

# 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



TO: Colorado Water Conservation Board Members

Bill Ritter, Jr.  
Governor

FROM: Eric Hecox and Todd Doherty  
Intrastate Water Management & Development

Harris D. Sherman  
DNR Executive Director

DATE: January 23, 2009

Jennifer L. Gimbel  
CWCB Director

SUBJECT: **Agenda Item 7 Addendum,  
January 27-28, 2009 Board Meeting  
Water Supply Reserve Account (WSRA) Account Balance Summary**

Dan McAuliffe  
CWCB Deputy Director

### Staff Recommendation

Several options are identified for Board discussion.

### Background

The Water Supply Reserve Account (WSRA) is funded out of the DNR Operational Account of the Severance Tax Trust Fund and is a "Tier 2" program.

Pursuant to Section 39-29-109.3(4), C.R.S., statutory transfers from the Operational Account of the Severance Tax Trust Fund are made in three annual installments. These installments include 40 percent of authorized funding being transferred on July 1 of a fiscal year, 30 percent being transferred on January 4, and the final 30 percent being transferred on April 1. Pursuant to this statute, the two 30 percent transfers are contingent upon there being sufficient revenue in the Operational Account to fully fund "Tier 2" programs (that is, programs authorized in Section 39-29-109.3(2), C.R.S.). If there are not sufficient revenues to meet these conditions, the statute requires proportional reductions to be made to all of the annual Tier 2 transfers. According to the statute, the condition that there is sufficient revenue for the 30 percent transfers is to be based on the revenue estimate made by Legislative Council Staff in December and March respectively.

The WSRA was authorized to receive a total of \$10 million in Fiscal Year 2008-2009. It received \$4 million on July 1, 2009. Of the \$4 million, \$2.7 million went into the Basin Accounts (thus fully funding each Basin Account at \$1 million), and \$1.3 went into the Statewide Account.

Staff recently learned that there is sufficient revenue in the Operational Account to fully fund all Tier 2 programs. Therefore, the WSRA received an additional \$3 million in January, 2009 which went into the Statewide Account.

These transfers and the current balances of the Basin Account and Statewide Account are summarized below.

<b>Water Supply Reserve Account Balances</b> <b>January 23, 2009</b>			
	Basin Accounts	Statewide Account	Total
Water Supply Reserve Account Grants Given	\$5,545,232.46	\$13,260,377.42	\$18,805,609.88
WSRA Allocation 2006-2007 (\$500,000/basin)	\$4,500,000	\$5,500,000	\$10,000,000
WSRA Allocation 2007-2008 (\$200,000/basin)	\$1,800,000	\$4,200,000	\$6,000,000
WSRA Allocation 2008-2009			
7/1/08 (\$300,000/basin)	\$2,700,000	\$1,300,000	\$4,000,000
1/1/09	\$0.00	\$3,000,000	\$3,000,000
4/1/09	\$0.00	\$3 million possible	
Total	\$9,000,000	\$14,000,000.00	\$23,000,000.00
<b>Water Supply Reserve Account Balance</b>	<b>\$3,454,768</b>	<b>\$739,622</b>	<b>\$4,194,390</b>

### **Analysis**

The results of receiving full July and January transfers are three fold:

1. All the applications already approved by the Board can be fully funded
2. Each Basin Account can be fully funded at \$1 million each per the Criteria and Guidelines
3. The Statewide Account has a balance of \$739,622

However, additional revenue coming into the WSRA is uncertain. The WSRA may or may not receive additional funding in April, 2009 and/or next fiscal year. Legislative Council Staff have significantly lowered the projection of severance tax revenue receipts and funding for Tier 2 programs will need to be reconciled with revenue shortfalls.

### **Options for Moving Forward**

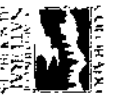
**Basin Account:** There are sufficient funds in each Basin Account to continue approving WSRA applications up to \$1 million per Basin. However, additional Basin Account funding in Fiscal Year 2009-2010 is uncertain.

**Statewide Account:** Staff has identified three options for the Statewide Account:

1. At the March Board meeting consider applications to the available funds in the Statewide Account (\$739,622).
2. Delay consideration of application to the Statewide Account until the May Board meeting. By May staff will know whether or not additional funds were received from the April transfer. This option allows for two rounds of Statewide applications in 2009.
3. Delay consideration of applications to the Statewide Account until the September Board meeting. By September staff will know whether or not additional funds were received from the April transfer and have a good idea of funding levels for Fiscal Year 2009-2010. This option will result in only one round of Statewide applications in 2009, but the Basin Roundtables and the Board will have a better idea of future funding levels when making funding decisions.

#7

Water Supply Reserve Account Applications for Consideration at the CWCB March 2009 Board Meeting									
Basin	Applicant	Name of Water Activity	Date Received	CWCB Meeting	Basin Account Request	Statewide Account Request	Total Request	Type of Water Activity	Reviewer
Arkansas	Upper Arkansas Water Conservancy District	UAWCD Hydrologic Water Balance Study	Jan-08		\$0	\$180,000	\$180,000	Study or analysis of non structural, consumptive, or nonconsumptive water needs and projects	
Arkansas	City of Pueblo	Bedload/Sediment Collection and Removal Technology - Fountain Creek	Jan-08		\$40,000	\$185,000	\$225,000	Study or analysis of structural, non structural, nonconsumptive water needs, projects	
Arkansas	Upper Black Squirrel Designated Groundwater Management District	Upper Black Squirrel Water Balance Study	Jan-09		\$25,000	\$85,000	\$110,000	Study or analysis of non structural, consumptive, or nonconsumptive water needs and projects	
Arkansas Basin Total Requests									
					\$65,000	\$450,000	\$515,000		
Colorado	NWCoG	Non Consumptive Needs Assessment	Jan-09		\$315,210	\$0	\$315,210	Study or analysis of nonconsumptive water needs	
Colorado Basin Total Requests									
					\$315,210	\$0	\$315,210		
Gunnison	City of Grand Junction Water Enterprise Fund	Juniata Reservoir Enlargement Project	Jan-09		\$25,000	\$72,000	\$97,000	Structural and/or nonstructural water project or activity	
Gunnison	Ridgeway Upper Gunnison River Water Conservancy District (on behalf of Gunnison BRT)	Ridgeway Ditch and Lake Otazawanda Improvement Project	Jan-08		\$50,000	\$58,500	\$108,500	Technical assistance regarding permitting feasibility studies and environmental compliance; and study or analysis of structural project or activity	
Gunnison		Agricultural Water Needs Assessment and Water Supply Analysis	Jan-09		\$111,480	\$74,320	\$185,800	Study or analysis of consumptive water project or activity	
Gunnison Basin Total Requests									
					\$186,480	\$205,820	\$392,300		
Metro	South Metro	Aquifer Recharge Pilot Study	Jan-09		\$0	\$1,167,000	\$1,167,000	Study or analysis of consumptive water project or activity	
Metro Basin Total Requests									
					\$100,000	\$1,167,000	\$1,267,000		



Basin	Applicant	Name of Water Activity	Date Received	CWCS Meeting	Basin Account Request	Statewide Account Request	Total Request	Type of Water Activity	Reviewer
Rio Grande	San Luis Valley Resource Conservation & Development Council	Lower Willow Creek Restoration Project	Jan-09		\$50,000	\$200,000	\$250,000	Structural and/or nonstructural water project or activity	
Rio Grande	Trinchera Irrigation Company	Sangre de Cristo Trinchera Diversion Canal Restoration	Jan-09		\$50,000	\$200,000	\$250,000	Structural and/or nonstructural water project or activity	
Rio Grande Basin Total Request					\$100,000	\$400,000	\$500,000		
South Platte	Ducke Unlimited Fort Morgan Reservoir and Irrigation Company and Groves Farms, LLC	Central South Platte Wetland Partnership: South Platte River, Colorado	Jan-09		\$150,000	\$0	\$150,000	Environmental compliance and feasibility study and structural and/or nonstructural water project or activity	
South Platte								Structural and/or nonstructural water project or activity	
South Platte Basin Total Requests					\$250,000	\$650,000	\$1,100,000		
Southwest	La Plata Archuleta Water District	La Plata Archuleta Water District	Jan-09		\$0	\$500,000	\$500,000	Technical assistance regarding permitting feasibility studies and environmental compliance	
Southwest	Lower Blanco River Restoration	Lower Blanco River Restoration Project	Jan-09		\$100,000	\$300,000	\$400,000	Structural and/or nonstructural water project or activity	
Southwest	Florida Mesa Canal Companies	Canal Seepage Reduction Program	Jan-09		\$0	\$1,000,000	\$1,000,000	Technical assistance regarding permitting feasibility studies and environmental compliance; and study or analysis of structural project or activity	
Southwest	Florida Mesa Canal Companies	Ditch Loss, Hydropower, and Monitoring Improvement Program	Jan-09		\$100,000	\$0	\$100,000	Technical assistance regarding permitting feasibility studies and environmental compliance; and study or analysis of structural project or activity; structural water project	
Southwest Basin Total Requests					\$200,000	\$1,800,000	\$2,000,000		
Water Supply Reserve Account Total January Requests					\$1,250,000	\$4,872,850	\$6,239,510		

# 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



TO: Colorado Water Conservation Board Members

FROM: Todd Doherty  
Intrastate Water Management and Development Section

DATE: January 18, 2009

SUBJECT: **Agenda Item 7, January 27-28, 2009 Board Meeting**  
**Water Supply Reserve Account Grant Applications**

Bill Ritter, Jr.  
Governor

Harris D. Sherman  
DNR Executive Director

Jennifer L. Gimbel  
CWCB Director

Dan McAuliffe  
CWCB Deputy Director

### Staff Recommendation

A summary of staff's recommendation for each grant request is provided in the table below. Favorable recommendations may be contingent on providing the CWCB with additional information, clarifications, or modifications in the scope of work. Please refer to the Water Activity Summary Sheets contained within this agenda item to find a summary of staff's review and any conditions associated with each recommendation.

	Basin	Project Name	Total Request	Recommendation
a.	South Platte and Metro	Lost Creek Basin – Aquifer Recharge and Storage Study	\$160,000	To fund up to \$80,000 from the South Platte Basin Account and up to \$80,000 from the Metro Basin Account.
b.	Southwest	Molas Lake Ditch Rehabilitation and Diversion Structures	\$95,000	To fund up to \$100,000 from the Southwest Basin Account

## Background

During this agenda item the Board will be provided with a brief overview of the two applications that are requesting money from the Water Supply Reserve Account (WSRA). Attachments to this memo include:

- Summary spreadsheet summarizing funding requests and summarizing to date activities for the basin and statewide accounts;
- Water Activity Summary Sheet which provides an overview, discussion, issues/additional needs and staff recommendation regarding funding, partial funding, or not funding the applications; and
- Copies of the full applications, Basin Roundtable approval letters and any supporting documentation provided by the applicants.

Staff's review of the applications involved the following procedures and steps:

- 1) The applications were reviewed for completeness based on the information requirements, which are primarily outlined in Part 2 of the Criteria and Guidelines.
- 2) The applications were reviewed to verify that the water activity met the **eligibility requirements** in Section 39-29-108 (III) C.R.S. (also outlined in Part 2 of the Criteria and Guidelines) and the **threshold criteria**, which are based on the requirements of Section 39-29-108 (III) C.R.S., and two sections of the Water for the 21st Century Act (House Bill 1177); Section 37-75-102 and Section 37-75-104(2)(c) (see Part 3 of the Criteria and Guidelines). Staff also verified whether that the applicant was an **eligible entity** to receive funding (see Part 2 of the Criteria and Guidelines).
- 3) This funding cycle only provided for funding from the Basin Accounts. Therefore, staff did not need to review the applications for conformance with the **evaluation criteria**.
- 4) Staff then prepared the Water Activity Summary Sheet which documents the outcome of the review process and contains staff's recommendations.

**Water Supply Reserve Account Balances November 2008 (No Interest Included)**

	<b>Total Basin Grants*</b>	<b>Combined Basin Funds (Fiscal Years, 2006-09)</b>	<b>Basin Account Balances*</b>	<b>Total State Grants*</b>	<b>Statewide Fund Balance</b>
<b>Arkansas</b>	\$783,781	\$1,000,000	\$216,219	\$3,193,287	
<b>Colorado</b>	\$535,000	\$1,000,000	\$465,000	\$2,227,900	
<b>Southwest</b>	\$462,000	\$1,000,000	\$538,000	\$2,240,000	
<b>Gunnison</b>	\$413,965	\$1,000,000	\$586,035	\$961,660	
<b>Metro</b>	\$813,139	\$1,000,000	\$186,861	\$200,000	
<b>North Platte</b>	\$849,715	\$1,000,000	\$150,285	\$311,027	
<b>Rio Grande</b>	\$669,950	\$1,000,000	\$330,050	\$2,617,400	
<b>South Platte</b>	\$563,111	\$1,000,000	\$436,889	\$1,260,269	
<b>Yampa/White</b>	\$454,572	\$1,000,000	\$545,428	\$248,835	
<b>Total</b>	\$5,545,232	\$9,000,000	\$3,454,768	\$13,260,377	\$3,739,623
<b>*WSRA grant requests that have been approved by the CWCB</b>					
<b>Total Grants (Basin and Statewide Accounts)</b>		\$18,805,610			

**Water Supply Reserve Account – Grant and Loan Program  
Water Activity Summary Sheet  
Agenda Item 7a**

**Applicant:** Lost Creek Groundwater Management District

**Water Activity Name:** Lost Creek Aquifer Recharge and Storage Study

**Water Activity Purpose:** Study of nonstructural/consumptive water needs

**County:** Arapahoe, Adams and Weld

**Drainage Basin:** South Platte

**Water Source:** South Platte

**Amount Requested:** \$160,000 (\$80,000 South Platte and Metro Basin Accounts)

**Matching Funds:** \$13,000

<b>Staff Recommendation</b>
Staff recommends approval of up to \$80,000 from the South Platte Basin Account and \$80,000 from the Metro Basin Account to help fund the Lost Creek Aquifer Recharge and Storage Study contingent on resolution of the items in the issues/additional needs section.

**Water Activity Summary:**

The objectives of this study are to compile, collect, and analyze hydrologic, aquifer property and water quality data to characterize the ground water resources in the alluvial aquifer and evaluate geographic, infrastructure, land ownership/use information for the purposes of assessing the potential for aquifer recharge and storage implementation. To address the needs of in-basin water rights holders and assist the management district in their decision-making processes, the applicants propose to:

1. Characterize the configuration and extent of the alluvial aquifer within the Lost Creek basin;
2. Compile and present current and historic ground-water levels and water level trends;
3. Characterize the amount of natural recharge and estimate the available storage capacity in the alluvial aquifer;
4. Determine hydraulic and storage properties of the alluvial aquifer;
5. Present the spatial relationship with the underlying Denver Basin bedrock aquifers;
6. Characterize the land use and ownership; and
7. Identify the existing water delivery infrastructure.



**Discussion:**

As indicated by the applicant, storage of water underground has many benefits over surface water storage including no evaporative losses, less security threat, lower vulnerability of contamination, less permitting hurdles and potentially lower implementation costs. The applicant also highlighted several relevant findings identified in SWSI including the fact that the South Platte basin has a water supply gap over 90,000 AF, competition in the basin is fierce, water supplies are not necessarily where demands are located, the reliance on non-renewable groundwater remains unresolved and new water development will most likely require additional storage. Lastly, the applicant refers to SB 06-193 directing the CWCB to study potential underground water storage areas in the South Platte and Arkansas River basins. Aquifers within those basins were evaluated for 10 criteria representing hydrogeologic, environmental, and implementation considerations. The two highest scoring subregions in the South Platte River basin were Lower Lost Creek and Upper Lost Creek, where the estimated storage capacity in the Lost Creek basin was over 1.4 million acre-feet.

While staff agrees with the applicant on the benefits of aquifer storage and recharge and that the SB 06-193 study demonstrated potential for aquifer recharge and storage in the Lost Creek aquifer, there are still broader questions that appear to remain unanswered. Primarily, the project does not identify a source of water for recharge purposes nor does it identify an end user. The scope of work includes the “identification of priority areas for potential aquifer recharge pilot areas” but does not provide enough information to determine if an evaluation of potential water supplies or end users is contemplated. Staff supports the overall concept of investigating aquifer recharge and recovery yet feels that without an identified water source or end user these funds could potentially be used for a project more likely to be implemented.

**Threshold and Evaluation Criteria:**

The application/project meets all four Threshold Criteria. No Statewide funds are being requested, therefore the evaluation criteria does not apply.

**Issues/Additional Needs:**

- Please include a more detailed project schedule that includes start and completion dates for key project milestones.
- Please provide a more detailed budget including level of effort for each task.
- Please provide more information for Task 3, specifically the analysis dealing with infrastructure and the subtask that will “identify priority areas for potential aquifer recharge pilot studies.”

**Staff Recommendation:**

Staff recommends approval of up to \$80,000 from the South Platte Basin Account and \$80,000 from the Metro Basin Account to help fund the Lost Creek Aquifer Recharge and Storage Study contingent on resolution of the items in the issues/additional needs section.

All products, data and information developed as a result of this grant must be provided to CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.

**Water Supply Reserve Account – Grant and Loan Program  
Water Activity Summary Sheet  
Agenda Item 7b**

**Applicant:** Town of Silverton

**Water Activity Name:** Molas Lake Ditch Rehabilitation and Diversion Structures

**Water Activity Purpose:** Structural Water Project

**County:** San Juan County

**Drainage Basin:** Animas River

**Water Source:** Molas Creek

**Amount Requested:** \$95,000 (Southwest Basin Account)

**Matching Funds:** Approximately \$1.1 million from the Town of Silverton and grant money have contributed towards the overall project.

<b>Staff Recommendation</b>
The proposed project meets a water supply need in the Southwest Basin. Staff recommends approval of up to \$95,000 from the Southwest Basin Account to help construct improvements to the Molas Lake Ditch and its diversion structures contingent on resolution of the items in the issues/additional needs section.

**Water Activity Summary:**

The improvements to the Molas Lake Ditch and diversion structures are part of a broader project to rehabilitate Molas Lake, which provides water storage to Silverton and other entities. The ditch and diversion improvements are required to meet Federal and State requirements for the conveyance and measurement of water into and out of Molas Lake. The purpose of the project is to perfect an augmentation water supply for the Town of Silverton, while protecting and enhancing the recreational features of Molas Lake Park. Though not the subject of the current application the other components of the project are complete and include: significant improvements to the Molas Lake Dam to increase water storage, meeting State requirements, campground enhancements and re-vegetation at the adjacent park, mitigation of wetlands, and filing for additional water storage rights for Molas Lake to include augmentation uses.

The complicated nature of the Molas Lake project has brought numerous federal, state, and local partners together. The Town has been working through the permitting and water rights processes since 2006, incurring costs of about \$70,000 to date. All necessary permits are now in place. The subject ditch improvements and diversion structures have been required by the US Forest Service and the Bureau of Land Management. In addition, the Colorado Water Conservation Board Staff is currently negotiating with the Town of Silverton to determine the appropriate mitigation and/or terms and conditions associated with the enlargement of the dam and the inundation of the Board's natural lake water right on Molas Lake.

The originally proposed improvements to the diversion have been modified to include a secondary structure upstream of the original diversion. The requirement of this new structure has doubled the projected cost for the Town. To obtain the Federal approval necessary for the Lake's pending water rights Silverton has agreed to construct the additional diversion structure, but is struggling to fund the additional requirements. Due to

the limitations of Silverton's small annual operating budget, grants have been critical to the Molas Lake project, providing over \$900,000 towards the project.

Although permitting and engineering for the Molas Ditch is complete, the rise in construction costs, combined with unanticipated permitting and legal expenses has left the ditch and diversion improvements unfunded. Silverton is seeking funds to assist with the construction, inspections, and final permitting submittals of the Molas Lake Ditch rehabilitation and diversion structures.

#### *Threshold and Evaluation Criteria*

The application/project meets all four Threshold Criteria. No Statewide funds are being requested, therefore the evaluation criteria does not apply.

#### *Funding Overview*

Grant funding in the amount of \$95,000 is being requested from the Southwest Basin Account. Funding from the WSRA constitutes about 9% of the overall project cost (\$1,090,999). Funding for the remainder of the project has been secured and spent.

#### **Discussion:**

As identified in the SWSI findings, small municipalities such as the Town of Silverton often lack sufficient funding to develop their water supplies and infrastructure without financial aid. As the beneficiary of multiple grants the Molas Lake project has successfully completed most of its objectives with the exception of the ditch and diversion improvements that are the subject of this application. These improvements and structures are critical to the operation and water rights of Molas Lake.

Through the storage of augmentation water and recreation at the Molas Lake Park, the WSRA money would enable the completion of a structural project to meet Silverton's consumptive and non-consumptive needs.

#### **Issues/Additional Needs:**

- Staff is aware that negotiations with the CWCB staff regarding the inundation of the Molas Lake natural lake level water right have been inactive for approximately 18 months and encourages the Town to resolve these outstanding issues.
- Please include a more detailed scope of work and budget.
- Please include a project schedule that includes completion dates for key project milestones.

#### **Staff Recommendation:**

Staff recommends approval of up to \$95,000 from the Southwest Basin Account to enable the completion of the Molas Lake Ditch rehabilitation and diversion structure construction contingent on resolution of the items in the issues/additional needs section.

All products, data and information developed as a result of this grant must be provided to CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.