

# STATE OF COLORADO

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## Colorado Water Conservation Board Department of Natural Resources

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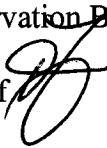
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Bill Ritter, Jr.  
Governor

Mike King  
DNR Executive Director

Jennifer L. Gimbel  
CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Tim Feehan, P.E., Chief   
Ted Kowalski, Chief

DATE: July 9, 2010

SUBJECT: **Agenda Item 10, July 20-21, 2010 Board Meeting**  
**Finance and Interstate & Federal Sections**  
**Animas-La Plata (A-LP) State's Pool Allocation Update**

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### **Introduction** *(This is for information only and no action is necessary)*

This agenda item is to provide the Board with some general background information and an update on the Animas-La Plata (A-LP) State's Pool Allocation. Staff will continue to update the Board as necessary.

### **AL-P Study**

In the fall of 2009, the CWCB hired Brown and Caldwell (Consultant) to analyze the needs and potential uses within the Animas River basin for A-LP Project water if the State were to purchase its allocation of 10,460 AF of supply or 5,230 AF of depletions. That study has been completed and is available on the CWCB website for your review. The Consultant found that there are local providers that have an immediate interest in purchasing up to 1,000 AF (depletions).

The State and the Southwestern Water Conservation District (District) are currently working together to complete Phase II of the Animas-La Plata Water Supply and Demand Study. This effort will examine exchange possibilities, compact issues, climate change impacts, operating, maintenance, and replacement costs, final cost allocation issues, potential federal statute revisions, financing options, and Tribal concerns. The Staff and the District have completed the final scope for the Phase II Study and Consultant is currently under contract to complete the work. It is the intent of the CWCB and the District to complete the Phase II Study by the November 2010 CWCB Board Meeting.

## **Legislation**

During the 2010 Legislative Session the Legislature approved HB10-1250 (Projects Bill) that allocates \$12M over 3 years (\$36M) from the Severance Tax Perpetual Base Account to the Construction Fund for the purchase of all or a portion of the State's A-LP Project Water. The Bill appropriates the first \$12M in fiscal year 2010/11, with the remaining \$24M to be appropriated by the General Assembly in 2012 and 2013. Appropriation of the remaining \$24M in A-LP funds is not a certainty, and will be contingent upon the State's economic health and available budget. The Bill was signed by the governor on June 7, 2010 in Durango, Colorado.

At the March 29, 2010 Telephonic Board Meeting, the Board reached a quorum and unanimously expressed support for legislation that would authorize the CWCB to purchase the State's A-LP pool allocation. The Board also clarified that this support was contingent on receiving additional information on the short and long term benefits of purchasing the water that would be presented in the A-LP Phase II Study. After reviewing the findings presented in the Phase II Study and any additional information, the Board would make final decisions regarding its support for the water purchase.

## **Bureau of Reclamation – Purchase Agreement**

Staff is currently drafting a letter to the Bureau of Reclamation stating its intent to purchase all or a portion of the State's A-LP Project Water. In addition, staff recently attended the Bureau's final cost allocation workshop for the project on June 8, 2010, which was a critical component in establishing the State's final cost for the water. The next final cost allocation workshop will be on August 23, 2010 in Durango. The Bureau anticipates it will complete all final accounting for the project by early 2012. It should be noted that the reservoir has to be full before the project can be finalized. Currently, the Bureau has pumped 70,000 AF into the reservoir and anticipates having a full reservoir by the fall of 2011, which is estimated at 123,000 AF.

Based on the Bureau's current final cost figures, the State's estimated capital cost for its 10,460 AF supply allocation would be \$27,915,000 or \$2,670 per AF. Since the State has not entered into a purchase agreement with the Bureau to date, the State is also required to cover interest during construction, which is currently estimated at \$7,000,000. The interest during construction payment adds an additional \$670 per AF, for a total estimated cost of \$3,340 AF or \$34,915,000.

**Exhibit A.**  
**Description of Project and Scope of Work**  
**Animas – La Plata Project Water Marketing Supply and**  
**Demand Study**  
**Durango, Colorado**

**BACKGROUND**

The Animas- La Plata (A-LP) Project was funded by the United States Bureau of Reclamation (USBR) as a municipal and industrial water supply project for the States of Colorado, New Mexico and the Ute Mountain and Southern Ute tribes. The project is located in southwest Colorado. The State of Colorado (State) has an allocation of 10,460 acre-feet (AF) of A-LP Project water (State Water). The State contracted with Brown and Caldwell to conduct an investigation of options for marketing this water to local water providers in the area. The preliminary study refined capital repayment costs that would be owed by the State to the United States Bureau of Reclamation and identified water providers in the vicinity that would be interested in purchasing A-LP Project water.

The Colorado Water Conservation Board (CWCB) and the Southwestern Water Conservation District (SWCD) have agreed to jointly fund the State Water demand study to evaluate potential water needs in southwest Colorado and Colorado.

**SCOPE OF WORK**

Brown and Caldwell proposes to complete the following tasks in A-LP Project Water Marketing Supply and Demand Study to further assist the State with clarifying the amount of State Water that can be sold to water providers in Southwestern Colorado. In addition, this study will refine the estimated capital and operations, maintenance and replacement (OM&R) costs for this water, and identify additional uses for the State's Water. In addition, Brown and Caldwell will evaluate the potential demand for the State water taking into account the Tribes allocations of water under the A-LP project, and the fact that the Tribes may be able to sell or lease their water allocation for a lower cost.

Brown and Caldwell will work closely with the Southwestern Water Conservation District (SWCD) to identify additional future water demands and other potential uses for State Water that cannot be sold reasonably soon to water providers in the area.

The development of A-LP has been the result of a 25 year partnership between Colorado and New Mexico Indian and non-Indian interests. This study shall be conducted and the results presented in a manner that enhances and supports the long term cooperation between all of the entities involved in A-LP.

**Phase 100 – Fully Describe State Water Costs and Supply Criteria**

This section of the A-LP study will fully describe the physical and cost aspects of the State Water and any restrictions that may be involved. Refining capital repayment and estimated OM&R costs are required to allow marketing of the State Water. Brown and Caldwell will conduct the following tasks to more closely define the capital payment due to the USBR and clarify the components of OM&R payments required by the Animas-La Plata Operation, Maintenance, and Replacement Association (Association)

Refining final capital repayment and estimated OM&R costs are required to allow the State to market the State water. Brown and Caldwell will conduct the following tasks to more closely define the final capital payment due to the USBR and clarify the components of OM&R payments required by the Association. The following tasks will include consultation with the Association as appropriate.

### **Task 001 – Describe Availability of Water from Lake Nighthorse**

Brown and Caldwell will review technical studies and evaluations prepared by Reclamation and/or the Association that describe any constraints or requirements regarding physical availability of water from Lake Nighthorse, including:

- Can the State Water be released in any pattern, e.g. constant over the year or all in one month?
- Is the water available in all years or are there shortages?
- Are there physical constraints to releasing water through the outlet works?

### **Task 002 – Verify Final Capital Cost Allocation with USBR**

This task will include:

- A. Brown and Caldwell will meet and confer with USBR to confirm the fiscal year 2011 Project Capital Cost allocation (including interest during construction).
- B. Brown and Caldwell will attend the USBR meeting scheduled in June to discuss the repayment schedule for A-LP Project water.
- C. Brown and Caldwell will coordinate with USBR to determine when the State's allocation will revert to the tribes if not paid for by the State.
- D. Brown and Caldwell will verify the tribal repayment obligations as part of the cost analysis.
- E. Brown and Caldwell will describe the contracting process that USBR will follow (including the appropriate environmental compliance) to develop a contract with the State.

### **Task 003 – Update OM&R Costs**

- A. Brown and Caldwell will summarize and describe the proposed operations of the Association as related to the State Water. This will include a review of the Inter-Governmental Agreement and governance by the Association's Management Committee, including how to become a member and the rights and obligations of being a member. Also included would be the determination of options for how the State's single vote on the Management Committee would be allocated, whether a CWCB representative or a local water user representatives and whether the Association would allow the vote to be divided in the event portions of State Water are sold by the State to third-party entities. This task would include consultation with the Association as appropriate.

- B. Brown and Caldwell will summarize and describe how the fixed and variable OM&R costs for the A-LP Project are determined. It will also describe how cost obligations will be assessed when water is released from the Lake Nighthorse and any OM&R cost issues related to pattern of water use.
- C. Brown and Caldwell will explain how the OM&R escrow account, consisting of \$1.5 million contribution each from the Southern Ute Indian Tribe and Ute Mountain Ute Tribe, will be operated to pay for variable costs and what variable costs will be paid by the State.

#### **Task 004 – Determine Alternatives for Repaying Project Capital Costs and Paying OM&R Costs**

Brown and Caldwell will work with CWCB to develop up to five A-LP Project repayment alternatives based on updated capital costs. Brown and Caldwell will also determine the total cost (capital plus OM&R) for the various repayment alternatives.

Brown and Caldwell will provide CWCB and SWCD with a technical memorandum summarizing Phase 100 when it has been completed.

**Exhibit A.**  
**Description of Project and Scope of Work**  
**Animas – La Plata Project Water Marketing Supply and**  
**Demand Study – Phase 2**  
**Durango, Colorado**  
**(Total Phase 2 Cost: \$50,000)**

**BACKGROUND**

The Animas- La Plata (A-LP) Project was funded by the United States Bureau of Reclamation (USBR) as a municipal and industrial water supply project for the States of Colorado, New Mexico and the Ute Mountain and Southern Ute tribes. The project is located in southwest Colorado. The State of Colorado (State) has an allocation of 10,460 acre-feet (AF) of A-LP Project water (State Water).

In 2009, the State contracted with Brown and Caldwell to conduct an investigation of options for marketing this water to local water providers in the area. This preliminary study investigated capital repayment costs that would be owed by the State to the United States Bureau of Reclamation and identified water providers in the vicinity that would be interested in purchasing A-LP Project water. The State subsequently awarded Brown and Caldwell an additional contract to further refine the repayment costs that water providers will be expected to pay.

This Phase 2 investigation will build upon the results of Phase 1 and investigate additional areas as detailed below.

**SCOPE OF WORK**

Brown and Caldwell proposes to complete the following tasks in A-LP Project Water Marketing Supply and Demand Study – Phase 2 (A-LP Phase 2) to further assist in clarifying the amount of State Water that can be sold to water providers in Southwestern Colorado. Brown and Caldwell will evaluate the potential demand for the State Water taking into account the Tribes allocations of water under the A-LP project, and the fact that the Tribes may be able to sell or lease their water allocation for a lower cost. Brown and Caldwell will work closely with the Southwestern Water Conservation District (SWCD) to identify additional future water demands and other potential uses for State Water that cannot be sold reasonably soon to water providers in the area. The development of A-LP has been the result of a 25 year partnership among entities in Colorado and New Mexico and three Indian tribes. This study shall be conducted and the results presented in a manner that enhances and supports the long term cooperation between all of the entities involved in the A-LP project.

**Phase 100 – Refine Water Demand from the A-LP Phase 1 Study and Develop Buyers' Assistance Program (Total Phase 100: \$14,505)**

**Task 001 – Refine Water Demand from the A-LP Phase 1 Study**

**A. Municipal Suppliers Where Little or No Additional Future Water Supply Is Required:**

Courtesy letters will be written to the City of Durango, Town of Ignacio, Town of Bayfield, Pagosa Area Water, and Sanitation District and San Juan Water Conservancy District. These letters will provide notice of the State's intent to market this State Water to others.

**B. Municipal Suppliers Who Expressed Need for Additional Supply:**

Brown and Caldwell proposes to coordinate meetings with CWCB, SWCD and each of the three following water providers who have indicated interest in purchasing State Water. It is anticipated that these meetings will be held in Durango Colorado

1. La Plata West Water Authority (LPWWA): Brown and Caldwell will coordinate a meeting with the LPWWA in Durango to discuss the LPWWA's April 2009 letter and its ability to fund and construct the facilities to use the A-LP Project water.
2. Lake Durango Water Authority: Brown and Caldwell will coordinate a meeting with the LDWA in Durango to discuss the interest and ability to fund and construct the facilities to use the State Water. LDWA is in the process of conducting a master plan to evaluate the future water needs.
3. La Plata Archuleta Water District (LPAWD): Brown and Caldwell will coordinate a meeting to be held with the LPAWD board and its consultants to explore ways to utilize the State Water.

**Task 002 – Municipal Water Supply Purchasers' Assistance Program**

Utilizing the information gained concerning federal and state funding, Brown and Caldwell, together with CWCB and SWCD, will design financing programs and other programs as further defined below for identified potential purchasers of State Water to assist them in acquiring a share of the allocation of State Water thereby increasing sales. This program could include: providing assistance in obtaining loans and grants from Federal sources for pumping, conveyance and water treatment facilities and using available state funds including the CWCB loan fund to facilitate implementation of required facilities for pumping, conveyance, and treatment of the State Water. With policy direction from CWCB, Brown and Caldwell will provide the necessary staff to implement this task.

Brown and Caldwell will provide CWCB and SWCD with a technical memorandum summarizing Phase 200 when it has been completed.

**Phase 200 – Develop Joint Program with SWCD and CWCB for Marketing State Water for Purposes In Addition to the Municipal Water Supply for Providers Identified in A-LP Phase 1 (\$35,595)**

The objective of this program is to market the remaining portion of the State's Water not needed to meet local water needs.

As part of the effort in setting up a joint program with the SWCD and CWCB, Brown and Caldwell will work with the SWCD to expand the list of possible municipal water purchasers of the State's Water that can be reached by exchange or direct diversion. These potential municipal purchasers will be subsequently contacted and efforts made to assist these potential customers with acquiring a portion of the State's Water for municipal use. This work will be done in conjunction with the Colorado River Compact Compliance Study currently being conducted by the CWCB, and will defer to that work to the extent that the CWCB seeks to keep some of the tasks described below confidential because it may be in preparation for litigation. In addition, Brown and Caldwell will

use the Colorado Decision Support System (CDSS), or coordinate with the CWCB Staff or the Colorado River Compact Compliance Study consultants to make appropriate model runs using the CDSS. The CWCB will coordinate with work on a Colorado River Compact Water Bank being conducted by the SWCD, Colorado River Water Conservation District, CWCB, and The Nature Conservancy. To the extent that some of these tasks may require coordination with the Association Management Committee, Brown and Caldwell and/or CWCB will consult with the Committee and its members.

#### **Task 001 – Identify Additional In-Basin Demands for A-LP Water in Coordination with CWCB**

Brown and Caldwell will identify additional water demands by conducting the following tasks:

- A. Work with CWCB and SWCD to review updates to the Statewide Water Supply Initiative (SWSI) to determine if there is additional unmet future demand within the currently identified study area. Any identified water providers with additional demand will be contacted.
- B. Review the draft Colorado River Water Availability Study to determine if there are additional unmet demands identified in the Colorado River Basin.

#### **Task 002 – Identify Additional Demands Which Could be Satisfied by Exchange of State Water in the Dolores/San Juan/San Miguel and Colorado River Basins**

Brown and Caldwell will conduct an engineering exchange analysis for the Dolores/San Juan/San Miguel and Colorado River Basins to determine the potential for exchanging State Water in these basins.

#### **Task 003 – Determine the Potential to Use State Water to Eliminate Priority Call on Junior Reservoirs**

Using the results of the engineering exchange analysis, Brown and Caldwell will work with Colorado Attorney General's office, SWCD, CWCB, and Colorado State Engineer's Office to determine the feasibility to use State water to eliminate priority call on reservoirs such as McPhee, Vallecito, Lemon, Jackson, and Summit.

#### **Task 004 – Develop Marketing Program**

Brown and Caldwell will recommend actions required to sell State Water to entities with additional water demands. This will include quantifying demand, identifying timeline of when water is needed, and identifying necessary water rights, regulatory and legislative changes required to utilize the State Water. The Association will be consulted on regulatory and legislative changes required to utilize State Water, as appropriate.

Brown and Caldwell will provide CWCB and SWCD with a technical memorandum summarizing Phase 300 when it has been completed.



## **SCHEDULE**

A draft report will be provided to the CWCB and SWCD by November 1, 2010. Comments should be returned to Brown and Caldwell by November 19, 2010 and a final report will be provided to CWCB and SWCD by December 1, 2010.

## **PROJECT TEAM AND QUALIFICATIONS**

### **Leo M. Eisel, Ph.D., P.E., Executive Engineer**

Dr. Eisel has 39 years of experience in the area of water resources engineering and management. His resume is attached. He has testified on two different occasions in the Animas-La Plata litigation and is quite familiar with water markets in southwestern Colorado. He is a recognized water appraiser in Colorado and has done other economic investigations related to water (see resume). His formal economic training includes a minor in economics in his Ph. D. studies at Harvard University.

### **Laura Chavez, Water Resource Analyst**

Laura Chavez has 13 years of experience in water resources management. Ms. Chavez has extensive knowledge in water rights, regulatory compliance and permitting issues, especially related to water supply and artificial recharge, water conservation, and the coordination of regional planning coalitions

### **D. Randolph Seaholm, Contractor to Brown and Caldwell**

Randy Seaholm has nearly 36 years of experience in Colorado water resources management as former employee of the CWCB. Mr. Seaholm's knowledge of the study area and history of the A-LP will benefit the project.

**Exhibit A.**  
**Description of Project and Scope of Work**  
**Animas – La Plata Project Water Marketing Supply and**  
**Demand Study – Phase 2C**  
**Durango, Colorado**  
**(Total for Phase 2C: \$22,500)**

**BACKGROUND**

The Animas- La Plata (A-LP) Project was funded by the United States Bureau of Reclamation (USBR) as a municipal and industrial water supply project for the States of Colorado, New Mexico and the Ute Mountain and Southern Ute tribes. The project is located in southwest Colorado. The State of Colorado (State) has an allocation of 10,460 acre-feet (AF) of A-LP Project water (State Water).

In 2009, the State contracted with Brown and Caldwell to conduct an investigation of options for marketing this water to local water providers in the area. This preliminary study investigated capital repayment costs that would be owed by the State to the United States Bureau of Reclamation and identified water providers in the vicinity that would be interested in purchasing A-LP Project water. The State subsequently awarded Brown and Caldwell an additional contract to further refine the repayment costs that water providers will be expected to pay.

This study will build upon the results of Phase 1 and investigate additional areas as detailed below.

**SCOPE OF WORK**

Brown and Caldwell proposes to complete the following tasks in A-LP Project Water Marketing Supply and Demand Study – Phase 2 (A-LP Phase 2) to further assist in clarifying the amount of State Water that can be sold to water providers in Southwestern Colorado. Brown and Caldwell will evaluate the potential demand for the State Water taking into account the Tribes allocations of water under the A-LP project, and the fact that the Tribes may be able to sell or lease their water allocation for a lower cost. Brown and Caldwell will work closely with the La Plata Archuleta Water District (LPAWD) to identify additional future water demands and other potential uses for State Water that cannot be sold reasonably soon to water providers in the area. The development of A-LP has been the result of a 25 year partnership among entities in Colorado and New Mexico and three Indian tribes. This study shall be conducted and the results presented in a manner that enhances and supports the long term cooperation between all of the entities involved in the A-LP project.

**Phase 100 – Identify Additional Demands and Legal Implications of Using State Water (\$15,130)**

The objective of this program is to market the remaining portion of the State's Water not needed to meet local water needs.

As part of the effort in setting up a joint program with the LPAWD, SWCD and CWCB, Brown and Caldwell will work with these entities to expand the list of possible municipal water purchasers of the State's Water that can be reached by exchange or direct diversion. These potential municipal purchasers will be subsequently contacted and efforts made to assist these potential customers with acquiring a portion of the State's Water for municipal use. This work will be done in conjunction with the Colorado River Compact Compliance Study currently being conducted by the CWCB, and

will defer to that work to the extent that the CWCB, SWCD and LPAWD seeks to keep some of the tasks described below confidential because it may be in preparation for litigation. In addition, Brown and Caldwell will use the Colorado Decision Support System (CDSS), or coordinate with the CWCB Staff or the Colorado River Compact Compliance Study consultants to make appropriate model runs using the CDSS. The CWCB will coordinate with work on a Colorado River Compact Water Bank being conducted by the SWCD, Colorado River Water Conservation District, CWCB, and The Nature Conservancy. To the extent that some of these tasks may require coordination with the Association Management Committee, Brown and Caldwell and/or CWCB will consult with the Committee and its members.

### **Task 001– Colorado River Compact Compliance**

Using the results of the engineering exchange analysis, Brown and Caldwell will work with Colorado Attorney General's office, CWCB, and Colorado State Engineer's Office to determine the feasibility to use State water to meet Colorado's obligation under the Colorado River Compact during droughts. To the extent that this task may be duplicative of the work occurring in the Colorado River Compact Compliance Study and the Compact Water Bank Study, Brown and Caldwell will defer to the work being done pursuant to these studies.

### **Task 002– Climate Change Analysis**

Brown and Caldwell will work with SWCD, CWCB, and Colorado State Engineer's Office to examine the feasibility for using State Water to meet long-term potential shortages resulting from reduced supply due to climate change.

### **Task 003 – Identify Legal Issues That Could Affect the Use of State Water:**

- A. Brown and Caldwell, CWCB and SWCD will work with the State Attorney General's office to identify legal issues that may limit potential uses of A-LP Project water. These legal issues include questions, such as; do A-LP water rights allow use of water in areas of the State that may be identified by this study?
- B. Examine hurdles to changing Federal law to expand uses of A-LP water. This may result in recommending legislation to allow additional uses of A-LP water beyond municipal use.

Brown and Caldwell will provide LPAWD, CWCB and SWCD with a technical memorandum summarizing Phase 300 when it has been completed.

### **Phase 200 – Evaluate Option of Leasing if State Water Reverts to Tribes (Total: \$7,370)**

The Southern Ute Indian Tribe and the Ute Mountain Ute Tribe have indicated a willingness to discuss the sale or lease of water to the State or other third-party entities in the event the State Water reverts to the Tribes. This section of the Phase 2 study would help the CWCB evaluate the potential sale and lease terms, and any other restrictions. The tasks are outlined below.

#### **Task 001 – Support CWCB Consultations with Tribal Representatives**

The CWCB will contact and work with Tribal representatives to evaluate how the Tribes and non-Indian water users could cooperate if the State Water reverted to the Tribes. Brown

and Caldwell will support the CWCB in this work, as requested. One example of support that Brown and Caldwell may be asked to perform would be to outline terms of potential sale or lease to non-Indians by the Tribes of reverted State Water or the Tribes' current allocation.

### **Task 002 – Evaluate Potential Restrictions if Tribes Hold State Water**

At the direction of CWCB, Brown and Caldwell will work with the Attorney General's office, and SWCD to determine how water rights, decrees, regulations and existing legislation may affect use of State Water by Ute tribes if the State Water reverts to the Ute tribes.

If appropriate, Brown and Caldwell will provide LPAWD, CWCB and SWCD with a technical memorandum summarizing Phase 400 when it has been completed.

## **SCHEDULE**

A draft report will be provided to the LPAWD, CWCB and SWCD by November 1, 2010. Comments should be returned to Brown and Caldwell by November 19, 2010 and a final report will be provided to CWCB and SWCD by December 1, 2010.

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