

# Colorado Water Conservation Board

FINANCE COMMITTEE MEETING  
SEPTEMBER 10, 2014  
GLENWOOD SPRINGS, COLORADO



Colorado Water Conservation Board  
Department of Natural Resources

2014

# **COLORADO WATER CONSERVATION BOARD**

## **Finance Committee Agenda**

**1:00 pm – 5:00 pm**  
**Wednesday, September 10, 2014**  
**Glenwood Springs, Colorado**

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- |               |  |
|---------------|--|
| <b>1:00pm</b> | <b>Opening Comments/Agenda Review</b>  |
| <b>20min</b>  | <b>FY2014 Recap and FY2015 Outlook</b>   |
| <b>20min</b>  | <b>Loan Processing Procedures</b>  |
| <b>20min</b>  | <b>Policy Change Regarding CWCB Loan Interest Rates</b>  |
| <b>120min</b> | <b>Construction Fund - Non-Reimbursable Project Investments</b><br><br><b>(20min) Funds Available for NRI - Growth Policy</b><br><br><b>(100min) NRI Presentations by CWCB Staff</b> |
| <b>20min</b>  | <b>Rio Grande Water Conservation District - Subdistricts 1-6</b>   |
| <b>20min</b>  | <b>Continuation of South Platte Groundwater Level Data Collection and Analysis.</b>  |
| <b>20min</b>  | <b>Water Plan Finance Chapter</b>  |
| <b>5:00pm</b> | <b>Adjourn</b>   |



**COLORADO**  
Colorado Water  
Conservation Board  
Department of Natural Resources

1313 Sherman Street  
Denver, CO 80203

P (303) 866-3441  
F (303) 866-4474

John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

**TO:** Colorado Water Conservation Board  
Finance Committee Members

**FROM:** Kirk Russell, P.E., Finance Section Chief

**DATE:** September 10, 2014

**RE:** 2014 Finance Committee

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The purpose of the Finance Committee Meeting is to review CWCB's funds available for applications received for Construction Fund - Non-reimbursable Project Investments (NRI). The growth of the Construciton Fund is guided by the Financial Policies of the CWCB. If projects are approved by the Committee they will be put on the November Board Meeting Agenda for final approval. Upon final approval by the full Board, the items will be included in the 2015 CWCB Projects Bill. The Project Manager or Section Chief will present the NRI Projects and be available to answer questions.

In addition to the NRI project review the 2014 Finance Committee Meeting will include the following items:

- 1) Recap of Fiscal Year 2014/15 funding
- 2) Overview of Loan Approval Process
- 3) Recommended Revisions to Financial Policy #7 - Lending Interest Rates
- 4) Rio Grande Water Conservation District - Subdistricts 1-6 funding
- 5) Continuation of South Platte Groundwater Level Data Collection and Analysis

If you have any questions or have a topic you would like to have included in the agenda please call me at 303-866-3441, x3232.



TAB 1

# CWCB Construction Fund

## FY 2014 Recap

<== as of 7/2/2014

	(\$Millions)	
1 <b>Revenue</b>		
2   Unreserved Cash Balance at Beginning of FY 13/14	\$27.2	
3   Cash in from Treas./Loan P&I	\$19.2	<= \$1.3+17.9M
4   Cash in from FML	\$17.0	
5   Deauthorizations or Reversals	\$18.4	
6                                  Revenue SubTotal	\$81.8	
7 <b>Expenses</b>		
8   2013 Long Bill (FY 13/14 Operations)	\$7.2	(7/1/2013)
9		
10   Water Project Loans (\$30M of WISE remains)	\$37.8	Approved in FY 13/14
11                                  Water Project Loans SubTotal	\$45.0	
12		
13   2014 Long Bill (FY 14/15 Operations)	\$7.3	(7/1/2014)
14   Auto Authorization (Refresh)	\$0.6	(7/1/2014)
15   Approved Non-Reimbursable Investments	\$5.5	2014 Projects Bill - HB 14-1333
16                                  SubTotal	\$13.4	
17		
18                                  Expenses SubTotal	\$65.6	
19		
20 <b>Balance</b>	<b>\$16.2</b>	

Kirk Russell, Chief  
August 29, 2014

# CWCB Severance Tax PBF

# FY 2014 Recap

		(\$Millions)	
1	<b>Revenue</b>		
2	Unreserved Balance at Beginning of FY 13/14	\$77.0	
3	Cash in from Treasury Int/Loan P&I	\$18.2	< = \$1.5M+16.7M
4	Cash from Severance Tax Revenue	\$52.0	
5	Loan Deauthorizations or Reversals	\$6.5	
6	Revenue Subtotal	\$153.7	
7	<b>Expenses</b>		
8	Emergency Flood Response Loans	\$18.7	Approved in FY 13/14
9	Water Project Loans (\$22M of Chatfield remains)	\$69.2	Approved in FY 13/14
10	Emergency Agricultural Drought Grant	\$1.0	Disbursed FY13/14
11	Wildfire Response (Rio Grande)	\$2.5	July 2014 Meeting
12	Project Funding - Rio Grande Cooperative #2	\$15.0	7/1/2013 - SB S12-002
13	Authorized Proj. Funding (Colorado River By-Pass)	\$2.0	7/1/2013 - SB 13-181
14	Authorized Investment (Chatfield #2)	\$14.0	1/1/2014 - SB 13-181
15	Authorized Investment (Chatfield #2a)	\$14.0	6/30/14 - SB 13-181
16	Project Funding - Long Hollow Reservoir	\$1.6	7/1/14 - HB 14-1333
17	Expenses Subtotal	\$138.0	
18			
19	<b>Balance</b>	<b>\$15.70</b>	

Kirk Russell, Finance Section Chief  
August 29, 2014

**Colorado Water Conservation Board  
September 10, 2014 Finance Committee**

**Projections of Total Loan/Grant Funds Available Through FY15/16 for Budgeting Discussion**

1	7/1/14	Severance Tax PBF	Constructon Fund
2		(\$Millions)	(\$Millions)
3	+ \$ 16.0	Unobligated 7/1/14	+ \$ 16.0 Unobligated 7/1/14
4	+ \$ 50.0	ST Projections FY14/15	+ \$ 17.0 Federal Mineral Lease Projections FY14/15
5	+ \$ 13.0	Loan Prin. Int. and Treas. Int.	+ \$ 14.0 Loan Prin. Int. and Treas. Int.
6	+ \$ 2.0	Deauthorizatons/Early Payoffs	+ \$ 2.0 Deauthorizatons/Early Payoffs
7	\$ 81.0		\$ 49.0
8			
9	- \$ 21.0	Previous Loan Commitments (Chatfield)	- \$ 29.0 Previous Loan Commitments (WISE)
10	- \$ 25.0	Projected Loan	- \$ 5.0 Projected Loans
11	- \$ 29.0	SB 13-181 (Chatfield) 1/1/15	- \$ 13.0 15/16 (Operations/NRI Programs) 7/1/15
12	\$ 75.0		\$ 47.0
13			
14	\$ 6.0		\$ 2.0
15			
16	\$ 30.0	Assume we approve \$30M (Average)	
17	\$ 8.0	Avail for new loans on 7/1/2015	
18			
19	7/1/15	Severance Tax PBF	Constructon Fund
20		(\$Millions)	(\$Millions)
21	+ \$ 6.0	Unobligated 7/1/15	+ \$ 2.0 Unobligated 7/1/15
22	+ \$ 50.0	ST Projections FY15/16	+ \$ 16.0 Federal Mineral Lease
23	+ \$ 13.0	Loan Prin. Int. and Treas. Int.	+ \$ 14.0 Loan Prin. Int. and Treas. Int.
24	\$ 69.0		\$ 32.0
25			
26	- \$ -	Total FY 15/16 Obligations	- \$ 14.0 16/17 (Operations/NRI Programs) 7/1/16
27	\$ -		\$ 14.0
28			
29	\$ 69.0		\$ 18.0
30			
31	\$ 30.0	Assume we approve \$30M (Average)	
32	\$ 57.0	Avail for new loans on 7/1/2016	

September 10, 2014  
Kirk Russell, Chief  
Finance Section

TAB 2





## COLORADO

### Colorado Water Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

To: Finance Committee  
Colorado Water Conservation Board

From: Anna Mauss, P.E., Marketing & Project Manager  
Finance Section

Date: September 10, 2014

Subject: Loan Processing Procedures  
Water Project Loan Program

**This item is for information only - no action required**

#### Introduction

The CWCB Finance Section staff has a screening process it goes through before loans are recommended for approval and presented at Board Meetings. Because the Board does not get to see the behind the scenes effort, the intent of this memo is to share information on the assessment process.

#### Background

The first step in the loan process is typically a phone call or email to staff by a potential borrower to discuss a project and whether or not it is eligible for a CWCB loan. This is a very important step in the process since the cost to prepare a Loan Feasibility Study can be \$20,000. Staff fielded sixty (60) loan inquiries during the first six months of 2014. As a result:

- 22 loans were approved by the Board
- 5 submitted Loan Feasibility Studies and Applications but were not presented to the Board as a result of concerns identified during staff review
- 4 were identified as potentially eligible but further investigation is required
- 10 were identified as not likely to receive a favorable recommendation

The five that submitted Loan Feasibility Studies but were never presented to the Board included a ditch company that simply did not provide enough information to review the project and ability to repay the loan, two private borrowers that did not show the ability to cover the debt service or meet the CWCB collateral requirements, a Metropolitan District that opted to withdraw its loan request until the results of an election to take on debt, and a Metropolitan District that did not show the ability to cover the debt service on the loan with its existing revenue source.



The four that were identified as potentially eligible included a private fishing club, a fish farm, a dam with a single family owner, and a flood control project in which a non-profit agency contacted the CWCB but it needs to collaborate with local entities to determine who would be the borrower in the loan contract.

The 10 that were eliminated based on preliminary discussions were done so for a variety of reasons, including:

- Unincorporated ditches (that need to incorporate in order to borrow from the CWCB)
- Private developers looking to speculate on the purchase water rights
- Projects that do not fit the program (i.e. on farm improvements, or potable system repairs)
- Lack of insurance by potential borrower
- Loan amounts under \$50,000
- Hydro projects where a private developer wants to add hydro to another owner's system

After a borrower has cleared the initial screening process, it must submit a Loan Feasibility Study and application. This information is thoroughly analyzed by CWCB Finance staff members and then presented in a staff level project review meeting. The project review meeting members include the Finance Section, members of other sections if projects have any crossover (i.e. In-Stream Flow or Water Supply Planning), and staff of the Attorney General's office. Following that meeting, a final staff recommendation is prepared for the Board meeting.

Below is a breakdown of loans approved over the past 10 years.

**TABLE 1: 10-YEAR LOAN SUMMARY**

Fiscal Year	Number of Loans	Total Loan Amount
2014	54	\$170,651,661
2013	19	\$55,657,842
2012	18	\$31,829,207
2011	8	\$17,947,953
2010	12	\$15,214,978
2009	14	\$27,237,478
2008	16	\$88,988,150
2007	13	\$89,595,696
2006	13	\$17,771,461
2005	17	\$14,552,544
Average	18	\$53 M*

*\*\$53M is the average including the Project's Bill loans (i.e. loans over \$10M). If Project's bill loans are excluded, the average is 17 loans annually for a total of \$23M.*



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources

# WATER PROJECT LOAN PROGRAM

## CWCB Mission

To promote the protection, conservation, and development of Colorado's water resources for present and future generations.

## Purpose of Program

The CWCB Water Project Loan Program provides loans for **Raw Water Supply Projects**.

## Eligible Projects

- **RESERVOIRS/DAMS**  
New raw water storage or enlargement of existing reservoirs, and dam repairs to recover restricted capacity.
- **WATER SUPPLY SYSTEMS**  
Rehabilitate or construct agricultural or municipal raw water supply systems such as (diversion structures, ditches, headgates, pipelines, wells, hydropower, etc.)
- **WATER RIGHTS ACQUISITION**  
Purchase must satisfy existing need or shortage.
- **FLOOD CONTROL PROJECTS**

## Project Financing

Loans are available for up to **90 Percent** of the total engineering and construction costs of the project.

Loan term: **up to 30 years**

2014/2015 Interest Rates\* for a 30-year term:

Agricultural	<b>2.0%</b>		
Municipal	Low <b>2.75%</b>	Medium <b>3.25%</b>	High <b>3.50%</b>
Commercial	<b>6.00%</b>		

\* Rates reduce by 0.25% for 20-year loans, and by 0.50% for 10-year loans.

**1.0% loan service fee will be applied**

## Loan Application Procedure

The applicant must submit a Loan Application and Loan Feasibility Study. The Study shall include technical, financial, and institutional feasibility of the project (examples available).

The CWCB staff will meet with the applicant to discuss the loan application, any planning or engineering work that has already been completed or is underway, and the loan application process.

Application/Study deadline:

Loans **under \$10 million** are accepted at any time. Allow two months after Board approves loan for the execution of a loan contract and funds to be available.

Loans **greater than \$10 million** are accepted once a year. Apply by **August 1** in order to receive funds by the following July.

**FOR MORE INFORMATION CONTACT**

**Anna Mauss, P.E., Loan Marketing**  
(303)866-3441x3224 or  
anna.mauss@state.co.us

Colorado Water Conservation Board  
1313 Sherman St, Room 721  
Denver, CO 80203

Notes

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# Colorado Water Conservation Board

## Water Project Loan Program



Lake Otonowanda

*Reinvesting in  
Colorado's Water Supply*

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**COLORADO**  
**Colorado Water**  
**Conservation Board**

Department of Natural Resources

Water Project Finance  
1313 Sherman St., Room 721, Denver, Colorado 80203  
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**COLORADO**  
Colorado Water  
Conservation Board  
Department of Natural Resources

The Colorado Water Conservation Board (CWCB) was created over 75 years ago to provide policy direction on water issues. The CWCB represents each major water basin in a joint effort to use water wisely and protect our water for future generations.

Since 1971, the CWCB has been providing low interest loans to Colorado water providers for raw water projects that develop and/or preserve waters statewide. Loans are available for up to 90% of the total project costs (including engineering fees).

## What Type of Projects are Eligible

Eligible projects include new construction or rehabilitation of existing raw water storage and delivery facilities, such as:

- Reservoirs
- Ditches and Canals
- Pipelines
- Diversion Structures
- Groundwater Wells
- Water Rights Purchases
- Flood Control Projects
- Hydro Projects



## Current Interest Rates (30-year term)

*Effective until June 2015*

Agricultural: 2.0% to 2.5%

Municipal: 2.75% to 4.0%

Commercial: 6.0%

Call or check the CWCB website for current interest rates.

For more information contact:

Anna Mauss, PE 303.866.3441 x3224 or  
anna.mauss@state.co.us

The CWCB has provided loans for many projects statewide. Examples of projects completed using program funds include:

Republican River Water Conservation District—Compact Compliance Pipeline Project  
\$60,600,000 at 2.0%

Ft. Morgan Reservoir & Irrigation Company—Augmentation/Pipeline Project  
\$1,500,000 at 2.9%

Town of Ridgway—Reservoir Rehabilitation  
\$600,000 at 3.0%

City of Monte Vista—Water Acquisition  
\$1,700,000 at 4.0%

Santa Maria Reservoir Company—Dam Repair  
\$3,000,000 at 1.75%

Tri-County Water Conservancy District—Hydropower Project  
\$13,000,000 at 2.0%

Bellyache Ridge Metropolitan District—Well Drilling Project  
\$200,000 at 3.0%

## How to Apply for a Loan

To apply for a loan, an applicant should submit a loan application and a loan feasibility study to the CWCB. The application can be found on the CWCB website at <http://cwcb.state.co.us/LoansGrants/water-project-loan-program/>.

The CWCB staff will meet with the loan applicant to discuss the loan application, any planning or engineering work that has already been completed or is underway and the application process.

## Application Deadlines

- Loans under \$10 million may be submitted throughout the year. Loans can be approved at the bi-monthly CWCB Board meetings. Please allow four to five months for loan approval and completion of the loan contract.
- Loans \$10 million and up must receive legislative authorization. *Applications must be submitted by August 1* to be considered for approval at the November CWCB Board meeting. Funds would then be available the following July, after approval by the legislature.

TAB 3



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

To: Finance Committee  
Colorado Water Conservation Board

From: Kirk Russell P.E., Chief  
Finance Section

Date: September 10, 2014

Subject: **Policy Change Regarding CWCB Loan Interest Rates  
Financial Policy #7- Lending Rate Determination**

### **Introduction**

Financial Policy #7 states that the Board shall establish interest rates annually in May for loans considered during the following fiscal year. Staff is requesting the Board to consider establishing a bi-monthly adjustment of the interest rates in order to stay current with the market. Using the annual approach has caused borrowers to rush a Loan Application and Feasibility Study through the process in order to avoid a projected interest rate increase. In other instances, staff is in an uncomfortable position of knowing the rates are projected to drop significantly causing borrowers to delay applications which in turn causes workload issues.

With technology advances, staff is better equipped to keep interest rates current than those that were available 20 years ago when the Policy was originally written.

Attached is a redlined version of the proposed changes to Policy #7.

### **Staff Recommendation**

Staff recommends that the Finance Committee support a change to Financial Policy #7 and in particular the frequency that the Board adjusts interest rates. If approved, the change will be formally considered at the November 2014 Board Meeting for loans approved at the January 2015 Board Meeting.



POLICY NUMBER: 7

SUBJECT: ANNUAL CONSTRUCTION FUND AND SEVERANCE TAX  
~~TRUST FUND PERPETUAL BASE FUND ACCOUNT~~ LENDING  
RATE DETERMINATION

EFFECTIVE DATE: January 25, 1995

REVISED DATES: Nov. 24, 1997, Jan. 27, 1999, Nov. 20, 2001, May 20, 2002, July 13, 2011  
May 16, 2012, Nov. 2014

POLICY: The Colorado Water Conservation Board (CWCB) staff shall ~~annually~~ establish lending rates bi-monthly for loans to be made from the Construction Fund and Severance Tax ~~Trust Fund~~ Perpetual Base ~~Fund Account~~ as set forth in this Policy. Thirty-year lending rates will be established for agricultural, commercial, municipal, hydroelectric, and restricted reservoir categories of loans using the procedure outlined below:

1. A Baseline Rate will be established equal to the average yield of the 30-year "A" rated\* municipal bond for the ~~six months~~ preceding six month period ~~the May Board meeting of each year~~, and will be used to set Commercial, Municipal and Agricultural ~~all of the other~~ lending ~~category~~ interest rates.
2. The Commercial Rate will be calculated as 110 percent of the Baseline Rate, rounded to the nearest 0.05% ~~one-quarter of one percent~~.
3. Municipal Rates will be based on the project sponsor's service area median household income, as established by the Colorado Department of Local Affairs, and will be structured as follows:
  - a. The Municipal High Income Rate will be calculated as 90 percent of the Baseline Rate rounded to the nearest 0.05% ~~one-quarter of one percent~~. The High Income Rate will apply where the median household income in the project sponsor's service area is greater than 110 percent of the state-wide median household income
  - b. The Municipal Middle Income Rate will be calculated as 80 percent of the Baseline Rate rounded to the nearest 0.05% ~~one-quarter of one percent~~. The Middle Income Rate will apply where the median household income in the project sponsor's service area is equal to 80 percent to 110 percent of the statewide median household income.
  - c. The Municipal Low Income Rate will be calculated as 70 percent of the Baseline Rate rounded to the nearest 0.05% ~~one-quarter of one percent~~. The Low Income Rate will



apply where the median household income in the project sponsor's service area is less than 80 percent of the statewide median household income.

4. Agricultural Rate Colorado's farms and ranches are irreplaceable resources providing food, fiber, open space, wildlife habitat, stable economies in rural areas and many other benefits. To help sustain the vitality of these economies, the Agricultural Rate will be calculated as 50 percent of the Baseline Rate rounded to the nearest 0.05%~~one-quarter of one percent~~.
5. The 30-year lending rates established ~~annually~~ by the Board may be reduced for each lending category, with the exception of the Hydroelectric Rate, by one-quarter of one percent for all loans with maturities of 20 years or less but more than 10 years and by one-half of one percent for all loans with maturities of 10 years or less.
6. For specific projects that involve matters of statewide concern, such as interstate compacts, the Board may establish a lending rate somewhat lower than the adopted rate for the particular class of borrower.
7. For project borrowers that fall into more than one lending category, i.e. an agricultural irrigation company with municipal shareholders, a weighted average lending rate will be established based on the percent ownership of each lending category within the borrower's organization. The lending rate will be revised at any time during the life of the loan when an ownership change would increase or decrease the weighted average by more than 0.5%.
8. Hydroelectric Rate The State recognizes the importance of providing clean, renewable energy, where feasible, to assist in meeting its long term energy needs. To help promote this a Hydroelectric Interest Rate will be determined by the Board annually. The interest rate will be applied only to the hydroelectric component of the project and will be the fixed interest rate for any length of loan term.
9. Restricted Reservoir Rate The CWCB is committed to addressing the State's long-term water needs and to assist in offering water providers with affordable financing to remove reservoir restrictions imposed by the Dam Safety Branch of the State Engineer's Office. The Restricted Reservoir Rate shall be a rate reduction applied to the borrower's interest rate as determined by the Borrower's lending category (or blend). The amount of the reduction shall be determined by the Board annually. The reduction shall also be limited to only those lending categories approved by the Board. This rate reduction shall be in addition to the reduction for shorter terms as described under Section

5. The Board reserves the right to deny any blended rate borrower the restricted reservoir rate based on the final determination of the borrower's ownership breakdown.

PURPOSE: To establish an ~~annual~~ lending rate structure for Construction Fund and Severance Tax ~~Trust Fund~~ Perpetual Base ~~Fund Account~~ loans.

APPLICABILITY: This policy and procedure apply to all applications for loans from the CWCB Construction Fund and Severance Tax ~~Trust Fund~~ Perpetual Base ~~Fund Account~~.

PROCEDURE: The CWCB staff will compile the closing weekly yields for the 30-year "A" rated municipal bond for the six months preceding ~~the 1st day of December, February, April, June, August, October~~ the May Board meeting of each year and estimate the bond's average annual yield. ~~The~~ A lending rate ~~structure will then be~~ for each lending category and published on the CWCB's website and provided in the CWCB Director's Report developed as outlined above and will be presented to the CWCB at the May Board meeting of each year. The interest rates calculated based on this procedure will be effective for Construction Fund and Severance Tax ~~Trust Fund~~ Perpetual Base ~~Fund Account~~ loans approved applications at the following Board Meeting for the upcoming Fiscal Year and will be effective July 1 through the following June 30.

\* Standard and Poor's definition of an "A" bond rating is: "A debt rated 'A' has a strong capacity to pay interest and repay principal although it is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than debt in higher rated categories."

TAB 4



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

## Memorandum

To: Colorado Water Conservation Board Members

From: Kirk Russell, P.E., Chief  
Finance Section

Date: September 10, 2014 Finance Committee Meeting

Subject: **Construction Fund NonReimbursable Investments**

Based CWCB Financial Policy #13 (attached) the CWCB will attempt to maintain an overall growth rate for the combined equity of the Construction Fund and Severance Tax Trust Fund Perpetual Base Account (STTFPBA) of no less than the long-term rate of inflation, as established by the Engineering News Record - Construction Cost Indices, plus 0.5%. This will offset the impacts of cost inflation and maintain the financial integrity of the CWCB Construction Fund. This also provides an estimate of financial resources available for NonReimbursable Project Investments from the Construction Fund.

The staff has determined that after CWCB covers operations and statutory automatic refresh funds/accounts there is \$3,166,600 available for NonReimbursable Investment applications.

The staff will present and recommended the following project/program applications totaling \$3,480,000.

1. Satellite Monitoring System Maintenance
2. Weather Modification Permitting
3. Colorado Floodplain Map Modernization
4. Colorado Watershed Restoration Program
5. Flood & Drought Response Fund - Refreshed
6. Litigation Fund - Refresh to \$2M
7. Arkansas River Decision Support System - Continue
8. Cost-Share for USDA Resource Conservation Partnership Program
9. Water Conservation Planning and Data Tracking Tools



POLICY NUMBER: 13

SUBJECT: **TARGET GROWTH RATE FOR THE COMBINED EQUITY OF THE CONSTRUCTION FUND AND SEVERANCE TAX TRUST FUND PERPETUAL BASE ACCOUNT**

EFFECTIVE DATE: October 1, 2000

POLICY: The Colorado Water Conservation Board (CWCB) will attempt to maintain an overall growth rate for the combined equity of the Construction Fund and Severance Tax Trust Fund Perpetual Base Account (STTFPBA) of no less than the long-term rate of inflation, as established by appropriate construction cost indices, plus 0.5%.

PURPOSE: To offset the impacts of cost inflation, to maintain the financial integrity of the CWCB Construction Fund and STTFPBA and to provide a process for estimating the financial resources available for non-reimbursable investments from the Construction Fund in any given year.

APPLICABILITY: This policy and procedure apply to the CWCB Construction Fund and STTFPBA.

PROCEDURE: The overall growth rate for the combined fund equity of the Construction Fund and STTFPBA will be presented as part of the Comprehensive Annual Financial Report by CWCB staff at the September Board meeting each year. Staff will present an annual estimate of funds available for grants relative to various rates of growth in combined fund equity including the target growth rate. At the same Board meeting each year, staff will present a summary of long-term construction cost indices with any recommendations for revisions to the target growth rate in combined fund equity.

Approved by the CWCB  
September 25, 2000 Board Meeting  
Agenda Item # 13d

**Colorado Water Conservation Board**  
**September 10, 2014 Financial Committee Meeting**  
**Construction Fund Analysis for FY15/16 NonReimbursables**

**Projected Gains**

**Projected Equity Gained**

Interest Earnings - Treasury	\$ 1,300,000
Interest Earnings - Loans	\$ 6,500,000
Federal Mineral Lease Income	\$ 17,700,000 (Max)
<b>Total</b>	<b>\$ 25,500,000</b>

Construction Fund Target Growth @ 3.54%

\$371,000,000 x .0354 = \$ 13,133,400

**Available for Operations and Non-Reimbursable Project Investments**

**\$ 12,366,600**

**Projected Equity Reduction to the Construction Fund**

CWCB Operations \$ 7,400,000

<b><u>Automatically Refreshed Funds / Accounts per Statute</u></b>		
Wild and Scenic Fund	Up to	\$ 400,000
In-Stream Flow Acquisitions	Up to	\$ 1,000,000
Stream Gauge Fund	Up to	\$ 250,000
Colorado Water Education Foundation - Annual Support *		\$ 150,000

Refreshed Subtotal = \$ 1,800,000

**Total \$ 9,200,000**

**Available for 2015 Projects Bill - Non-Reimbursable Project Investments**

=

**\$ 3,166,600**

**Non-Reimbursable Investment Applications**

<b>For Consideration by Finance Committee for 2015 CWCB Projects Bill</b>			<b>Requested Amount</b>		<b>Staff Recommends</b>
		<b>Benefit</b>			
1	DWR - Jeff Baessler	Satellite Monitoring System Maintenance	Statewide	\$ 330,000 (\$330K in 2014)	\$ 330,000
2	CWCB - Joe Busto	Weather Modification Permitting	Statewide	\$ 300,000 (\$175K in 2014)	\$ 300,000
3	CWCB - Thuy Patton	Colorado Floodplain Map Modernization	Statewide	\$ 500,000 Up To \$500K	\$ 500,000
4	CWCB - Chris Sturm	Colorado Watershed Restoration Program	Statewide	\$ 500,000 (\$500K in 2014)	\$ 500,000
5	CWCB - Kevin Houck	Flood & Drought Response Fund - Refreshed	Statewide	\$ 500,000 Up To \$500K	\$ 500,000
6	CWCB - Ted Kowalski	Litigation Fund - Refresh to \$2M	Statewide	\$ 250,000 (\$1.2M in 2014)	\$ 250,000
7	CWCB - Andy Moore	Arkansas River Decision Support System - Continue	Ark Basin	\$ 500,000 (\$500K in 2014)	\$ 500,000
8	CWCB - Steve Miller	Cost-Share for USDA Resource Conservation Partnership Program	Statewide	\$ 500,000 New	\$ 500,000
9	CWCB - Kevin Reidy	Water Conservation Planning and Data Tracking Tools	Statewide	\$ 100,000 New	\$ 100,000
10					
11					
					<b>\$ 3,480,000</b>

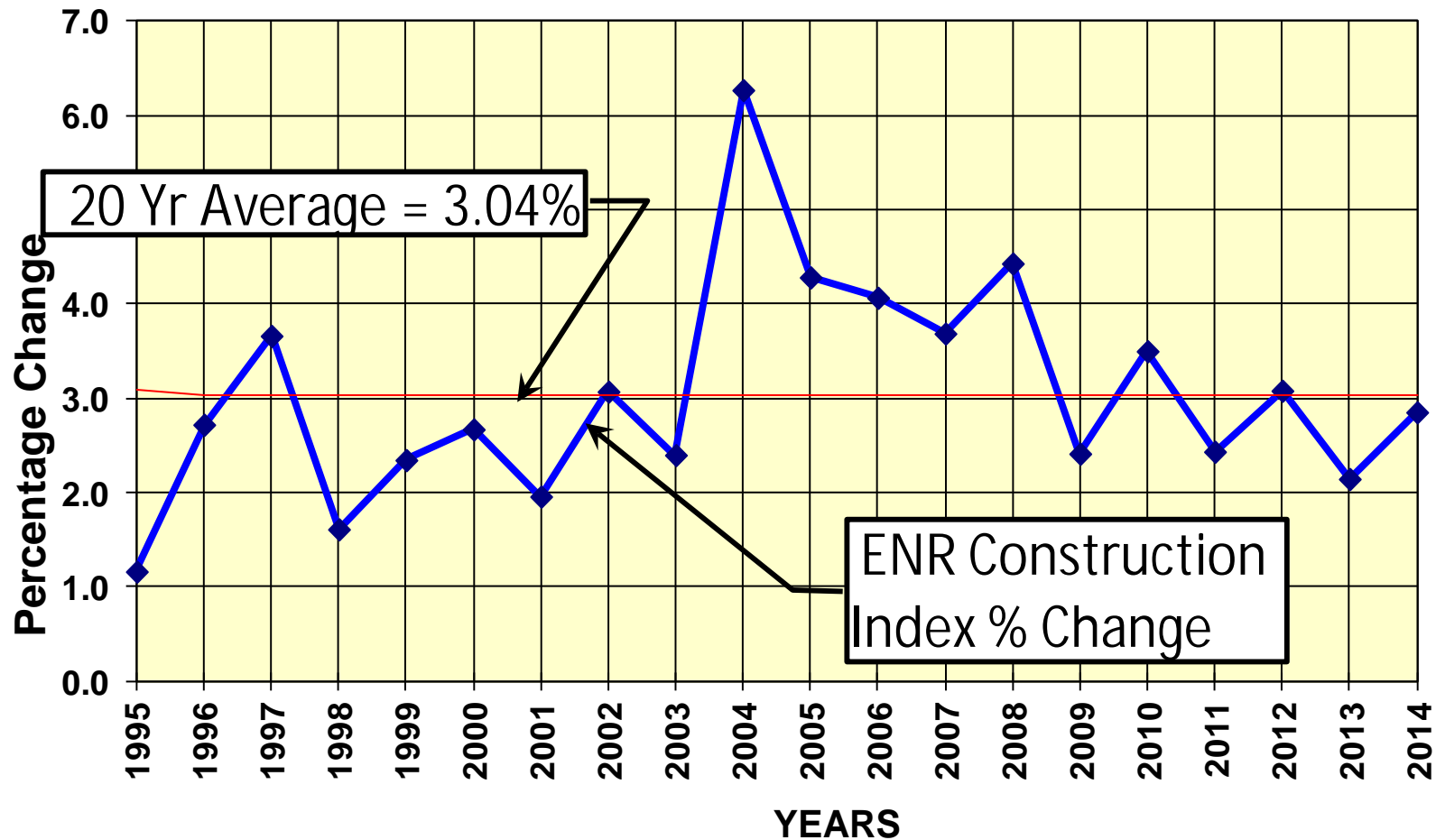
**2015 Projects Bill Requested Non-Reimbursable Investments**

**\$ 3,480,000**

**Footnotes:**

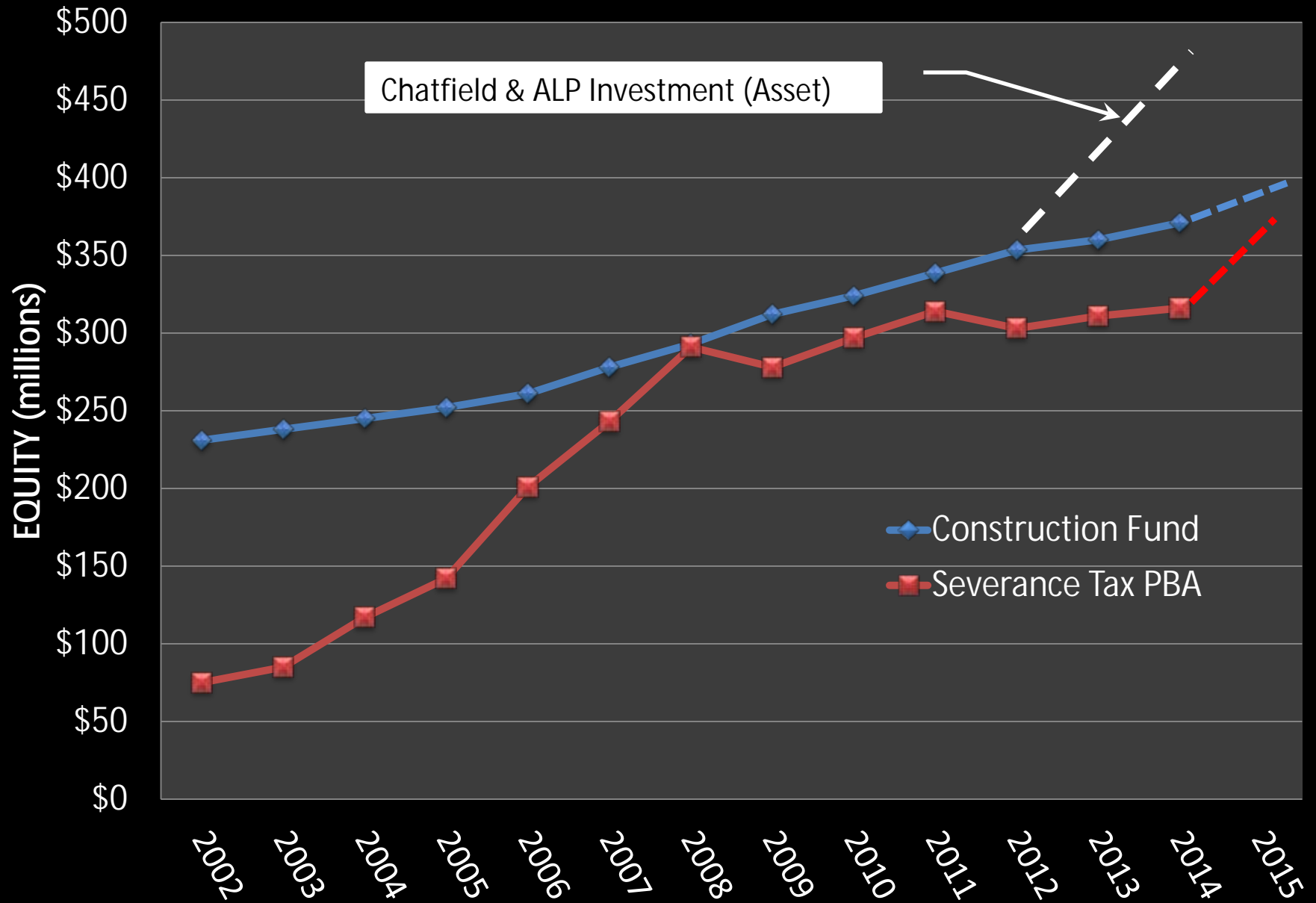
\* HB 02-1152 provided that the Colorado Water Education Foundation is annually refreshed for \$150,000 with Board member approval.

# ENR Construction Cost Index for 20 cities, 1995-2014



**Per Policy 13: Target Growth Rate = 0.5% + CCI Index (3.04%) = 3.54%**

# CWCB's Fund Equity







1313 Sherman Street, Room 721  
Denver, CO 80203

## Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Jeff Baessler, Deputy Section Chief,  
Stream and Lake Protection Section

Date: September 10, 2014

Subject: Non-Reimbursable Investments Item #1  
Satellite-linked Monitoring System and Stream Gage Refurbishment Program

### Introduction

The Division of Water Resources (DWR) has requested an appropriation of \$330,000 for the continued operational viability of the state Satellite-linked Monitoring System (SMS) and Stream Gage Refurbishment Program. Each year, funding for this program has been reviewed and approved by both the Finance Committee and the Board. It has been recognized that it is critical for both the State's water planning and water administrative agencies to support and maintain state-of-art stream gaging programs and continue to provide accurate water resources data to support multi-agency and water user needs. The DWR Satellite-linked Monitoring program is outlined in §37-60-121 and §37-80-102 C.R.S.

### Staff Recommendation

Staff recommends that the Board appropriate \$330,000 from the Construction fund to the Department of Natural Resources for allocation to the Division of Water Resources (DWR) to replace out-dated Data Collection Platforms and associated satellite telemetry equipment in the existing satellite monitoring system, and to refurbish existing stream gages.

### Discussion

The \$330,000 request for FY 2015-2016 will support the continued, long-term operational viability of 520 satellite-linked water resources monitoring sites. These funds will be allocated as follows:

\$275,000 for replacement of out-dated Data Collection Platforms (DCP) and associated satellite telemetry equipment and upgrading of satellite transmission components. The rate of replacement of DCPs is based on a life expectancy from normal wear, tear and software life cycle issues of 10 years. Replacement of out of date DCPs may also be required to



accommodate technology upgrades and changes which are mandated by NOAA, the Federal Agency managing the GOES satellite resource.

\$55,000 for refurbishing existing stream gages as needed to maintain operational reliability of stream flow data collection. This is a recurring annual request to cover refurbishment and repair costs which arise due to deterioration of the physical stream gage infrastructure.

The requested funding amount of \$330,000 is unchanged from last year's request. Please note that it is anticipated that a portion of the funding will go toward stream gage repair costs associated with the September 2013 flood event. (Further details of the DWR Satellite Monitoring System funding request and a report on previous year accomplishments, including a status on flood repair costs, are explained in the attached memo from Scott Cuthbertson to James Eklund, Kirk Russell and Jeff Baessler dated July 28, 2013).

# CWCB Water Project Non-Reimbursable Investment Program Project Data Sheet

Item #1

<b>Sponsor:</b> Colorado Water Conservation Board	<b>Location:</b> Statewide
<b>Project Name:</b> Satellite-linked Monitoring System and Stream Gage Refurbishment Program	<b>Project Type:</b> DWR Streamgaging
<b>Drainage Basin:</b> Statewide Drainage Basins	<b>Water Source:</b> Various
<b>Total Project Cost:</b> \$330,000	<b>Funding Source:</b> Construction Fund
<b>CWCB NRI:</b> \$330,000	<b>Type of Grantee:</b> State Agency

This project entails the continued, long-term operational viability of the State Satellite Linked Monitoring System and Stream Gage Refurbishment Program, which is administered by the Division of Water Resources (DWR). This program currently encompasses 520 satellite stream gaging stations which require continued replacement of outdated data collection platforms, upgrades to transmission components, and refurbishment of the associated infrastructure. In addition, many existing gaging stations need to be modified to provide critical stream flow data for both flood and low flow monitoring. Changes in technology, which will ultimately increase reliability and real time data transmission rates, will require the DWR to

continue to upgrade the system in the future. The costs associated with the continued refurbishment and operational viability of the system is currently approximately \$330,000 per year.



Crystal River DWR/CWCB Satellite Gage



Purgatoire River @ Fishers Crossing  
DWR/CWCB Compact Gage



## DEPARTMENT OF NATURAL RESOURCES

## DIVISION OF WATER RESOURCES


John W. Hickenlooper  
Governor

Mike King  
Executive Director

Dick Wolfe, P.E.  
Director/State Engineer

**MEMORANDUM**

**To:** James Eklund, Director - CWCB  
Kirk Russell, CWCB  
Jeff Baessler, CWCB

**From:** Scott C. Cuthbertson, Deputy State Engineer 

**Date:** July 28, 2014

**RE:** DWR Satellite-linked Monitoring System and Stream Gage Refurbishment Funding Request for FY2015-16 and Report on FY2013-14 Expenditures

**Summary**

Thank you for the opportunity for the Colorado Division of Water Resources (DWR) to request support for our satellite monitoring stream flow program from the CWCB Construction Fund. Also included in this memo is an accounting of the funds provided for FY2013-14.

We are requesting **\$330,000** for FY2015-16. The requested funds will support the continued, long-term operational viability of over 520 satellite-linked water resources monitoring sites, including routine replacement of satellite telemetry transmission components and refurbishment/renovation of gaging stations. The specific distribution of the funds requested is as follows:

1. The sum of \$275,000 will be used to replace satellite telemetry equipment. This level of funding is based on a life expectancy from normal wear, tear and software life cycle issues of 10 years.
2. The remainder of \$55,000 will refurbish existing stream gages as needed to maintain operational reliability of stream flow data collection. This is a recurring annual request to cover refurbishment and repair costs which arise due to deterioration of the physical stream gage infrastructure.

**Introduction**

The Division of Water Resources and CWCB, consistent with Section 37-60-121 and Section 37-80-102 C.R.S., maintain the stream gaging program to support multi-agency and water user needs such as water rights administration, compact protection, flood forecasting and warning and Decision Support System implementation and use. DWR must:

- maintain the electronic equipment in satellite-linked data collection stations;
- refurbish deteriorating gage station infrastructure and non-electronic station hardware;
- refurbish/replace cableways used for high flow measurements or implement alternate means of high flow measurement (for calibration of the upper end of stage-discharge relationships);
- rebuild gage sections damaged by high flows;
- flood harden, when possible, critical gages; and,
- continue, as necessary, the operation of vital gages operated by the United States Geological Survey (USGS) when that program can no longer provide the required support.

**Office of the State Engineer**

1313 Sherman Street, Suite 818 • Denver, CO 80203 • Phone: 303-866-3581 • Fax: 303-866-3589  
<http://water.state.co.us>

## **Background**

The Satellite-linked Monitoring System (SMS) has been operating since 1985, starting with 82 linked gaging stations. As the need for the data has increased, the SMS has expanded. Since inception, in excess of 8 million dollars has been invested in the development of the SMS infrastructure. Currently, DWR operates and maintains over 520 data collection platforms (DCPs) on rivers, streams, reservoirs, ditches and canals to collect and transmit basic stream flow and water elevation data to support the Division's primary mission of water rights and compact administration. Additional benefits of the system include flow alerts based on parameter thresholds, such as: low flow alerts in support of CWCB ISF programs; high flow alerts in support of flood protection decision making and flood warning; and, rate of change alerts below dams and reservoirs.

Collectively, these platforms and the computer equipment in Denver are the Satellite-linked Monitoring System (SMS). The USGS and other entities operate an additional 300+ sites in Colorado. The USGS and DWR are continuously working together to improve data availability and not duplicate efforts to maximize the overall effective of the two, cooperative programs for the benefit of the citizens of Colorado. The SMS provides basic water flow data to the staffs of the Division of Water Resources and Colorado Water Conservation Board and many public and private entities, such as: the cities of Colorado Springs and Aurora, the Denver Water Board, the Arkansas River Compact Commission, emergency coordinators for most Colorado counties, water rights owners, recreationists such as fishermen and rafters, and conservation groups. Many programs of the DWR, such as various river operations analysis spreadsheets used in each of the seven DWR Division offices for water administration, and the DWR Safety of Dams Program rely upon the real-time data acquired through the SMS. Water resources accounting programs utilizing the SMS include the Dolores Project, the Colorado-Big Thompson Project and the Fryingpan-Arkansas River Project. CWCB programs, such as Stream and Lake Protection, Flood Protection and Water Supply Protection also utilize the real-time data.

## **FY2015-16 Funding Request**

Satellite Telemetry Equipment. DWR requests \$275,000 to replace worn out or damaged satellite telemetry equipment. This is the same amount as requested for FY2014-2015 and represents the basic funding required to replace equipment on a 10-year life cycle.

DWR owns about 480 total sets of electronic (DCP and stage sensor) equipment out of the 520+ gages it operates. With an average life of 10 years, we project 45-50 replacements per year. At current equipment costs, the cost of DCP replacement with newest generation satellite transceivers as well as replacement of gage height sensors ranges from \$3750 to \$6000 per gage, depending on the type of gage height sensor needed (shaft encoder, constant flow bubbler or radar sensor). Using a mean of \$4500 and life expectancy of 10 years, the total annual projected equipment cost to simply maintain operable equipment is approximately \$216,000. The life of antennas, batteries, solar panels, wiring, and grounding equipment varies considerably. Based on the last several years, we project an average annual expense of this equipment is approximately \$24,000. Travel (vehicle mileage, per diem, etc.) and overtime support to perform this work around the State is projected at \$35,000. Total annual current cost is, therefore, approximately \$275,000.

Existing Stream Gages. DWR requests \$55,000 for refurbishing existing stream gages. The request in this category of funding is level and the same as the past several years. Approximately 60% of Colorado's satellite-linked gaging stations are located in the rivers and streams of the state. The others are located in reservoirs, ditches, and canals. Gaging station physical infrastructure (shelters, stream controls, independent reference gages, etc.) must be properly maintained and periodically refurbished in order to collect accurate data.

An important physical component of many DWR stream gages around the State is the ability to measure high flows so that the upper end of stage-discharge relationships can be improved and maintained to yield accurate high/flood flow data. High flow measurement capability varies from gage to gage. High flows at stream gages are measured from cableways near the gage or from nearby up- or downstream bridges. Cableways at DWR stream gages are given a detailed inspection each four years. Many cableways, primarily because of age, have been found to need replacement of key components of the cableway system. High flow measurement sustainability projects address such identified cableway design/safe use issues. These may include replacement of cable, improvements to the cable anchorage system, replacement of A-

frame components, replacement of cable cars, etc. Costs can run from as little as \$1000 per cableway to as much as \$20,000 per cableway, depending on what components need replacement before a cableway can be returned to safe service. Alternatively, existing cableways found to have design or safe use deficiencies are, under certain site conditions, being replaced with bank-operated cableways. Costs of installing bank-operated cableways range from \$6000 to \$9000 per site. As current funding allows, we have been addressing some of these needs.

### **FY2013-14 Accomplishments**

The CWCB provided \$300,000 in FY2013-14 for satellite telemetry equipment upgrade and replacement and stream gage refurbishment. An additional \$39,811.13 in CWCB carryover funds was available from the previous fiscal year for a total FY2013-14 project budget of \$339,811.13. DWR expended the entire available funds, an accounting of which is shown in the attached Table 1.

Satellite Telemetry Upgrade Program. The procurement and installation of new generation, high data rate, satellite-linked monitoring equipment and associated components expended the entire allocation of \$245,000 plus \$15,347 of the \$39,811 carried over from the previous year. The expenditure of more funds in this area than planned was due, in part, to the need to replace equipment lost during the September 2013 flood in the South Platte River basin, which is discussed in more detail below.

Stream Gage Refurbishment. The \$55,000 allocated plus \$24,463 in carry over funds was expended to refurbish existing stream gages throughout the State. Refurbishment projects and miscellaneous expenditures totaling \$79,463.58 were completed at the stream gages listed in Table 1, approximately \$43,000 of which went to replace gages destroyed by the South Platte flood (Division 1), as discussed below. The other unplanned event was the construction of four new gages to help manage flow alert systems in the West Fork Complex wild fire area in Division 3. Initially, \$34,472.67 was spent to install the gages, however, \$32,960 was reimbursed by the special fund from CWCB to assist with the wildfire, leaving a net expenditure from this program of \$1,531.15.

### **September 2013 Flood**

The September flooding in Division 1 caused approximately \$450,000 in damage to the stream gaging stations and equipment. As a result, the lion's share, approximately \$43,000, of this year's funds allocated to stream gage repair was diverted to assist with the recovery of gages required to administer water rights in the South Platte. With a Herculean effort by the South Platte hydrography team for which they deserve significant recognition, 18 of the 23 stream gages destroyed by the flood were operational by April 1, 2014. An additional two temporary gages were installed as surrogates for stream gages located where significant stream restoration is required before a permanent structure can be installed. The remaining three gages, representing approximately \$150,000 in anticipated costs, cannot be installed until CDOT has completed the final road construction in the canyons of the Big and Little Thompson Rivers.

To address the cost of the flood damage, DWR has applied for four grants from the FEMA Public Assistance (PA) program, two of which affect the stream gage program. One grant in the amount of \$34,407 is to cover the cost of setting up three temporary gages: one on the Big Thompson below the canyon mouth, one near Greeley on the South Platte and one on the Saint Vrain in Lyons. The second application, in the amount of \$400,378 covers the cost to replace the 23 stream gages destroyed by the flood. While the FEMA PA program is only expected to cover a very small portion of the actual cost (approximately 5%), the PA application process is being used by State Risk Management to quantify the losses and gain whatever benefit is possible from the program. State Risk has indicated they will reimburse the agency for the total cost of repair that is not funded by FEMA.

Once DWR is fully reimbursed by State Risk, we will likely not need the typical program support included for gage repair. The question, however, is one of timing. We anticipate receiving \$34,407 this fiscal year (2014-15), which will go toward reimbursing the \$43,000 spent last year on the unplanned flood recovery work and will give the program a total FY2014-15 allocation of \$89,407 for repair work (\$55,000 from the previous construction fund request and \$34,407 from State Risk). We still need approximately \$150,000 to complete the replacement of flood damaged structures, so in all likelihood, a significant portion of the \$89,000 will again go to cover that work. Because that work is not expected to be finished until FY2015-16, which means we do not anticipate any additional reimbursement from State Risk until FY2016-17.



Because we do not expect to be reimbursed for flood damages until 2016-17, we have not decreased our request for FY2015-16 support. We do, however, anticipate significantly reducing our FY2016-17 and perhaps even our FY2017-18 requests as the final reimbursement for flood damages will likely cover one or two years of normal program support. We have not asked for more support in FY2015-16 because we simply haven't the personnel resources to effectively spend more than about \$100,000 in one fiscal year on normal gage repair projects.

TABLE 1 - FY2013-14 Gage Projects			
Div. I	Project Name	Description of Work	TOTAL
	South Platte at Stateline	New return gage	\$ 102.92
	September Flood Recovery	Temporary stream gages and permanent repairs	\$ 43,143.20
<b>Div. II</b>			
	Arkansas River above Pueblo Reservoir	New inflow location	\$ 1,844.70
	Various locations	Radar sensor installation	\$ 115.92
<b>Div. III</b>			
	Rio Grande River nr Del Norte	Installation of new cableway A-frames	\$ 25,213.83
	Willow Creek nr Crestone	Replace control	\$ 1,380.35
	Los Pinos nr Ortiz	Replace condemned cableway	\$ 728.42
	West Fork Complex Fire Area	Installed 4 streamgages for flood warning	\$ 1,531.15
<b>Div. IV</b>			
			\$ -
<b>Div. V</b>			
	Snake River	New cantilever and radar installation	\$ 2,172.79
<b>Div. VI</b>			
	Michigan River at Walden	Materials for sensor install	\$ 146.25
<b>Div. VII</b>			
	Howardsville Gage	Bank operated cableway installation	\$ 873.50
	Jackson Gulch Reservoir Inlet	Outside horizontal cantilever gage	\$ 374.31
<b>Miscellaneous</b>			
	Misc. supplies and equipment		\$ 1,661.24
	Misc. gage maintenance		\$ 175.00
<b>TOTAL</b>			<b>\$ 79,463.58</b>

**COLORADO****Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203**Memorandum**

To: Finance Committee  
Colorado Water Conservation Board

From: Joe Busto, Weather Modification Program Coordinator,  
Watershed Protection and Flood Mitigation Section

Date: September 10, 2014

Subject: **Non-Reimbursable Investments Item #2**  
**Weather Modification- Water User Cost Share Assistance**

**Introduction**

The CWCB has had grants for winter cloud seeding since 2004. Colorado River downstream water users have been matching CWCB funding since 2007. To date the CWCB has provided \$1.3M and the Lower Basin has provided \$1.3M. Weather modification is one of the three legs of the stool for the Colorado River drought contingency plan along with extended reservoir operations and demand management.

The CWCB WM budget has been \$175,000 for the last six years. Staff is requesting an increase to \$300,000 per year for the following reasons: expanding weather modification in the Colorado River is an immediate next step; the Lower Basin matches the CWCB dollar for dollar; and the Lower Basin has already increased the CWCB allocation for the upcoming winter. Most importantly the increase is to be specifically earmarked to import and deploy better equipment and continue efforts to support water users as they refine their programs for optimum efficiency.

The CWCB has helped by bringing in remote machines to Winter Park, the Grand Mesa, and near Mesa Verde. However, there are still 105 low elevation generators in operation. Modeling studies are suggested in the 2012 DNR Weather Modification Rules to evaluate program design. One was completed for the Front Range Water Council program. There is a scientific means to retire machines, import newer machines, and focus in on areas with high cloud seeding potential. This funding supports initiative by Grand River Consulting and the Front Range Water Council to optimize their program. Collectively they supply 80% of the water to our citizens. The CWCB will partner with them to implement recommendations from their program design evaluation. Other programs will follow.

**Staff Recommendation**

Staff recommends that the Board request the General Assembly authorize \$300,000 from the Construction Fund to be appropriated to the CWCB for the Weather Modification Program.





**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

Item #2

<b>Sponsor:</b> Colorado Water Conservation Board <b>Project Name:</b> WM Grants <b>Drainage Basin:</b> Colo., Gunn, SW Basins <b>Total Project Cost:</b> \$1M+ spent all sources <b>CWCB NRI:</b> \$300,000	<b>Location:</b> Statewide <b>Project Type:</b> Grants, Equipment, & Evals <b>Water Source:</b> Various <b>Funding Source:</b> Construction Fund <b>Type of Grantee:</b> Grants to Sponsors
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The CWCB has had grants since 2004. Water Manager sponsored programs were developed after the drought of early 2000s. State-to-state agreements were signed in 2007 to provide grants. Each year the CWCB distributes grants from the CWCB, New Mexico Interstate Stream Commission, Southern Nevada Water Authority, Central Arizona WCD, and California Six Agency Committee and reports on the expenditures. For winter 2014-15 the Lower Basin has increased the CWCB budget from historic levels. The previous Lower Basin funding was about \$150,000/year. It is anticipated that winter 2014-15 it will be between \$200,000-\$300,000/year to create the new WM 2.0 program. The CWCB funding increase will give staff leverage to effectively match the pledged support of the Lower Basin. These units will be approximately \$40K each and several are needed.

The focus of the funding increase is to earmark additional funding for equipment to deploy state of the art and industry standard equipment. The CWCB goal should be to help make our programs better.

At right is the Idaho Power ice nuclei generator design. It has been 17 years in development and is considered the best design in the field. They have agreed to help us at the CWCB and provide these machines for our program. The wind barrel at the top rotates with the wind so the flame will not blow out. It is modular so parts that aren't working can be quickly switched out in the field. It uses smaller solutions tanks that can be put on a snowmobile to get to the site in winter.



Also pictured at right is a white remote sensing unit called a radiometer. It takes vertical columns of atmospheric information that is similar to a weather balloon launch but with continuous data every seven minutes. They are portable, lightweight, and easy to operate. Several cloud seeding programs in other states have purchased one of more of these to remove the guess work and stop seeding the whole storm system so they can focus on wetter cloud conditions. These units are excellent at seeing atmospheric water which is water in clouds that aren't naturally being converted into precipitation. In other words they can use the detection of atmospheric water to find ideal seeding potential, instead of looking at inaccurate forecasting and modeling. They will save lots of money by not wasting silver and confining operations to periods of abundant liquid water. They can also help develop storm climatologies and characterize areas where liquid water pools and scours as it interfaces with our mountainous terrain. Our operators and sponsors are excited to have this remote sensing tool for their seeding operations and are willing to share it among the programs and get trained how to use, operate, and maintain it.



Radiometers are \$180,000 and only one or two will be needed and will be shared and moved around in Colorado. It is estimated that we are spending over \$200,000 on seeding solutions in Colorado. It is not hard to see how radiometers will help us use solutions effectively and save money for the sponsors.

Typically each year about \$1M is spent on cloud seeding with \$175,000 or 18% from the CWCB and \$175,000 or 17% from the Lower Basin and New Mexico. The California Six Agency Committee has agreed to double its budget to \$100,000 per year to the CWCB and will ask AZ and NV to do the same. Currently for every dollar CWCB spends five is leveraged. This is a good ratio but more importantly these good budgets will help staff phase out older equipment over the next few years and bring in industry standard equipment.

**COLORADO****Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203**Memorandum**

To: Finance Committee  
Colorado Water Conservation Board

From: Thuy Patton, Floodplain Mapping Coordinator,  
Watershed Protection and Flood Mitigation Section

Date: September 10, 2014

Subject: **Non-Reimbursable Investments Item #3**  
**Colorado Floodplain Map Modernization Program**

**Introduction & Discussion**

In early 2003, Congress approved a substantial funding package to provide updated floodplain mapping nationwide. Similar funding levels have been allocated by Congress in subsequent years. The CWCB approved and the General Assembly authorized a non-reimbursable investment of \$500,000 in the 2003 Construction Fund Bill with annual funding amounts in all subsequent Bills. Staff is now requesting a total of \$500,000 for program funding.

Colorado has received over \$11 million in federal grant dollars for floodplain mapping activities since 2003 as part of the floodplain Map Modernization program initiated by FEMA. The FEMA funds are being matched by CWCB and local cost-share dollars to implement the map update work that includes engineering and GIS to create new digital countywide maps. The funds authorized in the 2003 and all subsequent Construction Fund Bills have provided the required non-federal matching dollars. The State funds are further leveraged by local cost share dollars and in-kind services from many communities thus far.

**Staff Request**

The staff of the Watershed Protection and Flood Mitigation Section is requesting approval by the Board for a non-reimbursable investment from the CWCB Construction Fund in the amount up to \$500,000 to provide matching dollars and related study funds in order to take advantage of the federal grant funds from FEMA for modernized floodplain maps in Colorado.

**Staff Recommendation**

Staff recommends that the Board request that the General assembly authorize up to \$500,000 from the Construction Fund to be appropriated to the Colorado Water Conservation Board for technical activities related to the Colorado Floodplain Map Modernization Program.



**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

Item #3

**Sponsor:** Colorado Water Conservation Board

**Location:** Statewide

**Project Name:** Colorado Floodplain Map Modernization Program

**Project Type:** Matching Funds for Federal Grants

**Drainage Basin:** All Basins in Colorado

**Water Source:** Various

**Total Project Cost:** \$1,900,000

**Funding Source:** Construction Fund

**CWCB NRI:** \$500,000 (up to)

**Type of Grantee:** State Government

Colorado has received approximately \$11.0 million in federal grant dollars for floodplain mapping activities as part of the floodplain Map Modernization Program (Program) initiated by FEMA in 2003. The FEMA funds are being matched by CWCB and local cost-share dollars to implement the map update work to create new digital floodplain maps. The initial Program funds authorized in the 2003 and all subsequent Construction Fund Bills have provided the required non-federal matching dollars (80/20 cost share program). The State funds are further leveraged by local cost share dollars and in-kind services from many communities thus far. The total funding amounts have been instrumental in keeping Colorado as a lead state within FEMA Region 8 and will continue to benefit Colorado communities in the future. It is expected that significant FEMA funding will continue as long as the Program exists. Program deliverables will become part of the Flood DSS system to increase data capture and enhance Colorado's decision support tools.

The Program will eventually impact the entire state, and the objective is to develop updated watershed-based countywide floodplain maps using current base map information within a digital environment. The use of GIS technology will be employed for all new countywide studies for ease of distribution, updating and viewing. The table below summarizes funding provided by the CWCB and FEMA/Local governments for CWCB managed projects (in progress or completed).

<u>COUNTY/WATERSHED</u>	<u>CWCB Funds</u>	<u>FEMA/Local Funds</u>	<u>COUNTY/WATERSHED</u>	<u>CWCB Funds</u>	<u>FEMA/Local Funds</u>
Archuleta	\$71,000	\$228,760	Mesa	\$33,960	\$435,780
Boulder	\$17,807	\$524,709	Montrose	\$60,376	\$241,503
Clear Creek	\$2,950	\$158,605	Montezuma	\$53,000	\$452,735
Chaffee	\$44,000	\$399,290	Morgan	\$25,000	\$270,700
Delta	\$21,630	\$277,763	Park	\$18,800	\$165,200
El Paso	\$75,635	\$1,472,030	Pitkin	\$20,772	\$466,388
Elbert	\$141,548	\$301,982	Prowers	\$76,605	\$691,024
Fremont	\$23,294	\$146,240	Pueblo	\$71,768	\$1,115,902
Garfield	\$29,912	\$325,000	Rio Grande	\$58,300	\$152,810
Gunnison	\$79,250	\$272,422	Summit	\$21,098	\$189,876
La Plata	\$74,200	\$391,910	Teller	\$23,100	\$207,900
Logan	\$30,550	\$271,050	Weld	\$112,419	\$658,530
St. Vrain Wtsd	\$88,580	\$354,320	Purgatoire	\$140,137	\$347,963
Clear Creek Wtsd	\$114,060	\$456,240	Cache La Poudre Wtsd	\$718,834	\$150,000



1313 Sherman Street, Room 721  
Denver, CO 80203

## Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Chris Strum, Stream Restoration Coordinator,  
Watershed Protection and Flood Mitigation Section

Date: September 10, 2014

Subject: Non-Reimbursable Investments Item #4  
Colorado Watershed Restoration Program

### Introduction

The CWCB supports watershed restoration projects presented by multiple stakeholders with diverse interests. The results are plans and projects designed to satisfy a range of non-consumptive and consumptive water use objectives. Many of these efforts are completed on small budgets funded through several sources of local, state and/or federal funds. There is often a community volunteer component that contributes in-kind services through donated materials and time. The Colorado Watershed Restoration Program (CWRP) has funded 36 projects with over \$1,300,000 since its first grant cycle in January 2009. The projects have leveraged over \$5.50 for every \$1.00 contributed by CWRP.

In recent years Colorado has experienced catastrophic floods, mega-fires, and floods exacerbated by fire scars that have de-stabilized many rivers. Staff is requesting that the Colorado Watershed Restoration Program continue to be funded to aid in post-flood and fire restoration. Staff also requests that the funds be used for non disaster related watershed and stream protection and restoration efforts throughout the state.

### Staff Recommendation

Staff recommends that the Board request the General Assembly to authorize \$500,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB for the Colorado Watershed Restoration Program.





**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

**Item #4**

**Sponsor:** Colorado Water Conservation Board    **Location:** Statewide

**Project Name:** Colorado Watershed    **Project Type:** Watershed Protection  
Restoration Program

**Drainage Basin:** All Colorado Basins

**Water Source:** Various

**Total Project Cost:** Up to 50% Cost share

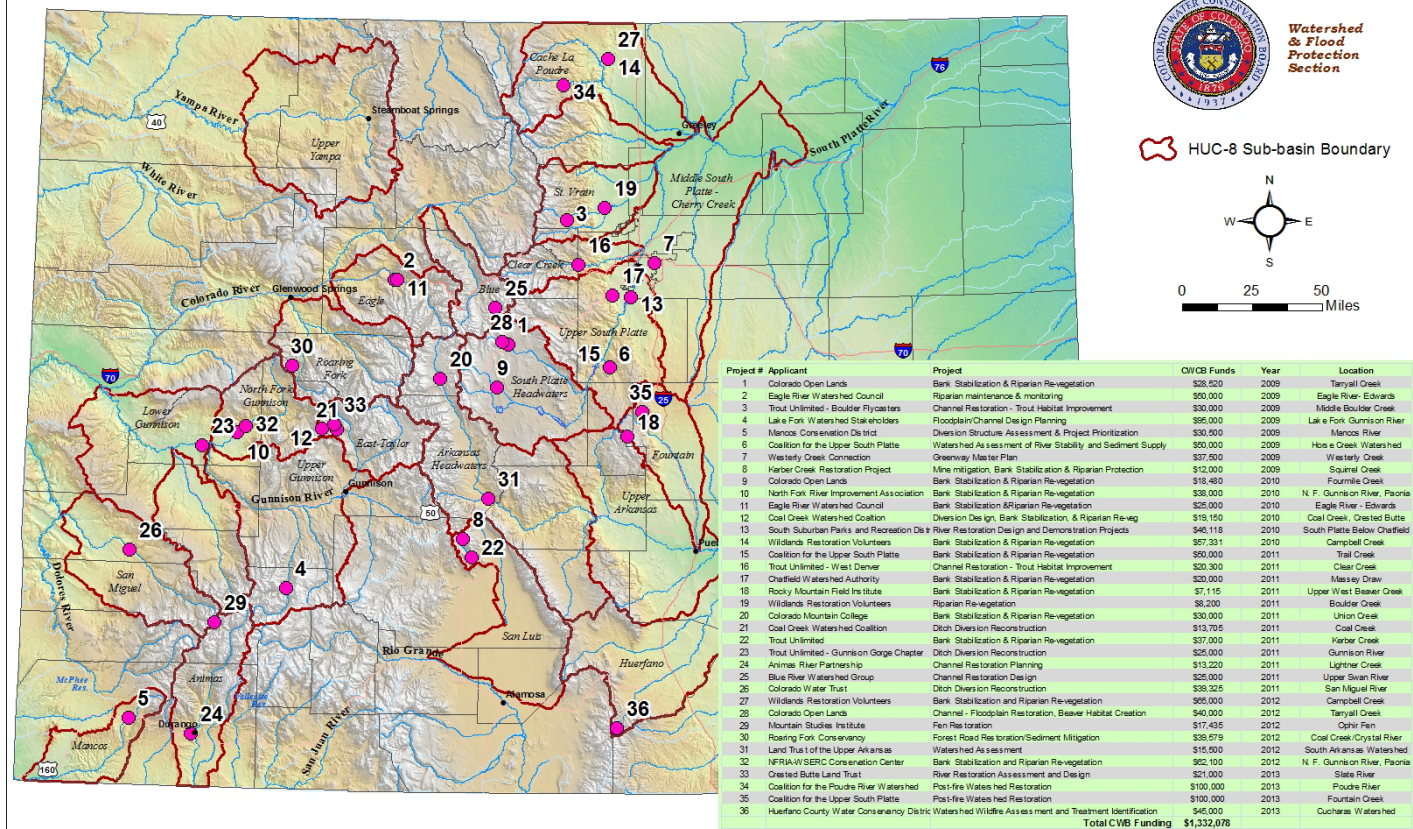
**Funding Source:** Construction Fund

**CWCB NRI:** \$500,000

**Type of Grantee:** State Agency & Watersheds

The Program objective is to provide funding for watershed restoration studies and projects. Special consideration is given to projects that reduce flood hazards, protect infrastructure, stabilize post-fire watersheds, and increase benefits for water supply. Past projects successfully completed with aid from the Construction Fund include post-fire channel stabilization on Trail Creek in the Hayman burn area, channel stabilization and restoration on the North Fork Gunnison River in Paonia, and channel design planning on the Lake Fork of the Gunnison River. Program funding has also been used in conjunction with funding from the Water Quality Control Division to develop a Measureable Results Program (MRP). Studies and projects resulting from this program can have far reaching benefits for water supply, flood recovery, forest restoration (including post-fire), enhancement of aesthetic and environmental quality, recreation, and increased economic benefit. The Program has funded 36 projects since the first grant cycle in January 2009. Total project funding exceeds \$1,300,000. The projects have leveraged over \$5.5 for every \$1 contributed by the Program. The Program is intended for statewide benefit. The map below displays projects funded since 2009.

**Colorado Watershed Restoration Program Grant Projects 2009 - 2013**





## COLORADO

Colorado Water  
Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

### Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Kevin Houck, P.E.- Chief, Watershed Protection and Flood Mitigation Section  
Taryn Finnessey- Climate Change Risk Management Specialist  
Water Supply Planning Section

Date: September 10, 2014

Subject: Non-Reimbursable Investments Item #5  
Flood and Drought Response Fund

#### Introduction

A \$150,000 Flood Response Program was authorized in the 2001 Construction Fund Bill (SB 01-157) and enacted by the Colorado General Assembly. This amount was increased in the 2007 Construction Fund Bill (SB 07-122) to \$300,000 to reflect the additional cost of performing existing program functions and the addition of valuable services under the program. In FY 2013 the scope of the fund was expanded to include drought response activities, which continue to be included. The original expansion of the scope did not include any increase in funds, however in fiscal year 2014 the fund was increased to \$500,000 to reflect activities associated with Drought Response and to address the increasing threat of wildfires and post-wildfire activities. The Flood and Drought Response Fund (Fund) exists to give the CWCB an ability to quickly respond to events and have program funds in the areas of: 1) flood & drought documentation, 2) flood & drought forecasting and outlooks, 3) post-event floodplain mapping, 4) aerial photography, and 5) flood & drought mitigation.

The current request is to refresh the account up to \$500,000 for FY 2014/15 for flood and drought response purposes, including post-wildfire activities. Use of this fund to address both flood and drought increases the efficiency and effectiveness of the CWCB to adequately respond to natural hazards affecting Colorado while also recognizing the current fiscal constraints by utilizing existing resources. Staff clearly recognize that there will be years in the future when both flood conditions and drought conditions exist during the same year, as was the case in 2013. In those situations, the Fund could be stressed by needs from the two extreme conditions, and Staff will prioritize expenditures.

#### Staff Recommendation

Staff recommends that the Board request the General Assembly to authorize \$500,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB for technical activities related to flood and drought response, as called out in the scope of the Flood and Drought Response Fund.



**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

Item #5

**Sponsor:** Colorado Water Conservation Board    **Location:** Statewide

<b>Project Name:</b> Colorado Flood and Drought Response Fund <b>Drainage Basin:</b> All River Basins In Colorado <b>Total Project Cost:</b> \$500,000 <b>CWCB NRI:</b> \$500,000 (refresh up to)	<b>Project Type:</b> Program Funds for flood and drought mitigation and response activities <b>Water Source:</b> N/A <b>Funding Source:</b> Construction Fund <b>Type of Grantee:</b> State Government
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A \$150,000 Flood Response Program was authorized in the 2001 Construction Fund Bill (SB 01-157) and enacted by the Colorado General Assembly. This amount was increased in the 2007 Construction Fund Bill (SB 07-122) to \$300,000 to reflect the additional cost of performing existing program functions and the addition of valuable services under the program. In FY 2013 the scope of the fund was expanded to include drought response activities, which continue to be included. The original expansion of the scope did not include any increase in funds, however in fiscal year 2014 the fund was increased to \$500,000 to reflect activities associated with Drought Response and to address the increasing threat of wildfires and post-wildfire activities. The Flood and Drought Response Fund (Fund) exists to give the CWCB an ability to quickly respond to events and have program funds in the areas of: 1) flood & drought documentation, 2) flood & drought forecasting and outlooks, 3) post-event floodplain mapping, 4) aerial photography, and 5) flood & drought mitigation.

The current request is to refresh the account up to \$500,000 for FY 2014/15 for flood and drought response purposes, including post-wildfire activities. Use of this fund to address both flood and drought increases the efficiency and effectiveness of the CWCB to adequately respond to natural hazards affecting Colorado while also recognizing the current fiscal constraints by utilizing existing resources. Staff clearly recognize that there will be years in the future when both flood conditions and drought conditions exist during the same year, as was the case in 2013. In those situations, the Fund could be stressed by needs from the two extreme conditions, and Staff will prioritize expenditures.



## COLORADO

### Colorado Water Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

To: Finance Committee  
Colorado Water Conservation Board

From: Ted Kowalski, Chief  
Interstate, Federal, and Water Information Section

Date: September 10, 2014

Subject: **Non-Reimbursable Investments Item #6**  
**Refresh of Litigation Fund**

#### Introduction

Section 37-60-121(2.5) provides that the Colorado Water Conservation Board is authorized "to expend, pursuant to continuous appropriation and subject to the requirements of paragraph (b) of this subsection (2.5), a total sum not to exceed the balance of the litigation fund, which is created, for the purpose of engaging in litigation...to defend and protect Colorado's allocations of water in interstate streams and rivers..." Paragraph (b) of section 121(2.5) provides: "pursuant to the spending authority set forth in paragraph (a) of this subsection (2.5), moneys may be expended from the litigation fund at the discretion of the board if (l) with respect to litigation, the Colorado Attorney General requests that the Board authorize the expenditure of moneys in a specified amount not to exceed the balance of the fund for the costs of litigation associated with one or more specifically identified lawsuits meeting the criteria set forth in paragraph (a) of this subsection (2.5)."

The Interstate, Federal, and Water Information Section works closely with the Office of the Attorney General in monitoring ongoing processes on interstate streams, in conjunction with our federal and state partners in water management. Negotiations on the Colorado River, implementation of Minutes to the Mexican Treaty, and ongoing litigation regarding the Republican and Rio Grande Compacts are some of the issues that command the attention and time of CWCB staff and the Attorneys General. As is necessary, a refresh of the litigation fund will be requested, as funds are available, and the ongoing processes require more work and incur costs. These funds will be used in preparation for litigation, or to reach solutions while avoiding litigation of these important issues.

To expend these funds once they have been properly appropriated, CWCB staff will prepare a memo and presentation for the Board, with accompanying letter from the Attorney General. These items provide more detail about the request, such as the river basin in question, and a specific value for the request, appropriate for the issues at hand.

#### Staff Recommendation

Staff recommends that the Board request that the litigation fund be refreshed with \$200,000, to ensure necessary participation by the State of Colorado in these important processes, in conjunction with the Office of the Attorney General.





**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

Item #6

<b>Sponsor:</b> Colorado Water Conservation Board	<b>Location:</b> Statewide
<b>Project Name:</b> Litigation Account Refresh	<b>Project Type:</b> Litigation
<b>Drainage Basin:</b> All River Basins	<b>Water Source:</b> Various
<b>Total Project Cost:</b> \$2M available annually	<b>Funding Source:</b> Construction Fund
<b>CWCB NRI:</b> \$200,000	<b>Type of Grantee:</b> CWCB IFWI Section

Section 37-60-121(2.5) provides that the Colorado Water Conservation Board is authorized “to expend, pursuant to continuous appropriation and subject to the requirements of paragraph (b) of this subsection (2.5), a total sum not to exceed the balance of the litigation fund, which is created, for the purpose of engaging in litigation...to defend and protect Colorado’s allocations of water in interstate streams and rivers...” Paragraph (b) of section 121(2.5) provides: “pursuant to the spending authority set forth in paragraph (a) of this subsection (2.5), moneys may be expended from the litigation fund at the discretion of the board if (I) with respect to litigation, the Colorado Attorney General requests that the Board authorize the expenditure of moneys in a specified amount not to exceed the balance of the fund for the costs of litigation associated with one or more specifically identified lawsuits meeting the criteria set forth in paragraph (a) of this subsection (2.5).”

The Interstate, Federal, and Water Information Section works closely with the Office of the Attorney General in monitoring ongoing processes on interstate streams, in conjunction with our federal and state partners in water management. Negotiations on the Colorado River, implementation of Minutes to the Mexican Treaty, and ongoing litigation regarding the Republican River and the Rio Grande Compacts are some of the issues that command the attention and time of CWCB staff and the Attorneys General. As is necessary, a refresh of the litigation fund will be requested, as funds are available, and the ongoing processes require more work and incur costs. These funds will be used in preparation for litigation, or to reach solutions while avoiding litigation of these important issues.

To expend these funds once they have been properly appropriated, CWCB staff will prepare a memo and presentation to the Board, with accompanying letter from the Attorney General. These requests provide more detail about the particulars of the request, such as the river basin in question, and a specific value for the request, appropriate for the issues at hand.

The Interstate, Federal, and Water Information Section requests that the litigation fund has \$2 million available annually, to ensure necessary participation by the State of Colorado in these ongoing processes, in conjunction with the Office of the Attorney General.



1313 Sherman Street, Room 721  
Denver, CO 80203

## Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Andy Moore, Water Resources Engineer  
Interstate, Federal & Water Information Section

Date: September 10, 2014

Subject: Non-Reimbursable Investments Item #7  
Arkansas River Decision Support System- Continuation

### Introduction

Colorado's Decision Support Systems (CDSS) are a joint effort of CWCB and DWR, with the purpose of providing data and analytical tools to aid in water resources planning and management in the State. Currently there are DSSs in place for the Colorado River and Rio Grande Basins, and the development of the South Platte DSS is ongoing.

The Arkansas River Decision Support System (ArkDSS) is the last DSS to be developed for CDSS. The feasibility study was completed in December 2011, resulting in a proposed implementation process including four phases, at an estimated total cost of \$7,590,000. \$1,250,000 has previously been approved by the Board for Phases 1 and 2. Work has begun on several aspects of ArkDSS, with coordination with several Roundtable projects and DWR Division 2 work, and a streamflow gage has been installed on Fountain Creek. Requests for Proposals for more tasks will be released in the near future. The funding requested herein will be used to continue the ArkDSS implementation, which at this stage includes primarily data compilation and data collection activities that will provide the foundation for the ArkDSS.

### Staff Recommendation

Staff recommends that the Board request the General Assembly to authorize \$500,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB to continue implementation of the ArkDSS.



**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

Item #7

<b>Sponsor:</b> Colorado Water Conservation Board <b>Project Name:</b> Arkansas River Decision Support System (ArkDSS) <b>Drainage Basin:</b> Arkansas River Basin <b>Total Project Cost:</b> \$7,590,000 <b>CWCB NRI:</b> \$500,000	<b>Location:</b> Statewide <b>Project Type:</b> Decision Support System <b>Water Source:</b> Arkansas River Basin <b>Funding Source:</b> Construction Fund <b>Type of Grantee:</b> Decision Support System
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Colorado's Decision Support Systems (CDSS) are a joint effort of CWCB and DWR, with the purpose of providing data and analytical tools to aid in water resources planning and management in the State. Currently there are DSSs in place for the Colorado River and Rio Grande Basins, and the development of the South Platte DSS is ongoing.

The Arkansas River Decision Support System (ArkDSS) is the last DSS to be developed for CDSS. The feasibility study was completed in December 2011, resulting in a proposed implementation process including four phases, at an estimated total cost of \$7,590,000. \$1,250,000 has previously been approved by the Board for Phases 1 and 2. Work has begun on several aspects of ArkDSS, with coordination with several Roundtable projects and DWR Division 2 work, and a streamflow gage has been installed on Fountain Creek. Requests for Proposals for more tasks will be released in the near future. The funding requested herein will be used to continue the ArkDSS implementation, which at this stage includes primarily data compilation and data collection activities that will provide the foundation for the ArkDSS.



**COLORADO WATER CONSERVATION BOARD**  
**CONSTRUCTION FUND**  
**NON-REIMBURSABLE PROJECT INVESTMENT**  
**APPLICATION**



Item #7

**Arkansas River Decision Support System**

**(Project Name)**

**Application Deadline: August 1 for funds available July 1 the following year.**

**Funding recommendations will be considered at the November CWCB Board Meeting.**

**Instructions:** This application form should be emailed, typed, or printed neatly. You may attach additional sheets as necessary to fully answer any question, or to provide additional information that you feel would be helpful in evaluating this application. Include with your application a cover letter summarizing your request. If you have difficulty with any part of the application, contact Kirk Russell, PE, Finance Section Chief for assistance, at (303) 866-3441, ext. 3232 or email [kirk.russell@state.co.us](mailto:kirk.russell@state.co.us).

Generally, the applicant is also the prospective owner and sponsor of the proposed project. If this is not the case, contact CWCB before completing this application.

**Part A. - Description of the Applicant** (Project Sponsor or Owner);

1. Applicant Name(s): Colorado Water Conservation Board

Mailing address: 1313 Sherman St, Ste 718  
Denver, CO 80203

Taxpayer ID#:

Email address:

(Please supply current W-9 with application)

Phone Numbers: Business:

303-866-3441

Home:

Fax:

2. Person to contact regarding this application if different from above:

Name:

Andy Moore

Position/Title

Water Resources Engineer

# Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #7

3. Provide a brief description of your organization below:

The Colorado Water Conservation Board (CWCBC) was created in 1937 for the purpose of aiding in the protection and development of the waters of the state. The agency is responsible for water project planning and finance, stream and lake protection, flood hazard identification and mitigation, weather modification, river restoration, water conservation and drought planning, water information, and water supply protection.

## Part B. - Description of the Project or Study

1. Name of the study or project: Arkansas River Decision Support System (ArkDSS)

2. What is the purpose of this grant application? Check one.

- ☒ Study  
☐ Demonstration project.  
☐ Rehabilitation or replacement of existing  
☐ Other (Please describe)

3. General location of the study or demonstration project. (Please include county, and approximate distance and direction from the nearest town):

Arkansas River Basin – Division 2

4. Please provide a brief narrative description of the proposed study or demonstration project including purpose, need, and service area. (Attach scope of study, if available)

The ArkDSS will be similar to other DSSs developed in Colorado, with data collection and development of modeling tools to aid in water resources planning and management. The feasibility study was completed in December 2011, resulting in a proposed implementation including four phases, at an estimated total cost of \$7,590,000. The \$500,000 requested herein will be used to continue implementation of the ArkDSS, which at this stage includes primarily data compilation and data collection activities that will provide the foundation for the ArkDSS.

## Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #7

5. Explain why you are requesting a grant, instead of a loan. (the Construction Fund exists primarily to provide low interest loans for the construction or rehabilitation of raw water projects. Non-reimbursable investments are approved only when the project or study is of statewide interest and benefits a wide range of people and organizations, and/or a large geographical area .

The ArkDSS will be part of Colorado's Decision Support Systems, to aid in water resources planning for the State. Water users and planners within the Arkansas Basin, as well as the State, will benefit from the data and tools developed as part of the ArkDSS.

6. List the names and addresses of any technical or legal consultants retained to represent the applicant or to conduct investigations for the proposed project or study.

Name	Address & Phone Number
N/A	

7. List any feasibility study or scope of work that has been completed or is now in progress for the proposed project or study. (Submit one copy with this application):

The feasibility study for the ArkDSS was completed in December 2011. The report is available for download on the web page below:

<http://cwcb.state.co.us/water-management/basin-roundtables/Pages/ArkansasBasinRoundtable.aspx>

## Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #7

8. What is the estimated cost of the study/demonstration project? Please include estimated Study, Planning, Engineering, and Construction costs, if known :

Estimated Planning/Study Costs:

\$7,590,000

Estimated Engineering Costs:

Estimated Construction Costs:

**Estimated Total Costs:**

\$7,590,000

9. **How much funding are you requesting?**

\$500,000

### Part C. - Project Sponsor Financial Information

1. The CWCBC Construction Fund is primarily a revolving loan fund. Non-reimbursable investments are approved only when the project or study is of statewide interest and benefits a wide range of people. Provide copies of the two most recent annual reports, financial statements, corporate reports or other current documentation of financial condition and operations with this application.
2. Provide a brief narrative description of potential sources of funding (in addition to the CWCBC) which have been explored or which will be explored for the proposed project or study. (Examples would be Local County and Town Governments, Water Conservancy Districts, USDA Rural Development, The Natural Resources Conservation Service, The U.S. Environmental Protection Agency, Commercial Banks, etc.)

The above statements are true to the best of my knowledge:

**Signature of Applicant:**

**Print Applicant's Name:** Andy Moore

**Project Title:** Arkansas River Decision Support System (ArkDSS)

**Date:** July 31, 2013

### Return this application to:

Mr. Kirk Russell, P.E., Chief  
Finance Section  
COLORADO WATER CONSERVATION BOARD  
1313 Sherman Street, Room 718  
Denver, CO 80203

Submit applications by email to: [kirk.russell@state.co.us](mailto:kirk.russell@state.co.us) or fax to (303) 866-4474



## COLORADO

Colorado Water  
Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

### Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Steve Miller, Water Resources Engineer  
Interstate, Federal & Water Information Section

Date: September 10, 2014

Subject: **Non-Reimbursable Investments Item 8**  
**Cost-share USDA Regional Conservation Partnership Program**

#### Introduction

The USDA Regional Conservation Partnership Program (RCPP) was authorized as a new program in the 2014 Farm Bill to be administered by the Natural Resources Conservation Service (NRCS). Per NRCS:

The ... RCPP promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners. NRCS provides assistance to producers through partnership agreements and through program contracts or easement agreements. RCPP combines the authorities of ... former conservation programs (including) - the Agricultural Water Enhancement Program, ..., the Cooperative Conservation Partnership Initiative .... Assistance is delivered in accordance with the rules of EQIP, CSP, ACEP and HFRP; and in certain areas the Watershed Operations and Flood Prevention Program.

The RCPP allows enhanced delivery of traditional NRCS programs, such as the Environmental Quality Improvement Program (EQIP) by modifying some requirements and addressing problems in a more comprehensive, basinwide basis. This can be particularly useful in meeting regional water quality and water conservation goals. Selection into the RCPP involves a highly competitive process. The applicant must demonstrate the ability to meet eligible resource goals through implementation of specific best management practices. In addition, the RCPP requires the applicant to identify sources of the 50% non-USDA cost-share they are required to provide. Applications therefore involve a significant amount of pre-proposal planning and cost-estimating. The funding requested herein will be used to provide technical assistance to entities applying to the NRCS for RCPP funding and financial cost-share assistance to successful applicants.

#### Staff Recommendation

Staff recommends that the Board request the General Assembly to authorize \$500,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB to provide technical and cost-share assistance to applicants and participants in the Regional Conservation Partnership Program.





**CWCB Water Project Non-Reimbursable Investment Program  
Project Data Sheet**

Item #8

<b>Sponsor:</b> Colorado Water Conservation Board <b>Project Name:</b> Cost-share USDA RCPP <b>Drainage Basin:</b> Statewide <b>Total Project Cost:</b> \$40 Million <b>CWCB NRI:</b> \$500,000	<b>Location:</b> Statewide <b>Project Type:</b> Cost-share <b>Water Source:</b> Statewide <b>Funding Source:</b> Construction Fund <b>Type of Grantee:</b> Agricultural water users
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The USDA Regional Conservation Partnership Program (RCPP) was authorized as a new program in the 2014 Farm Bill to be administered by the Natural Resources Conservation Service (NRCS)

The RCPP allows enhanced delivery of traditional NRCS programs, such as the Environmental Quality Improvement Program (EQIP) by modifying some requirements and addressing problems in a more comprehensive, basinwide basis. This can be particularly useful in meeting regional water quality and water conservation goals. Selection into the RCPP involves a highly competitive process. The applicant must demonstrate the ability to meet eligible resource goals through implementation of specific best management practices. In addition, the RCPP requires the applicant to identify sources of the 50% non-USDA cost-share they are required to provide. Applications therefore involve a significant amount of pre-proposal planning and cost-estimating. The funding requested herein will be used to provide technical assistance to entities applying to the NRCS for RCPP funding and financial cost-share assistance to successful applicants.

The funding requested herein will be used to provide technical assistance to entities applying to the NRCS for RCPP funding and financial cost-share assistance to successful applicants.



**COLORADO WATER CONSERVATION BOARD**  
**CONSTRUCTION FUND**  
**NON-REIMBURSABLE PROJECT INVESTMENT**  
**APPLICATION**



Item #8

Cost-share for USDA Regional Conservation Partnership Program

(Project Name)

**Application Deadline: August 1 for funds available July 1 the following year.**

**Funding recommendations will be considered at the November CWCB Board Meeting.**

**Instructions:** This application form should be emailed, typed, or printed neatly. You may attach additional sheets as necessary to fully answer any question, or to provide additional information that you feel would be helpful in evaluating this application. Include with your application a cover letter summarizing your request. If you have difficulty with any part of the application, contact Kirk Russell, PE, Finance Section Chief for assistance, at (303) 866-3441, ext. 3232 or email [kirk.russell@state.co.us](mailto:kirk.russell@state.co.us).

Generally, the applicant is also the prospective owner and sponsor of the proposed project. If this is not the case, contact CWCB before completing this application.

**Part A. - Description of the Applicant (Project Sponsor or Owner);**

1. Applicant Name(s): Steve Miller for Colorado Water Conservation Board in cooperation with the Colorado River Water Conservation District

Mailing address: Colorado Water Conservation Board  
1313 Sherman Street, Room 721  
Denver, CO 80203

Taxpayer ID#:  Email address: Steve.miller@state.co.us

(Please supply current W-9 with application)

Phone Numbers: Business: 303-866-3441, x3228

Home:

Fax:

2. Person to contact regarding this application if different from above:

Name:

Position/Title

# Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #8

## 3. Provide a brief description of your organization below:

The Colorado Water Conservation Board (CWCBC) represents each major water basin, Denver and other state agencies in our joint effort to use water wisely and protect our water for future generations.

## Part B. - Description of the Project or Study

1. Name of the study or project: Cost-share for USDA Regional Conservation Partnership Program (RCPP).

2. What is the purpose of this grant application? Check one.

- ☐ Study
- ☐ Demonstration project.
- ☒ Rehabilitation or replacement of existing
- ☐ Other (Please describe)

Technical and financial assistance grants to agricultural water user entities and sponsors applying for, or participating in, the USDA RCPP. Funds would be available for planning and design work leading to USDA funded implementation of irrigation system infrastructure improvements. Funds may also be used for financial assistance to meet participant cost-share requirements.

3. General location of the study or demonstration project. (Please include county, and approximate distance and direction from the nearest town):

Statewide, with particular emphasis on areas identified by USDA as Critical Conservation Areas (CCAs). Colorado is covered by two CCAs: the Colorado River Basin and the Prairie Grasslands which covers the eastern third of Colorado as part of a 13 state area.

4. Please provide a brief narrative description of the proposed study or demonstration project including purpose, need, and service area. (Attach scope of study, if available)

The proposed project is to offer technical assistance to sponsoring entities seeking to apply to the USDA funded RCPP and financial to those successful applicants in meeting the non-USDA cost-share requirements. Participants in the RCPP will generally be agricultural water users and providers seeking to improve irrigation systems to meet water conservation and water quality goals. These systems have opportunities to receive significant federal funding for infrastructure improvements however, the federal funding is dependent on credible designs and cost-estimates for which timely local funding is necessary.

## Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #8

5. Explain why you are requesting a grant, instead of a loan. (the Construction Fund exists primarily to provide low interest loans for the construction or rehabilitation of raw water projects. Non-reimbursable investments are approved only when the project or study is of statewide interest and benefits a wide range of people and organizations, and/or a large geographical area .

Grant funding is being sought to support engineering and planning needed to produce successful competitive applications to the RCPP. These applicants often have marginal resources with which to obtain high quality technical services at the beginning of the federal funding process. State financial assistance to defray or reduce the upfront application costs can result in major new irrigation modernization projects, producing Statewide and local benefits of improved water quality, improved water use efficiency, and more productive agricultural communities. A significant infusion of federal funding will follow, but a minimum of 50% non-USDA cost-share is required for implementation. A combination of funds from other federal programs, as well as local and State grants and construction fund loans from the Board will help meet the cost-share requirement.

6. List the names and addresses of any technical or legal consultants retained to represent the applicant or to conduct investigations for the proposed project or study.

Name	Address & Phone Number

7. List any feasibility study or scope of work that has been completed or is now in progress for the proposed project or study. (Submit one copy with this application):

This project would be a compliment to similar activities being done by other programs such as:

1. Colorado River Basin Salinity Control Program which has done extensive investigations of irrigation system needs and opportunities in the Basin.
2. Gunnison Selenium Management Program.
3. Ogallala Aquifer conservation and management efforts

At least two entities in Colorado are still competing for FY14 and FY15 RCPP funding: the CRWCD for work in the Gunnison Basin and a group working in the Republican Basin. Competition for FY16 USDA funds will open in early 2015.

## Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #8

8. What is the estimated cost of the study/demonstration project? Please include estimated Study, Planning, Engineering, and Construction costs, if known :

Estimated Planning/Study Costs:

\$250,000

Estimated Engineering Costs:

Estimated Construction Costs:

\$250,000

**Estimated Total Costs:**

\$500,000

9. **How much funding are you requesting?**

\$500,000

### Part C. - Project Sponsor Financial Information

1. The CWCBC Construction Fund is primarily a revolving loan fund. Non-reimbursable investments are approved only when the project or study is of statewide interest and benefits a wide range of people. Provide copies of the two most recent annual reports, financial statements, corporate reports or other current documentation of financial condition and operations with this application.
2. Provide a brief narrative description of potential sources of funding (in addition to the CWCBC) which have been explored or which will be explored for the proposed project or study. (Examples would be Local County and Town Governments, Water Conservancy Districts, USDA Rural Development, The Natural Resources Conservation Service, The U.S. Environmental Protection Agency, Commercial Banks, etc.)

The above statements are true to the best of my knowledge:

**Signature of Applicant:** /s/

**Print Applicant's Name:** Steve Miller

**Project Title:**

**Date:** Aug. 1, 2014, revised Aug. 25, 2014

### Return this application to:

Mr. Kirk Russell, P.E., Chief  
Finance Section  
COLORADO WATER CONSERVATION BOARD  
1313 Sherman Street, Room 718  
Denver, CO 80203

Submit applications by email to: [kirk.russell@state.co.us](mailto:kirk.russell@state.co.us) or fax to (303) 866-4474



1313 Sherman Street, Room 721  
Denver, CO 80203

## Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Kevin Reidy, State Water Conservation Technical Specialist  
Water Supply Planning Section

Date: September 10, 2014

Subject: Non-Reimbursable Investments Item #9  
Water Conservation Planning and Data Tracking Tools

### Introduction

To better understand Colorado's future water supply needs and options, accurate and timely local information must be incorporated into statewide demand forecasts. The first phase of water use and water conservation data collection has been completed through the creation of the CWCB Water Efficiency Data Portal. The first phase included creation of the portal and database with the necessary content fields for water use and water conservation data.

This next phase will entail refinements to the output tools such as customized reports that will assist in future SWSI efforts as well as informing future Colorado Water Plans. Additionally, as local water providers use the system and begin to enter multiple years of data, CWCB staff will be surveying them as to their needs for specific data outputs that will help their long term planning. A savings estimation and program tracking tool could be built into this existing database and portal. This would allow local water providers to track program effectiveness and estimate water savings more accurately and in a uniform fashion. Additionally, work can be done to integrate this web data portal into the BNDSS so that the CWCB can have water use and conservation data tied into the bigger water supply planning efforts of the CWCB.

Data collection is critical to refining and improving the State's understanding of the role of urban conservation in meeting Colorado's future water supplies. This project is necessary for the long term collection of water demand and water conservation data in order to identify savings and programmatic trends. As the CWCB progresses



through successive planning cycles of SWSI and Colorado's Water Plan, this data will form an important part of the planning process.

**Staff Recommendation**

Staff recommends that the Board request the General Assembly to authorize \$100,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB for technical activities related water conservation planning and data tracking.

**Water Project Construction Program – Project Data  
Non-Reimbursable Investment**

Item #9

**Applicant:** Colorado Water Conservation Board

**County:** Statewide

**Project Name:** Water Conservation Planning and Data Tracking Tools

**Project Type:** Mixed- Study, improved use of data, and development of tool and resources

**Drainage Basin:** All River Basins in Colorado

**Water Source:** N/A

**Total Project Cost (Annual):** \$100,000

**Funding Source:** CWCB Const. Fund

**Type of Grantee:** State Government

**CWCB Non-Reimbursable Inv.:**

To better understand Colorado's future water supply needs and options, accurate and timely local information must be incorporated into statewide demand forecasts. The first phase of water use and water conservation data collection has been completed through the creation of the CWCB Water Efficiency Data Portal. The first phase included creation of the portal and database with the necessary content fields for water use and water conservation data.

This next phase will entail refinements to the output tools such as customized reports that will assist in future SWSI efforts as well as informing future Colorado Water Plans. Additionally, as local water providers use the system and begin to enter multiple years of data, CWCB staff will be surveying them as to their needs for specific data outputs that will help their long term planning. One idea is that a savings estimation and program tracking tool could be built into this existing database and portal. This would allow local water providers to track program effectiveness and estimate water savings more accurately and in a uniform fashion. Additionally, work can be done to integrate this web data portal into the BNDSS so that we can have water use and conservation data tied into the bigger water supply planning efforts of the CWCB.

Data collection is critical to refining and improving the State's understanding of the role of urban conservation in meeting Colorado's future water supplies. This project is necessary for the long term collection of water demand and water conservation data in order to identify savings and programmatic trends.





**COLORADO WATER CONSERVATION BOARD**  
**CONSTRUCTION FUND**  
**NON-REIMBURSABLE PROJECT INVESTMENT**  
**APPLICATION**



Item #9

Water Conservation Planning and Data Tracking Tools

(Project Name)

**Application Deadline: August 1 for funds available July 1 the following year.**

**Funding recommendations will be considered at the November CWCB Board Meeting.**

**Instructions:** This application form should be emailed, typed, or printed neatly. You may attach additional sheets as necessary to fully answer any question, or to provide additional information that you feel would be helpful in evaluating this application. Include with your application a cover letter summarizing your request. If you have difficulty with any part of the application, contact Kirk Russell, PE, Finance Section Chief for assistance, at (303) 866-3441, ext. 3232 or email [kirk.russell@state.co.us](mailto:kirk.russell@state.co.us).

Generally, the applicant is also the prospective owner and sponsor of the proposed project. If this is not the case, contact CWCB before completing this application.

**Part A. - Description of the Applicant** (Project Sponsor or Owner);

1. Applicant Name(s):

Kevin Reidy

Mailing address:

1313 Sherman St. Suite 721  
Denver, CO 80203

Taxpayer ID#:

Email address:

Kevin.reidy@state.co.us

(Please supply current W-9 with application)

Phone Numbers: Business:

303-866-3441

Home:

Fax:

2. Person to contact regarding this application if different from above:

Name:

Position/Title

# Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #9

3. Provide a brief description of your organization below:

N/A

## Part B. - Description of the Project or Study

1. Name of the study or project: Water Conservation Planning and Data Tracking Tools

2. What is the purpose of this grant application? Check one.

☒

Study

☐

Demonstration project.

☐

Rehabilitation or replacement of existing

☒

Other (Please describe)

Continue collecting data through the water efficiency data portal and create more planning tools based on collected data

3. General location of the study or demonstration project. (Please include county, and approximate distance and direction from the nearest town):

Statewide

4. Please provide a brief narrative description of the proposed study or demonstration project including purpose, need, and service area. (Attach scope of study, if available)

See Attached

## Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #9

5. Explain why you are requesting a grant, instead of a loan. (the Construction Fund exists primarily to provide low interest loans for the construction or rehabilitation of raw water projects. Non-reimbursable investments are approved only when the project or study is of statewide interest and benefits a wide range of people and organizations, and/or a large geographical area .

A CWCBC project not suited for a loan

6. List the names and addresses of any technical or legal consultants retained to represent the applicant or to conduct investigations for the proposed project or study.

Name	Address & Phone Number

7. List any feasibility study or scope of work that has been completed or is now in progress for the proposed project or study. (Submit one copy with this application):

- Implementation of Phase 1 of Water Efficiency Data Portal

## Non-Reimbursable Project Investment Application - CWCBC Construction Fund

Form Revised July 2014

Item #9

8. What is the estimated cost of the study/demonstration project? Please include estimated Study, Planning, Engineering, and Construction costs, if known :

Estimated Planning/Study Costs:

100,000

Estimated Engineering Costs:

Estimated Construction Costs:

**Estimated Total Costs:**

100,000

9. **How much funding are you requesting?**

100,000

### Part C. - Project Sponsor Financial Information

1. The CWCBC Construction Fund is primarily a revolving loan fund. Non-reimbursable investments are approved only when the project or study is of statewide interest and benefits a wide range of people. Provide copies of the two most recent annual reports, financial statements, corporate reports or other current documentation of financial condition and operations with this application.
2. Provide a brief narrative description of potential sources of funding (in addition to the CWCBC) which have been explored or which will be explored for the proposed project or study. (Examples would be Local County and Town Governments, Water Conservancy Districts, USDA Rural Development, The Natural Resources Conservation Service, The U.S. Environmental Protection Agency, Commercial Banks, etc.)

The above statements are true to the best of my knowledge:

**Signature of Applicant:**

**Print Applicant's Name:**

**Project Title:**

**Date:**

### Return this application to:

Mr. Kirk Russell, P.E., Chief  
Finance Section  
COLORADO WATER CONSERVATION BOARD  
1313 Sherman Street, Room 718  
Denver, CO 80203

Submit applications by email to: [kirk.russell@state.co.us](mailto:kirk.russell@state.co.us) or fax to (303) 866-4474

TAB 5



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street  
Denver, CO 80203

P (303) 866-3441

F (303) 866-4474

John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Finance Committee  
Colorado Water Conservation Board

FROM: Tim Feehan, Deputy Director, Resource Management

DATE: September 10, 2014

SUBJECT: Rio Grande Water Conservation District - Subdistricts 1 - 6

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### **Staff Recommendation**

*This is an informal item only.*

### **Introduction**

In response to upcoming rules regarding the administration of ground water in the Rio Grande Basin The Rio Grande Water Conservation District (RG District) is currently in the process of developing Subdistricts that will operate and manage Groundwater Management Plans (GWMP's). The GWMP's will identify how each Subdistrict will replace injurious stream depletions caused by well pumping. Each Subdistrict will be required annually to develop Annual Replacement Plan (ARP's) which will specify how injurious depletions in the coming year will be addressed. The ARP's will be provided to the RG District for review and the forwarded to the State Engineer's Office (SEO) for approval, approval with conditions, or denial.

Part of SEO's review process of the individual ARP's will include a requirement for some type of guarantee by the RG District that the future continuing injurious depletions for each Subdistrict will be covered in the rare event the Subdistrict fails. Since the RG District revenue income is set by mill levy, its ability to financially guarantee all the Subdistricts long term injurious depletions is limited.

### **Discussion**

Staff would like to discuss with the CWCB Finance Committee possible scenarios in developing a fund that could be set aside to address the long term financial cost associated with ensuring long term injurious depletions are replaced per the ARP's.



TAB 6





**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, CO 80203

## Memorandum

To: Finance Committee  
Colorado Water Conservation Board

From: Andy Moore, Water Resources Engineer  
Interstate, Federal & Water Information Section

Date: September 10, 2014

Subject: South Platte Groundwater Issues - Summary of Previous NRI Requests

### Staff Recommendation

*This is an informational item only.*

### Introduction

High groundwater levels have been an issue in recent years in localized areas of the alluvial aquifer system tributary to the South Platte River. At the November Board meetings in 2011, 2012, and 2013, the Board directed staff to request the General Assembly to appropriate funds in the Projects Bill for the Board to use for data collection and analysis, for South Platte Decision Support System (SPDSS) groundwater model updates and simulations, and for other efforts as necessary to assist in determining the cause and possible remediation of the high groundwater levels. This resulted in a total of \$1,250,000 being appropriated in the three prior Projects Bills: \$500,000 in the 2012 Projects Bill, \$250,000 in 2013, and \$500,000 in 2014.

### Discussion

These funds are being used by the Colorado Water Conservation Board (CWCB) and the Division of Water Resources (DWR) to collect and analyze data, update and make enhancements to the SPDSS alluvial groundwater model and to perform two pilot projects in the Sterling and Gilcrest/LaSalle areas, in order to assist in determining the cause and possible remediation to high groundwater levels in the South Platte River Basin.

Concurrent with the CWCB and DWR's efforts, the General Assembly approved House Bill 12-1278 that directed the Colorado Water Institute (CWI) to collect and analyze existing groundwater data within the South Platte Basin and provide an independent review of what might be contributing to high groundwater levels. CWI's efforts



related to HB 12-1278 were funded out of the Construction Fund at an approximate total cost of \$940,000; a report was provided to the General Assembly in December 2013. The South Platte Basin Roundtable is planning to review the recommendations from this report.

As part of the two pilot projects, DWR installed monitoring devices in the Sterling area and is currently collecting data from those locations and at existing wells in the Sterling and Gilcrest/LaSalle areas. DWR is also in the process of releasing a Request for Proposals, for a contractor to review and analyze the data from the pilot projects and provide conclusions and recommendations related to the high groundwater levels. This work should be completed early in 2015.

An update and enhancement of the SPDSS alluvial groundwater model is underway, with the revised model available early in 2015. Once the model is updated, model simulations will be performed.

Accounting for these ongoing activities being performed by CWCB and DWR, as well as additional follow-up efforts, Staff expects that the \$1,250,000 appropriated under the 2012, 2013, and 2014 Projects Bills will be adequate and will not be fully expended until 2016. The request for additional funds should not be necessary in the 2015 Projects Bill.

TAB 7



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street  
Denver, CO 80203

P (303) 866-3441

F (303) 866-4474

John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

## Memorandum

TO: Finance Committee  
Colorado Water Conservation Board

FROM: Tim Feehan, Deputy Director, Resource Management

DATE: September 11, 2014

SUBJECT: **Water Plan Finance Chapter**

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**If necessary, Documents shall be dispersed during Finance Committee Meeting.**

