

Minutes of Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, November 18, 2015.

A meeting of the Colorado River Board of California was held on Wednesday, November 18, 2015.

Board Members and Alternates Present

Stephen Benson  
Brian Brady  
Dana Bart Fisher, Jr., Chairman  
James Hanks  
Henry Kuiper  
Peter Nelson

Glen Peterson  
David Pettijohn  
Jack Seiler  
David Vigil  
Jeanine Jones, Designee  
Department of Water Resources

Board Members and Alternates Absent

Michael Touhey  
Doug Wilson  
John Powell Jr.

Chris Hayes, Designee  
Department of Fish and Wildlife

Others Present

Steve Abbott  
Tim Blair  
John Carter  
Lawrence Cox  
Linsey Dale  
Edwin Delgado  
Dan Denham  
Ron Derma  
Graeme Donaldson  
Karen Donovan  
Craig Elmore  
Larry Fleming  
Bill Hasencamp  
Tom Havens  
Kevin Kelly  
Michael Hughes  
Lisa Johansen  
Laura Lamdin  
Lindia Liu  
Kara Mathews  
Jan Matusak  
Vic Nguyen

Mike Pacheco  
Paula McConnell Pangle  
Angela Rashid  
Jack Safely  
Suzanna Sexton  
Tina Shields  
Peter Silva  
Darren Simon  
Ed Smith  
Joanna Smith Hoff  
Philip Southern  
Mark Stuart  
Gary Tavetian  
Tanya Trujillo  
Mark VanVlack  
Harold Walk  
Cherie Watte  
Donnell Wilcox  
Michael Yu

## **CALL TO ORDER**

Chairman Fisher announced the presence of a quorum and called the meeting to order at 1:05 P.M.

Chairman Fisher asked whether anyone in the audience 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. Fisher took a moment to thank the Directors and staff of IID for the tour and extended a special thanks to Mr. Jack Vessey, who hosted the farm visit.

Mr. Steve Benson, IID Board President, thanked everyone who was in attendance and expressed his gratitude to those who attended the tour. Mr. Benson noted Mr. Jim Hanks' contributions to the Colorado River Board.

## **ADMINISTRATION**

### **Consideration and Approval of the Minutes**

Chairman Fisher asked for a motion to approve the October 14, 2015 meeting minutes. Mr. Pettijohn moved that the minutes be approved, seconded by Ms. Jones. After receiving a correction in regarding the water report, by unanimous support, the October 14, 2015 meeting minutes were approved.

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

Ms. Trujillo reported that as of November 9, 2015, the system storage was 51% of capacity. Lake Mead water level was at 1,079 feet, with 9.94 million acre-feet (MAF), or 38% of capacity. The water level at Lake Powell was at 3,606 feet with 12.3 million acre-feet, or 51% of capacity. In the Upper Basin, reservoirs continue to show the benefits of the "Miracle May" precipitation. Upper Basin reservoirs other than Lake Powell remain between 70-90% full.

Ms. Trujillo reported that as of November 17, 2015, the water year has been tracking close to an average year. Observed inflow was 104% of average and the forecast for November inflow is about 85% of average.

Ms. Trujillo reported that in the Lower Basin, Brock Reservoir storage was 125,690 acre-feet through November 10, Senator Wash storage was 99,930 acre-feet through November 12, and excess flows to Mexico were 14,282 acre-feet through November 15. The Bypass flows were 121,721 acre-feet as of November 6, 2015.

Ms. Trujillo reported that precipitation during the month of September, in most of the Basin, was below 89% and in some areas below 50%. Precipitation in October was

above average, particularly in the lower Basin as a result of several large storms. Ms. Trujillo reported that the Drought Monitor map showed increased favorable conditions in Wyoming, Colorado, New Mexico, Utah, and Arizona.

The California drought continues to persist with 45% of the State remaining in the Exceptional Drought category. Ms. Trujillo noted that in addition to the Drought Monitor Map, reservoir levels are also an important indicator of the severity of the drought. On November 13, Governor Brown issued an additional Executive Order extending the existing drought proclamation and April mandatory water use reductions. On a statewide basis, California municipalities have continued to exceed the 25% conservation mandate and since June 1, the cumulative statewide savings has been 28%. Governor Brown issued a state of emergency for the removal of dead forest trees impacted by the drought and bark beetles, which are susceptible to forest fires. Ms. Trujillo reminded the Board that there have been a large number of forest fires that have occurred across the State this year.

In addition to dealing with drought issues, the State is also preparing for storms and possible flooding related to the strong El Nino that is anticipated. The state has a setup a new website, [www.storms.ca.gov](http://www.storms.ca.gov), to provide information on the State's storm preparation activities. Mr. Stuart, of the California Department of Water Resources, reported on the seasonal precipitation as recorded at the Los Angeles Civic Center. Precipitation last year was well below normal, and October of this year was just above zero. Mr. Stuart reported that as preliminary reporting indicated that the snow accumulation as of early November is about 75% for California and he was hopeful that El Nino would bring a wet year. Precipitation at selected southern California stations for October were a mix of below ten percent in Imperial to over 300% in Blythe, although the amount of precipitation received in Blythe was only 0.84 inches, where the normal for October was 0.27 inches.

Mr. Stuart reported that water storage in Lake Oroville, as of November 1, was about 1 million acre-feet, or 28% of capacity, and is approaching an all-time low. Water storage in the San Luis reservoir was about 287,000 acre-feet, or 27% of capacity. Total water storage in the State Water Project system is 1.76 million acre-feet, or 32% of capacity.

Mr. Glen Peterson, of the Metropolitan Water Agency of Southern California, reported that MWD's combined reservoir storage, as of November 1, was 47% of capacity. Total deliveries were 87% of average and MWD intends to increase system storage in the coming year.

Mr. David Pettijohn, of the Los Angeles Department of Water and Power, reported that the water year as of November 17 was about normal for this time of year. He pointed out that current precipitation conditions in the Eastern Sierra also showed the precipitation pattern of the last El Nino event for water year 1997-1998, and that most of the rain occurred after February and continued through March. Water Year 2015 was the new lowest year on record.

Mr. Peter Nelson, of the Coachella Valley Water District (CVWD), reported that the urban water users have conserved 27.6 percent of their water use, the State Water Resources Control Board required CVWD conserve 36 percent of its urban water use and the State Board has fined CVWD \$61,000 but CVWD is appealing the fine. Mr. Nelson added that the CVWD has conserved the seventh largest amount of water in the State.

Mr. Brian Brady, of the San Diego County Water Authority, reported that for San Diego County, the conservation is at 27 percent. He noted that the Water Authority has asked the State Board to account for water agencies that introduce new water supplies. Mr. Brady mentioned that some agencies in the county that have agriculture use have conserved up to 35 percent but there has been no acknowledgment of those efforts.

### Imperial Irrigation District Water Conservation and Management Status Report

Ms. Tina Shields, of the Imperial Irrigation District, covered the status of Quantification Settlement Agreement (QSA) conservation and transfer programs, and the IID apportionment program. IID supplies about 500,000 acres of Imperial Valley farmland with Colorado River water that is transported about 82 miles via the All-American Canal. In 2010, the Canal Lining Project, one of the Capital Improvement Projects funded by the State of California and the San Diego County Water Authority, was completed and provides an annual conservation yield of almost 70,000 acre-feet. The IID irrigation and drainage system is an extensive, largely gravity flow, closed system, with more than 1,500 miles of canals and drains. IID's primary business is farming, and includes permanent, garden, and field crops. The top 13 crops grown within the IID service area are mainly forage crops.

Ms. Shields presented an overview of the IID water conservation and transfer programs, which include the 1988 MWD-IID agreement that predated the QSA agreement. The total conservation volumes are close to 500,000 acre-feet at full implementation, representing almost 15% of IID's Colorado River entitlement. IID has significant agricultural conservation commitments that it has been fulfilling for decades, particularly since 2003. Salton Sea mitigation fallowing has been implemented since 2003 to address environmental issues. There has been a lot of progress made on the Salton Sea since last year. The State has appointed a task force and a high-level policy person to address Salton Sea issues. Discussions have been initiated to move forward with restoration activities.

With respect to the transfer schedules, the volumes of conservation for Salton Sea mitigation ramps up through 2017 when mitigation deliveries end. For this year, the Salton Sea mitigation delivery is 110,000 acre-feet. Next year it ramps up to 130,000 acre-feet, and in the final year, it increases to 150,000 acre-feet. After 2017, IID will end its large-scale fallowing program for mitigation, and transition to efficiency-based programs. IID plans to implement on-farm conservation projects that have been refined based on experience to allow maximum flexibility to benefit growers who participate in the program. On the IID tour, participants saw an inter-tie that can be used to move

water to locations with higher demand. IID is also looking at a new reservoir (2,000 to 3,000 acre-feet in storage capacity) that will be added into its system in the coming months to help manage on-farm programs, particularly, the 12-hour run program to help growers order water in smaller time increments rather than take water for the full 24-hour period that they may not need. With on-farm programs already in use and a wider use of pumps, drip systems, and sprinklers, farmers are provided more flexibility to be able to manage their water. Given the IID apportionment system that is in place, the use of the 12-hour run program has skyrocketed. IID is also commencing a pilot project to look at metering all of the farm deliveries. Other conservation projects could include additional canal lining, performing reservoir upgrades, performing SCADA upgrades to automate the facilities, and providing zanjeros computers with real-time information and decision support features. IID's on-farm conservation program began in 2013, and was scheduled to ramp up 20,000 acre-feet each year. IID's goal this year is to conserve 60,000 acre-feet. When the Salton Sea mitigation deliveries cease in 2017, the water transfer to SDCWA will ramp up again at 30,000 acre-feet increments a year.

IID's water apportionment program was developed to provide a water budget for the growers, and a clearinghouse was established to build in flexibility to transfer (buy and sell) water between farm units. In 2013, IID implemented a straight-line method of agricultural apportionment. Now, IID uses a hybrid method so that one-half of a farm unit apportionment is based on historical use, and the other half is based on an equal version of what every other acre has on a per acre basis. Apportionments are now in place on January 1 of each year, and apportionments for next year have just been mailed out to farmers, and they average about 3 to 8 acre-feet per acre. Ms. Shields explained that trading done outside of a farm unit would have to go through the clearinghouse so that IID may be able to track the water and help facilitate the movement of the water within the valley. IID also has a payback program at the grower level. These tools help growers manage their apportionments to plan and make cropping choices in advance and to help IID manage its 3.1 million acre-feet water budget from the river. Over the past decade, IID's QSA conservation has totaled about 3.4 million acre-feet.

Director Hanks commented that farmers in the valley and the IID have made tremendous efforts and investments in conservation to help California live within its 4.4 million acre-feet requirement. He also reminded the audience that the QSA implementing statute, (Section 1013 (e) of the California Water Code) restricts other entities from seeking conservation and transfer programs unless and until the IID Board adopts a resolution offering to make conserved Colorado River water available.

#### Updates From California Department Of Water Resources

Ms. Jeanine Jones, of the California Department of Water Resources, reported on developments to improve seasonal precipitation forecasting. Ms. Jones reported that seasonal precipitation forecasting is difficult scientifically to predict. She noted that the National Weather Service forecasts typically extend out ten days. The National Oceanic Atmospheric Administration's Climate Prediction Center's outlooks for temperature and precipitation extend out for three months. Climate model predictions can extend out for

decades. Ms. Jones mentioned that weather forecasting is used for managing reservoirs, for example controlling when to schedule flood control releases. Snowmelt runoff forecasts, as made by the Colorado Basin River Forecast Center, are used to estimate runoff later in the year after the snow has already fallen. However, for water project management and for managing demands during drought, it would be good to know how much it is going to rain this winter.

Ms. Jones reported that although short-term weather forecasting has improved significantly over the decades, seasonal forecasting remains an emerging science. The skill level of these forecasts is only about two to three percentage points above equal chance. The effects of El Nino Southern Oscillation typically extend about three months out or so, but they are poorly understood. Nonetheless, the media is having a feeding frenzy about how the coming Godzilla El Nino will flood us all out, especially in Southern California. There is still a possibility that next year could be dry and that is why Governor Brown's Executive Order is continuing with conservation efforts in California. Ms. Jones stated that meetings with NOAA were held in May and October and that there will be a meeting at CRWUA to ask NOAA to identify a programmatic approach to improve skill in long-term weather forecasting.

Ms. Jones also reported on DWR's California Irrigation Management Information System (CIMIS). The CIMIS has been in operation for about 30 years. It's a network of agricultural weather stations used for irrigation scheduling and to increase water use efficiency. In recent years DWR has partnered with U.C. Davis, NASA and other researchers to develop a satellite-based effort that compliments the CIMIS system. Ms. Jones added that there are close to 50,000 users of the CIMIS system, including water districts or private weather service companies that repackage the CIMIS data and deliver it to their service area either for water use efficiency programs, homes, large turf areas, or for agricultural purposes. Ms. Jones added that DWR is exploring opportunities to include interstate river basins, such as the Klamath, the Colorado, and the Truckee-Carson-Walker complex to improve the irrigation efficiency and that the first meetings are scheduled for February 2016.

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

Ms. Laura Lamdin, with the Metropolitan Water District of Southern California, provided an overview of the current status of the Pilot System Conservation Program. Ms. Lamdin stated that the program provides funding for Colorado River water users to voluntarily reduce their water use. The reductions can be through fallowing or conservation in the agricultural, industrial or municipal sectors. Ms. Lamdin noted that the extra water created would benefit reservoir elevations and have water supply, power generation, and water quality benefits. Five agencies contributed funding for the program, which included \$2 million each from Southern Nevada Water Authority, Metropolitan Water District of Southern California, Denver Water and Central Arizona Water Conservation District and \$3 million from Reclamation. Ms. Lamdin reported that a Request for Proposals was issued to Lower Basin entities in October 2014 and a Request for Proposals for the Upper Basin was issued in May 2015.

Ms. Lamdin reported that a committee was formed to review the proposals, which varied by project type, scale, and geographical location. To date, there are 11 contracted pilot projects --five projects in Wyoming, three in Colorado, two in Arizona, and one in Nevada. The project types include seven fallowing projects, one deficit irrigation project, one tributary conservation project, one wastewater recovery project and one project is a reduction of groundwater storage. There are five additional projects under contract negotiation. Ms. Lamdin stated that the Basin States are planning to issue a second round of Requests for Proposals with potential additional funding of \$500,000 dollars from the Six Agency Committee and \$1 million from the Central Arizona Project. Ms. Lamdin noted that Southern Nevada Water Authority has also contemplated providing additional funding.

Ms. Trujillo reminded the Board that Chris Harris, Deputy Director at the Colorado River Board, provided a detailed overview of the Bypass Flows Work Group during a prior meeting. The purpose of the Work Group is to evaluate options to address the high level of over-delivery to Mexico due to Minute 242 salinity operations. Ms. Trujillo stated that the best two options to address this issue may include some level of operation of the Yuma Desalting Plant and increasing Reclamation's pumping from the Minute 242 well field. Both options will require a lengthy budgeting and funding process and will also involve discussions with Mexico because of the potential impacts to the Cienga de Santa Clara and Minute 242. Ms. Trujillo noted that the Work Group met in Yuma, AZ at the end of October and is in the process of drafting a report highlighting the recommended options.

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

At the Salinity Control Forum and Advisory Council meetings on October 28-29 in Tucson, Arizona, Reclamation reported on the current operations for the Paradox Valley Unit Well replacement project. Reclamation anticipates completing the EIS within the estimated timeframe and within budget. Reclamation also has a contingency plan mapped out if the existing well were to fail prior to the conclusion of the EIS process. Board staff will continue to monitor the progress of the EIS. Ms. Trujillo reported that the Board is involved in establishing potentially new policies relating to the NPDES permitting process and has a representative of California's Water Quality Control Board involved from a state regulatory perspective. At the meeting, the members reviewed and approved funding recommendations that will be formally submitted to the Appropriations Committee for next year's budgets for Reclamation, the Bureau of Land Management, and the Department of Agriculture's NRCS EQIP program, whose Upper Basin programs provide salinity control benefits throughout the system. The funding requests for the program remain similar to what they have been in the past several years.

The next Work Group meeting will be in February 2016 in Phoenix, Arizona and the Forum will meet in June 2016 in Colorado. Ms. Trujillo highlighted a photograph in

the presentation of a potential project area called the Pah Tempe Springs in Utah. This area is potentially a project that is similar in scale in terms of salinity control to what is currently underway at the Paradox Valley Unit. Ms. Trujillo added that this would be an opportunity to shift from the smaller Upper Basin on-farm type projects to another large-scale project. There is on-going discussion with local entities that may be able to cost-share and co-develop the project.

#### Review status of the implementation of Minute 319

Ms. Trujillo reported that a meeting of the bi-national negotiating group occurred on November 12-13 in Mexicali, Mexico to continue to try to establish the initial framework for a possible successor minute to Minute 319. The primary focus of the group so far has been to provide guidance to work groups to evaluate what additional programs may be put in place for the next minute. The three work groups that are being contemplated are a Projects Work Group, a Salinity Work Group, and an Environmental Flows Work Group. On November 5, the environmental work group toured the Colorado River Delta, including the limitrophe area along the border then down into Mexico. The tour was a good opportunity to see some of the habitat restoration work that resulted from last year's pulse flow event and the on-going base flow deliveries that are being scheduled through the term of the minute.

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

Ms. Trujillo reported that a determination had been made not to carry out a high flow experiment at Glen Canyon Dam this fall. The determination was the result of biological concerns over a newly established population of nonnative green sunfish, which could expand downstream due to high flows. Ms. Trujillo noted that efforts to eradicate the sunfish had been recently undertaken, with the latest survey failing to detect any remaining fish.

Ms. Trujillo reported that work on the Long-Term Experimental and Management Plan (LTEMP) EIS is ongoing, with a public draft of the document expected in December. Ms. Trujillo stated that the next meeting of the Technical Work Group would be January 26-28, 2015.

#### 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) steering committee met on October 28. The LCR MSCP budget for fiscal year 2016 has been set at \$30.7 million, with an additional \$8 million earmarked for the purchase of the Planet Ranch property in Arizona. The purchase of the Planet Ranch property had been in jeopardy due to a lower court ruling against the Arizona Department of Water Resources' sever and transfer of water rights at the property. However, Ms. Trujillo reported that in November, the Arizona Supreme Court



ruled in favor of the Department, clearing the way for the purchase of the property as a conservation area for the LCR MSCP.

Ms. Trujillo reported that conservation measures for the flannelmouth sucker and relict leopard frog had been recently completed, finalizing the program's obligations for those species. Additionally, Reclamation received coverage for the recently listed yellow-billed cuckoo and has entered formal consultation with the U.S. Fish and Wildlife Service on the northern Mexican gartersnake.

Ms. Trujillo noted that the LCR MSCP would hold two technical meetings in January in Laughlin, NV.

#### Announcements/Notices

Ms. Trujillo reported that in October, the Governor signed legislation relating to the Salton Sea which directed the creation of 12,000 acres of habitat over the next five years, increasing to 25,000 acres by 2020. On November 5, a "playa breaking" ceremony was held at the Red Hill Bay area to commemorate the kickoff of the Fish and Wildlife Service's project in the area. Jennifer Gimbel was the lead participant for the Federal government and several local agencies, including IID, were present for the event. On November 4, a follow-up meeting was held in Coachella as a result of the Governor's task force and was chaired by Bruce Wilcox, the Assistant Secretary for actions relating to the Salton Sea. .

Ms. Trujillo reported that a hearing was held in Washington, D.C. in early October at the Senate Energy and Natural Resources Committee regarding drought legislation introduced by several states, including California-specific legislation introduced by Senators Feinstein and Boxer and that a committee mark-up of the bills may be scheduled for early December. Ms. Trujillo noted that Arizona's Senator Flake had stated an interest in introducing a series of amendments to the bill, one of which was of concern because it would limit the Secretary's discretion to allocate unused apportionment from one state to another state. Ms. Trujillo stated that California's agencies have been opposing the proposed amendment and have emphasized to other Basin States that the proposal is inconsistent with the negotiation and collaboration typically undertaken by the Basin States to resolve issues.

Ms. Trujillo reported that the Colorado River Basin Forecast Center held a stakeholder forum and verification webinar in October. Some of the information presented in those meetings will be used for the December Board meeting's year-end hydrology review.

Ms. Trujillo reported that the Department of the Interior and the California Natural Resources Agency released a final EIS for the Desert Renewable Energy Conservation Plan, which covers the development of wind, solar, and geothermal projects. The EIS requires projects to offset impacts to the Colorado River Basin. Ms.

Trujillo noted that this phase of the EIS covers only projects on federal lands, with future phases dealing with other lands.

Ms. Trujillo reported that the Southern Nevada Water Authority is leading an effort to put together a traveling museum exhibit to highlight Colorado River Basin issues at a national level. The Basin States would be involved in the exhibit's development and would be asked to contribute small amounts of funding toward the planning and initial development of the project.

Ms. Trujillo reported that Board staff member Angela Rashid was a member of a panel at a Colorado River Water Forum in Grand Junction, Colorado at the end of October. Several Upper Basin programs were highlighted during the forum.

Ms. Trujillo reported that ACWA would be holding its fall conference December 2-5 in Palm Desert, featuring at least one panel on Colorado River issues, to be moderated by Jim Barrett. Additionally, the Colorado River Water Users' Association plans to meet in Las Vegas in December. Chairman Fisher noted that the next meeting of the Colorado River Board is scheduled in coordination with that meeting and will be held at 3:00 pm on December 16th.

## **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 Ms. Jones, seconded Mr. Peterson, and unanimously carried, the meeting was adjourned at 2:38 P.M.