

Minutes of Regular Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, February 14, 2007

A Regular Meeting of the Colorado River Board of California (Board) was held in the Keller Peak Room, of Doubletree Hotel, at 222 North Vineyard Avenue, Ontario, California, 91764-4428, Wednesday, February 14, 2007.

Board Members and Alternates Present

Dana Bart Fisher, Jr., Chairman

James H. Bond

Jim Cleo Hanks

Henry Merle Kuiper

James B. McDaniel

John W. McFadden

Bill D. Wright

Jeanine Jones, Designee

Department of Water Resources

Christopher G. Hayes, Designee

Department of Fish and Game

Board Members Absent

John V. Foley

Terese Maria Ghio

John Pierre Menvielle

Others Present

Steven B. Abbott

Mark Beuhler

William I. DuBois

Tony Ferraro

William J. Hasencamp

Gordon A. Hess

Michael L. King

Russell Kitahara

W. D. "Bill" Knutson

Ricardo De Leon

Jay W. Malinowski

Jan P. Matusak

Doug McPherson

Roger K. Patterson

McClain Peterson

David R. Pettijohn

Javier Saunders

Ed W. Smith

Mark Stuart

William H. Swan

James J. Taylor

Peter E. von Haam

Larry Walkoviak

William S. Abbey

Abbas Amir-Teymoori

J.C. Jay Chen

Christopher S. Harris

George R. Spencer

Mark Van Vlack

Gerald R. Zimmerman

**CALL TO ORDER**

Chairman Fisher, announced the presence of a quorum and called the meeting to order at 10:04 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 January 10<sup>th</sup> meeting minutes. Ms. Jones moved the January 10<sup>th</sup> minutes be approved. Mr. Wright seconded the motion. Unanimously carried, the Board approved the January 10<sup>th</sup> meeting minutes.

### Riverside County Board of Supervisors Request for Co-hosting the Riverside County Water Symposium

Mr. Zimmerman reported that the Riverside County Board of Supervisors had requested the Board co-host the Fourth Annual Riverside County Water Symposium to be held on June 21, 2007. County events have not been sponsored by the Board in the past, and the Board indicated no interest in co-hosting this particular event.

### State of California Employee's Ethics Training

Mr. Zimmerman reminded the Board that not all of the bi-annual ethics training certification forms have been received. All of the forms will need to be signed and turned in to Board administration staff.

### Senate and Assembly Budget Hearings

Mr. Zimmerman reported that staff from both the Assembly and Senate have indicated that there are no issues with the Board's budget for the 2007-2008 Fiscal Year, at this time. Hearings will be held in both the Assembly and the Senate in March.

### Introduction of Alternate for Imperial Irrigation District Board Member

Mr. Fisher introduced and welcomed Mr. Jim Hanks of the Imperial Irrigation District to the Board, who is attending on behalf of Mr. John Menvielle.

## **AGENCY MANAGERS' MEETING**

Mr. Zimmerman reported that the agency managers have not met since the January 10<sup>th</sup> Board meeting. The agency managers are expected to meet regarding the Basin states discussions.

## PROTECTION OF EXISTING RIGHTS

### Colorado River Water Report

Mr. Harris reported that as of February 8<sup>th</sup>, the storage in Lake Powell was 11.657 million acre-feet (maf), or 48 percent of capacity. The water surface elevation was 3,559 feet. The storage in Lake Mead was 14.332 maf, or 55 percent of capacity, and water surface elevation of 1,129.8 feet. Total System storage was about 33.6 maf, or 56 percent of capacity. Last year at this time, there was 34.1 maf in storage, or 57 percent of capacity. Lake Powell's contents decreased nearly 400,000 acre-feet over last month though Lake Mead's contents increased by about 150,000 acre-feet since last month.

Mr. Harris reported that precipitation from October 1<sup>st</sup> to February 8<sup>th</sup> is 91 percent of normal, and, the snowpack is only about 76 percent of normal. There was a significant reduction in the percent of average by about 10 percent for both the precipitation and snowfall over the past month. The forecast, April through July inflow into Lake Powell for Water Year 2007, is currently projected to be about 5.9 maf, or 75 percent of normal. The projected 2007 water year unregulated inflow into Lake Powell is about 10.17 maf, or about 85 percent of normal. Runoff projections have also fallen by slightly over 10 percent from last month. However, normal climate conditions are prevailing to the north and east of the Upper Colorado River Basin. It is still early enough in the season that precipitation and snowfall could increase.

Mr. Harris added that Reclamation's projected consumptive use (CU) for the State of Nevada is 300,000 acre-feet; and for Arizona, the CU is projected to be just under their basic entitlement of 2.8 maf (2.783 maf); and for California the CU is projected to be 4.298 maf. The total projected CU in the Lower Basin is expected to be about 7.380 maf. In 2006, the Lower Basin CU was about 7.422 maf.

### State and Local Water Reports

Mr. Mark Stuart, of the California Department of Water Resources, reported on the preliminary current climate conditions in California. For the first few months of water year 2007, precipitation has been very dry in the southern part, and slightly wetter in the northern part; however, the overall average precipitation is currently about 55 percent of normal. About 20 percent less than last month.

Mr. Stuart added, that the overall state reservoir storage is about 80 percent of capacity. State Water Project (SWP) storage in the northern part of the state is about 2.9 maf, and in the south about 1.7 maf of storage. Overall, there is about 4.6 maf of storage in the SWP. Entitlements to the SWP are presently at 60 percent.

Mr. Wright, of The Metropolitan Water District of Southern California (MWD), reported that as of February 1<sup>st</sup>, MWD's combined reservoir storage of Lakes Skinner, Mathews, and Diamond Valley, is about 900,000 acre-feet. This amounts to about six months of supply for the MWD system. As of February 1<sup>st</sup>, Diamond Valley Lake had about 731,000 acre-feet in storage, or about 90 percent of capacity. Lake Mathews had about 128,000 acre-feet, or 70 percent of capacity. Lake Skinner had about 41,000 acre-feet or

about 93 percent of capacity.

Mr. McDaniel, of the City of Los Angeles Department of Water and Power (LADWP), reported that as of February 13<sup>th</sup>, precipitation over the last two days raised the precipitation to 40 percent of the season average. Only a few percentage points higher than the driest year on record.

### Colorado River Operations

#### *Final Environmental Impact Statement of the Wellton-Mohawk Title Transfer*

Mr. Zimmerman reported that the executive summary of the Final Environmental Impact Statement (EIS) associated with the Wellton-Mohawk Irrigation District Land and Facility Transfers, is included in the Board folder. The EIS and a Record of Decision (ROD) is awaiting the approval and signature of Secretary Kempthorne. The ROD will provide a transfer of the Wellton-Mohawk Division of the Gila Project managed by Reclamation to the Wellton-Mohawk Irrigation and Drainage District (WMIDD), a local agency created in 1951 by the Arizona state legislature. The title transfer would consolidate management within the WMIDD, limit potential development of agricultural lands, and protect the Gila River Flood Channel. The final EIS is available on Reclamation's website at <http://www.usbr.gov/lc>.

### Reports of Quagga Mussel Presence in the Lower Colorado River

#### *Discovery of Quagga Mussels in Lake Mead and the Lower Colorado River*

Mr. Larry Walkoviak, Reclamation's Lower Colorado Region Deputy Director shared some video footage captured in late January 2007 showing the occurrence of quagga mussels in Lake Mead. Originally it was thought that the mussels discovered were zebra mussels, but specimens brought back to the lab were subsequently identified as quagga mussels. Quagga mussels have some notable differences. They are smaller than zebra mussels and don't tend to stack on top of each other. These mussels are small, adults don't get much bigger than a thumb nail. So far, there aren't very many and they are observed at levels mainly deeper than 30 feet. Several mussels were shown in the video, at depths ranging from 36 to 78 feet in the vicinity of the Nevada intakes at Hoover Dam. The temperature of the water column at the time of filming was 60 to 61 degrees. Mr. Walkoviak added that similar footage was taken in the vicinity of the Arizona intakes to a depth of 200 feet and the results were similar to what was shown. The oldest appear to be one to two years of age. Reclamation is still in the discovery phase, determining what is there and where it is. Reclamation has also been in communication with other agencies that have dealt with these mussels before to find out what they wish they had done after initial discovery. Mr. Chris Hayes of the California Department of Fish and Game (CDFG) added that CDFG has instituted a quarantine zone in some areas and have stopped boats at check stations. Staff and divers from MWD have been doing surveys and have found quagga mussels in Lake Havasu.

## *MWD's Investigation of Quagga Mussels in the MWD System*

Dr. Ricardo De Leon of MWD gave an overview and summarization of MWD activities related to the quagga mussels. He reported that quagga mussels were first discovered on January 6, 2007 in Lake Mead. Along with the Lake Mead occurrence, this was the first known established population of invasive quagga mussels in the western United States. Metropolitan divers found quagga mussels at Whitsett Intake Pumping Plant and Gene Wash Basin. Fiscal impacts from the zebra/quagga mussels in the Eastern U. S. were estimated to be about \$3.1 billion to the power industry and about \$5 billion on industries, business, and communities. The safety of drinking water is not affected but the consequences of unmanaged quagga/zebra mussel infestations can alter the aquatic ecology of lakes and rivers; clog intakes and raw water conveyance systems; reduce recreational and aesthetic value of lakes and beaches; alter or destroy fish habitats; and render lakes more susceptible to deleterious algae blooms.

Dr. De Leon added that MWD's response is being modeled after the Rapid Response Plan, which was developed by the Corps, California Department of Water Resources and others. The three main activities are detection, coordination, and mitigation. Quagga mussels have been found in Lakes Mead, Mohave, and Havasu, as well as the Whitsett Intakes and Gene Wash. Quagga mussels have not yet been detected in Lakes Mathews, Diamond Valley, or Skinner. The density at the Whitsett Intakes is low, only about one or two adults per square meter. However, the upper limit of infestation of quagga mussels could range from 10,000 to 40,000 individuals per square meter. Zebra mussel populations have been known to be as high as 70,000 mussels per square meter.

Dr. De Leon added that the quagga mussel control program will include improved detection and surveillance in the Colorado River and State Water Project water systems, development and implementation of strategies to mitigate the spread of the mussels via waterways and boating activities, and the development and implementation of cost effective control strategies. Phase one detection and coordination activities are to include improved methods for detection of adult and larvae stages, consisting of the use of pole nets for the larval stages and remote cameras especially for depths greater than 100 feet. Investigative studies will be utilized to assess colonization behavior in water conveyance systems. Multi-agency coordination to complete surveys and review regional boating practices will be utilized. Phase one mitigation activities include vulnerability assessment to establish a risk-based prioritization process for facility upgrades and control measures. Assessment of feasible boating practices will be developed for control of mussel spread from lake to lake. Assessment of quagga mussel control strategies for larvae and adult stages will be implemented as well as investigation of alternative screen or intake designs. The next phases of the quagga mussel control program would include implementation of recommendations for feasible boating practices in lakes, and implementation of prioritized infrastructure upgrades identified in the vulnerability assessment, and development of routine control measures to reduce attachment, colonization or spread of mussels.

*Board's Comment Letter Regarding Reclamation's Draft Report on IID's Delivery System Loss.*

Mr. Zimmerman reported that Reclamation had contracted with Dr. Allen Dedrick to conduct a delivery system loss study within the Imperial Irrigation District (IID). Dr. Dedrick's study compiled data and information from Reclamation, previous studies that Reclamation had conducted, and information and studies from IID. Reclamation requested that the Lower Division states review and comment on the methods and conclusions contained in the report. Board staff prepared a draft letter that was sent to the member agencies. There was some discussion regarding the data and conclusions contained in the report. Mr. Cleo Hanks moved the approval of the staff's proposed comment letter. Mr. McFadden seconded the motion, upon approval, the Board directed that the comment letter be sent to Reclamation.

*Miscellaneous News Items*

Mr. Zimmerman reported that several news items were included in the Board folder. Mr. Zimmerman mentioned a few of them: a symposium on March 2<sup>nd</sup> and 3<sup>rd</sup> hosted by the University of Utah on the Colorado River Compact in the 21<sup>st</sup> Century; The Water Education Foundation tour of the Colorado River Delta region March 7<sup>th</sup> through 9<sup>th</sup>; and an article compiled by the United Nations Intergovernmental Panel on Climate Change. Mr. Zimmerman listed some of the concerns raised in the climate change article and added that Board staff is beginning to compile a library associated with climate change. He also mentioned that significant information would be brought to the Board in the future via a workshop or symposium.

Basin States Discussion

*Colorado River Long-Term Augmentation Studies*

Mr. Zimmerman reported that the Basin States Technical Committee met in Las Vegas, February 6<sup>th</sup>. The consultants that Nevada hired recently provided additional details on the six most promising long-term water augmentation options. The review included: brackish water leaving the U.S.; conjunctive use and water banking in the U.S.; ocean water desalinization in the U.S. and Mexico; storm-water runoff in the Gila River and Painted Rock Reservoir areas; Colorado River imports; and vegetation management. The consultants are requesting comments from the Technical Committee and plan to provide a final draft of the report by March 15<sup>th</sup>.

*Lower Basin States Forbearance Agreement*

Mr. Zimmerman added that the Technical Committee also discussed the Lower Basin States Forbearance Agreement. General agreement among the Lower Basin States has been reached on the proposed forbearance agreement. Included in the Board folder is an article and news release reporting that Arizona and Nevada have reached an agreement to share shortages and that the Arizona House has passed a joint resolution that supports the Director of the Arizona Department of Water Resources signing the Forbearance Agreement. A similar action is pending in the Arizona Senate. The Agreement would not be finalized and

executed until a ROD for the Shortage Guidelines and Reservoir Management Strategies Final EIS is signed by Secretary Kempthorne.

Mr. Zimmerman added that the Lower Basin states are also working on the Water Delivery Agreement that will facilitate the delivery, by the Secretary, of the Intentionally Created Surplus pursuant to the Forbearance Agreement. California was tasked with developing the initial draft of the Water Delivery Agreement. MWD and CRB staff are working on the first draft, which will be sent out to the Agency Managers and others for a review prior to forwarding it on to the other Lower Basin states. The intent is to have the Forbearance Agreement and Water Delivery Agreements ready for signature concurrent with the execution of the ROD associated with the Final EIS.

### *Status of the Draft EIS*

Mr. Zimmerman reported that Reclamation recently reported that the Draft EIS on the development of the Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lakes Powell and Mead under Low Reservoir conditions is expected by the end of February. There will be a Basin States Technical Committee meeting to discuss what is contained in the Draft EIS on March 15<sup>th</sup> and 16<sup>th</sup>, followed by a meeting of the Basin States on March 23<sup>rd</sup>.

### Colorado River Environmental Activities

#### *Glen Canyon Dam Adaptive Management Program*

Mr. Harris reported that Assistant Secretary Mark Limbaugh sent a memorandum on February 2<sup>nd</sup>, regarding the decision of the Department of the Interior not to implement a Beach-Habitat Building Flow (BHBF) in 2007. According to Assistant Secretary, a BHBF in 2007 was not adequately scoped, planned or budgeted. Reclamation and the Glen Canyon Monitoring and Research Center (GCMRC) are moving forward to develop and complete a peer-reviewed Science Plan and Long-Term Experimental Plan Environmental Impact Statement (LTEP).

With respect to the LTEP, Mr. Harris reported that Reclamation is moving forward to develop and complete a LTEP EIS associated with the operations of Glen Canyon Dam. The EIS related to the LTEP includes ways to manage the releases out of the dam via a temperature control structure to bring warmer water through the Grand Canyon. It also includes analysis of non-flow related actions, such as management of the humpback chub population and some of the riparian habitat issues, as well as the beach, sand and sediment issues in the Grand Canyon. The Board submitted scoping comments on the proposed EIS process also, Reclamation asked the Board if it would like to be a cooperating agency in the development of the EIS. Board staff prepared a letter, included in the Board handout materials, indicating that the Board has considered the invitation and determined that it does not want to participate as a formally designated cooperating agency. However, the Board desired to continue to be involved through the NEPA/EIS development and review process. The Board members indicated that the letter represents the sense of the Board.

## *Lower Colorado River Multi-Species Conservation Program*

Mr. Harris reported that Reclamation is continuing to make excellent progress related to implementation of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP). Recently, Arizona U.S. Senator Jon Kyl reintroduced Senate Bill 300, the LCR MSCP Act. The Legislation is intended to ensure adequate long-term federal funding for the LCR MSCP implementation. S.B. 300 provides a waiver of sovereign immunity, which could allow non-federal participants to compel the United States to fund its share of the program, through litigation if necessary. Also, the proposed legislation directs the Secretary of the Interior to enter into an agreement with the Lower Division states associated with water use and water accounting related to habitat restoration and maintenance activities. Water supplies for the restored habitat would be required for the 50 year duration of the LCR MSCP.

### Lower Colorado Water Supply Project

#### *Advanced Delivery of Lower Colorado Water Supply Project Water*

Mr. Amir-Teymoori reported that most of the applicants for the Lower Colorado Water Supply Project (LCWSP) have reserved the water for delivery in the future. Consequently, to repay the expected project capital costs, and ensure the future viability of the project an advance delivery option was explored. The advance delivery would make temporary use of the present full capacity of the LCWSP. The final contract and trust agreement have been prepared. The contract among Reclamation, the City of Needles, and MWD would allow MWD to take water from the excess capacity of the well field. The MWD Board has approved signing the contract. Mr. Amir-Teymoori reported that Reclamation has requested a letter from the Board supporting the execution of the contract. Mr. Zimmerman had already sent a copy of the draft letter to each of the Board members. Mr. Wright moved the letter be approved. Mr. Kuiper seconded the motion, unanimously carried, the Board approved the letter be sent to Reclamation in support of the LCWSP Contract and Trust Agreement.

## **Water Quality**

### *Moab Uranium Mill-Tailings Site Cleanup*

Mr. Amir-Teymoori reported that the Department of Energy (DOE) recently announced that it may take significantly more time to move the uranium mill tailings near Moab, Utah, than originally anticipated. Originally it was anticipated that the 2.5 million tons would be moved to the new disposal site by 2011 to 2012. The DOE now estimates that the tailings pile may not be completely relocated until 2028. In addition, groundwater remediation activities would be ongoing for approximately 75 years. There was a comment indicating that probably part of the reason for the extended duration is associated with the logistics of safely moving such a large volume of material. Mr. Amir-Teymoori added that the Bush Administration plans on spending \$23 million dollars on remediation activities during the next fiscal year. There was another comment that the potential negative effects due to the schedule slippage would extend vulnerability to a catastrophic flood event in the

vicinity of the Colorado River near the Moab Tailings site.

*Colorado River Basin Salinity Control Forum Work Group Meeting*

Mr. Amir-Teymoori reported that there were two meetings related to the Salinity Control Forum Work Group in Salt Lake City, Utah. The Advisory Council's Cost-Share Rate Committee Working Group met on January 31<sup>st</sup>, and is developing a proposal for the Advisory Council's consideration: The Natural Resource Conservation Service (NRCS) has been cost sharing with participants in the salinity control projects where the NRCS pays 75 percent of project cost and the participants pay 25 percent of the cost. The goal of the Cost-Share Rate Work Group meeting was to reach a consensus on development of an alternative to the 75/25 cost-share rate. The alternative to be proposed is that NRCS would pay 50 percent of the cost of the physical structures, and up to 25 percent of the cost paid would be paid as incentives to the participant with emphasis on salt removal. The Forum's Work Group met on February 1<sup>st</sup> and 2<sup>nd</sup>. The Forum's Work Group discussed several ongoing salinity control projects, namely, the Huntington-Cleveland and Paradox Well projects. Updates were given on the Colorado River salinity model and the model that estimates the damage that occurs from salinity impacts to the Lower Basin States. There was also a review of special projects that are funded with the states discretionary funding for projects that do not qualify for funding from other sources, but may potentially become cost effective salinity control projects.

**Other Business**

Next Board Meeting

Chairman Fisher announced that the next meeting of the Colorado River Board will on Wednesday, March 14, 2007 at 10:00 a.m., at the Double Tree Hotel Ontario, 222 North Vineyard Avenue, 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. Wright, and unanimously carried, the meeting was adjourned 11:59 a.m. on February 14, 2007.



Gerald R. Zimmerman  
Executive Director