical hundred-year look back-type of modeling that has been done in the past. She noted that the study included various assumptions on both the demand and supply sides of the analysis and that the conditions were always changing.

Mr. Nelson reported that the Southwest California Regional Basin Study was released in early December and that the report evaluates the supply and demand in Borrego, Coachella and Imperial Valleys.

Review Status of the implementation of Minute 319 & 32X

Ms. Trujillo reported that a workgroup process is underway to evaluate the implementation of Minute 319, which is a five-year pilot program, and to determine what elements of the Minute may be able to be extended or duplicated through a subsequent Minute. The three primary workgroups cover projects, environmental flows and salinity. The projects group looks at potential projects in Mexico to conserve water either for the system or through a funding agency relationship. The environmental flows workgroup had a tour in March of some of the restoration areas and high salinity, which is the same issue that U.S. also deals with as well. Ms. Trujillo reported that the Mexican Delegation's perspectives on the negotiations would be presented during the CRWUA Program on Friday.

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

Ms. Trujillo noted that Don Barnett gave an overview of the Paradox EIS process and other activities with the Salinity Control Forum at the previous December meeting and we could plan for another similar report for December 2016. Ms. Trujillo is currently the Vice Chair of the Salinity Control Program and will be moving into the President/Chair role for the next two years. Ms. Trujillo stated she appreciates the importance of this program for the California water users' perspective and looks forward to working with Don and the other Basin States, and the Bureau of Reclamation and the USGS folks on the various science elements that keep the program running successfully.

Ms. Trujillo noted some of the ongoing issues that are being addressed through the program, including the potential cost-share funding imbalance, which will have to be addressed through a legislative fix. Ms. Trujillo noted that, in addition to the on-farm programs that have been the focus in the Upper Basin, the Pah Tempe Springs location in Utah is a potential point-source area that could be developed to control salinity in a manner similar to the Paradox project.

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

Ms. Trujillo reported that the public draft of the Long-Term Experimental and Management Plan EIS is expected to be released on January 8 which will be carefully reviewed and will be an opportunity to examine the balancing that happens within the Grand Canyon reach of the river among various management priorities. As was previously reported, the Department of the Interior did not hold a High Flow Experiment (HFE) in 2015 due to concerns over an invasive green sunfish population that had recently established below Glen Canyon Dam. Ms. Trujillo noted that USGS has reported that the population is believed to have been eliminated as a result of electrofishing or poisoning.

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

Ms. Trujillo reported that the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) had celebrated its ten year anniversary in April, 2015 and continues to be an excellent example of a successful multi-state, multi-species conservation program.

Deputy Director Harris reported that LCR MSCP partners are working to complete the identification and potential acquisition of lands needed in California in satisfaction of the CESA 2081 permit. Mr. Harris also acknowledged Mr. Larry Purcell, of the San Diego County Water Authority who would be retiring at the end of the month after 25 years and thanked Mr. Purcell for his many important contributions to the LCR MSCP.

Additional 2015 Colorado River Board Highlights

Ms. Trujillo reported that over the last year, the Board had heard several presentations on issues of importance in the Basin, including presentations from Reclamation managers regarding the invasive quagga mussels and hydropower issues at Hoover Dam. Ms. Trujillo reported that Board staff continues to monitor the progress of the Californian Desert Renewable Energy Conservation EIS, which includes the potential development of solar projects that may seek to be served with Colorado River water from the Colorado River Water Supply Project. The Board has also heard updates regarding water quality issues such as the recent Gold King Mine spill in southeastern Colorado. Mr. Benson inquired whether there was data available on Colorado River water quality that could address concerns raised by the Gold King Mine spill. Ms. Trujillo noted that Reclamation finalized a report on the impacts of the spill, but that more information on general water quality could be developed for a future Board meeting.

Ms. Trujillo reported that continued collaboration among stakeholders on matters such as the QSA implementation and 2007 Interim Guidelines implementation would be critical. Ms. Trujillo noted that Congressional issues had been raised in 2015 that required coordination with California's Congressional delegation and the other Basin States based on advocacy from Arizona's Senator Jeff Flake. Senator Flake had proposed legislative language that would alter the Supreme Court decree in *Arizona v. California* and other elements of the long-standing Law of the River without having the support of the other Basin States, which was contrary to the standard practice within the Basin of developing a consensus among the States prior to asking for legislative adjustments.

ANNOUNCEMENTS

Ms. Trujillo reported that the State Water Resources Control Board will hold a workshop on January 5 relating to Salton Sea issues, and will accept comments regarding the workshop through December 30. The workshop will include reports from various agencies on Salton Sea-related activities. Ms. Trujillo reiterated many of the highlights noted by Mr. Benson regarding the progress that has occurred on Salton Sea issues over the past year.

Mr. Wilson thanked Reclamation Commissioner Lopez for his recent visit to the Padre Dam Advanced Water Purification Project.

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. Nelson, seconded by Mr. Pettijohn, and unanimously carried, the meeting was adjourned at 4:57 pm.