

Minutes of Regular Meeting
COLORADO RIVER BOARD OF CALIFORNIA
Wednesday, April 11, 2007

A Regular Meeting of the Colorado River Board of California (Board) was held in the Big Bear Room, of the Doubletree Hotel, 222 North Vineyard Avenue, Ontario, California, Wednesday, April 11, 2007.

Board Members and Alternates Present

Dana Bart Fisher, Jr., Chairman
Thomas M. Erb
Terese Maria Ghio
Henry Merle Kuiper
John W. McFadden

Bill D. Wright
Jeanine Jones, Designee
Department of Water Resources

Board Members and Alternates Absent

James H. Bond
John V. Foley
James Cleo Hanks
George I. Loveland

James B. McDaniel
John Pierre Menvielle
Christopher G. Hayes, Designee
Department of Fish and Game

Others Present

Steven B. Abbott
Mark D. Beuhler
John Penn Carter
William I. DuBois
David Fogerson
Terrance J. Fulp
Elston K. Grubaugh
William J. Hasencamp
Gordon A. Hess
Michael L. King
Russell Kitahara
W. D. "Bill" Knutson
Bart Koch
Brad Luckey
Jay W. Malinowski
Jan P. Matusak
Douglas N. Noble
Roger K. Patterson
David R. Pettijohn

Steven B. Robbins
Javier Saunders
John L. Scott
Ed W. Smith
Mark Stuart
William H. Swan
James J. Taylor
Joseph A. Vanderhorst
Charles Van Dyke
Bill D. Wright
Nan Yoder

William S. Abbey
Abbas Amir-Teymoori
J.C. Jay Chen
Christopher S. Harris
Mark Van Vlack
Gerald R. Zimmerman

CALL TO ORDER

Chairman Fisher, announced the presence of a quorum and called the meeting to order at 10:05 a.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 March 14th meeting minutes. Mr. Kuiper moved the March 14th minutes be approved. Mr. McFadden seconded the motion. Unanimously carried, the Board approved the March 14th meeting minutes.

AGENCY MANAGERS' MEETING

Chairman Fisher reported that the Agency managers would be meeting following the Board meeting. Mr. Zimmerman mentioned that while there have been communications among the Agency managers; however, they had not met since the March Board meeting.

PROTECTION OF EXISTING RIGHTS

Colorado River Water Report

Mr. Harris reported that, as of April 5th, the storage in Lake Powell was 11.664 million acre-feet (maf), or 48 percent of capacity. The water surface elevation was 3,599.1 feet. The storage in Lake Mead was 13.876 maf, or 54 percent of capacity, and water surface elevation of 1,125.3 feet. Total System storage was about 33.2 maf, or 55 percent of capacity. Last year at this time, there was 33.6 maf in storage, or 57 percent of capacity. This is a decrease of nearly 400,000 acre-feet in total System storage over last year.

Mr. Harris reported that precipitation from October 1st through April 5th is 88 percent of normal, and the snowpack is only about 66 percent of normal. There was a twenty percent decline in the the April through July runoff. The projected April through July runoff as of April 5th is 4.0 maf or 51 percent of normal. The anticipated 2007 water year runoff is 8.39 maf, or about 69 percent of normal. The snow condition, as of March 13th, is nearly 10 percent less than last month and 15 percent less than January. The snow has melted faster than usual.

Mr. Harris added that Reclamation's projected consumptive use (CU) for the State of Nevada is 309,000 acre-feet; and for Arizona, the CU is projected to be slightly above their basic entitlement of 2.8 maf (2.819 maf); and for California the CU is projected to be 4.438 maf. The total projected CU in the Lower Basin is projected to be about 7.566 maf.

State and Local Water Reports

Mr. Mark Stuart, of the California Department of Water Resources (CDWR), reported on the current climate conditions in the west, particularly California. The Northern Sierra eight-station precipitation index as of April 9th is 70 percent of normal. Snowpack throughout the Sierra's is also about 70 percent of normal; however, reservoir storage is approximately 110 percent of normal. Precipitation in the south is dryer than normal, with most areas reporting less than 40 percent. Precipitation in the Imperial Valley is a mere three percent of normal. Reservoir storage throughout the State Water Project (SWP) is about 4.88 maf, or 89 percent of capacity and SWP projected deliveries are currently 60 percent of entitlements.

Mr. Wright, of The Metropolitan Water District of Southern California (MWD), reported that the Colorado River Aqueduct was shut down for about three weeks for annual maintenance and inspection of the aqueduct. Consequently, storage in MWD's system is down about 26,000 acre-feet from last month. Storage in Diamond Valley Lake is 726,000 acre-feet or, 90 percent of capacity. Lake Mathews storage is about 121,000 acre-feet, or 63 percent of capacity, and Lake Skinner is about 37,000 acre-feet, or 83 percent of capacity. Overall storage is 883,000 acre-feet, or 85 percent of capacity.

Mr. Erb, of the City of Los Angeles Department of Water and Power (LADWP), reported that the Eastern Sierra was also dryer than usual. As of April 1st, the snowpack was 22 percent of average. The snowpack has completely melted at some of the reported stations. The most probable runoff forecast is slightly less than 50 percent (48 percent). The implementation of the Owens Lake dust mitigation and the re-watering of the lower Owens River will influence the amount of water moved through the LADWP system to metropolitan Los Angeles this year.

Colorado River Operations

Report from Reclamation on Draft Environmental Impact Statement-Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

Mr. Terry Fulp, Area Manager of Reclamation's Boulder Canyon Operations Office summarized the characteristics of the storage and delivery of water from Colorado River Basin. Mr. Fulp then gave a brief history of events leading up to the initiation of the NEPA process to develop shortage criteria and coordinated operations of Lakes Powell and Mead. The DEIS contains Alternatives that were analyzed, compared and contrasted against each other. A couple of the alternatives generated very large shortages. The analysis of the shortages more fully discloses the potential impacts and makes clear what the trade-offs between alternatives would be. The key elements analyzed in the DEIS include: 1) the development of a shortage criteria related to operation at Lake Mead and deliveries to the

Lower Division States; 2) the coordinated operation of both Lakes Powell and Mead; and 3) the development of mechanisms for the storage and delivery of conserved system and non-system water in Lake Mead.

Mr. Fulp added that while Mexican Treaty deliveries were modeled and reductions were assumed during periods of shortage in each of the alternatives analyzed, the proposed federal action under the jurisdiction of the Secretary of the Interior is only within the United States. There is a separate discussion and consultation process, through the State Department and the two sections of the International Boundary and Water Commission (IBWC) that is ongoing.

Mr. Fulp briefly described the “no action” alternative, and the four action alternatives: 1) Basin States alternative; 2) conservation before shortage alternative; 3) water supply alternative; and 4) reservoir storage alternative. No preferred alternative has been identified in the Draft EIS. After the Draft EIS and the conclusion of the comment period, a preferred alternative will be identified by Reclamation and the Department of the Interior.

Mr. Fulp described the geographic scope of the study area, from the full pool elevation of Lake Powell to the Southerly International Boundary, including the municipal and industrial service areas of Nevada, Arizona, and California. Mr. Fulp emphasized that Reclamation welcomes comments throughout the process, but encourages submission of comments before April 30th so that those comments can be included in the finalization of the process to determine a preferred alternative.

Mr. Fulp summarized the completion schedule of the DEIS. Comments are due by April 30th. He reiterated that feedback will help form development of a preferred alternative. The preferred alternative is to be identified by June 2007. The final EIS is to be published by September 2007. The Record of Decision is anticipated to be released by the Department of the Interior in December 2007.

California Superior Court Judge Issues Decision to Shut Down State Water Project

Ms. Jones, of the CDWR, reported that in response to a suit brought by a group headed by the California Sportfishing Protection Alliance, a California Superior Court judge held that the SWP did not have the California Endangered Species Act (CESA) permits that it needed to pump at the Harvey Banks Pumping Plant, south of the Sacramento Delta, and suggested that the pumps be shut down in 60 days. The CDWR believes it has CESA compliance through a grandfathered set of previous agreements with the California Department of Fish and Game (CDFG), which date back to the original Four Pumps Agreement of 1986. Ms. Jones mentioned that the director of the CDFG has the ability to issue a “consistency determination” that would determine that the CDWR is in compliance with CESA. The director of the CDFG has thirty days by statute to make such a determination. CDWR may ask the judge to delay publishing the final ruling while the consistency determination process is going on.

Ms. Jones added that the CALFED Bay-Delta Program-Programmatic Record of Decision, of August 2000, recognized that a long-term conservation process would be useful for the Bay Delta, i.e., a Habitat Conservation Plan (HCP) or Natural Communities

Conservation Plan (NCCP) under state law would be desirable. There was a meeting approximately a year ago among Reclamation, CDWR, and other stake holders in the Delta to consider developing such a plan. Additionally, a hearing is scheduled April 26th where the federal court will be asked to strike one or both of the existing biological opinions dealing with the Delta Smelt.

Mr. Swan mentioned that a “consistency determination” would be a bare-bones CESA compliance while progress could be made to develop a HCP under the federal ESA and an NCCP under the CESA, which is similar to what was accomplished with the Lower Colorado River Multi-Species Conservation Plan.

Central Arizona Water Conservation District Letter Regarding Determination to Maintain Full Aqueduct Conditions in the Central Arizona Project Canal

Mr. Zimmerman reported that included in the handout material is a letter from the general manager of the Central Arizona Water Conservation District (CAWCD). The CAWCD intends to maintain a full Central Arizona Project (CAP) aqueduct in excess of 2,500 cubic feet per second (cfs). A copy of the letter was sent to Reclamation and each of the Basin states. The 1968 Colorado River Basin Project Act (CRBPA), Section 301(a) prohibits diversions above 2,500 cfs unless there are flood control or equalization releases from Lake Powell. In its letter, CAWCD believes that the 1984 Hoover Power Plant Act supersedes the CRBPA prohibition, by promoting operational efficiency and power management.

Mr. Zimmerman reported that he had prepared a draft response to the CAWCD letter and emailed a copy to each of the Board members. In the draft letter, several concerns were raised with regard to CAWCD’s current position. The language of the CRBPA provides a clear prohibition. The Board would like to further discuss this situation with CAWCD and other Basin states. Mr. Zimmerman requested the Board approve the development of a letter response to the CAWCD. Mr. Wright moved that a response letter be approved. Ms. Jones seconded the motion. Unanimously carried, the Board approved a response letter expressing concern about the CAWCD action and suggesting that Arizona representatives meet with California representatives to further discuss the matter.

All-American Canal Lining Lawsuit

Mr. Zimmerman reported that on April 6th, a panel of the U.S. Ninth Circuit Court of Appeals lifted the temporary injunction blocking the lining of the All-American Canal. Mr. James Taylor of the San Diego County Water Authority and Mr. Elston Grubaugh of IID added some details as to when preliminary construction activities such as cultural surveys, protection of cultural resources and habitat plantings will be completed. The notice for the contractors to proceed will be sent out and construction is expected to begin around June 4th.

Navajo-Gallup Water Supply Project

Mr. Zimmerman reported that Arizona entities, Arizona Department of Water Resources (ADWR), CAWCD, and the Salt River Project, recently wrote letters to the New Mexico Office of the State Engineer and the Arizona congressional delegation expressing

significant concern about New Mexico's legislation authorizing the Navajo-Gallup Water Supply Project. ADWR believes that the project is in conflict with a number of components of the Law of the River, including: the Compact; the Consolidated Decree; the Colorado River Basin Project Act; and the Arizona Water Rights Settlements Act. Arizona has asked if California has similar concerns. Mr. Zimmerman suggested that a meeting be held with the agency managers, after further discussions with Arizona and New Mexico. Following these discussions, Mr. Zimmerman would bring a recommendation back to the Board for its consideration.

Colorado River Commission of Nevada Conference: The Colorado River – Conflict, Concerns, and Challenges – April 26-27, 2007

Mr. Zimmerman reported that he has been asked to participate on one of the panels, along with other Basin States representatives, to discuss “Conflicts, Concerns and Challenges” on the Colorado River. The Colorado River Commission of Nevada is hosting the conference, which will be held on April 26 and 27, 2007.

Basin States Discussions

Basin States Agreement

Mr. Zimmerman reported that the Basin States met in Denver, Colorado on April 5th and 6th to continue to develop a refined Basin States' Proposal for submittal to the Secretary for consideration in the Final EIS for the shortage guidelines in the Lower Basin and coordinated operations of Lakes Powell and Mead. The Basin States continued the work on the various agreements. The Arizona-Nevada Shortage Sharing Agreement was executed in February 2007. The Intentionally Created Surplus (ICS) Forbearance Agreement, the Basin States Agreement, and the Reservoir operations guidelines are near finalization. The Basin States transmittal letter is in draft form and a meeting has been scheduled on April 18th of a small group of individuals from each of the Basin States to finalize the draft transmittal letter. The entire package with the transmittal letter is planned to be submitted to the Secretary of the Department of the Interior by the April 30th deadline.

Mr. Zimmerman added that there will be an opportunity to modify each of these agreements prior to the Final EIS and ROD with the exception of the Arizona-Nevada Shortage Sharing Agreement and the Basin States Agreement, which is anticipated to be executed on April 23rd.

Mr. Zimmerman continued that the Basin States agreement is about as good as we can get at this point in time. It is not what California had originally agreed to in the February 3, 2006, Preliminary Proposal. For example, the agreement does not provide a definitive reduction in deliveries to Mexico under shortage conditions. California will be agreeing that Arizona and Nevada will not initially take more than 500,000 acre-feet of shortages. The agreed upon stepped shortages of 400,000, 500,000 and 600,000 acre-feet may not be attained. This could mean lower reservoir conditions, and more frequent shortages and shortages of a larger magnitude. California would be accepting a larger risk of having a shortage imposed on it, relying on the plain language of the 1968 CRBPA. In addition, the Upper Basin is questioning whether ICS that is stored in Lake Mead is counted when there

are surplus declarations, whether it is a domestic surplus, a 70R surplus, or a quantified surplus.

Mr. Zimmerman reported that the benefits of the Basin States Agreement would include the following: 1) coordinated operation of Lakes Powell and Mead; 2) the ISG would be extended through preparation of the 2026 AOP; 3) there will be shortage reductions of at least 333,000 417,000 and 500,000 acre-feet; 4) California will not have any shortage imposed on it provided the Lower Division States shortage is 500,000 acre-feet or less; 5) there will be an ability to create and recover ICS water; 6) all of the states are agreeing to augment the Colorado River System's water supply; 7) Nevada is agreeing to put further development of the Virgin and Muddy Rivers on hold; and 8) finally a number of legal issues are being set aside, the states are agreeing to extensive consultation, and each of the states retain their existing legal arguments.

Mr. Zimmerman added that the intent is to execute the agreement on April 23rd. The Chairman of the Board would execute the Agreement. Ms. Jones moved approval for the Board Chair to have the authority to execute the revised version of the agreement. Mr. Kuiper seconded the motion. Unanimously carried, the Board approved Chairman Fisher to sign the Basin States Agreement.

Colorado River Environmental Activities

Scoping Report on the Glen Canyon Dam Long Term Experimental Plan

Mr. Harris reported that Reclamation is in the process of preparing a Draft EIS associated with the Glen Canyon Dam Adaptive Management Program Long-Term Experimental Plan (LTEP). The LTEP was released in late March. Reclamation received 651 scoping comments after the publication of the initial *Federal Register* notice, approximately 70 percent of those comments were associated with threatened or endangered species, specifically the humpback chub. There was additional concern expressed over potential long-term impacts to the existing blue ribbon non-native trout fishery. The scoping report is available on the Upper Colorado Region's webpage.

Water Quality

Salinity Control Program

Mr. Amir-Teymoori reported that the Salinity Control Program Work Group (Work Group) met in Las Vegas, Nevada, on March 27-28, 2007. Reclamation has proposed creation of a Salinity Control Program 'Review Team' to document policies and improve overall Program effectiveness. The Review Team would solicit comments and develop new programs and procedures based on the comments received, by the end of September 2007. Reclamation proposed a draft scoping plan to evaluate implementation of alternatives related to the Paradox Project. The completion of the analysis is estimated to cost \$2.85 million dollars.

Mr. Amir-Teymoori added that the National Resources Conservation Service (NRCS) presented a revised evaluation spreadsheet to aid in the ranking of the proposed on-farm salinity control projects. The NRCS will start using the new ranking system June 2007. The NRCS also reported that 29 applications have been received associated with the Manila-Washam Project, and that these applications are currently being evaluated and ranked with the new spreadsheet analysis.

Las Vegas Wash Perchlorate Remediation

Mr. Amir-Teymoori reported on the status of the two remediation sites for perchlorate contamination at the Tronox and the AMPAC sites. The Nevada Department of Environmental Protection (NDEP) reports that the perchlorate load to Las Vegas Wash has been reduced to approximately 125 pounds-per-day via the Tronox Fluidized Bed Reactor (FBR). The goal is to achieve less than 100 pounds-per-day. As of April 1, 2007, approximately 2,230 tons of perchlorate have been removed from the Las Vegas Wash basin. The AMPAC's well-system is working successfully, with six of nine wells in place and removing approximately 12 pounds-per-day, with an overall goal of about 35 pounds per day. Currently, the perchlorate concentration at the Willow Beach monitoring station is about two parts-per-billion (ppb).

Status of Hexavalent Chromium Remediation, PG&E Topock Gas Compressor Station Site

Mr. Amir-Teymoori reported that the Arizona Department of Environmental Quality (ADEQ) recently released an assessment report regarding hexavalent chromium (CrVI) contamination on the Arizona side of the River near Topock and Golden Shores, Arizona. The ADEQ study indicates that currently in Arizona there are limited impacts and low-levels of chromium have been detected. The groundwater flow on the Arizona side is westerly toward the Colorado River. Mr. Bart Koch, the Water Quality Laboratory Manager, Chemistry Unit, Water Quality Section of The Metropolitan Water District of Southern California, added that Pacific Gas and Electric (PG&E) believes that the CrVI 30 ppb are ambient, or background, levels. The ADEQ does not concur with PG&E and recommends that additional monitoring wells be established closer to river near the Topock site and conduct further studies to determine the extent of potential impacts on the Arizona side of the river.

Mr. Koch, reported on the status of the CrVI remediation. The Topock site is located about 42 miles north of MWD's intake at Lake Havasu. The contaminant CrVI was used as a corrosion inhibitor and was disposed of by releasing the solvent into the wash. There is a large plume in the area. The concentrations range from 10 to 13,000 ppb. The wells closest to the river, about 60 feet, exhibit about 800 ppb of CrVI. Chromium is regulated as total chromium at 50 ppb in California. There is no Maximum Contaminant Level (MCL) for CrVI at this time.

The California Department of Toxic Substances Control (DTSC) entered into a Corrective Action Agreement with PG&E in 1996, requiring PG&E to conduct a facility investigation and ultimately determine a final remedy for the clean-up of the plume. PG&E installed interim treatment measures to stabilize the CrVI plume, and prevent the movement toward the river. Wells installed to extract and treat the groundwater have been in operation

since 2004. The “Corrective Measures Study”, a long-term treatment study to determine the technology PG&E will use to identify the final remedy. PG&E would like to use *in-situ* treatment. The DTSC established a consultative workgroup that includes a number of stakeholders. State and federal regulatory agencies as well as some of the Indian tribes provide consultation and recommendations to DTSC.

The current interim treatment consists of four extraction wells close to the river. The extraction wells are to help stabilize the plume and induce movement away from the river. The extracted water is treated and injected further to the west of the river. One monitoring well located about 60 feet from the river that measures the effectiveness of the interim treatment is still registering over 800 ppb. This indicates that the interim treatment is not achieving the goal for long-term treatment. PG&E has a different opinion. Some of the monitoring data suggest that the plume may be moving under the river. Two slant wells are to be installed. One at 30 degrees and a second at 40 degrees. The 30 degree well has not indicated contamination under the river, but then that well doesn't reach the lower sediments under the river. The 40 degree slant well is designed to reach the deeper sediments, but has not yet been tested.

Mr. Koch added that their recommendation has been made for PG&E to install a subsurface barrier to prevent groundwater movement from the CrVI plume to the river. Extraction and treatment wells would still need to be installed and operated. Mr. Koch wants PG&E to finish up the CrVI plume delineation, as well as expand the interim treatment. The timeline for the “Facility Investigation Report” is to be completed this year. The historic section has been completed. A draft of the report is available. The groundwater monitoring section is nearly complete, though the final remedy is yet to be written. Treatment technologies are still being studied. The “Corrective Measures Study” is targeted to be completed this year. The report would be released for public comment in 2008-2009. Potentially, construction could start by 2011, with the removal of the interim treatment measures in 2012.

Mr. Koch added that the concerns of the Colorado River stakeholders are that the CrVI plume may enter the river; the CrVI plume is not fully delineated; the interim measures are not achieving the goals; and the long-term *in-situ* biological treatment may not be an acceptable option. A coalition of stakeholders of the Colorado River water users could approach the California Regional Water Quality Control Board, Colorado River Basin Region, as well as Arizona's Department of Environmental Quality and seek beneficial use protection for the river. Site visits could be set up for the coalition of stakeholders to participate in the Consultative Work Group and ultimately dialogue with PG&E on the final remedy and seek support from the coalition for the installation of the physical barrier and insure long-term treatment consisting of nutrient injections would cover a wide enough area to be effective. Mr. Koch asked the Board and members present if there were individuals that would like to participate in the coalition and enter into the technical discussions on the final remedy.

Other Business

Next Board Meeting

Chairman Fisher announced that the next meeting of the Colorado River Board will be held in conjunction with the Association of California Water Agencies Spring Conference on Wednesday, May 9, 2007, in Sacramento, 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. Wright, seconded by Mr. Kuiper, and unanimously carried, the meeting was adjourned 12:09 p.m. on April 11, 2007.



Gerald R. Zimmerman
Executive Director