

# STATE OF COLORADO

---

## Colorado Water Conservation Board Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, Colorado 80203  
Phone: (303) 866-3441  
Fax: (303) 866-4474  
www.cwcb.state.co.us



### MEMORANDUM

TO: Colorado Water Conservation Board

FROM: Jennifer Gimbel  
Dan McAuliffe  
Christian Lyons

DATE: January 26-27, 2010

SUBJECT: Agenda Item 5d, January 2010 CWCB Board Meeting  
CWCB Director's Report

Bill Ritter, Jr.  
Governor

Jim Martin  
DNR Executive Director

Jennifer L. Gimbel  
CWCB Director

Dan McAuliffe  
CWCB Deputy Director

---

#### Pg. 4 FEDERAL AND INTERSTATE

- **Federal Partnerships**
- **National Integrated Drought Information System**
- **Alliance for Water Efficiency Tracking Tool**

#### Pg. 5 STATEWIDE

- **Climate Change in Colorado: A Synthesis of Impacts and Vulnerabilities (Climate IV Report)**
- **Western Water Assessment**
- **State Drought Plan**
- **Water Conservation Plans Approved**
- **Floodplain Map Modernization/Risk Map Update**
- **CWCB Partners with Local Governments to Develop Multi-Hazard Mitigation Plans**
- **2009 Statewide Flood Prediction and Data Collection Program**
- **Water Utility Claims Alliance**
- **Front Range Climate Change Vulnerability Study**
- **"Dealing With Drought: Adapting to a Changing Climate" Workshops Report**
- **Water Conservation Level Analysis**
- **Colorado Waterwise Best Practices Guidebook**
- **Groundwater Commission Meeting**
- **Presentation to CSU on Wild and Scenic Rivers and Instream Flows**
- **Tamarisk and Russian Olive Control**
- **Colorado Agricultural Meteorological Network**
- **Basin Roundtable Needs Assessment Update**

**Pg. 15      ARKANSAS RIVER BASIN**

- Colorado Springs Utilities' Fish and Wildlife Mitigation Plan for the Southern Delivery System
- Arkansas River Compact Administration
- Trinidad Project
- Surface Water Irrigation Consumptive Use Rules

**Pg. 17      COLORADO RIVER BASIN**

- Summit County Ski Area Compliance and Monitoring Visit
- Stapleton Brothers Ditch Water Acquisition
- Annual Operating Plan
- Colorado River Water Users Association
- High Flow Protocol Announced
- Upper Colorado River Commission
- U.S. – Mexico Negotiations
- Colorado River Basin Study
- Lower Colorado River Wild and Scenic Rivers Process
- Colorado River Water Use

**Pg. 20      GUNNISON RIVER BASIN**

- Wild and Scenic Draft Eligibility Report Issues
- Gunnison Basin Selenium Management Plan

**Pg. 21      PLATTE RIVER BASIN**

- Platte River Recovery Program
- Chatfield Reservoir Reallocation Project
- South Platte River Operations and Maintenance

**Pg. 22      SOUTHWEST RIVER BASINS**

- River Protection Workgroup
- Tacoma Power Plant Relicensing Update
- Dolores River Dialogue

**Pg. 24      AGENCY UPDATES**

- Water Efficiency Grant Fund Report
- Colorado Water Supply Future Monthly Progress Report
- Water Information Section Updates
- Recently Decreed ISF Water Rights
- Stream and Lake Protection Section Ongoing Projects Via Outside Consultants
- Governor's Water Availability Task Force
- CWCW Water Efficiency Grant Fund Program Update
- Basin Needs Decision Support System Updates, January 2010
- ISF Workshop
- Water Supply Reserve Account Criteria and Guidelines Proposed Amendments
- Alternative Agricultural Transfer Methods Grant Program

**Pg. 33      ATTACHMENTS**

- **5d-01      Colorado Water Supply Future Monthly Progress Report Schedule**
- **5d-02      Summary of Resolved Cases**
- **5d-03      Loan Repayment Delinquency & Financial Activity Report**
- **5d-04      Design and Construction Status Report**
- **5d-05      Dolores River Letter**
- **5d-06      Deminimis Cases**
- **5d-07      2010 January Loan Prospects**
- **5d-08      Federal Register Information**
- **5d-09      Salazar Announcement on Grand Canyon Resources**
- **5d-10      CRWUA Remarks by Anne Castle**
- **5d-11      Tamarisk/Russian Olive “Next Step Memo”**
- **5d-12      CoAgMet Program Announcement**
- **5d-13      Final Gunnison River Basin Excerpts Related to Selenium Management Plan**
- **5d-14      AOP Letter to Arizona Governor Brewer**

## ~FEDERAL AND INTERSTATE~

**FEDERAL PARTNERSHIPS:** CWCB along with other representatives of government agencies, water providers, and organizations with a stake in Colorado's water future recently wrote to the Honorable Harris Sherman, Undersecretary for Natural Resources and Environment; Honorable Anne Castle, Assistant Secretary for Water and Science; Honorable Wilma Lewis, Assistant Secretary for Land and Mineral Management to urge support of and attention to critical funding needs for climate data monitoring networks. We respectfully requested them to consider inclusion of additional funding in the FY 2011 budget request for key climate data monitoring networks operated by the Natural Resources Conservation Service, U.S. Forest Service, U.S. Geological Survey, the Bureau of Reclamation and the State of Colorado in partnership with federal, state, and local agencies. These appropriations help monitor changes in the climate and the increased data will better help the state to monitor, assess, and respond to change in a timely manner. *(Taryn Hutchins-Cabibi)*

**NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM:** The National Integrated Drought Information System (NIDIS) is continuing work on the "gaps" report that assess the data and information gaps that exist for proper creation of a drought early warning system for the Upper Colorado River System. This effort is part of the NIDIS Upper Colorado River Pilot Project. Information from this report will be incorporated into the revision of the state drought plan. *(Taryn Hutchins-Cabibi)*

**ALLIANCE FOR WATER EFFICIENCY TRACKING TOOL:** The OWCDP is investigating using a water conservation tracking tool developed by the Alliance for Water Efficiency (AWE), a national water efficiency non-profit. The tool helps water providers track and project savings associated with various water conservation programs and measures and conduct cost-benefit analyses on the same measures. The OWCDP is interested to see if this tool can be used as an aid in developing water conservation plans. *(Kevin Reidy)*

## ~STATEWIDE~

### **CLIMATE CHANGE IN COLORADO: A SYNTHESIS OF IMPACTS AND VULNERABILITIES (CLIMATE IV REPORT):**

OWCDP is beginning to scope out the next phase of work towards the implementation of the Governor's Climate Change Action Plan that will produce a report that builds on the significant achievements of the 2008 report *Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation* and allow us to move forward in assess the potential impacts of a changing climate on water resources. We hope to utilize this information that we will be able to develop strategies to reduce our long term vulnerability. Our goal is to complete the report over the next 18 months. (*Taryn Hutchins-Cabibi*)

**WESTERN WATER ASSESSMENT:** WWA was successfully re-granted funding for another 5 years from the Climate Program Office at NOAA. It is believed their strong engagement with decision makers is one of the key reasons they were successful. WWA is a joint effort between the Cooperative Institute for Research in Environmental Sciences at the University of Colorado and the National Oceanic and Atmospheric Administration's Earth System Research Laboratory; WWA uses multidisciplinary teams of experts in climate, water, law, and economics to convey scientific information in a more digestible format to educate and inform decision makers. (*Taryn Hutchins-Cabibi*)

**STATE DROUGHT PLAN:** The revision of the state's Drought Response and Mitigation plan is well underway. AMEC Earth and Environmental has been awarded two contracts associated with the revision; one contract to write the plan and create the related resource documents as well as insure compliance with FEMA, and another to conduct a vulnerability assessment on state assets.

Colorado Climate Center is examining the indices we currently use to monitor drought to see if they accurately capture the available information and provide a good picture of what is occurring at any given time throughout the state. They will also be looking at how these indices trigger response at various stages of drought.

In response to the concerns of numerous water providers, CWCB and DWR is working with the Natural Resource Conservation Service (NRCS) to update the Surface Water Supply Index (SWSI) for the first time since the index was created in the early 1980's. The revised index will be a more helpful tool for providers to forecast their water supply situation.

The schedule for completion of the plan has not shifted and we are still on track to have a draft by early summer and a final product in September of this year. (*Taryn Hutchins-Cabibi*)

**WATER CONSERVATION PLANS APPROVED:** The Office of Water Conservation & Drought Planning (OWCDP) has *approved* additional Water Conservation Plans from water providers. They include:

- Widefield Water and Sanitation District
- City of Glenwood Springs

The OWCDP has determined the Plan to be in accordance with §37-60-126 C.R.S. and the CWCB's Guidelines for the Office to Review Water Conservation Plans Submitted by Covered Entities. Water providers may proceed with implementation of their Plans.

The OWCDP has received and is evaluating and working with providers on the following Water Conservation Plans:

- Pinery Water and Wastewater District
- Consolidated Mutual Water Company
- City of Lamar
- City of Steamboat and Mount Werner Water District
- Castle Pines Metropolitan District
- City of Lafayette
- Tri-County Water Conservancy District
- St. Charles Mesa Water District
- City of Thornton
- City of Sterling
- City of Louisville
- City of Fort Collins
- Town of La Junta
- City of Broomfield

*(Ben Wade)*

## **FLOODPLAIN MAP MODERNIZATION/RISK MAP UPDATE:**

### **FY10 projects:**

Chaffee County scoping meeting took place in mid September 2009. The State has been coordinating with the county and local communities to assess mapping needs and cost estimates. The DFIRM project for Chaffee is anticipated to begin sometime this year.

CWCB received \$20,000 from FEMA for scoping counties this year for projects to begin in FY2011. The selected counties are Logan and Las Animas Counties. Logan County scoping meeting is scheduled for January 21, 2010.

### **FY09 projects:**

The base mapping task has been completed for Morgan County DFIRM and is on schedule.

Prowers County DIRM is now underway. There are three levees to analyze in the county. The hydrology has been completed and submitted for review. Work continues on the field survey and topographic data for Prowers.

**FY08 projects:** Work continues for Gunnison, Montrose, Elbert, and Rio Grande Counties. The floodplain mapping has been completed for Gunnison County. Montrose County draft preliminary maps have been submitted for review. Rio Grande County and Elbert County are both anticipated to go preliminary at the end of January 2010. Additional FEMA funding in the amount of \$247,150 was provided to address identified levee issues along the Arkansas River and Fountain Creek in Pueblo County. FEMA has almost completed their review of the hydrology for Fountain Creek and as soon as it is approved, the hydraulic analysis and floodplain mapping will continue.

**FY07 Counties:** La Plata and Summit Counties are nearing the end of the Preliminary phase. Park County has gone effective in December 2009. La Plata County had two appeals, which have been resolved but will delay the effective date. Delta County is now in the preliminary phase. A final meeting was held at the beginning of November 2009. The City of Colorado Springs is working with Anderson Consulting to pursue certification of the Templeton Gap Floodway levee in El Paso County. Anderson Consulting has finalized the hydraulic modeling for Templeton Gap and FEMA is currently reviewing. Teller County and Archuleta County have gone effective since September 2009.

**FY 06 Counties:** Weld County detailed study work continues to progress. Weld County has identified levees in the Town of Evans and Severance. Due to these levees, additional work was needed. The projected preliminary date for Weld County has been pushed back to April 2010. The projected preliminary date for Fremont County has been delayed due to a delay in the review process with FEMA. It is now expected to go preliminary sometime at the end of January or February 2010. The State's contractor has completed work on updating the hydrologic and hydraulic study to update the floodplain through Idaho Springs. Clear Creek County will go preliminary sometime in the beginning of 2010. The Pueblo County Arkansas River Levee floodplain study is in progress, finalization is still progressing. The hydrology and the methodology used are currently being reviewed by FEMA.

**FY 05 Counties:** Mesa County DFIRM is expected to go effective in June 2010. The Garfield County DFIRM is almost complete and is still delayed due to a USGS study that has been reviewed by Michael Baker Jr., Inc. (FEMA's NSP). This study was recently submitted to FEMA for review. Discussions recently took place between FEMA, CWCB and the local community officials to resolve some questions regarding this study. Garfield County is planned to go preliminary in Winter/Spring 2010. The Montezuma County DFIRM went effective September 28<sup>th</sup> 2008.

**FY 04/03 Counties:** All of the Boulder County levees have been identified. The South Boulder Creek Study has been completed and approved. Incorporation of this study into the DFIRM is

now complete. FEMA has provided Provisionally Accredited Levees (PAL) agreements for two levees in the County. The scheduled preliminary date for Boulder County has been pushed back to mid January 2010 due to a delay in addressing comments. *(Thuy Patton)*

#### **CWCB PARTNERS WITH LOCAL GOVERNMENTS TO DEVELOP MULTI-**

**HAZARD MITIGATION PLANS:** CWCB has had a longstanding tradition of working with the Colorado Division of Emergency Management (CDEM) to partner with local governments in the development of local multi-hazard mitigation plans. These plans include a detailed assessment of risks in the community, and alternatives and projects that can be developed to address these risks. By design, local plans are locally driven, although funds and technical assistance can be given by both state and federal government. The most recent communities partnering with the CWCB and CDEM in the development of plans are Archuleta County, Elbert County, Eagle County, and Pitkin County. In all of these cases, the plans are countywide, meaning they include the participation by incorporated communities within their borders. \$10,000 is being provided to both Archuleta and Elbert Counties, and a total of \$50,000 is being provided for a combined plan for Pitkin and Eagle Counties. *(Kevin Houck)*

#### **2009 STATEWIDE FLOOD PREDICTION AND DATA COLLECTION PROGRAM:**

2009 marked another successful year for the Statewide Flood Prediction and Data Collection Program. The program has been managed by the Flood Section and is in its fourth year of existence. Once again, HDR Hydromet Services served as the contractor to the CWCB. This program produces a daily statewide flood prediction service as well as a daily rainfall reconstruction identifying spatially where precipitation fell in the previous day. While 2009 marked a very wet year for much of the state, it was mostly characterized by high duration and low intensity precipitation resulting in extremely few flood events. An annual report has been prepared summarizing the services provided under this program for the year. The total expenditures for the year for this program was \$74,600. *(Kevin Houck)*

**WATER UTILITY CLIMATE ALLIANCE:** The Water Utility Climate Alliance is a consortium of metropolitan drinking water providers dedicated to understanding and preparing for the potential impacts of climate change. CWCB has developed a relationship and participated with the group over the last few months, including an intensive workshop with water providers and climate modelers held earlier this fall. The group's commitment to making climate information digestible and usable for water planning purposes will serve Colorado providers well and both parallels and builds on the work CWCB is already doing.

WUCA recently released a white paper that explains how climate models work; describes how models have been used in the water sector to assess potential impacts on our systems; and makes recommendations regarding how to improve modeling and downscaling techniques so these tools can be more useful for the water sector. This white paper, entitled "Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change," is now available at: [www.wucaonline.org](http://www.wucaonline.org) *(Taryn Hutchins-Cabibi)*



**FRONT RANGE CLIMATE CHANGE VULNERABILITY STUDY:** The final draft for the Front Range Climate Change Vulnerability Study is nearing completion and should be published later this spring. The study was intended to assess potential changes in the timing and volume of hydrologic runoff for the years 2040 and 2070 as compared with the historical period of 1950-1999. Preliminary results are comparable to those seen in the Colorado River Water Availability Study. *(Taryn Hutchins-Cabibi)*

**THE “DEALING WITH DROUGHT: ADAPTING TO A CHANGING CLIMATE” WORKSHOPS REPORT:** Last fall CWCB, in collaboration with Western Water Assessment and NIDIS, held a series of three workshops throughout the state intended to improve climate literacy of the participants and provided input to the state drought plan. The series was a great success and a report is now available that outlines the findings of these workshops. Please contact Taryn Hutchins-Cabibi for more details or a copy of the report. *(Taryn Hutchins-Cabibi)*

**WATER CONSERVATION LEVEL ANALYSIS:** The OWCDP is working with Great Western Institute to analyze the conservation levels framework from SWSI I. The purpose is to examine the assumptions that went into the original levels framework, evaluate the conservation savings associated with the levels and then to assess where water providers are at currently in their conservation efforts. A draft of this work will be coming in the next few months and will be incorporated into the upcoming SWSI update. *(Kevin Reidy)*

**COLORADO WATERWISE BEST PRACTICES GUIDEBOOK:** The Best Practices (BP) Guidebook is a water efficiency grant project to develop a set of water conservation best practices specific to Colorado. The guidebook will assist water providers with the selection and implementation of effective water conservation programs and measures. A Project Advisory Committee and Stakeholder group, consisting of water professionals and water conservation experts from around the state, was formed to guide the process and review the technical aspects of the project. Over the last few months, a list of best practices has been selected for inclusion and the guidebook is being written at present time. A draft of the final document will be ready by May 2010. The BP guidebook will also inform the update to SWSI in the form of implementation costs and water savings estimates. *(Kevin Reidy)*

**GROUND WATER COMMISSION MEETING:** The Groundwater Commission met on November 20 in Castle Rock, Colorado. The next meeting is scheduled for February 19, 2010 in Denver, Colorado. For more information visit: <http://water.state.co.us/cgwc/> *(Ted Kowalski)*

**PRESENTATION TO CSU ON WILD AND SCENIC RIVERS AND INSTREAM FLOWS:** Ted Kowalski, of CWCB staff, spoke about the wild and scenic rivers issues and instream flow water rights at Colorado State University’s Interdisciplinary Water Resources Seminar (Graduate Class 592), on November 30, 2010. Thanks to Dr. Reagan Waskom, Dr. Luis Garcia, Troy Bauder, and the Colorado Water Institute for having this seminar, and for including the CWCB staff in the execution of this lecture series. *(Ted Kowalski)*

**TAMARISK AND RUSSIAN OLIVE (TRO) CONTROL:** We have agreements in place with 13 of the 16 grant recipients the Board selected at the May 2009 meeting, and will complete the final 3 agreements this month. Work has commenced on most of the projects and we have received initial invoices totaling nearly \$100,000 of the \$1 million which has been committed to this activity.

The Tamarisk Coalition has completed the “Colorado River Basin Tamarisk and Russian Olive Assessment” funded by the seven Colorado River Basin States to evaluate the potential for water augmentation through TRO control. In general those potentials are variable and site specific. A “next steps memo” (copy attached hereto as Exhibit 5d-11) was presented to the full basin augmentation committee. On January 14, 2010 staff will be meeting with the USBR and a representative from the Seven States group at technical service center in Denver to compare results of this assessment and one which USBR is conducting. We will be recommending that the water augmentation potentials of TRO removal be incorporated into the \$2 million Colorado River Basin Water Supply and Demand Study funded by the Bureau of Reclamation and the seven basin states which will be discussed further at agenda item 23. *(Steve Miller)*

**COLORADO AGRICULTURAL METEOROLOGICAL NETWORK (CoAgMet):** The CoAgMet network is a standardized set of weather instruments and a datalogger program established in major irrigated areas of Colorado. The Colorado Climate Center at Colorado State manages the daily data collection and quality assessment and provides internet delivery and a wide range of data delivery options, and continues to improve the user interface in response to a growing interest in these data. We brought the issue of funding CoAgMet operation and maintenance to the Board’s attention in the September Director’s Report, but received no feedback or suggestions of ways the CWCB could provide assistance. CWCB staff is continuing to explore avenues for securing long-term, consistent funding to CoAgMet, perhaps in connection to climate change assessment and DSS data needs. More recently supporters of Nolan Doesken’s program at CSU have organized an ET workshop from which the proceeds of registration fees will be applied toward keeping the CoAgMet system functioning in the short term. A copy of the program announcement is attached as Exhibit 5d-12. Ray Alvarado will be conducting part of the program. *(Steve Miller)*

**BASIN ROUNDTABLE NEEDS ASSESSMENT UPDATE:** House Bill 05-1177 (“Colorado Water For the 21<sup>st</sup> Century Act”), requires each Basin Roundtable to develop a basin-wide water needs assessment consisting:

- Consumptive Needs
- Nonconsumptive Needs
- Water Supply Availability
- Propose projects or methods to meet water needs

Specifically, the enabling legislation states:

USING DATA AND INFORMATION FROM THE STATEWIDE WATER SUPPLY INITIATIVE AND OTHER APPROPRIATE SOURCES AND IN COOPERATION WITH THE ON-GOING

STATEWIDE WATER SUPPLY INITIATIVE, DEVELOP A BASIN-WIDE CONSUMPTIVE AND NONCONSUMPTIVE WATER SUPPLY NEEDS ASSESSMENT, CONDUCT AN ANALYSIS OF AVAILABLE UNAPPROPRIATED WATERS WITHIN THE BASIN, AND PROPOSE PROJECTS OR METHODS, BOTH STRUCTURAL AND NONSTRUCTURAL, FOR MEETING THOSE NEEDS AND UTILIZING THOSE UNAPPROPRIATED WATERS WHERE APPROPRIATE.

Provided below is a short paragraph summarizing each basin roundtable's efforts in completing their basin-wide needs assessments. Also included is a table depicting major milestones in this effort.

**North Platte Basin:** The only consumptive need for the North Platte Basin identified in the SWSI report was 100 acre-feet in the Walden area. As a result, a roundtable task order was used to complete a comprehensive water supply evaluation for the Town of Walden, published in March 2008. Water Supply Reserve Account basin funds were then used to execute the Walden Water Supply Improvement Project as recommended in the evaluation. This project has been essentially completely, successfully addressing the consumptive needs identified in the North Platte Basin. The North Platte Basin has completed and approved Phase I of its nonconsumptive needs assessment through the creation of a map with subcategory counts by stream segment. The nonconsumptive subcategories included 11 different attributes of environmental and recreational items. The highest concentrations of subcategories are located on the following segments: the Big Creek Lakes, a portion of the North Fork Michigan River, and a segment of the Illinois River south of Walden.

**Rio Grande Basin:** Through its Consumptive Use Subcommittee the Rio Grande Basin has performed its consumptive needs assessments as documented in letters to the CWCB dated May 12, 2009 and November 30, 2009. The letters note major issues in the basin including agricultural use and related groundwater shortages, increasing M&I demands, solar energy development, and oil and gas development. A total shortfall by 2050 of 180,000 acre-feet is documented, of which 160,000 acre-feet is the agricultural groundwater shortage to be addressed by pending SEO rules and regulations and fallowing land via the Groundwater Subdistrict. The Rio Grande Basin has completed and approved Phase I of its nonconsumptive needs assessment through the creation of a map with subcategory counts 12-digit HUC. The Rio Grande Basin used seven environmental and recreational subcategories for their mapping efforts. Nearly all HUCs within the Rio Grande Basin had at least one environmental or recreational subcategory present. The areas of the Rio Grande Basin with the highest concentration of priority subcategories are located near Crestone, south of Fort Garland, northeast of Alamosa, along Hat Springs Creek in the northwest portion of the basin, and a number of HUCs in western Conejos County.

**Southwest Basin:** The Southwest Basin is actively working on updates to its consumptive needs assessment. Updates on projects and processes are being solicited through the roundtable process. In addition, updates for a number of the larger water providers are being

compiled by Steve Harris. An updated consumptive use needs list will be presented and discussed at the January 2010 roundtable meeting. Final updates and roundtable consensus are anticipated in the near future. The Southwest Basin has completed and approved Phase I of its nonconsumptive needs assessment through the creation of a map with subcategory counts by stream segment. The nonconsumptive subcategories included 6 different attributes of environmental and recreational items. A large portion of the streams and lakes contained at least one environmental or recreational subcategory. The majority of streams found in the wilderness and forest service areas between Durango and Silverton were highlighted for their nonconsumptive water needs and nearly the entire lengths of the major rivers (the San Juan, San Miguel and Dolores Rivers) are highlighted because they contain environmental and recreational subcategories deemed important by the Basin Roundtable NCNA subcommittee.

**Arkansas Basin:** The Arkansas Basin has recently approved a report describing the basin's significant efforts towards implementing the requirements set forth in the Colorado Water for the 21<sup>st</sup> Century Act. Since the Arkansas Basin Roundtable first convened in September 2005, the BRT has worked to determine its consumptive and nonconsumptive water supply needs, examined water supply availability and identified projects or methods to meet those needs. This resource document, *Projects and Methods to Meet the Needs of the Arkansas Basin* (November 2009), details the work of the three major subcommittees (transfer guidelines, consumptive and nonconsumptive). Through a task order, the BRT completed the *Arkansas Basin consumptive Use Water Needs Assessment: 2030* (July 2008). This report updated the analysis of SWSI and re-examined the "Gap" and the IPP's contemplated by the major providers. Through a series of BRT meetings, they identified the projects and methods to meet their needs and then individually scored each project or method on how well it was deemed viable, bearable or equitable. While significant work has been completed, the basin is currently involved in Phase 2 of the NCNA and determining how to best support and/or implement the projects and methods identified.

**South Platte Basin:** The South Platte Basin has completed their basin-wide water needs assessments for their consumptive and nonconsumptive water supply needs and analyzed the basin's water supply availability. The basin consumptive needs assessment is divided into three separate parts. Part One of the consumptive needs assessment was done in 2006 when the basin adopted the findings of SWSI Phase 1. Part Two of the consumptive needs assessment examined five key areas: competition for the same water supply, identification of any unappropriated water, current and historical river administration, increasing use of consumable effluent and water conservation plans by M&I providers. Part Three of the consumptive needs assessment updated the M&I water demands and projected forecast out to the year 2050, projected agricultural demands and recalculated the water supply gap for the basin. The basin has completed the mapping of the nonconsumptive needs and is currently underway on the statewide effort with the Phase 2 of the NCNA.

**Gunnison Basin:** The Gunnison basin has completed their basin-wide water needs assessments for their consumptive and nonconsumptive water supply needs and analyzed the basin's water supply availability. The basin conducted a separate study to further examine their consumptive

needs. This study, completed and adopted by the BRT in August 2009, examined four specific areas: demands and supplies for smaller municipalities, rural domestic demands and supply, identified water supply vulnerabilities and snowmaking demands. The basin has completed their non-consumptive needs assessment mapping (phase 1) and is currently underway on the statewide effort with the Phase 2 of the NCNA.

**Colorado:** The draft report entitled “The State of Colorado 2050 Municipal and Industrial Water Use Projections” indicates that the Colorado could need between 184,748 AF and 262,719 AF for new municipal and industrial demands. The high figure includes oil shale production at 1.5 million barrels of oil produced each day, as reported out by the Phase I Energy Needs Assessment. The inclusion of oil shale is a new addition compared to SWSI, which was a big concern of the roundtable. Phase II is underway. By January 2010 an updated assessment of the potential water requirements of oil shale will be completed. Subsequently, Phase II will then explore the sources for water that could support the industry. For the remaining municipal and industrial needs, the Colorado roundtable is actively participating in the statewide process of gathering accurate demand data. Draft report figures do not accurately reflect Pitkin County’s usage rates, for instance. Both Basalt and Aspen are providing new data. For their nonconsumptive needs, the Colorado completed Phase I. Their approach was to develop a table listing each stream reach and what risks were associated with that. Their map reflects the areas at risk that have important environmental and/or recreational values. The Colorado is also currently conducting basin wide quantification using the Watershed Flow Evaluation Tool, and validating the results with site specific quantification.

**Metro:** The Metro Basin Roundtable adopted the SWSI methodology for calculating municipal and industrial demands. Updated figures range from 800,762 AF to 928,949 AF, and are primarily focused in the south metro region. Additionally, the south metro area expects that approximately 100,000 AF of existing annual supplies will no longer be available by 2050 as the Denver Basin Aquifer’s water table continues to fall. The Metro Basin approved its Phase I nonconsumptive needs assessment maps. Their approach was to select reaches where environmental and recreational attributes were focused. The primary environmental concerns are the imperiled minnow species found on river systems such as Plum Creek. The roundtable identified the South Platte, Bear Creek, and Clear Creek as being areas with a recreational focus.

**Yampa/White:** The draft report entitled “The State of Colorado 2050 Municipal and Industrial Water Use Projections” indicates that the Yampa/White could need between 88,759 AF and 471,063 AF for new municipal and industrial demands. The high figure includes oil shale production at 1.5 million barrels of oil produced each day, as reported out by the Phase I Energy Needs Assessment. The inclusion of oil shale is a new addition compared to SWSI, which was a big concern of the roundtable. Phase II is underway. By January 2010 an updated assessment of the potential water requirements of oil shale will be updated. For other municipal and industrial demands, the roundtable is participating in the statewide process, including gathering a subcommittee of county and city representatives to ensure the accuracy of population projections, per capita water demands, and identified projects and processes.

In addition, the roundtable has funded and agricultural needs assessment. Roundtable members believe that the Yampa/White is likely the only basin that could see an increase in irrigated agricultural acres over the next forty years. This report will likely be completed by 6/30/2010. The Yampa/White completed the phase I mapping of the nonconsumptive needs assessment. Their approach was to select reaches where environmental and recreational attributes were focused. In addition to the endangered species concerns on the Green and lower Yampa and White rivers, cutthroat trout were identified in upper White River tributaries, Elk River, Slater Creek, Elkhead Creek, South Fork of the Little Snake, and South and East forks of the Williams Fork. Significant recreational areas include sections of the Yampa, White, Willow Creek, Fish Creek, Little Snake River, and several reservoirs and lakes. *(Todd Doherty)*

## **~ARKANSAS RIVER BASIN~**

### **COLORADO SPRINGS UTILITIES' FISH AND WILDLIFE MITIGATION PLAN FOR THE SOUTHERN DELIVERY SYSTEM:**

The Southern Delivery System (SDS) Project will supply water to Colorado Springs, Fountain, Security Water District, and Pueblo West Metropolitan District. The Project Participants are preparing a Fish and Wildlife Mitigation Plan in cooperation with the Colorado Division of Wildlife (DOW). The Plan will be presented to the Wildlife Commission in March 2010 for their approval. The Project Participants tentatively plan to present the plan to the CWCB at the March 2010 Board Meeting for approval in accordance with 37-60-122.2. (Fish and Wildlife Resources Fund Authorization). The Project Participants are not planning to request any funding from the Fish and Wildlife Resources Fund. CWCB Staff will attend the Wildlife Commission Meeting to take notice of the Plan presentation. (*Chris Sturm*)

### **ARKANSAS RIVER COMPACT ADMINISTRATION (ARCA):**

The 2009 ARCA Annual Meeting was held in Garden City, KS on December 7-8, 2009 with Federal Representative Robin Jennison presiding. Matt Heimerich of Olney Springs and Colin Thompson of Holly, reappointed to ARCA in August by Governor Ritter, represented Colorado. Reports on Colorado's Compact compliance activities, final resolution of the US Supreme Court litigation, and annual accounting of John Martin Reservoir ("JMR") operations were received. The Special Engineering Committee on which Dick Wolfe and I serve was reauthorized for 2010 and will look into concerns Kansas has continued to express with regard to winter water accounting issues at JMR as well as other longer standing issues. A Special Meeting of ARCA will be held by conference call on February 11, 2010 to consider adoption of a revised 1980 Operating plan for JMR. (*Steve Miller*)

**TRINIDAD PROJECT:** Reclamation issued a new draft of the Ten Year Review of the Operating Principles for the Trinidad Project covering the period 1995 – 2004 right after the 2009 ARCA Annual meeting. There will be a follow-up meeting with Div. 2, Kansas, and the Purgatoire River Water Conservancy District (PRWCD) to finalize this activity. Reclamation has adopted the CWCB suggestion that it develop a more frequent, less formal, annual process for discussion of project issues so that future reviews are less contentious and more focused on the intended purpose of maximizing the beneficial use of project water supplies while also protecting downstream water users. (*Steve Miller*)

**SURFACE WATER IRRIGATION CONSUMPTIVE USE RULES:** The new rules designed to offset increased consumptive use of through modernization of surface water supplied irrigation systems were filed in water Court on September 30, 2009. Issues raised by a handful of objectors will be considered at a hearing in November of 2010. To assist in bringing Basin irrigators into compliance with the new rules we are utilizing \$250,000 of funds provided in the 2009 Projects Bill. In Phase 1 of this work the Lower Arkansas Valley WCD used \$100,000 for technical services to develop a model compliance plan for irrigators can evaluate. We are in the

process of completing an agreement with LAVWCD to use the \$150,000 balance of the authorization to refine and implement the compliance plan prior to the rules taking effect in January 2010. (*Steve Miller*)



## **~COLORADO RIVER BASIN~**

**SUMMIT COUNTY SKI AREA COMPLIANCE AND MONITORING VISIT:** On December 2, 2009, staff from Stream and Lake Protection Section conducted a field visit to four Summit County ski resorts (Copper Mountain, Breckinridge, Keystone and Arapahoe Basin). This visit was designed to educate new staff from both the ski areas and the CWCB on the compliance and monitoring agreements regarding stream depletions resulting from snowmaking activities. At each ski area, CWCB and ski area staff examined and discussed the snowmaking operations, including diversion points and monitoring procedures, to ensure proper mitigation efforts are instituted if snowmaking diversions cause the ISFs to fall below their decreed amounts. (*Rob Viehl*)

**STAPLETON BROTHERS DITCH WATER ACQUISITION:** On December 23, 2009, the CWCB Director and Pitkin County signed the Declaration of a Revocable Trust approved by the Board in November 2009. The Trust will enable the CWCB to use a portion of the Stapleton Brothers Ditch water right for ISF use on Maroon Creek and the Roaring Fork River after obtaining approval from the water court for such use. The Trust also contemplates adding approximately 34 other water rights to the portfolio available to the CWCB for ISF use, all of which must be approved and accepted by the CWCB under the ISF Rule 6 process, and approved by the water court. (*Linda Bassi*)

**ANNUAL OPERATING PLAN:** On January 5, 2010, Secretary Salazar signed the final 2010 Annual Operating Plan for the Colorado River System Reservoirs (2010 AOP). His transmittal letter is attached to this report, wherein the Lake Powell release for water year 2010 is projected to be 8.23 million acre-feet (maf). The AOP has also been posted on the Bureau of Reclamation's Upper and Lower Colorado Region websites. See <http://www.usbr.gov/lc/region/g4000/AOP2010/AOP10.pdf> (*Ted Kowalski*)

**COLORADO RIVER WATER USERS ASSOCIATION:** The annual CRWUA conference was held in Las Vegas, Nevada on December 9-11, 2010. Secretary Salazar appeared by video from Copenhagen, Denmark. He and Anne Castle, the Assistant Secretary for Science and Water, announced plans to develop a protocol for a multi-year experimental approach to conducting high flow releases from Glen Canyon Dam. The remarks of Secretary Salazar and Assistant Secretary Castle are attached to this report. (*Ted Kowalski*)

**HIGH FLOW PROTOCOL ANNOUNCED:** Following up on the Secretary's announcement of a high flow protocol at CRWUA, on December 31, 2009, the Department of Interior published a Federal Register Notice to initiate the development of the protocol and to conduct an environmental assessment regarding the protocol. A copy of the federal register notice is attached to this report and the link to the Federal Register notice is: <http://edocket.access.gpo.gov/2009/E9-31050.htm>

Additional information about the protocol will be released and discussed at the upcoming Glen Canyon Dam Adaptive Management Work Group meeting on February 3 and 4, 2010, in Phoenix, Arizona. *(Ted Kowalski)*

**UPPER COLORADO RIVER COMMISSION :** The Commission held its annual winter meeting on December 9, 2009 in Las Vegas in conjunction with the Colorado River Water Users Association Annual meeting. The Commission received reports on the recent activities of Reclamation, Western Area Power Administration, Fish and Wildlife Service, U.S. National Park Service, and the Salinity Forum. Assistant Secretary Anne Castle addressed the Commission and committed to continuing to work collaboratively with the Upper Colorado River Basin states on the U.S.-Mexico negotiations, the Supply and Demand Basin Study, the Upper Colorado River ESA Recovery Program, the Glen Canyon Adaptive Management Work Group issues, and many other Colorado River basin issues. It was a pleasure to have Anne Castle at the Upper Colorado River Commission meeting. *(Ted Kowalski)*

**U.S.-MEXICO NEGOTIATIONS:** In 2010, the U.S. Colorado River basin states' representatives will continue to meet with the Mexican Colorado River basin states' representatives, U.S. federal representatives and Mexican federal representatives to explore bi-national water opportunities. The delegations' modeling subgroup has been exploring different scenarios for the creation and use of Intentionally Created Mexican Allocation ("ICMA"). In addition, the delegations' pilot project subgroup will be meeting in January to further this work. The next bi-national principal meeting will be in late February or early March, 2010. *(Ted Kowalski)*

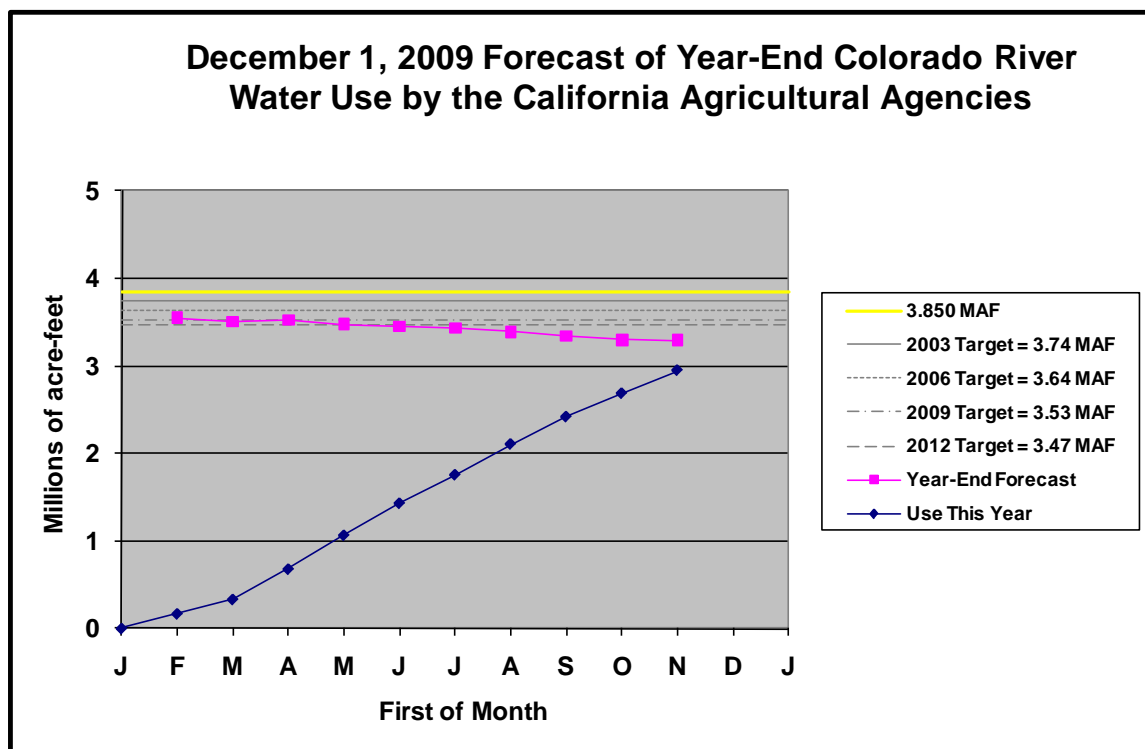
**COLORADO RIVER BASIN STUDY:** The Bureau of Reclamation and the seven basin states have completed work on an agreement to implement this supply and demand study, and the study work will begin in January, 2010. The Board will receive a presentation on this study at the January Board meeting. More information is available on the Bureau of Reclamation website: <http://www.usbr.gov/lc/region/programs/crbstudy.html> *(Ted Kowalski)*

**LOWER COLORADO RIVER WILD AND SCENIC RIVERS PROCESS:** The Lower Colorado River Alternatives Stakeholder Group met in December in Grand Junction, and has scheduled the next meeting for January 21-22, 2010. Rebecca Mitchell, of the Executive Director's Office, is taking the lead on this process. In November, the Stakeholder Group formed subgroups to explore the various river segments that are being considered for suitability. This matter will be discussed at the Board meeting. Additional information is available at:  
[http://www.blm.gov/pgdata/etc/medialib/blm/co/field\\_offices/grand\\_junction\\_field/PDF.Par.3668.File.dat/Final%20Wild%20and%20Scenic%20Eligibility%20Report%20original%20signature%20web.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/grand_junction_field/PDF.Par.3668.File.dat/Final%20Wild%20and%20Scenic%20Eligibility%20Report%20original%20signature%20web.pdf) *(Ted Kowalski)*

**COLORADO RIVER WATER USE:** As of December 1, 2009, storage in the four major Upper Basin reservoirs decreased by 389,170 acre-feet and storage in the Lower Basin reservoirs

increased by 46,900 acre-feet during November 2009. Total system active storage as of December 6 was 33.390 million acre-feet (MAF), or 56 percent of capacity, which is 0.017 MAF more than one year ago. (Upper Basin reservoirs increased by 1.272 MAF, and Lower Basin reservoirs decreased by 1.289 MAF.)

The end-of-year measure for 2008 California agricultural consumptive use of Colorado River water under the first three priorities and the sixth priority of the 1931 *California Seven Party Agreement* was reported as 3.604 MAF. Tracking of use in 2009 is shown in the graph below, and the preliminary year-end estimate for 2009 is 3.292 MAF. The target under the Interim Surplus Guidelines (ISG) for the end of 2006 was 3.640 MAF, the target for 2009 is 3.530 MAF, and the target for 2012 is 3.470 MAF, thus California is in compliance with the ISG.



(Andy Moore)

## ~GUNNISON RIVER BASIN~

**WILD AND SCENIC DRAFT ELIGIBILITY REPORT ISSUED:** The Uncompahgre Field Office is revising its Management Plan, and as part of this process the field office issued a draft eligibility report in December, 2009. The BLM Field Office is accepting comments on the draft report through February 26, 2010. The draft report includes 35 segments of creeks and rivers that are listed as eligible for wild and scenic designation, including certain segments of the Gunnison River, the San Miguel River, and the Dolores River. *(Ted Kowalski)*

**GUNNISON BASIN SELENIUM MANAGEMENT PLAN:** As part of the NEPA compliance work for the continued operation of the Aspinall Unit USBR was required to address the impact of selenium on endangered Colorado River fish. We have attached to this report a document entitled “Final Gunnison River Basin Programmatic Biological Opinion Excerpts Related to Selenium Management Plan” (See Attachment 5d-13) which explains the need for and structure of a Selenium Management Program (“SMP”) being developed by the USBR.

Coincidentally the Colorado Water Quality Control Division in November 2009 released a pre-notice draft of a proposed “Total Maximum Daily Load (“TMDL”) Assessment for the Gunnison River and Tributaries” which also addresses selenium concentrations well above the existing water quality standard.

On December 14 staff attended an initial meeting convened by USBR to begin drafting the plan. Gunnison Board Director John McClow, as well as several water user representatives, was in attendance. The success of the SMP is important to basin water users because it becomes part of the “reasonable and prudent alternative” protecting them from later findings of “take” which otherwise might be made by USFWS based on alleged effects of their water use and return flows. Staff will be working with the water users and USBR to identify the specific commitments and responsibilities of each participating entity that will lead to success of the SMP.

CWCB has already committed \$525,000 to work on Uncompahgre River irrigation systems, and will also coordinate on further irrigation system work through the Colorado River Basin Salinity Control Program. In addition, we will be monitoring the effectiveness of selenium reductions in meeting overall recovery goals, coordinating with the Recovery Program, the Div. of Wildlife and the WQCD on these issues, and assisting USBR in obtaining essential supplemental funding for selenium reduction activities and projects. *(Steve Miller)*

## ~PLATTE RIVER BASIN~

**PLATTE RIVER RECOVERY PROGRAM:** The Platte River Recovery Implementation Program (“Program”) held its last Governance Committee meeting in Denver, Colorado, on December 1-2, 2009. At the meeting, the Governance Committee approved the 2010 annual budget, approved an amended water action plan, and received an update from the U.S. Fish and Wildlife Service about current work regarding the possible listing of the caddis fly. In 2010, the Governance Committee will be meeting quarterly. The next meeting will be held in Kearney, Nebraska on March 9-10, 2010. The Program continues to acquire lands, and make progress on its adaptive management and water goals. For more information, please visit: [www.platteriverprogram.org](http://www.platteriverprogram.org). (*Ted Kowalski*)

**CHATFIELD RESERVOIR REALLOCATION PROJECT:** Work continues on the Project with strong emphasis on finishing key elements required for the Draft Feasibility Report and Environmental Impact Statement (FR/EIS). One significant accomplishment was the recent completion of the environmental mitigation plan that describes, in significant detail, proposed on-site and off-site mitigation activities that would address identified environmental impacts resulting from the Project. The CWCB is partnering with State Parks to contract with BBC Research, Inc. for completing additional work on the regional socioeconomic analysis. The scope of work indicates a cost of \$25,000 for this effort, which should begin in the very near future. Staff is also planning to hire Katie Fendel of Leonard Rice to replace Brooke Fox as the Coordinator of the Environmental/Recreation/Public Outreach committee meetings. (*Tom Browning*)

**SOUTH PLATTE RIVER OPERATIONS AND MAINTENANCE:** CWCB owns land and river features just downstream of Chatfield dam along the South Platte River from Coal Mine Avenue to Oxford Avenue. The River was straightened and lined with rock to accommodate high volume releases out of Chatfield Reservoir. The CWCB, as the coordinating non-federal sponsor, signed flood control project agreements with the U.S. Army Corps of Engineers. The Project is annual inspected by the Flood Readiness Branch of the Corps in Omaha, Nebraska. Minimally acceptable ratings since 2001 have led to increased activities and expenditures by staff to maintain a good inspection rating. An unacceptable rating could impact floodplain maps and insurance needs in Littleton, Englewood, and Arapahoe County. Working with the Urban Drainage & Flood Control District and their contractors, staff has been working on the following activities: vegetation removal for flood conveyance, training dike maintenance and repair, and boat chute safety at Union Avenue chute #1. For questions contact CWCB staff member Joe Busto. (*Joe Busto*)

## ~SOUTHWEST RIVER BASINS~

**RIVER PROTECTION WORKGROUP:** The River Protection Workgroup (“RPW”), has concluded the work on the Hermosa Creek sub-basin. The Hermosa Creek Workgroup has begun to develop legislative language on the land protections, as described in the November Board memo on this topic. The next sub-basin will begin work in February on the San Juan River basin. The first public meeting will be held in Pagosa Springs at the Community Center from 5:30 pm to 8:30 pm, on February 25, 2010. *(Ted Kowalski)*

**TACOMA POWER PLANT RELICENSING UPDATE:** The Public Service Company of Colorado d/b/a Xcel Energy is in the process of relicensing its Tacoma Hydroelectric Project with FERC. The Tacoma Project is located on Cascade Creek and the Animas River just north of Durango.

Xcel owns the water rights to divert the flows of Cascade Creek into a conduit that delivers those flows to the Little Cascade Creek watershed, and then into Electra Lake. From Electra Lake, the water is diverted into a penstock to the Tacoma Powerhouse in the Animas River canyon. The relicensing process, which started in July 2004, is scheduled for completion in February 2010. As reported in May 2009, the Administrative Law Judge issued a decision that favored the USFS on the majority of the issues after holding a trial-type hearing on factual issues related to preliminary conditions on the license, including the imposition of a bypass flow.

On July 27, 2009, the USFS submitted its final 4(e) conditions, which mirrored the preliminary conditions that were the subject of the hearing. FERC is in the process of completing its final EA, which will include those conditions. The USFS and Public Service Company continued to explore settlement options, but in October 2009, reached an impasse when each party made a final offer that was rejected by the other party.

On November 16, 2009, Public Service Company sent the Regional Forester, Rick Cables, a letter requesting the USFS to resume settlement discussions, and on November 29, 2009, Senator Bruce Whitehead sent Rick Cables a letter encouraging continued negotiations to reach a final settlement between the USFS and Public Service Company. Subsequently, the USFS expressed a willingness to resume negotiations if Public Service Company would provide detailed information on its updated proposal. As of the date of this report, the Company had requested a meeting with DNR representatives and was in the process of providing the requested information to the USFS. *(Linda Bassi)*

**DURANGO MOBILE RADAR PROJECT:** CWCB is teaming up again with the NOAA National Severe Storms Lab in Norman, Oklahoma. NOAA will deploy a mobile radar truck near Durango for four weeks during the summer 2010. A similar project was completed in Gunnison in summer 2009. The goal of these two projects are to document what is seen by the

mobile radar and compare it to what is seen by the fixed radar on top of the Grand Mesa. This is needed because of beam blockage and complex terrain issues in Colorado.

The CWCB Flood Response Fund is funding \$18,000, the Southwestern Water Conservation District is funding \$15,000 and the Colorado Division of Emergency Management is funding \$33,000 of the project. It is the CWCB staff's hope that these projects will lead to either recommendations for either a new National Weather Service radar in the four corners area or a series of smaller fixed radars to supplement the current WSR-88D network. These projects are also a first look at dual polarization (scans vertical and horizontally) capability. The current national WSR-88D network will be upgrading to dual polarization over the next five years. Advances in radar will greatly help National Weather Service forecasters and emergency managers. For questions contact CWCB staff member Joe Busto. (*Joe Busto*)

**DOLORES RIVER DIALOGUE UPDATE:** The DRD Technical Committee has been meeting regularly to: (1) coordinate on strategy and meeting topics for the Lower Dolores Plan Working Group; (2) continue its field work efforts; and (3) discuss spill objectives for this year. On November 12, 2009, the DRD Technical Committee held a retreat to revisit and reaffirm the purpose and mission of the DRD, and to identify and agree upon goals and projects for the upcoming year. At its November 30, 2009 meeting, the Committee agreed to review and potentially revamp the structure of the DRD to enable the process to move forward more effectively and with more input from the public.

At the same meeting, the Science Committee gave an update on its goals and tasks, which include : (1) a review of new relevant literature since the first Core Science report was done; (2) soils analysis work; (3) consideration of channel restoration; (4) continuing field work at the Big Gypsum site; and (5) working on the DRD Core Hydrology Report II. The Science Committee intends to involve Fort Lewis students and young scientists in these efforts, and to integrate work being done by Fort Lewis College, the BLM and The Nature Conservancy. On December 19, 2009, the DRD and the Lower Dolores Plan Working Group jointly sent a letter to Representative Diana DeGette expressing concerns about the introduction of the Wilderness Act of 2009 without consulting with the two Dolores River groups, given that approximately 32,000 acres covered by the Bill encompass the Lower Dolores River corridor. A copy of the letter is attached to this report as Exhibit 5d-05.

The DRD Technical Committee met on January 10, 2010 to plan the January 19, 2010 Lower Dolores Plan Working Group Meeting and to discuss retreat follow-up activities. For more information on the DRD and the Lower Dolores Plan Working Group, visit the website at <http://ocs.fortlewis.edu/drd/default.asp> (*Linda Bassi*)

## ~AGENCY UPDATES~

**WATER EFFICIENCY GRANT FUND REPORT:** The OWCDP has completed a report of the Water Efficiency Grant Fund Program: Fiscal Years 2005-2009. The report is included in the sleeve of the Board notebook. The report was intended to not only demonstrate the accomplishments that have been achieved with these grant funds, but also to provide information to legislators about the program fund as they evaluate the 2010 legislation before them for reauthorization of the grant program. The Water Resources Review Committee agreed to carry a bill this session to extend the sunset date on the program and to restart funding of the program beginning in 2012. Sponsors of the bill are Rep. Baumgardner and Sen. Whitehead. *(Ben Wade)*

**COLORADO WATER SUPPLY FUTURE MONTHLY PROGRESS REPORT:** CWCB's role in the basin roundtable process is to support the on-going implementation of the Colorado Water for the 21<sup>st</sup> Century Act. In this capacity CWCB provides technical assistance to the Basin Roundtables and the IBCC in their development of basin-wide water needs assessments and evaluation of strategies for meeting Colorado's future water supply needs. In order to keep everyone up-to-date with these efforts, we provide regular progress reports on this work.

Below is the November/December monthly progress report summarizing progress to date. This is the monthly progress report summarizing progress to date on the statewide update of consumptive and nonconsumptive needs based on the Basin Roundtables' needs assessments and other work products that the Colorado Water Conservation Board (CWCB) drafted in June 2009. Progress is summarized on a task-by-task basis below. A detailed schedule is attached reflecting final work products available by July 2010 and delivery of a final report by November 2010. A draft Final Report outline is also attached.

### **Task 1.1 Municipal and Industrial Demands**

To date, CWCB staff have attended all of the Basin Roundtable meetings to gather feedback on the draft report summarizing 2050 M&I Demands. CWCB Staff have summarized feedback received to date. CDM compiled this information into a spreadsheet and has suggested ways to respond to each comment. CWCB staff are reviewing these and responses to comments will be available in February 2010. The analysis/report will be revised accordingly. CWCB will work with those who are providing additional data. It is anticipated that the report will be finalized in early April 2010.

### **Task 1.2 Nonconsumptive Needs**

The draft *Watershed Flow Evaluation tool Pilot Study for Roaring Fork and Fountain Creek Watersheds and Site-Specific Quantification Pilot Study for Roaring Fork Watershed* report will be finalized in February 2010. Although no details of the report will be modified, section five will include a summary of the next steps that the Colorado and Yampa/White roundtables will include in their studies to better the methodology in accordance with the comments and concerns expressed by various stakeholders.



To date, CWCB staff have attended all of the Basin Roundtable meetings on the draft *Nonconsumptive Needs Assessment Focus Mapping* report summarizing nonconsumptive needs focus area mapping. CWCB Staff will summarize feedback received to date and will develop a response to comments at the beginning of next year. Any updates to the existing report will be included in Section 2 of the final report, a draft of which will be available during July 2010.

CWCB has kicked-off Phase II of the Nonconsumptive Needs Assessments. A major task of Phase II is identifying projects and methods to meet nonconsumptive needs. CDM has developed tables for each basin that indicate which nonconsumptive focus areas have existing instream flow protections and is in the process of adding land use protections into that table. By July 2010 the table and related geodatabase will be created that matches existing and planned nonconsumptive projects, methods, and quantification studies with the focus areas and reaches identified by each roundtable. To accomplish this task, CWCB will examine resources such as:

- Existing studies and plans by "ISF recommending entities"
- Watershed restoration plans and flood DSS for identified restoration projects
- Other relevant restoration and quantification studies, plans and processes
- Other WSRA funded studies or Basin Roundtable Studies
- Outreach efforts to the environmental, recreational, and water provider communities
- In addition, CWCB plans to utilize work completed by the Priority Waters group in updating the projects and processes

This information will be summarized by the focus areas identified by the Roundtables during Phase I. A technical memo describing these results will be developed by July 2010.

In addition to incorporating these results into the Final Report by November 2010, the report will include the following:

- An analysis indicating what percentage of the identified focus areas have protections for the attributes identified by the roundtables
- An update from SWSI Phase II of the approaches and mechanisms for maintaining Environmental Integrity in Statewide Water Supply Management
- An update from SWSI Phase II of existing federal, state, local, and private funding programs for meeting environmental and recreation water needs

The final report will then allow the roundtables to determine what next steps, if any, they would like to take for meeting their identified nonconsumptive needs.

### **Task 1.3 Agricultural Needs**

CWCB has finalized a scope of work to update the agricultural needs and shortage estimates that were completed as part of SWSI 1. This effort will also forecast agricultural demands out to the year 2050. Total irrigated acreage for the year 2050 will be determined by utilizing results from the CWCB's Colorado River Water Availability Study Phase I, information developed as part of Yampa/White Basin's Agricultural Needs Assessment funded through a Water Supply

Reserve Account grant, interviews with Division Engineers' Offices, trends in irrigated acreages by basin utilizing the DSS, agricultural statistics and public outreach efforts. The modeling for this effort will begin in January 2010 and the interim results will be vetted with the Basin Roundtables during 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2010. A memorandum summarizing results will be completed by July 2010. This information will be included in the final report.

CWCB will also be reviewing the Agricultural Transfer Methods Grant Projects results to assist in addressing the following question: What would it take to make an alternative agricultural transfer program work in CO? CDM drafted a summary of the schedule and deliverables of the ATM funded projects. Part of this task is to convene a meeting with the ATM grant recipients to report any findings to date. This meeting is expected to occur in late January or February 2010. As a deliverable, a draft and final report summarizing the projects and findings of the ATM projects as well as analyzing which questions the ATM funded projects are answering and what questions regarding alternative agricultural transfer methods remain.

#### **Task 1.4 Consumptive Gap Analysis**

CWCB is in the process of updating the Identified Projects and Processes information developed as part of SWSI 1 through its Basin Needs Decision Support System. This updated information will be used to develop the consumptive gap analysis. This work will be completed in spring 2010. This information will be vetted with the Basin Roundtables during 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2010. A technical memo describing these results will be developed by July 2010 and incorporated into the Final Report by November 2010

#### **Task 1.5 Basin Roundtable Support**

CDM will support CWCB in meetings in the 1<sup>st</sup> and 2<sup>nd</sup> quarter of next year related to the agricultural needs update as well as the consumptive gap analysis.

#### **Task 1.6 Final Report**

A draft Report Outline is attached. Technical memos detailing the results of each section will be available by July 2010, and the Final Report will be completed by November 2010. **Annotated Report Outline**

### **Update to the Basin Needs Assessments and Projects and Methods to Meet Basin Needs 11-24-09**

Fact Sheet

Executive Summary

Section 1 Introduction

1.1 Introduction to the Interbasin Compact Process [*Use June 2009 draft reports and historic annual reports, website, education and outreach efforts, and legislation to complete this section*]

1.1.1 Overview of the Water for the 21<sup>st</sup> Century Act

1.1.2 Basin Roundtable Process

1.1.3 Interbasin Compact Committee (IBCC)

- 1.1.4 Water Supply Reserve Account (WSRA)
- 1.2 CWCB History and Mission [*Update from SWSI 1 Report*]
  - 1.2.1 Fundamental Goals
  - 1.2.2 Structure, Authority, and Role of the Board
- 1.3 Background on Colorado Water Resources [*Update from SWSI 1 Report*]
  - 1.3.1 Colorado River, Gunnison River, Yampa/White/Green Rivers, and Dolores/San Juan/San Miguel Rivers
  - 1.3.2 South Platte River, Republican River, and North Platte River
  - 1.3.3 Arkansas River
  - 1.3.4 Rio Grande
- 1.4 Colorado Water Law [*Summarize and update from SWSI 1 Report*]
- 1.5 Acknowledgements [*Include list of CWCB Board Members, Basin Roundtable, and IBCC*]
- 1.6 Overview of Report [*Will summarize report contents*]

## Section 2 Nonconsumptive Needs Assessments

- 2.1 Overview of Nonconsumptive Needs Assessment Process [*Update from Focus Area Mapping Report and Annual Report*]
- 2.2 Focus Area Mapping [*Update from Focus Area Mapping Report*]
  - 2.2.1 Methodology
  - 2.2.2 Results
- 2.3 Summary of Nonconsumptive Needs by Focus Area [*If quantification or other needs are defined as part of Task 1.2.2 of current Task Order they will be summarized here at the basin level*]

## Section 3 Consumptive Needs Assessments

- 3.1 M&I Consumptive Needs [*Update from Demands to 2050 Report; Response to comments; and BNDSS*]
  - 3.1.1 Future Population Projections
    - 3.1.1.1 2050 Population Projection Methodology
    - 3.1.1.2 2050 Population Projection Results
  - 3.1.2 Future M&I Water Demands
    - 3.1.2.1 2050 M&I Water Demands Methodology
    - 3.1.2.2 2050 M&I Water Demands Results
  - 3.1.3 M&I Consumptive Needs Summary
- 3.2 Agricultural Consumptive Needs [*Section will be based on results from Task 1.3 of current Task Order*]
  - 3.2.1 Agricultural Demand Methodology
  - 3.2.2 Agricultural Demand Results

## Section 4 Projects and Methods to Meet Basin Needs

- 4.1 Projects and Methods to Meet M&I Consumptive Needs [*Summary of information from BNDSS and Basin Roundtable task orders/reports*]

4.2 Projects and Methods to Meet Nonconsumptive Needs [*Will be based on Task 1.2 work and BNDSS*]

4.3 Consumptive Gap Analysis [*Will be based on Task 1.1, 1.3 and 1.4 work*]

4.3.1 Consumptive Gap Analysis Methodology

4.3.1.1 M&I Gap Analysis

4.3.1.2 Agricultural Shortages

4.3.2 Consumptive Gap Analysis Results

4.3.2.1 M&I Gaps

4.3.2.2 Agricultural Shortages

Section 5 Water Availability [*Will be based on CRWAS Phase 1 results and will need to be coordinated with Water Information Section and CRWAS contractor*]

Section 6 Portfolios and Strategies to Address the M&I Gap

6.1 Portfolios to Address the M&I Gap [*Summary of IBCC discussions to date*]

6.2 Strategies [*This will be a summary of work completed through 1<sup>st</sup> quarter 2010*]

6.2.1 Agricultural Transfers

6.2.2 Conservation [*From Conservation Section*]

6.2.3 Colorado River System [*Update current info with Green Mountain and Blue Mesa – this is not currently in our Scope of Work and would need to be addressed*]

6.3 Evaluation of Portfolios and Strategies [*This will be a summary of work completed through 1<sup>st</sup> quarter 2010*]

Section 7 Findings and Recommendations [*Will be updated from Section 11 from the SWSI report*]  
(Please see Attachment 5d-01 for schedule) (*Eric Hecox*)

**WATER INFORMATION SECTION UPDATES:** The North Park surface water model has been completed and final documentation will be made available online by the end of January 2010.

The SPDSS alluvial groundwater model calibration effort is moving forward, though it is turning out to be more problematic than what had been anticipated. We are reviewing all model inputs to insure that no major water uses have been overlooked or mischaracterized. It is anticipated that the calibration effort will be completed by the end of February.

The SPDSS surface water model for the lower South Platte (WD64) is also in the calibration phase, but it is not as far along as the groundwater model. It is anticipated that the model will be completed in late March 2010.

The Colorado River Water Availability Study (CRWAS) and the results of Phase 1 will be presented at the CWCB workshop and at a Colorado Water Congress workshop.

The Arkansas DSS feasibility study (ArkDSS) contract is still going through the procurement process; hopefully we will have a signed contract by the end of January 2010.

The FloodDSS is moving forward, on schedule and on budget. The data collection task has been completed and the information obtained by the various providers is being reviewed and checked.

The CWCB website redesign is moving forward, with a contractor being selected to help with the upgrade. The site's web pages will be modified to be more concise and understandable, with easier subject-based navigation. The new site will be rolled out this summer.

*(Ray Alvarado)*

**RECENTLY DECREED ISF WATER RIGHTS:** On November 15, 2009, the Division 5 Water Court decreed an instream flow water right to the CWCB on Battlement Creek in Case No. 08CW098 for 6.3 cfs (April 1 – June), 3.5 cfs (July 1 – July 31) and 1.5 cfs (August 1 – March 31), with an appropriation date of January 23, 2008. The upstream terminus is the outlet of Battlement Reservoir and the lower terminus is the Battlement Ditch. This ISF reach is approximately 5.15 miles long and flows through part of Garfield County. *(Rob Viehl)*

**STREAM & LAKE PROTECTION SECTION ONGOING PROJECTS VIA OUTSIDE CONSULTANTS:**

Consultant Name	Project Name	Project Cost
DiNatale Water Consultants Inc.	Dominguez Canyon Water Demand Study	\$7,884.00
Applegate	CWCB Hydrographic Strategic Plan	\$24,900.00

*(Rob Viehl)*

**GOVERNOR'S WATER AVAILABILITY TASK FORCE:** The next WATF meeting will be scheduled for January 22 at the Colorado Division of Wildlife Headquarters. Please check the website

(<http://cwcb.state.co.us/Conservation/DroughtPlanning/WaterAvailabilityTaskForce/>) for additional information. *(Ben Wade)*

**CWCB WATER EFFICIENCY GRANT FUND PROGRAM UPDATE:** Since the passage of HB09-1017, the Water Efficiency Grant Fund has resumed operations and has awarded 5 grants to the following water providers:

- **City of Durango:** \$17,710 to develop a Water Conservation Plan
- **Town of Castle Rock:** \$31,875 to develop a water conservation website
- **Pagosa Area Water & Sanitation District:** \$48,700 to conduct a commercial water audit

- **City of Brighton:** \$49,613.10 to conduct commercial & residential water audits
- **Town of Windsor:** \$30,750 to conduct a water rate study

(Ben Wade)

## **BASIN NEEDS DECISION SUPPORT SYSTEM (F/K/A IP&P Database) UPDATES, JANUARY 2010:**

### **Background**

CWCB staff is implementing refinements and expansion of the IP&P Database via two concurrent efforts. The first effort involves developing and piloting a statewide survey for water providers to collect and maintain accurate data. The second effort involves database enhancements and DSS integration. As a result of the extensive enhancements and integration with other CWCB Decision Support System (DSS) tools, the name of the IP&P Database is changed to the *Basin Needs Decision Support System (BNDSS)*. The BNDSS will track projects and processes identified in SWSI and others identified by water providers since the SWSI report. The BNDSS will monitor their progress and identify where CWCB programs can help implementation. The BNDSS will also track water use and supply data (actual and projected), population data (actual and projected), and non-consumptive project data, in order to refine local and regional estimates of the projected water supply “gap”.

### **Updates on BNDSS Provider Survey and Consultation**

The CWCB is using DiNatale Water Consultants, Inc. (DiNatale) to help determine the format, substance, and attainability of information for the BNDSS via a provider survey. The survey has been developed and refined extensively in response to internal review and pilot interviews with numerous water providers (Greeley, Johnstown, Glenwood Springs, Silt, Ute Water, Palisade, Minturn, and Louis Meyer, an engineer involved in numerous west slope IP&P's). Additional comments resulting from a presentation of the survey to the Metro roundtable in December are currently being considered. The survey will be further refined and automated in a web-based format in conjunction with the efforts on BNDSS system enhancements and DSS integration. In addition staff is working with roundtables and major providers to obtain data necessary for the current effort to update the SWSI consumptive use water supply “gap” calculation by June 2010.

### **Updates on BNDSS System Enhancements and DSS Integration**

The RFP process has resulted in the selection of a contractor team lead by Riverside Technology, inc. (RTi) and including Leonard Rice Engineers and DiNatale Water Consultants. As developer of the initial IP&P Database, RTi has extensive experience with the project. Leonard Rice and DiNatale Water Consultants bring significant experience with existing DSS products and water providers. Staff is working to expedite completion the procurement process in order to begin work in the near future. (Greg Johnson)

**ISF WORKSHOP:** CWCB staff will not hold an ISF workshop this year. Based upon preliminary discussions with the major recommending entities, it appears that there will be few new recommendations for discussion at a workshop. In addition, not holding the workshop will save staff time and resources in recognition of the state budget crisis. However, public outreach efforts will continue as staff processes the recommendations that it receives. Staff will discuss all new recommendations with the Board at its March 2010 meeting. (*Jeff Baessler*)

## **WATER SUPPLY RESERVE ACCOUNT CRITERIA AND GUIDELINES PROPOSED**

**AMENDMENTS:** On December 2, 2009, the Water Supply Reserve Account Subcommittee met to discuss amendments to the grant program's criteria and guidelines. These proposed amendments will be presented to the IBCC and the CWCB at their March 2010 meetings accompanied with a more detailed memorandum and redlined version of the WSRA criteria and guidelines. The subcommittee agreed to recommend retaining the current allocation between the basin and statewide accounts at 27% and 73% respectively. Following is a description of the proposed amendments for the statewide and basin accounts.

Statewide Account: The evaluation criteria for the statewide criteria was reviewed and made changes to the evaluation criteria. The proposed changes streamline the evaluation criteria and provide guidance to applicants to propose a project that either furthers/implements their needs assessments or implements an identified project or process (IPP). Also, in keeping with the intent of the Interbasin Compact process, requests from the statewide account will need to provide an approval letter from their basin as well as an addition basin. In recognition of the State's budgetary constraints, it is recommended that requests for the statewide account be considered at the September CWCB meeting only.

Basin Accounts: The basins accounts will also be required to detail/explain how applications will further their basins needs assessments or if a needs assessment is not yet completed, will assist in further the completion of a consumptive or nonconsumptive needs assessment. (*Todd Doherty*)

**ALTERNATIVE AGRICULTURAL TRANSFER METHODS GRANT PROGRAM:** At the May and November 2009 meetings, the CWCB approved the \$1.5 million appropriated by the Legislature in SB 07-122. At this time, most of the projects are well underway. On September 1, 2009, staff convened a coordination meeting with all of the project managers to discuss the status of their projects, discover areas of potential collaboration and to report any findings to date.

Attendees thought the meeting was very helpful in advancing this area of study and expressed the need for future meetings. In the past legislative session, the ATM grant program was extended through the passage of SB 09-125 and was appropriated an additional \$1.5 million. To ensure that these moneys are spent prudently, staff has been waiting for the current grants (SB 07-122) to move advance further to report findings and identify areas where additional work/study is warranted. To achieve this, staff will convene an additional meeting/workshop with the project managers in February 2010. Subsequent to this workshop, staff will convene a

subcommittee to develop criteria and guidelines for the funds appropriated in SB 09-122. Staff expects to request approval by the CWCB at the March or May 2010 meeting with the initial grant requests being considered by the CWCB in September or November 2010. *(Todd Doherty)*



## **~ATTACHMENTS~**

- **5d-01** Colorado Water Supply Future Monthly Progress Report Schedule
- **5d-02** Summary of Resolved Cases
- **5d-03** Loan Repayment Delinquency & Financial Activity Report
- **5d-04** Design and Construction Status Report
- **5d-05** Dolores River Letter
- **5d-06** Deminimis Cases
- **5d-07** 2010 January Loan Prospects
- **5d-08** Federal Register Information
- **5d-09** Salazar Announcement on Grand Canyon Resources
- **5d-10** CRWUA Remarks by Anne Castle
- **5d-11** Tamarisk/Russian Olive “Next Step Memo”
- **5d-12** CoAgMet Program Announcement
- **5d-13** Final Gunnison River Basin Excerpts Related to Selenium Management Plan



THE SECRETARY OF THE INTERIOR  
WASHINGTON

**RECEIVED**

**JAN 11 2010**

Colorado Water Conservation Board

**JAN 05 2010**

Honorable Janice K. Brewer  
Governor of Arizona  
Phoenix, Arizona 85007

Dear Governor Brewer:

Enclosed is the Annual Operating Plan (AOP) for Colorado River System Reservoirs for 2010. The 2010 AOP contains the projected plan of operation of Colorado River reservoirs for 2010 based on the most probable runoff conditions. The plan of operation reflects use of the reservoirs for all purposes consistent with the Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968. The 2010 AOP incorporates the Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (Interim Guidelines).

The 2010 AOP was prepared by the Bureau of Reclamation in consultation with: (1) the seven Colorado River Basin States Governors' representatives; (2) the Upper Colorado River Commission; (3) Native American tribes; (4) appropriate Federal agencies; (5) representatives of the academic and scientific communities, environmental organizations, and the recreation industry; (6) water delivery contractors; (7) contractors for the purchase of Federal power; (8) others interested in Colorado River operations; and (9) the general public, through the Colorado River Management Work Group (Work Group). The Work Group held meetings on June 25, 2009, August 26, 2009, and September 22, 2009.

The release from Lake Powell in water year 2010 is projected to be 8.23 million acre-feet (maf), but the release could be greater depending on projected inflow into Lake Powell and the projected elevation of Lake Mead.

Water deliveries in the Lower Basin are limited to 7.5 maf plus or minus any credits for Intentionally Created Surplus (ICS). The Interim Guidelines adopted the ICS mechanism that, among other things, encourages the efficient use and management of Colorado River water in the Lower Basin. Intentionally Created Surplus may be created and delivered in 2010 pursuant to the Interim Guidelines and appropriate delivery and forbearance agreements.

A volume of 1.5 maf (1,850 million cubic meters) of water will be scheduled for delivery to the Republic of Mexico during calendar year 2010 in accordance with Article 15 of the 1944 United States-Mexico Water Treaty and Minutes No. 242 and 314 of the International Boundary and Water Commission.

Honorable Janice K. Brewer

2

Drought conditions since 1999 have significantly reduced water in storage in the Colorado River system. All water users in the Colorado River Basin are encouraged to prudently manage the use of available supplies.

The Department of the Interior continues to closely monitor water supply conditions in the Colorado River Basin and looks forward to continuing to work with your representatives and other interested stakeholders regarding the management of this vital river system.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Salazar", with a stylized flourish at the end.

Ken Salazar

Enclosure

Honorable Janice K. Brewer

3

Identical Letter Sent To:

Honorable Joseph R. Biden, Jr.  
President of the Senate  
Washington, DC 20510

Honorable Nancy Pelosi  
Speaker of the House of Representatives  
Washington, DC 20515

Honorable Jim Gibbons  
Governor of Nevada  
Carson City, Nevada 89701

Honorable Arnold Schwarzenegger  
Governor of California  
Sacramento, California 95814

Honorable Gary Herbert  
Governor of Utah  
Salt Lake City, Utah 84114-2220

Honorable Bill Richardson  
Governor of New Mexico  
Santa Fe, New Mexico 87501

Mr. Timothy Meeks  
Administrator  
Western Area Power Administration  
P.O. Box 281213  
Lakewood, Colorado 80228-8213

Honorable David Freudenthal  
Governor of Wyoming  
Cheyenne, Wyoming 82002

Honorable Bill Ritter, Jr.  
Governor of Colorado  
Denver, Colorado 80203-1792

Colonel Thomas H. Magness, IV  
District Engineer  
U.S. Army Corps of Engineers  
Los Angeles District  
P.O. Box 532711  
Los Angeles, California 90053

Ms. Lisa P. Jackson  
Administrator  
Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Mr. Bill Ruth  
Commissioner, United States Section  
International Boundary and Water  
Commission  
4171 North Mesa, Suite C-100  
El Paso, Texas 79902-1441

Honorable Janice K. Brewer

4

cc: Mr. George Caan, Executive Director  
Colorado River Commission of Nevada  
555 East Washington Avenue, Ste 3100  
Las Vegas, Nevada 89101-1048

Mr. John D'Antonio  
State Engineer  
Office of the State Engineer  
P.O. Box 25102  
Santa Fe, New Mexico 87504-5102

Mr. Herb Guenther  
Director  
Arizona Department  
of Water Resources  
3550 North Central Avenue  
Phoenix, Arizona 85012

Mr. Gerald R. Zimmerman  
Executive Director  
Colorado River Board  
of California  
770 Fairmont Avenue, Suite 100  
Glendale, California 91203-1068

Mr. Dennis J. Strong  
Director  
Utah Division of Water Resources  
P.O. Box 146201  
Salt Lake City, Utah 84114-6201

Mr. Patrick T. Tyrrell  
State Engineer  
State of Wyoming  
Herschler Building, 4<sup>th</sup> Floor East  
Cheyenne, Wyoming 82002-0370

Ms. Jennifer Gimbel  
Director  
Colorado Water Conservation Board  
1313 Sherman Street, Suite 721  
Denver, Colorado 80123

Mr. Don Ostler  
Executive Director  
Upper Colorado River Commission  
355 South 400 East Street  
Salt Lake City, Utah 84111