

Minutes of Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, October 15, 2014

A meeting of the Colorado River Board of California (Board) was held at the Executive Conference Room 1514, of the Los Angeles Department of Water and Power, 111 North Hope Street, Los Angeles, California, 90012 on Wednesday, October 15 2014.

Board Members and Alternates Present

Dana Bart Fisher, Jr., Chairman
Franz De Klotz
James McDaniel
Glen Peterson
David Pettijohn
Jack Seiler

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

Board Members and Alternates Absent

Stephen Benson
James Hanks
Henry Kuiper

Others Present

Steve Abbott
Tim Blair
Brenda Burman
John Carter
Robert Cheng
Dan Denham
Christopher Harris
Bill Hasencamp
Michael Hughes
Lisa Johansen
Lori Jones
Phil Krause
Lindia Liu
Kara Mathews
Jan Matusak

Kathy Murphy
Jessica Neuwerth
Thang (Vic) Nguyen
Autumn Plourd
Angela Rashid
Tom Ryan
Tina Shields
Ed Smith
Gary Tavetian
Tanya Trujillo
Joseph Vanderhorst
Mark Van Vlack
Eric Wilson
Michael Yu
Jerry Zimmerman

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 1:32 pm.

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

Approval of Minutes of the September 10, 2014 Colorado River Board Meeting

Chairman Fisher asked if there was a motion to approve the September 10, 2014 minutes. Ms. Jones moved that the minutes be approved, seconded by Mr. Wilson. By unanimous support, the September 10, 2014, meeting minutes were approved.

Executive Director Trujillo informed the Board that planning of next year's Board meeting schedule has begun. Ms. Trujillo noted that there will be a proposal to continue meeting monthly. In addition, the proposal for next year's schedule will reduce the number of rotating meetings.

COLORADO RIVER BASIN WATER REPORT & DROUGHT UPDATE

Colorado River Basin Water Report

Executive Director Tanya Trujillo announced that October 1st marks the first day of the new Water Year. The drought in the Colorado River Basin continues to persist despite above average precipitation in September. As of October 6, 2014, the water level at Lake Mead was at 1081.66 feet with 10.15 million acre-feet (MAF) of storage, or 39% of capacity, while the water level at Lake Powell was at 3606.04 feet with 12.34 MAF of storage, or 51% of capacity. The total System active storage as of October 5 was 30.10 MAF, or 50% of capacity, which is approximately 200,000 acre-feet (AF) higher than one year ago when the System storage was also at 50% of capacity. As of October 5, 2014, the Upper Colorado River Basin reservoirs, other than Lake Powell, ranged from 64% to 95% of their capacities.

Ms. Trujillo reported that the final unregulated inflow into Lake Powell for WY 14 was estimated at 10.38 MAF (96% of average), which is an improvement from the past couple of years. In 2014 the system experienced a record-low elevation at Lake Mead and a record-low release from Lake Powell of 7.48 MAF in accordance with the U.S. Bureau of Reclamation's (Reclamation) 2007 Interim Guidelines. Based on Reclamation's August projections, there is a 36% probability of shortage in Lake Mead in 2016. Ms. Trujillo presented a graph that depicted the historic system storage levels since the 1960s. The trend indicated fluctuations in the system through 2000 when the current multi-year drought period began, which includes generally declining reservoir levels.

Ms. Trujillo reported that California has been especially hard hit by the drought with respect to the other western states. The October 7, 2014 U.S. Drought Monitor Map

indicates that the Western U.S. is still experiencing widespread drought, but 58% of California is in the Exceptional Drought category (the most severe drought category).

Ms. Trujillo noted that the Basin States Technical Committee will meet on October 16 in Las Vegas. The purpose of the bi-annual meeting is to get an update on reservoir operations and hydrology, forecasting, and other studies or programs within the Basin. Ms. Trujillo will present an update on the California drought during the meeting.

Colorado River System Consumptive Uses and Losses Reporting

Ms. Trujillo reported that Reclamation has began updating its calculations for the consumptive use and losses report that is required to be updated every 5 years by the 1968 Colorado River Basin Project Act. The reports reflect the Department of the Interior's estimate of actual consumptive uses and losses for each year within the Colorado River Basin. Reclamation has been in consultation with staff and other Basin state representatives on proposed methodologies for evaluation. A working group will be established with a kickoff meeting planned for 2015.

State and Local Reports

Board Member Jeanine Jones reported that statewide reservoir storage is currently slightly below 60% as we enter the new Water Year. By comparison, this percentage is about the same at the end of the 1987-1992 drought, but greater than the mid-30s percent range experienced in the 1977 drought. One reason for maintaining greater storage in recent droughts (2007-2009 and current drought) is due to requirements to maintain colder water (higher water levels in reservoirs) for salmon spawning to meet biological requirements.

The past three Water Years have been particularly dry and represent the driest three-year period for the past 119 years of record as contained in the California Climate Tracker. However, the southern part was much drier than in northern California for the past several WYs. If the precipitation indices were based on the Northern Sierra Precipitation 8-station Index, the same three-year period would only rank as the 15th driest in the same period. Ms. Jones noted that the CA Department of Water Resources' annual co-sponsored winter forecast workshop will be held towards the end of November.

Board Member Glen Peterson of the Metropolitan Water District of Southern California (MWD) reported that MWD's combined reservoir storage (492,424 af) is 48% of capacity as of October 1st. Mr. Peterson stated that MWD has diverted 888,000 af of Colorado River water on an eight-pump flow and has a target to divert a total of 1.172 maf by the end of the year. Mr. Peterson added that there has been some loss of capacity as some pipes have been taken off-line for cleaning and maintenance, which will also occur during the winter season. Mr. Peterson reported that water deliveries, including replenishment have declined in August, which typically has the hottest temperatures and highest delivery for the year.

Mr. Peterson added that this year has been the hottest on record and August is typically MWD's highest delivery month. Deliveries in August were lower than the previous months of May, June and July, with a 7% drop between the months of July and August. MWD is currently implementing several conservation programs, including the Turf Removal Program, which has been very successful. Mr. Peterson added that his home district has over one million dollars pledged for turf removal and applications for the program have increased sharply after the reimbursement price increased to \$2.00 (per square foot).

California Drought Update

Ms. Trujillo reported that drought conditions have not improved and the drought state of emergency is still in effect. Mandatory conservation measures that were imposed a few months ago are still in place. Ms. Trujillo added that water use data from August reports that there has been an 11.5% reduction in urban water use from 2013 to 2014, despite higher temperatures in 2014.

Ms. Trujillo stated that there have been reports of more than 1,000 homes without water in their domestic wells or in communities with small water systems, particularly in areas overlying fractured bedrock. An Executive Order was issued on September 19 to provide disaster assistance funding to supply emergency water by activities such as trucking in water and purchasing bottled water.

The latest prediction shows a 67% chance of an El Nino occurring this coming year although it was predicted to be a weak one. Ms. Jones added that the State is preparing for the possibility of a dry 2015 by discussing operation scenarios of the State Water Project and Central Valley Project, and working with regulatory agencies on studying various hydrology and operation scenarios.

Review and Adoption of Resolution in Support for Proposition 1

Chairman Fisher stated that during the last Colorado River Board meeting, there was a question from a board member whether it was appropriate for the Board to support Proposition 1. Executive Director Trujillo explained the California Attorney General's Office confirmed that it would be acceptable for the Board to take action on a resolution that would support Proposition 1, which has been authorized by the State Legislature and has moved forward through the proposition process. Ms. Trujillo added that a copy of the draft resolution, based on a template prepared by the Association of California Water Agencies, as well as additional background materials were included in the Board packet.

Further, Ms. Trujillo noted that if the Board approves the resolution, it would be consistent with actions the member agencies have taken on this matter. Ms. Trujillo noted that the resolution provided general background about the bond measure and highlights the particular issues that would be relevant to Colorado River matters, including funding to support implementation of the Quantification Settlement Agreement. In addition, Proposition 1 will allocate \$22.5 million to the Colorado River Basin

Hydrologic Region, which includes Coachella, Imperial, Palo Verde and the Yuma Valleys. The resolution states that the Colorado River Board formally supports Proposition 1, the Water Quality, Supply and Infrastructure Improvement Act of 2014, listed on the November ballot.

MOTION: Upon the motion of Mr. Peterson, seconded by Mr. Wilson, and unanimously carried, the Board adopted the resolution in support of Proposition 1. Ms. Jones, and Mr. Vigil abstained from voting on the motion.

Lower Colorado Water Supply Project

CRB Board staff Vic Nguyen presented background information for two Lower Colorado Water Supply Project (LCWSP) applications and recommended approval of both applications. The total amount of water for the two applications is 41 acre-feet per year (AFY).

The first application was submitted by the San Bernardino County Regional Parks Department for expansion and upgrade of the Moabi Regional Park in San Bernardino County. Project water would be used for recreational purposes and the amount of water requested now is 37 AFY. The County will segregate water use between State lands and Federal lands so that payments for water uses could be made to the appropriate agencies.

The second application was submitted by Mr. Paul Page for domestic/household water use. His 74-acre property is located in Imperial County and the amount of water requested now is 1 AFY with 3 AFY to be available in the future.

MOTION: Upon the motion of Ms. Jones, seconded by Mr. De Klotz, and unanimously carried, the Board adopted the resolution to approve the LCWSP applications for the San Bernardino County Regional Parks and Mr. Paul Page.

COLORADO RIVER BASIN PROGRAM REPORTS

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Colorado River Basin Water Supply and Demand Study

Ms. Trujillo reported that the Coordination Team met in Denver on October 1st and reviewed the status of the Phase 1 reports. The consolidated report will be finalized around the end of November. The main focus for the Coordination Team and Workgroups will be to finalize the review of the reports as well as develop key messages or key outcomes associated with each workgroup report. In addition, Ms. Trujillo reported that there was a joint request for funding from the Imperial Irrigation District, Family Farm Alliance, the Nature Conservancy and the Environmental Defense Fund sent to the Department of the Interior (DOI) and Office of Management and Budget, requesting additional funding for the DOI Water SMART program. The funding could be used to develop projects that would directly arise from the Basin Study process.

Ms. Trujillo also reported that the joint initiative between the DOI and Basin

States to review augmentation opportunities in the Basin is underway, as part of the Next Steps process.

Minute 319 Implementation

Ms. Trujillo reported that Minute 319 implementation workgroups met on September 25th and 26th in San Ysidro, CA. The Hydrology Workgroup met to continue discussion of potential drought monitoring measures. The U.S. parties support using the measures that Reclamation already utilizes for the general operation of the system. Ms. Trujillo added that the U.S. participants have encouraged our Mexican counterparts to learn more about Reclamation's reservoir operation system.

Ms. Trujillo reported that during the meetings the workgroups received updates from the Mexican delegation on several proposals. The first proposal was for a pilot project that would involve U.S. investment to implement conservation improvements in Mexico resulting in reduced delivery of water to Mexico. Ms. Trujillo added that the proposal was the most detailed one received to date and included a canal lining project of one of their damaged canal areas. The workgroup also received updates on a proposal to construct a regulating reservoir adjacent to some of their canal systems. The workgroup also heard updates regarding Mexico's proposal for a bi-national connection on the All-American Canal in the Imperial Irrigation District. The Mexican delegation indicated that the connection could be used during an emergency and will work to define potential emergency conditions during the next meeting.

Ms. Trujillo reported that the environmental flows workgroup has continued to monitor the results of the pulse flow. It is anticipated that an initial report on the results of the pulse flow will be available within the next month.

Salinity Control Forum, Work Group, and Advisory Council

Ms. Trujillo reported that the Salinity Control Workgroup met in September in Salt Lake City and finalized a draft of the 2014 Triennial Review to be presented to the Salinity Control Forum in October. The Triennial Review showed that the program has successfully implemented salinity control projects in excess of a million tons of salt that have been removed from the system and it is anticipated an additional 67,000 tons of salt per year will be controlled by 2017. The next Forum meeting is in Santa Fe, New Mexico at the end of October.

Board staff member Lindia Liu updated the Board on the status of the EIS for the Paradox Valley Salinity Control Unit. Ms. Liu referred to the draft briefing document that was just released by the Colorado River Basin Salinity Control Forum earlier that week. The briefing document, which was included in the Board folder, provides a summary of the current concerns and the potential impact if the injection well fails. The Forum is expected to finalize the draft briefing document during its upcoming meeting at the end of October. #

Ms. Liu provided background regarding the Paradox Valley Unit, which was designed to intercept shallow brine groundwater before it discharges to the Dolores River, a tributary to the Colorado River in the Paradox Valley in Montrose County in Colorado. Saline water is extracted from 9 shallow wells located adjacent to the river and is re-injected through a 16,000-foot deep injection well. The Unit removes approximately 100,000 tons of salt per year and provides about 10% of the total salinity control program benefits.

Ms. Liu reported that the current issue is that the wellhead injection pressure has been increasing steadily towards the maximum allowable surface injection pressure of 5,350 psi allowed by its Underground Injection Control permit from the Environmental Protection Agency. Under current operation, the well is estimated to last an additional 3 to 5 years. Another concern is the increased seismic activities caused by long-term injection, an increase in both rate and magnitude of earthquakes near the well and the town of Paradox. The biggest earthquake to date was a Magnitude 4.4 earthquake near the town of Paradox on January 24, 2013. As a response, Reclamation started doing weekly 18-hour shutdowns to dissipate that pressure buildup and decreased the injection rate as a short-term solution.

For a long-term solution, an Environmental Impact Statement is being proposed by Reclamation to find alternative brine disposal methods to replace and/or supplement the existing injection well. The study will identify a range of alternatives with salinity control measures of 100,000 tons per year.

Ms. Liu reported that Reclamation is evaluating 4 alternatives, which are a second injection well, evaporation ponds, commercial operations, and other brine reduction alternatives. A panel of experts is tasked to review existing data and reports, review criteria to be used in selecting a second well site location, and propose any new data acquisition or analyses. Some of the issues facing the second well alternative are similar to the ones with the existing well, namely induced seismicity and the projected life of the new well. Ms. Liu reported that Reclamation is also working with a contractor to complete a literature search on evaporation pond technology. A Consultative Review Board will be tasked to review the technical reports and prepare a report of their findings and recommendations. The Review Board will convene early next year and the final report should be done by March. Ms. Liu reported that one of the issues with evaporation ponds is the potential incidental take of migratory and endangered birds.

Another alternative is looking for a potential commercial market for the brine or salt. Reclamation's first step is putting out a Request For Information (RFI) to see if there is enough interest to develop a Request For Proposal (RFP). The RFI is expected to be done this month and the Statements of Interest are due at the end of the year. Ms. Liu further reported that Reclamation is working with the U.S. Geological Survey on modeling groundwater flow and transport of the Paradox Valley to test different water-management scenarios on the increase of brine discharge to the Dolores River. Ms. Liu concluded that the preferred alternative could be any one of the alternatives, or a combination of several alternatives. The next cooperating agency meeting is scheduled

for October 20, 2014.

Board Member Wilson commented that the timeframe for the completion of the EIS may surpass the life of the injection well and that an emergency plan should be put in case the system fails. Board staff reported that the Salinity Control Forum has been working diligently on this issue but that no salinity reduction measures can be put into place on an immediate basis. Chris Harris noted that projects such as a land fallowing program in Title II Salinity Control Project areas in the Upper Basin could potentially be implemented with a possible synergy between the System Conservation Pilot Project Program in the Upper Basin and developing an emergency action plan related to the Paradox Unit. He further stated that long-term projects of 100,000 tons of salt control have potential in the Lower Gunnison, Uinta Basin project area, and the Pah Tempe Springs on the Virgin River.

Mr. Wilson suggested the need for the Board to present its concerns about creating an emergency plan. Ms. Trujillo replied that she will reiterate the Board's concerns at the next Salinity Control Forum meeting. Mr. Peterson also expressed concern about the potential for delay and noted that incidental take of birds was not an issue with the evaporation pond some of the Board members visited in Moab, Utah. Mr. Harris responded that siting an evaporation pond is particularly complicated with the mixed land ownership in the Paradox Valley and that issues associated with both the Migratory Bird Treaty Act and the Endangered Species Act were being reviewed by the Fish and Wildlife Service and Reclamation.

Mr. Wilson asked whether the Board could take action to urge Reclamation to develop an emergency action plan with regard to the Paradox Well issue. After a discussion with Board counsel, it was decided that the Board could direct Ms. Trujillo to carry the Board's message to the Colorado River Basin Salinity Control Forum meeting. Ms. Trujillo stated that she would report back on the Forum's response to the Board's concerns during the next Board meeting.

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

Executive Director Trujillo reported that Reclamation has announced that the next high flow experiment (HFE) is proposed for November. Pursuant to previously developed protocols, the timing of the HFE is tied to the availability of a sufficient amount of sediment that develops in the river, primarily close to the Paria River's confluence with the Colorado River. Reclamation will be coordinating with stakeholders such as the Western Area Power Administration to discuss offsetting the effects of reduced energy generation resulting from water bypassing some of the power generation turbines at Glen Canyon Dam. It is anticipated that the Secretary will approve the proposal and that the Department will schedule the HFE releases in November.

Ms. Trujillo reported that Secretary Jewell approved the recommended workgroup's budget and work plan for 2015, 2016, and 2017. The work plan governs the

Federal agencies' scientific experiments over the next three-year period. Ms. Trujillo added that discussions are also continuing with the Department of the Interior on the elements of the Long Term Experimental and Management plan EIS, which takes into account the interests of tribes, recreation, endangered species and water and power generation.

Ms. Trujillo also noted that Assistant Secretary, Anne Castle has resigned from her position, and Jennifer Gimbel will fill her position. Formerly, Ms. Gimbel served as Director of the Colorado Water Conservation Board in Colorado and most recently served as counselor to Anne Castle.

Lower Colorado River Multi-Species Conservation Program

Executive Director Trujillo reported that the yellow-billed cuckoo, a covered species within the LCR MSCP, has been listed as a threatened species. Ms. Trujillo added that CRB staff have finalized recommendations to the U. S. Fish and Wildlife Service requesting that the critical habitat designation for the yellow-billed cuckoo should exclude MSCP planning areas. Ms. Trujillo added that a similar action was taken in connection with the southern willow flycatcher's critical habitat designation.

Ms. Trujillo reported that on September 24th, the MSCP workgroup heard updates regarding the resolution of the program underfunding issue as well as the potential acquisition of the Planet Ranch property in Arizona. Ms. Trujillo added the acquisition would be a component of the Hualapai Indian water rights settlement in Arizona but that Federal legislation approving the settlement was stalled in Congress.

Ms. Trujillo reported that the next MSCP steering committee meeting will held on Wednesday, October 22nd, when the underfunding resolution is expected to be confirmed.

Announcements/Notices

Ms. Trujillo reiterated that at the Department of the Interior, Jennifer Gimbel has been appointed as the Principal Deputy Assistant Secretary for Water and Science and Estevan Lopez has recently started as the Principal Deputy Commissioner for the Bureau of Reclamation. There is a current vacancy for Reclamation's Regional Director's position in the Upper Colorado region. The position will be filled temporarily by rotating executive staff from other Reclamation regional offices, such as Jennifer McCloskey from the Lower Colorado region.

Ms. Trujillo reported that the Department of the Interior and the State of California have issued a draft Desert Renewable Energy Conservation Plan, Environmental Impact Statement (EIS/EIR) for public comment. Comments are due by January 9, 2015. Ms. Trujillo added that Board staff will be reviewing the report, paying special attention to impacts on Colorado River resources. Renewable energy projects, developed in the vicinity or within the hydrologic boundary of the Colorado River, such

as solar projects need to be properly analyzed to assure the associated water use is properly accounted for. The report also analyzes the development of additional geothermal production, which relates to IID's proposal to develop additional geothermal resources.

Ms. Trujillo also reported that the Secretary of the Interior celebrated the 50th anniversary of power generation at Glen Canyon Dam on September 27, 2014.

Ms. Trujillo reminded Board members of upcoming events including the National Water Resources Association (NWRA) conference scheduled to be held on November 12-14 at the Hotel del Coronado in San Diego. In addition, the Western Governor's Drought Forum (Forum) is scheduled through November 13-14 in Sacramento. Ms. Jones noted that the event in November will focus on agricultural water supply, while the Drought Forum's program event in December in Las Vegas will focus on urban water supplies. The December Forum meeting will be co-located with the Colorado River Water Users Association (CRWUA) conference in Las Vegas, Nevada, with the Western Water Council also sponsoring parallel sessions. Ms. Jones added that the Council's event will discuss potential improvements to Federal agency authorities with respect to drought, citing the 1991 Emergency Drought Relief Act as an example. Ms. Trujillo reported that the Association of California Water Agencies (ACWA) fall conference will be held in San Diego on December 2 – 5.

Chairman Fisher reminded the Board that the next meeting will be held in Coachella and it will be the conclusion of the Board's travelling meetings. The meeting will take place in the Hovley Lane Offices. The meeting date was moved to the week of November 17 to avoid conflicts with travel around the Veteran's Day Holiday.

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. Wilson, and unanimously carried, the meeting was adjourned at 2:50 p.m. on October 15, 2014.