

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, August 13, 2014

A Meeting of the Colorado River Board of California (Board) was held in the Board Room, of the San Diego County Water Authority, at 4677 Overland Avenue, San Diego, California, on Wednesday, August 13, 2014.

Board Members and Alternates Present

Stephen Benson	Bud Pocklington
Dana Bart Fisher, Jr., Chairman	Jack Seiler
Franz De Klotz	Michael Touhey
Henry Kuiper	Doug Wilson
James McDaniel	Jeanine Jones, Designee
Glen Peterson	Department of Water Resources
David Pettijohn	

Board Members and Alternates Absent

James Hanks	Christopher Hayes, Designee
John Powell, Jr.	Department of Fish & Wildlife

Others Present

Steve Abbott	Kara Mathews
Martin Adams	Jan Matusak
Tim Blair	Jim Murtland
Vikki Dee Bradshaw	Thang (Vic) Nguyen
John Carter	Ken Olson
Robert Cheng	Autumn Plourd
Dan Denham	Mojgan Poursadijhi
Matt Dessert	Larry Purcell
Lesley Dobalian	Angela Rashid
Andrew Fisher	Eric Ruckdaschel
Terry Fulp	Tina Shields
Christopher Harris	Peter Silva
Bill Hasencamp	Gary Tavetian
George J. Janezyn	Tanya Trujillo
Lisa Johansen	Deven Upadhyay
Richard Johnson	Joseph Vanderhorst
Lori Jones	Mark Van Vlack
Tom Levy	Meena Westford
Lindia Liu	Jerry Zimmerman

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:11 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.

Mr. Doug Wilson welcomed the Colorado River Board to the San Diego County Water Authority. Mr. Wilson explained that a tour was postponed due to scheduling issues associated with the Urban Water Institute Conference. A tour may be rescheduled in the spring of some of the San Diego County Water Authority's facilities.

ADMINISTRATION

Approval of Minutes of the June 11, 2014 Colorado River Board Meeting

Chairman Fisher asked if there was a motion to approve the June 11, 2014 minutes. Mr. Kuiper moved that the minutes be approved, seconded by Mr. Wilson. By unanimous support, the June 11, 2014, meeting minutes were approved.

COLORADO RIVER BASIN WATER REPORT & DROUGHT UPDATE

Colorado River Basin Water Report

Executive Director Trujillo reported that as of August 4, 2014, the water level at Lake Mead was at 1,080 feet with 10.05 million acre-feet (maf) of storage, or 38% of capacity, while the water level at Lake Powell was at 3,608 feet with 12.53 maf of storage, or 52% of capacity. The total System active storage as of August 4th was 30.44 maf, or 51% of capacity, which is about 200,000 af more than one year ago when the System storage was also at 51% of capacity. As of August 3, 2014, the Upper Colorado River Basin reservoirs, other than Lake Powell, ranged from 67% to 100% of their capacities. The Fontenelle Reservoir in Wyoming is at 100% of capacity and is spilling. The Flaming Gorge Reservoir is at 88% of capacity and the Blue Mesa Reservoir in Colorado is similarly at 80% of capacity.

Ms. Trujillo reported that Lake Mead is currently at its lowest level since it was initially filled. Reclamation expects the elevation of the reservoir to drop to about 1,080 feet but will level out in November timeframe as the irrigation season slows down. The Board was reminded that one of the factors for the low elevation in Lake Mead is the record low release of 7.48 maf last year from Lake Powell to Lake Mead in accordance with the 2007 Interim Guidelines for the coordinated operations of Lakes Powell and Mead. Lake Mead will benefit from higher releases from Lake Powell next year.

Ms. Trujillo provided a brief overview of the current drought conditions within California. The August 5, 2014 U.S. Drought Monitor Map indicates that the Western U.S. is still experiencing significant drought. California is experiencing nearly the worst level of drought on record, with over 58% of the state in the exceptional drought category (the most severe drought category) and over 80% of the state in the extreme drought category, with no relief in sight.

Ms. Trujillo updated the Board regarding the development of the 2015 Annual Operating Plan (AOP) for the Colorado River System. This plan covers basin-wide operations and informs water managers what to expect from a hydrological perspective and facilities management standpoint. Reclamation has held two public consultation sessions with the second one on July 31, 2014. Ms. Trujillo stated that there were no significant controversies raised at the most recent consultation session. Reclamation's August 24-month study is used to determine the release amount from Lake Powell for next year, and that initial indications are that 9.0 maf will be released next year. The results of the August 24-month study will be available very soon. The next AOP consultation meeting is scheduled for September 4, 2014 at the McCarran Airport in Las Vegas, Nevada.

Ms. Trujillo referenced a few of the hydrologic slides that Reclamation presented during the last AOP consultation meeting. The snowpack reached 111% of average and the runoff peaked on April 7, 2014. The snowpack this year was significantly higher than last year, but only slightly above the 30-year median. Lake Powell elevation forecasts predict Reclamation would release between 8.23 to 9.0 maf from Lake Powell depending on how other reservoir conditions develop. For Lake Mead, projected elevation levels indicate a Normal Condition is anticipated again for next year. Shortage Conditions could be imposed by 2015 based on the latest projections.

State and Local Reports

Board Member Jeanine Jones reported that statewide reservoir storage is in the 60% range and dropping. She reported that the Governor's Drought Taskforce has been very active in meeting with city and other officials to determine what actions to take if 2015 is dry. The Task Force has wanted to deal with the public misconception that El Nino will be the answer to the state's current drought condition. She stated it is now unlikely that we will get a strong El Nino as was originally predicted. Ms. Jones explained that a weak or moderate El Nino has little predictability for precipitation in California and with a neutral condition expected for this year, anything could happen.

Ms. Jones stated that, similar to last year, a zero allocation is expected again for the State Water Project due to low reservoir storage. The only place in California that is close to average precipitation is Blythe, which has experienced a natural southwestern monsoon season.

Board Member Glen Peterson, of the Metropolitan Water District of Southern California (MWD), reported that its combined reservoir storage is at 55% (672,000 af) and is expected to decline slightly below 600,000 af by end of the year. Deliveries to date have been 109% of average. MWD has recently partnered with the Los Angeles Department of Water and Power (LADWP) to augment the LADWP program to implement a lawn replacement program. This program has been very successful. In addition, MWD has spent an additional \$20M on conservation programs and \$5M on outreach, which is more than in normal years.

Board Member James McDaniel, of LADWP, reported that LADWP was pleased to have MWD supplement its lawn replacement program by \$1.00 per square foot, raising the total incentive to \$3.00 per square foot. Additionally, Mr. McDaniel reported that conservation programs are ramping up and that LADWP and MWD continue to coordinate on consistent messaging.

California Drought Update

Ms. Trujillo stated that the Governor's Emergency Declarations are still in effect and that beginning July 29th, the State Water Resources Control Board has implemented mandatory conservation measures statewide. Fines can be imposed on water users who do not comply with the regulations. The state continues to issue weekly updates on number of wildfires, drought response activities, and key action items.

One area that is getting increased attention, not just in California, but also the Colorado River basin is groundwater resources. Ms. Trujillo noted that Coachella Valley Water District was recently featured in an article from Stanford's Water in the West program, which highlights potential problems caused by groundwater overdraft and potential solutions to managing this resource.

Progress report on Implementation of California's Colorado River Water Use Plan

Ms. Trujillo provided a progress report on California's implementation of the Colorado River Water Use Plan at the July 31st Annual Operating Plan consultation meeting in accordance with the report to the Secretary required by the 2007 Interim Guidelines. California has been successful in implementing several elements of the Quantification Settlement Agreement (QSA), including the large transfers from agricultural uses to urban uses that are continuing to ramp up over the next several years. California has kept its overall water uses within its basic apportionment of 4.4 maf. This goal was met largely due to successful storage programs that have been implemented, such as the Intentionally Created Surplus Program, that MWD has been able to implement and use over the past ten years. Other programs such as the Palo Verde

Irrigation District and MWD fallowing program has produced approximately 900,000 af of water savings over the past ten years.

One of the requirements that was included in the QSA agreements was tying agricultural reduction levels in California to the availability water during “surplus” conditions pursuant to the Interim Surplus Guidelines. Ms. Trujillo stated that the benchmark levels that were created in the 2007 Interim Guidelines have been met this year.

Ms. Trujillo reported that Imperial Irrigation District (IID) has been able to meet the overrun payback requirements pursuant to the Inadvertent Overrun and Payback Policy. IID repaid approximately 93,000 af last year and is on track to repay about 117,000 af this year, at which point the IID balance for overruns will be zero.

A significant outstanding challenge is addressing the Salton Sea mitigation issues. The QSA Joint Powers Agreement has allocated more than \$100M to this effort and to date about \$55M has been spent on mitigation activities.

Ms. Trujillo reported that state court cases challenging QSA have been dismissed and the QSA decisions have been determined to be valid. No environmental challenges have been successfully raised against the QSA. Similarly, in the federal court proceedings, the Ninth Circuit Court of Appeals recently affirmed the District Court’s decisions that there was no NEPA violation in connection with the Secretary’s approval and implementation of the QSA agreements.

Comments by Terry Fulp, Lower Colorado River Regional Director, Bureau of Reclamation

Terry Fulp, Regional Director of Reclamation’s Lower Colorado Region, reflected back over the last 15 years and believes that a lot of progress has been made on a range of complex and difficult issues. Beginning around 1999 when Lake Mead was spilling, Reclamation began developing Interim Surplus Guidelines, which was a key element for the California Colorado River Water Use Plan. As part of the QSA process, Reclamation set up the Colorado River Water Delivery Agreement that allowed for flexibility for overruns and system paybacks.

As we moved forward in the first decade of the 21st century, Reclamation worked on the Lower Colorado River Multi-Species Conservation Program. Reclamation knew it had to resolve the many environmental issues in the Basin to continue in a proactive and positive manner.

As the current multi-year drought began to kick in, Reclamation produced the 2007 Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead that are being implemented through 2026. Mr. Fulp explained that the current drought contingency planning involves taking voluntary actions to reduce the risk of reaching critical elevations at Lake Powell and Lake Mead. The last

15 years have been one of the worst periods in terms of average inflows and certainly stand out over the past 1,200 years of tree ring reconstructions of the hydrology.

Mr. Fulp added that the U.S. reached a major breakthrough in terms of cooperation with Mexico for sharing in surpluses as well as shortages. He said that the best solutions continue to involve a collaborative and consensus-based approach. Reclamation will continue to monitor drought conditions and determine what additional steps might be considered.

Mr. Peterson asked what steps will be taken beyond 2026. Mr. Fulp responded that the 2007 Interim Guidelines require that stakeholders convene no later than December 31, 2020 to address that issue. He believed that the current drought contingency planning efforts are a pre-cursor towards the development of new guidelines. He added that there would be difficult issues after 2026. Mr. Fulp concluded that a succession plan needs to be in place so that the younger generations will be able to tackle these difficult issues moving forward.

Chairman Fisher added that it is critical to get a short-term resolution in the ongoing drought contingency planning efforts. This would help with facilitating the larger negotiations that begin in the 2020 timeframe.

COLORADO RIVER BASIN PROGRAM REPORTS

Update regarding the Basin States' Drought Contingency Planning Efforts

Ms. Trujillo stated that the current multi-year drought has led to a focus on what can be done in the next five-year time frame to protect the existing 2007 Interim Guidelines. There is a goal in the Lower Basin to add or save between 1.5 to 3 maf of water in Lake Mead over the next five years. Stakeholders are brainstorming and strategizing about ideas including how to improve system efficiencies, particularly in the Yuma area, and how to reduce the over-deliveries that are made to Mexico annually.

Ms. Trujillo stated that one achievement that was completed recently was the System Conservation Agreement that was executed among MWD, Southern Nevada Water Authority, Central Arizona Project, Denver Water and the U.S. to create a pool of funding that will be used to acquire water to be reserved and maintained as system water. It will be a two-year pilot project. Another program being continued is the Weather Modification Program that is occurring in Colorado, Utah, and Wyoming. There may be other augmentation possibilities, and staff will keep Board members apprised of any progress.

Chairman Fisher again stressed the importance of reaching consensus on the drought contingency planning efforts as it would help set the stage for the larger negotiations beginning on or about 2020. Mr. Wilson stated that he would like to see a report on the price per acre-foot for the cost of the Weather Modification Program.

Colorado River Basin Water Supply and Demand Study

Board staff member Angela Rashid reported that the draft Phase I reports from the Agricultural Conservation, Productivity, and Transfer and the Environmental Flows and Recreation Workgroups were released during the first week of August. Ms. Rashid stated that the Agricultural Conservation, Productivity and Water Transfer report provided a detailed overview of agricultural water uses in the Basin as well as an analysis of water conservation programs and practice. The report also analyzed water conservation practices and programs practiced in Basin, some of which were featured as case studies in the report's appendix. Ms. Rashid noted that conservation and efficiency programs in California represented five of the thirteen case studies presented. Ms. Rashid reported that the report concluded with an evaluation of the opportunities and challenges of expanding successful conservation and efficiency programs in the Basin.

Regarding the Environmental Flows and Recreation Workgroup, Ms. Rashid reported that the Phase I draft report included a detailed description of environmental, recreational resources throughout the Basin. The report also included an assessment of four focus reaches. Three focus reaches are located in the Upper Basin and include Upper Colorado between the Gunnison and the Green Rivers, the White River below Taylor Draw Dam in Utah, and Henry's Fork Headwaters downstream of the Flaming Gorge Dam in Utah. The fourth focus reach is the Bill Williams River located in the Lower Basin, below Alamo Dam in Arizona. Each reach analysis included an in-depth analysis of environmental and recreational attributes, existing management programs, data gaps and scientific uncertainties. The report also analyzed existing environmental and recreational programs in the Basin and analyzed the opportunities and challenges for expanding these programs.

Ms. Rashid stated that the Phase I report from the Municipal and Industrial Workgroup is still under development. The status of this report, in addition to the other draft reports, will be discussed during an upcoming Coordination Committee meeting scheduled for Friday, August 15, 2014, in San Diego, California.

Minute 319 Implementation

Ms. Trujillo reported that we are currently in year two of the five-year implementation phase of Minute 319. The environmental workgroup held a status update meeting on June 26, 2014 to review the progress of the various monitoring activities associated with the pulse flow that occurred between March and May downstream of Morelos Dam. The monitoring activities will continue and a draft report will be presented later this summer. Ms. Trujillo reported that a final report will be delivered to the principal engineers at the International Boundary and Water Commission (IBWC) and its Mexican counterpart agency, CILA, at the conclusion of the Minute 319 term. Ms. Trujillo showed a map of the Delta area where water was released near Yuma at Morelos Dam for re-establishing some of the riparian areas. Ms. Trujillo also showed a few photos of downstream areas below Morelos Dam before and after the pulse flow event. The photos included an area about one mile north at the Southern International

Boundary (SIB) as well as another near the Laguna Grande, one of the key habitat restoration areas, showing dramatic difference between pre- and post-pulse flow conditions.

In addition to the environmental workgroup, the workgroup established to concentrate on the Rosarito Desalination Project has been active in discussions on whether there is a possibility for an exchange for water uses in U.S. coupled with reduced deliveries to Mexico in addition to a direct delivery option. The initial feedback from Mexico is that they are open to a discussion of the exchange possibilities and teams are currently working through those issues through the workgroup process. There is also continued coordination with Mexico on general hydrology in an attempt to better incorporate Mexico into Reclamation's annual hydrologic reporting process and the Annual Operating Plan process, building a level of trust on how we do the accounting and monitoring for our shortage and surplus determinations.

Salinity Control Forum, Work Group, and Advisory Council

Ms. Trujillo reported that the Salinity Control Forum and Advisory Council met in June in Wyoming. She indicated that one of the highlights at the meeting included a 40th anniversary of the Salinity Control Program presentation made by Jack and Don Barnett. Additionally, she reported that the Forum, through its legal subgroup, continues to work on the development of feasible alternatives or options for addressing the potential funding shortfall in the Lower Colorado River Basin Development Fund. Any option is likely to require legislation because the Congressional authorization for the Salinity Control Program is restrictive and does not allow flexibility in how funds can be contributed to the Program.

Ms. Trujillo also reported that the Forum's Work Group met in Salt Lake City, Utah, on July 28-29, 2014, and continued to finalize the draft Triennial Review of Water Quality Standards for Salinity (Review) for the period 2014 through 2017. The Review includes a Plan of Implementation that guides salinity control efforts in the upper basin, and for this Review period the Plan of Implementation would control an additional 67,000 tons of salt by 2017. She indicated that when the draft Review is finalized it will be sent out to all of the agencies for their review and comment. Ms. Trujillo reported that the Work Group has also kicked off an effort with Reclamation to update the current economic damages model. The current model is outdated and does not portray the full range of impacts that are likely occurring to Colorado River water users in the Lower Basin.

Finally, Ms. Trujillo reported that the Work Group received an update associated with Reclamation's preparation of the Paradox Valley Unit Environmental Impact Statement (EIS). She also reported that the U.S. Geological Survey is currently working on a model of the groundwater flow and transport in the Paradox Valley. This model is being used to test selected water management alternatives that could affect the concentration of total dissolved solids in the Dolores River. The modeling results are intended to help inform the development and refinement of potential alternatives to be

analyzed in the EIS. Mr. Wilson asked whether an emergency action plan was in place in case of a catastrophic failure at the Paradox well. Ms. Trujillo indicated that this is an issue being addressed by the Forum and particularly by Reclamation in the context of development of the EIS. She further indicated that while there is nothing that can be put in place immediately, there are a range of options that could be implemented over a period of time.

Glen Canyon Dam Adaptive Management Work Group and Long-Term Experimental and Management Plan EIS

Executive Director Trujillo reported that the Technical Work Group of the Glen Canyon Dam Adaptive Management Work Group (AMWG) has been meeting to review the final draft of the triennial budget (2015-2017) associated with implementation of the Glen Canyon Dam Adaptive Management Program (AMP) by Reclamation and the Grand Canyon Monitoring and Research Center (GCMRC). The proposed triennial budget will be acted upon by the AMWG at its upcoming meeting in late-August in Flagstaff, Arizona. Ms. Trujillo reported that Reclamation will be providing hydrology updates and a report on the potential for scheduling a High-Flow Experiment in late-Fall 2014 if conditions warrant.

Ms. Trujillo reported that the Basin States and their science advisors continue to work with the Department of the Interior Team in the development of a hybrid alternative for evaluation in the Long-Term Experimental and Management Plan EIS process. While there are points of tentative agreement, there are still issues that remain to be resolved (e.g., nature of experimental design, and how decision-making will be conducted). She indicated that the Basin States were meeting with the Interior team in the following week to continue the discussions.

Lower Colorado River Multi-Species Conservation Program

Ms. Trujillo reported a potential Indian water rights settlement is coming together in Arizona involving the United States, Freeport-McMoRan (Freeport), and the Hualapai Indian Tribe. Ms. Trujillo indicated that what has been proposed addresses water rights and uses in the Bill Williams River watershed in west-central Arizona. Ms. Trujillo explained that this first phase of the Hualapai Indian water rights settlement would sever and transfer some of Freeport's water rights to the LCR MSCP for use on Planet Ranch. Approximately 5,500 acre-feet of water would be leased to the LCR MSCP in exchange for \$8.3 million provided by the LCR MSCP. Freeport would donate the Planet Ranch property (3,418 acres) to the Arizona Game and Fish Commission and a portion of the ranch lands would be restored with 550 acres of new LCR MSCP habitat (cottonwood-willow and marsh). Ms. Trujillo reported that with the acquisition of the Planet Ranch and associated LCR MSCP water rights, the USFWS will credit the LCR MSCP with an additional 396 acres of habitat establishment for protecting the existing cottonwood-willow forest habitat on the Bill Williams River National Wildlife Refuge.

Mr. Harris reported that in February 2014 it was discovered that the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) had been underfunded during Fiscal-Years 2011 through 2014. One of the inflation factor indices--the Gross Domestic Product Implicit Price Deflator--that is used in determining the total amount of annual contributions due to the Program had been changed by the government but had not been picked up by the Central Arizona Project's finance group when developing the annual contributions amounts. Mr. Harris indicated that over the four-year period, the LCR MSCP was underfunded by \$7,601,040.00, and that the total amount of underfunding to be repaid by the California LCR MSCP contributing entities is \$2,090,286.00. He further indicated that it is proposed to repay this amount in conjunction with California's FY-2015 contributions and schedule (i.e., quarterly payments). Mr. Harris reported that the underfunding repayment amounts contributed by both the federal and non-federal contributors will be utilized to makeup contributions to the LCR MSCP Habitat Maintenance Fund and the Remedial Measures Fund. He indicated that if any funds deposited in the Remedial Measures Fund are not utilized during the Program implementation period (2005-2055), those funds would then be refunded to each of the contributing entities.

Chairman Fisher asked Mr. Harris if the proposed Hualapai settlement and Planet Ranch acquisition alleviated any of the obligation for habitat acquisition in California. Mr. Harris responded that just over 3,000 acres of riparian habitat (i.e., cottonwood-willow and honey mesquite) still needed to be acquired and managed in California pursuant to the terms and conditions of the CESA 2081 permit.

Announcements/Notices

Ms. Trujillo reported that the Board packet included a copy of the judicial decision in Navajo Nation v. Department of the Interior. The favorable ruling at the District Court level in Federal Court in Arizona addressed the Navajo Nation's claims against the U.S., which potentially could negatively impact many of the agreements in place today such as the Interim Surplus Guidelines and the 2007 Interim Guidelines.

Ms. Trujillo also included a copy of the Protecting Lakes Against Quaggas Act of 2014 (Act) that has been introduced by Senator Heller from Nevada. The Act contains protective language advocated for by California entities to protect interstate diversions. The Board will continue to monitor the progress of that bill.

Ms. Trujillo reported that Senator Feinstein and Senator Boxer introduced the Water in the 21st Century Act, and although a hearing has not been held yet, the bill has been assigned to Senator Boxer's Environment and Public Works Committee. Ms. Trujillo said that Senator Boxer's office is open to hearing suggestions and feedback from the member agencies. Ms. Trujillo will keep the Board updated on the bill's status.

Ms. Trujillo reported that the Board packet included the 2015 ICS Creation Plans for MWD and IID, which are subject to change depending on changes agreed to between the agencies and Reclamation throughout the year. Also included in the Board packet

was the approval that CAP received from Reclamation to leave the water that was leased from the Yuma Mesa Irrigation and Drainage District, which may amount to approximately 9,000 af, in Lake Mead as system storage in 2014.

Ms. Trujillo reported that the Board packet included a recent economic report that seeks to quantify the ecosystem values in the Basin. The report estimates between \$69 billion and \$496 billion of economic benefits are provided by the ecosystem on an annual basis.

Ms. Trujillo announced the retirement of Board staff member Dr. Jay Chen, who has been with the Board for approximately 25 years. She encouraged the meeting participants to contact the Board staff with any issues they need help with.

Board Member Pocklington thanked the meeting participants for coming to the San Diego County Water Authority. He emphasized that SDCWA is expecting its first desalination plant to come on line next year, which will be the largest desalination plant in the U.S. processing 50 million gallons a day.

Chairman Fisher announced that the next meeting of the Colorado River Board will be held on Wednesday, September 10, 2014, at 10:00 a.m. at the Holiday Inn, Ontario Airport, 2155 East Convention Center Way, Ontario, California.

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. McDaniel, seconded by Mr. Benson, and unanimously carried, the meeting was adjourned at 11:42 a.m. on August 13, 2014.