

Minutes of Special Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, December 12, 2012

A Special Meeting of the Colorado River Board of California (Board) was held in the Augustus Ballroom I, of Caesars Palace Hotel, at 3570 Las Vegas Boulevard South, Las Vegas, Nevada 89109-8924, Wednesday, December 12, 2012.

Board Members and Alternates Present

Dana Bart Fisher, Jr., Chairman
James Cleo Hanks
W.D. "Bill" Knutson
Henry Merle Kuiper
John Palmer Powell
Bill D. Wright

Jeanine Jones, Designee
Department of Water Resources

Christopher G. Hayes, Designee
Department of Fish and Game

Board Members and Alternate Absent

John V. Foley
Terese Marie Ghio
James B. McDaniel

John Pierre Menvielle
David R. Pettijohn

Others Present

Autumn Ashurst
Don A. Barnett
Stephen W. Benson
Gary A. Bryce
Brenda Burman
Fred Cagle
John Penn Carter
J.C. Jay Chen
Michael J. Cohen
David De Jesus
Ron Derma
Matt Dessert
Charles T. Du Mars
Jim Edwards
Terry J. Fulp
Leslie M. Gallagher
John Giambastiani
William J. Hasencamp
Mark J. Hattam

Thomas C. Havens
Timothy J. Henley
Andy G. Horne
Richard Johnson
Jill Johnson
Kevin E. Kelley
Jeffery V. Kightlinger
Mark Limbaugh
Carlos Madrid
Jan P. Matusak
Craig Morgan
John Morris
Peter Nelson
David Osias
David Palumbo
Roger K. Patterson
Lowell Pimloy
Halla Razak
Randy A. Record

Dan Robinson
Marcia Scully
Jack Seiler
Tina L. Shields
Jesse P. Silva
Peter S. Silva
Robert Snow
Ed W. Smith
Joanna Smith
Tanya M. Trujillo
Deven Upadhyay
Joseph A. Vanderhorst
Mark Van Vlack
David Vigil
Manu Watton
Meena Westford
Michael Yu
Gerald R. Zimmerman

CALL TO ORDER

Chairman Fisher welcomed the audience and announced a quorum was present, then called the meeting to order at 3:15 p.m.

OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD

Chairman Fisher asked if there was anyone in the audience who wanted 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

Chairman Fisher requested the approval of the November 14th meeting minutes. Mr. Knutson moved that the minutes be approved. Mr. Kuiper seconded the motion. Mr. James Cleo Hanks abstained, the remaining Board members approved the November 14th meeting minutes.

2013 Board Meeting Schedule

Chairman Fisher requested that the meeting schedule, included in the Board folder, for calendar year 2013 be approved by the Board. On the motion of Mr. Knutson, seconded by Mr. Wright, and unanimously carried, the Board approved the meeting schedule for 2013.

Resolution Commemorating the Colorado River Board's 75th Anniversary

Executive Director Trujillo reported that the Colorado River Board was formed by California State statute in 1937. Ms. Trujillo reported that upon review of some of the Board's earliest minutes she found the Board discussed funding, management, Upper and Lower Basin, and U.S. Mexico issues and so for 75 years the Board has continued to work on these issues. Ms. Trujillo reported that Mr. Zimmerman led the Board for the past 21 years. Many of the past successes are due to Mr. Zimmerman's leadership of the Board. Ms. Trujillo reported that the proposed resolution recognizes that the Board was involved in framing the law of the River, participated in the development of criteria rules and procedures for management of the river system and operation of the reservoirs. The Board also participated in addressing endangered species and other significant water supply challenges. The Board's Resolution resolves to commemorate its 75th anniversary and acknowledges the hard work and service of past and present Board members and staff, and further resolves to challenge itself and future Board members and staff to build upon the past 75 years and make the next 75 years even more significant to California, its agencies and citizens, who rely upon the Colorado River for water supply, recreation, environmental benefits, and economic security. Chairman Fisher asked if there was a motion to approve the Resolution commemorating the Board's 75th anniversary. Ms. Jones made the motion that the Resolution be approved, Mr. Wright seconded the motion, and the Board unanimously approved the Resolution commemorating the Board's 75th anniversary.

PROTECTION OF EXISTING RIGHTS

Colorado River Water Report

Ms. Trujillo reported that precipitation in the Colorado River Basin, as of December 1st, was about 63 percent of average. The snowpack water equivalent as of December 3rd was 61 percent of average. The observed April 2012 through July 2012 unregulated flow into Lake Powell was 2.06 million acre-feet (maf), or 29 percent of average. The observed 2012 water year unregulated flow into Lake Powell was 4.91 maf, or 45 percent of average. Ms. Trujillo reported that the current drought map indicated the continuation of dire drought conditions covering much of the U.S., and noted that various federal agencies were meeting in Washington D.C., December 12th, to discuss the drought.

Ms. Trujillo reported that, as of December 1st, the storage in Lake Powell was 13.8 maf, or 54 percent of capacity. The water surface elevation was 3,615.1 feet. The storage in Lake Mead was 13.33 maf, or 52 percent of capacity, and water surface elevation was 1,117.2 feet. Total System storage was about 33.34 maf, or 55 percent of capacity.

Ms. Trujillo reported that Reclamation's projected consumptive use (CU) for the State of Nevada to be under its basic entitlement of 300,000 acre-feet (i.e. 244,000 af), and Arizona CU of Colorado River water to be slightly under its 2.8 maf apportionment (i.e. 2.796 maf), and California CU is projected to be slightly over its 4.4 maf apportionment (i.e. 4.434 maf). The CU in the Lower Basin is expected to be about 7.474 maf.

State and Local Water Reports

Ms. Jones, of the California Department of Water Resources (CDWR), stated that in the Northern Sierra Precipitation Eight-Station Index is currently above the wettest year on record. However, it is very early in the water year and the long-range forecast from both the NOAA Climate Prediction Center and academics retained by CDWR call for seasonal conditions in the northern part of California to be drier than average and southern California to be about average. Though there's been a lot of rain, the last series of storms have been warm so there isn't much of a snowpack. Currently reservoirs are at 100 percent of normal so most of the reservoirs are in flood control operations. Reservoir filling operations will be expected to resume April 1st.

Mr. Wright, of The Metropolitan Water District of Southern California (MWD), reported MWD's combined reservoir storage is about 867,500 acre-feet or 84 percent of capacity. The Colorado River Aqueduct was on a one-pump flow to perform maintenance on the eight-pump system. Total deliveries to member agencies through the end of October was 1.57 maf or 87 percent of the annual average to date.

Ms. Trujillo reported that climate conditions in the Eastern Sierra, as of December 3rd, while early in the season, are wetter than normal.

Colorado River Operations

Glen Canyon Dam High Flow Experiment

Ms. Trujillo reported that the High-Flow Experimental (HFE) release from Glen Canyon

Dam (GCD) began on November 19th and concluded on November 23rd. The results are currently being evaluated and will be reported on in future meetings. The HFE was a 24-hour release from GCD ramped up to 42,300 cubic feet per second (cfs), 27,300 cfs through the power plant and 15,000 cfs through the river outlet tubes. The high flow was preceded and followed by fluctuating flows of 7,000 to 9,000 cfs. The HFE was shorter in length than had previously been conducted in 2008. Very preliminary results seem to indicate that some beaches were built up from pre-release conditions.

Binational Discussions U.S. and Mexico

Ms. Trujillo reported that Minute 319 was executed by representatives of the United States and Mexico on November 20th in San Diego, California. It is a five-year agreement to provide benefits to both Mexico and the U.S. including: (1) Sharing of shortages and surpluses under specifically defined conditions; (2) Pilot projects to fund water conservation activities in Mexico with water being made available for use in the U.S.; and (3) Providing water for environmental purposes in the Colorado River Delta.

Ms. Trujillo reported that Domestic Agreements were also executed at the signing ceremony, including: (1) a Memorandum of Understanding between the U.S. Section of the IBWC, DOI, the Basin States, and several water agencies; and (2) an Operating Agreement, Forbearance Agreement, Delivery Agreement, and a Funding Agreement.

Basin States Discussions

Ms. Trujillo reported that the final draft of the Basin Study report was issued by the Department of the Interior on December 12, 2012. The Basin Study outlines a range of options including conservation, water reuse, and system augmentation to help address potential water supply and demand imbalances. The Basin States are committed to working with Reclamation and other stakeholders on the next steps.

REPORTS

Report from Ms. Anne Castle, Assistant Secretary for Water and Science, Department of the Interior

Ms. Anne Castle, the Department of the Interior's Assistant Secretary for Water and Science, congratulated the Board on its 75th anniversary. She congratulated the Board on its superior choice in the selection of its current and past Executive Directors.

Ms. Castle reported that Minute 319 was a historic milestone on the Colorado River. Ms. Castle reported that Secretary Salazar, who was at signing ceremony November 20th, has called Minute 319 the most important bi-national agreement on the river since 1944. Ms. Castle reported that Minute 319 is really three agreements in one. Ms. Castle reported that the Secretary has also said that our shared reliance on the Colorado River between the two countries really connects us as two nations and in so many ways it makes us one people. The types of collaboration that are contemplated in Minute 319 really bring that point home with definitions of shortage sharing, with collaborative projects in Mexico that will bring benefit into the United States, and the agreement to send pulse flows into the delta to reconnect the Colorado River with the Sea of Cortez, something

that hasn't happened in many, many years. All of that is significant and will really change the way we operate on the river and change the way our two countries relate to each other on water issues. Ms. Castle congratulated the Board for its role in developing the Minute, and looked forward to working together with all of the Colorado River Basin states to address the implementation of Minute 319. It was anticipated that while the Secretary is in Las Vegas on Friday he is planning to hold a meeting with the principals of the Basin States and involved river districts and other entities to talk about how to move forward with implementation of Minute 319.

The Secretary, Ms. Castle, Commissioner Connor, and Ms. Kay Brothers, as the representative from the Basin States, did a press conference earlier this morning, December 12th, to coincide with the roll-out of the Colorado River Basin Study. The Basin Study is part of Reclamation's WaterSMART program. WaterSMART is DOI's signature water conservation initiative that is focused on bringing different tools to bear to help our constituents work towards the state of a water management in the various watersheds that they operate in. Part of that is WaterSMART grants, Title XVI, recycling and reclamation project funding. And part of it is the Basin Study program and looking at how the Colorado River Basin Study has done such a comprehensive look at a huge watershed and provided state of the art information, state of the art science and tools to allow water managers to think about how to address shortages in the future. It seems to me that that kind of Basin Study tool can really be the most significant assistance that the federal government can provide to states and water districts, water managers, and water users to address the shortages that we see coming. This Colorado River Basin Study is one of 17 that we have going in basins across the west, but it is by far the most comprehensive. It took three years, \$6.7 million of funding equally shared between the Bureau of Reclamation and the seven basin states. And that partnership has resulted in a hugely valuable tool. And that core partnership also then reached out to a much broader spectrum of stakeholders, the ten tribes, NGO's representing environmental and recreational and business interests, and power interests. Having that broad spectrum of collaboration in the Basin Study is another component that gives it great strength. The Basin Study looked at supply and demand and has a lot of technical information about supply and demand. The Basin Study also took the next step and developed options and strategies to address the shortage that we see coming, which is a median of 3.2 million acre-feet of shortage in the Colorado River Basin by 2060. Under various climate change and population growth scenarios, the shortage could be larger than that. But we have looked at different options and strategies. The next step is to really drill down on some of those different options and strategies identified. However, it is clear that there's no one strategy that's going to address that magnitude of shortage. What the Basin Study did was pulled together a number of different options and organized them into portfolios to get a more accurate picture of how a basin-wide response would stack up against the shortages that are projected. So now we have to figure out what we're going to do. All of our constituents will be asking us what we are going to do to address this shortage. So now we're in the process of having discussions with our constituents about what those next steps look like and how we can put together groups that can look at issues within their particular wheelhouses, issues that they have responsibility over or expertise to bring to bear and figure out which solutions are practical, which are cost effective, which are politically viable, and then how we bring all of those together to address this shortage issue at a basin scale. The Basin Study is a first step a call to action. It's a call to engagement of the various different entities that have been involved in the study and probably a broader spectrum of entities in the future. Ms. Castle reported that copies were available at the Reclamation booth of the Colorado Water Users Association Conference. The Study is also available online.

Ms. Castle reported that Secretary Salazar is scheduled to visit the Salton Sea with Senator Boxer and Congressman Ruiz in the afternoon after he leaves Las Vegas. He is expected to take a short tour of the Salton Sea and then hold a stakeholder meeting. In November, both California senators inquired about Reclamation's past and current involvement in the Salton Sea. Reclamation has funded about \$30 million of research into Salton Sea issues. U.S. Geological Survey (USGS) has also done a lot of work about Salton Sea issues and we'll be talking about that as well. Reclamation has fulfilled all of its obligations with respect to the Salton Sea, but DOI continues to provide technical assistance to various different entities that are looking at Salton Sea issues and potential steps forward. DOI has land ownership around the Salton Sea, and thus has interest in dust emissions and Endangered Species Act and Migratory Bird Treaty Act issues. Ms. Castle reported that DOI has interests in the impacts that are anticipated on populations of endangered species and trust responsibilities for Native American holdings that are at the north end of the Salton Sea, both submerged and above ground holdings. The band of Cahuilla Indians is implicated in Salton Sea issues. The 2007 legislation authorized \$30 million in pilot studies for restoration of the Salton Sea and directed the Secretary of the Army to consult with the USGS on those pilot projects. And that has been occurring. USGS has recently facilitated a meeting with the Corps of Engineers and the State of California to talk about strategies for moving forward. USGS has also done research in pesticides that are reaching the Salton Sea from the New and the Alamo Rivers and looking at the impacts of those pesticides on wildlife in and around the Salton Sea. And finally, Reclamation, IID, the State of California and USGS completed an Ecological Risk Assessment on exposure of birds to selenium in the saline habitats that are being looked at for possible creation to mitigate the retreat of the sea particularly in the Sonny Bono Wildlife Refuge. DOI is also working with the California Department of Fish & Wildlife and the California Department of Water Resources to try to develop an integrated monitoring plan that will be able to fold into any restoration efforts as well.

Ms. Castle commented on the progress on the Colorado River over the past four years because this Board and the representatives of other states have really engaged in a collaborative partnership with each other and with the Interior agencies, and with the Secretary, who has such significant management responsibilities on the Lower Colorado River. We want to make sure that that progress continues. We want to make sure that that partnership continues to operate in the same productive and collaborative manner that it has in the past. Ms. Castle reported that they are committed to doing that and that she appreciated this opportunity to be able to engage with this Board and she wants to continue to do that periodically in the future.

Report from Dr. Terry Fulp, Regional Director, U.S. Bureau of Reclamation, Lower Colorado Region

Dr. Terry Fulp reported that this was the first time he has addressed the Board as Reclamation's Regional Director of the Lower Colorado Region. He assured the Board that Reclamation's philosophy of collaboration and transparency will continue. As Assistant Secretary Anne Castle said, it's the only way to solve complex water problems. Dr. Fulp assured the Board that Reclamation continues to implement the 2007 Interim Guidelines for the Coordinated Operation of Lake Powell and Lake Mead. The Interim Guidelines extend through 2026, and the collaborative, transparent process to extend the guidelines will begin no later than 2020.

Dr. Fulp also reported that the current Basin-wide snow pack is about 62 percent of average. Last year the inflow was less than 50 percent of average. He indicated that there's been a drought in the basin for the last thirteen years with the usual 3 or 4 years of above average inflow. He questioned what should be done in the future. Dr. Fulp reported that the Basin Study report is the next step to address the water problems in the next 50 years. Two things that are different about the Basin Study is: (1) climate change scenarios were considered to quantify what the future might look like; and (2) demand scenarios were also considered for the first time. Dr. Fulp reported that the demand-supply imbalances range from 3 maf to 8 maf per year, depending on the scenario. The next steps are to be determined in a collaborative process with all of the stakeholders along the river, as we move forward.

Dr. Fulp recalled the development of the Quantification Settlement Agreement, in the late 90's and early 2000's, and mentioned how the parties grappled with California's 4.4 Plan and the eventual formulation of that important agreement. He said we have a good agreement in place. It's the largest agricultural to urban conservation and transfer program in the nation, so implementation issues were likely to occur. From Reclamation's Lower Colorado Region perspective they will continue to work with each of the members of the Board to resolve these implementation issues, as they arise.

Dr. Fulp reported that as Assistant Secretary Castle had mentioned, Minute 319 was negotiated and signed and now it is time to implement it.

Finally, Dr. Fulp assured the Board that Reclamation will continue its mission to deliver water and generate hydropower to Lower Colorado Basin entitlement and contract holders in the future. It will be done operationally and administratively as efficiently as possible.

Report from Mr. Don Barnett, Executive Director, Colorado River Basin Salinity Control Forum

Mr. Barnett reported that the Salinity Control Program has made the Colorado River water at Las Vegas 80 milligrams per liter better. The Colorado River water at Parker Dam is about 90 milligrams per liter better, and the Colorado River water at Imperial is about 100 milligrams per liter better because of the Salinity Control Program. That's not something that happened quickly, but over the past 30 years by slowly implementing Salinity Control Projects in the Upper Basin.

Mr. Barnett reported that Reclamation has initiated planning studies in the Lower Gunnison and Uinta Basin salinity control areas. These studies are funded using Basin States dollars with 85 percent coming from the Lower Basin. The Uinta Basin is in Utah. It is an old project area that's been ongoing for the past 30 years. It's starting to reach the end of its project life and the Program is determining how to finish the project in the most cost effective manner. The Lower Gunnison area of Colorado has been in place for a number of years, but hasn't yet taken off. It's a voluntary program and we need to know how to get this program going. A draft report is anticipated in about 9 months and a final report is expected in about 15 months.

Mr. Barnett reported that Reclamation has started a NEPA review process on the Paradox Valley Unit to look at alternatives for replacing the aging injection well. There are three potential paths: 1) an Environmental Assessment (EA) for replacement of well by 2015. The EA would cost about \$1.3 million; 2) an Environmental Impact Statement (EIS) to evaluate all potential alternatives. An EIS would cost about \$2.8 million; and 3) an EIS of all alternatives plus a pilot evaporative pond study by 2018. This option would cost about \$12.5 million. The Basin States

through the Salinity Control Program has begun to formulate an emergency action plan in case the existing injection well fails before the replacement option is in place.

Mr. Barnett reported that Reclamation is also continuing to move ahead with its Basin-wide Program, its principal program for implementing salinity control projects. Approximately 40 applications totaling \$100 million have been reviewed by the Application Review Committee (ARC). The ARC has recommended 15 projects totaling about \$40 million under the Basin States Program. The 15 projects are expected to control about 35,000 tons of salt at an effective cost of \$56 per ton of annual salinity control. The contracting process is expected to begin May 1, 2013.

Mr. Barnett reported that the Natural Resources Conservation Service (NRCS) is continuing to implement on-farm salinity control projects. In 2012 the NRCS obligated \$12.4 million for about 13,000 tons of new salinity control. Three State Conservationists have prepared a three-year funding plan requesting \$12 million in 2013. The Environmental Quality Incentives Program (EQIP) of the NRCS has been extended through Fiscal Year 2014.

Mr. Barnett reported that the Bureau of Land Management (BLM), in conjunction with Basin States Program dollars and efforts and moneys from USGS and the Agricultural Research Service, has initiated a study of salt mobilization on rangelands. BLM has hired a salinity coordinator who is to begin the end of January 2013.

Mr. Barnett reported that the Farm Bill expired on September 30, 2012. NRCS's salinity program (about 2/3 of total program funding) is funded out of EQIP under the Farm Bill. EQIP was extended through 2014 under the Continuing Resolution legislation last fall. The Senate passed a new farm bill in June and the House Agriculture Committee passed a similar farm bill in July, but it has not been heard on the House Floor.

Mr. Barnett thanked the Board for the opportunity to provide an update on the Program and then responded to questions about the Paradox Valley Unit and the implementation of the Salinity Control Program.

Washington D.C. and Congressional Updates

Ms. Trujillo reported that copies of Mr. Pete Carlton's annual report were included in the handout materials. Ms. Trujillo reported that fiscal issues are uncertain, and the continuing resolution is in place until March 27, 2013. A new budget will be released in February, and its fate is also uncertain.

Finally, Ms. Trujillo reported that there is a drought forum being held on December 12, 2012 in Washington D.C. where many of the federal agencies are meeting to discuss the drought. Ms. Trujillo also reported that the leadership of the Senate Energy and Natural Resources Committee will be transferred from Senator Bingaman, who is retiring, to Senator Wyden (D-OR). The Senate Energy and Natural Resources Committee addresses the authorizations for Reclamation and USGS.

Next Board Meeting

Chairman Fisher announced that the next meeting of the Colorado River Board is scheduled for January 2013 at the Holiday Inn Ontario Airport, 2155 E. Convention Center Way, Ontario, California.

There being no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn the meeting.

Upon the motion of Mr. Kuiper, seconded by Mr. Knutson, and unanimously carried, the meeting was adjourned 4:27 p.m. on December 12, 2012.

/S/

Tanya M. Trujillo
Executive Director