



# **COLORADO WATER CONSERVATION BOARD**

## **DIRECTOR'S REPORT**

**SEPTEMBER 2013**

# STATE OF COLORADO

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## Colorado Water Conservation Board

### Department of Natural Resources

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TO: Colorado Water Conservation Board

FROM: James Eklund  
Brent Newman  
CWCB Staff

DATE: September 24-25, 2013

SUBJECT: **Agenda Item 5d**, September 2013 CWCB Board Meeting  
Director's Report

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John W. Hickenlooper  
Governor

Mike King  
DNR Executive Director

James Eklund  
CWCB Director

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## **~INTERSTATE AND FEDERAL~**

**COLORADO RIVER BASIN STUDY NEXT STEPS:** The United States Bureau of Reclamation (BOR) and the Colorado River Basin States (Basin States) have continued to work with interested stakeholders to develop scopes of work for the three work groups focusing on three different subject areas—municipal conservation and reuse; agricultural conservation and transfers; and, environmental and recreational flows. Colorado is well represented on the workgroups and the Coordination Team, which is overseeing the entire effort. The membership list of the Coordination Team and the three workgroups is enclosed as Attachment 6. The Municipal conservation workgroup has finalized its scope of work, which is attached to this Director's report, also under Attachment 6. The other scopes of work will be finalized in the upcoming weeks, and they will be attached a future Director report. *(Ted Kowalski & Kevin Reidy)*

**M & I WATER CONSERVATION/REUSE WORKGROUP MEETINGS:** CWCB Staff (Kevin Reidy) attended the first U.S. Bureau of Reclamation M&I Water Conservation workgroup meeting in San Diego on August 14<sup>th</sup>. The meeting was very productive and the three Colorado members were able to share their water conservation expertise and tools with the group and contribute to refining the scope of work for Phase 1. The group is tasked with assessing the savings assumptions put forth in the Colorado River Basin Study and quantify savings to date within the study area and provide information on projected future water savings. The next meeting is scheduled for October 22. *(Kevin Reidy)*

**WESTERN STATES WATER COUNCIL HOLDS SUMMER MEETING:** The Western States Water Council ("WSWC") held its annual summer meeting on June 24-26, 2013 in Casper, WY. John Stulp and Dick Wolfe represented Colorado at these meetings. Recently, Governor Hickenlooper named James Eklund to replace Jennifer Gimbel as Colorado's representative to WSWC along with a number of alternates. A copy of this letter is enclosed as Attachment 9. The fall WSWC meeting will be held in Deadwood, South Dakota, on October 2-4, 2013. More information about the WSWC, and the upcoming meetings, can be found at: <http://www.westernstateswater.org/171st-spring-council-meeting-april-3-5-2013-denver-colorado/> *(Ted Kowalski)*

**WSWC DROUGHT IMPACTS MEETING IN SAN DIEGO, CA:** The Western States Water Council and the California Department of Water Resources cosponsored a workshop on quantifying drought impacts August 5-7<sup>th</sup>, in San Diego. Better measurement and reporting of observed drought impacts help identify lessons learned from droughts, and help define resources needed to mitigate future drought impacts. Yet, data quantifying impacts of drought, if available, are often not readily accessible in a manner useful for water agencies. This workshop aimed to develop a strategy for building a centralized information source, by bringing together state, local, and federal agencies to discuss ways to improve quantifying impacts and making information available. CWCB Staff (Taryn Finnessey) attended and contributed to the workshop. *(Taryn Finnessey)*

**COLORADO RIVER WATER USE:** As of August 1, 2013, the Lake Mead water level was at 1105.9 feet with 12.27 million acre-feet (MAF) of storage, or 47% of capacity, while the Lake Powell water level was at 3594.2 feet with 11.20 MAF of storage, or 46% of capacity. Total

system active storage as of August 1 was 30.30 MAF, or 51% of capacity, which is 5.03 MAF less than one year ago when system storage was 59% of capacity.

As of August 2, the 2013 Reclamation forecast for the Lower Basin states' consumptive use of Colorado River water totals 7.31 MAF, which includes Arizona at 2.71 MAF, California at 4.34 MAF, and Nevada at 0.265 MAF. The preliminary end-of-year estimate for 2013 for California's agricultural consumptive use of Colorado River water is 3.455 MAF. The Metropolitan Water District of Southern California is forecasted to use approximately 0.794 MAF. (*Andy Moore*)

**EKLUND NOMINATED TO COLORADO RIVER BASIN SALINITY CONTROL FORUM AND ADVISORY COUNCIL:** On July 13<sup>th</sup>, CWCB Director James Eklund was nominated by Governor Hickenlooper to serve on the Colorado River Basin Salinity Control Forum and Advisory Council. Eklund joins Steve Gunderson, Director of the Colorado Water Quality Control Division, and David Robbins, citizen representative. The Forum and Advisory Council are a cooperative effort between basin states and the federal government, seeking to reduce the amount of salt in the Colorado River through technical study and project implementation. Mr. Eklund's nomination letter and welcoming memo from the Forum are enclosed as Attachment 7. (*Brent Newman*)

**GLEN CANYON DAM ADAPTIVE MANAGEMENT WORK GROUP ("AMWG") AND TECHNICAL WORK GROUP ("TWG") MEETINGS:** The Glen Canyon AMWG summer meeting was held in Flagstaff, Arizona on August 8-9, 2013. The primary agenda items included: budget issues, the Long Term Experimental and Management Plan ("LTEMP") process, and the High Flow Experimental Protocol implementation. Prior to this AMWG meeting, the Bureau of Reclamation ("BOR") and the National Park Service ("NPS") held a workshop in order to collect information about the various alternatives. This workshop used a Strategic Decision Making ("SDM") analysis to consider the possible effects that the various alternatives may have on critical resources. After this workshop and the AMWG meeting, the seven basin state representatives sent a letter expressing their concerns with the metrics and with regard to using the SDM process. This letter is attached to this Report as Attachment 8. Presently, the USBOR and NPS are intending to release a draft EIS by the end of 2013 or in early 2014. Information is available at: [http://www.usbr.gov/uc/rm/amp/amwg/amwg\\_mtginfo.html](http://www.usbr.gov/uc/rm/amp/amwg/amwg_mtginfo.html) or <http://ltempeis.anl.gov/index.cfm> Later in August, Governor Hickenlooper recommended that John McClow replace Jennifer Gimbel as the AMWG representative for Colorado. A copy of this nomination letter is enclosed as Attachment 5. (*Ted Kowalski*)

**ICWP ANNUAL CONFERENCE TO BE HELD IN DENVER:** The Interstate Council on Water Policy (ICWP) will be holding their Annual Conference in Denver on October 15-17, 2013. With the goal to "invigorate and realign the ICWP's next efforts as an advocate in national water policy development", the program features a keynote address by Director Eklund and presentations by other CWCB staff members. For more information on this event, visit <http://www.icwp.org.php53-16.dfw1-2.websitetestlink.com/icwp-annual-meeting-2013>. (*Brent Newman*)

## ~STATEWIDE~

**DROUGHT UPDATE:** Following above average temperatures in July, August began cool but warmed substantially the last two weeks of the month ending with above average temperatures for most of the state. Strong July and August rains have also helped to keep municipal demand lower, while elevating drought conditions across large portions of the state. Reservoir storage, especially across southern Colorado, remains quite low and providers are hoping for a strong snow accumulation season to fill the deficit. Monsoonal moisture on the eastern plains has brought much needed relief to the agricultural community, but soil moisture remains low and a full recovery will take years. (*Taryn Finnessey*)

**GROUND WATER COMMISSION MEETING:** The Ground Water Commission (GWC) held its quarterly meeting on August 16, 2013, in Pueblo, CO. The agenda items included routine reports and a hearing on a request for a variance to Rules 7.3.1, 7.3.2, 7.3.3 and 7.3.4 to allow for the relocation of a well by Verna Marlene Hill. A hearing was also held on an appeal of the Hearing Officer's decision in the Meridian Case that found that a portion of the precipitation that falls within the designated basins to be designated groundwater. The decision also found that water diverted through french drains and released to the surface is also designated groundwater. The GWC approved the variance request and upheld the Hearing Officer's decision. Also during the meeting, the Ground Water Management Districts (GWMD) indicated that they intend to pursue, during the next legislative session, proposed legislation that would grant GWMD enforcement authority and the ability to impose fines. The Ground Water Commission will hold its next regular meeting on November 15, 2013 in Castle Rock, CO. For more information visit: <http://water.state.co.us/groundwater/CGWC/Pages/default.aspx>. (*Suzanne Sellers*)

## ~COLORADO RIVER BASIN~

**RED CANYON FIRE EVALUATED:** Staff from the Watershed and Flood Protection Section met with local, state, and federal partners on August 22 to assess potential flooding impacts from the Red Canyon Fire. The Red Canyon Fire burned 390 acres immediately southwest of Glenwood Springs. This represents nearly one third of the tributary area of Red Canyon draining to the Roaring Fork River upstream of Glenwood Springs. The group consensus following the meeting was that structural susceptibility to flooding was much less than in other recent fires from around the state, but impacts to Highway 82 could be significant due to debris and flooding across the highway following rain events. Triggers for warnings from the National Weather Service and other emergency protocols were established. As of September 9<sup>th</sup>, no highway closures were noted. (*Kevin Houck*)

## ~ARKANSAS RIVER BASIN~

**ARKANSAS BASIN DROUGHT IMPACT TOUR RECAP:** August 12<sup>th</sup> the Drought Task Force and CWCB held a drought impact tour in the Arkansas River Basin. Attendees met with producers, water managers and area leaders to discuss the drought impacts from the last three years of well below average precipitation. The tour was extremely well attended and included cabinet members, legislators, and senior leadership and staff from many state and federal

agencies. A community meeting was also held in Lamar in which local citizens were able to voice their concerns regarding drought preparedness and management. (*Taryn Finnessey*)

**TWO BUTTES DAM EMERGENCY IN BACA COUNTY:** On August 13, 2013, the State Engineer' Office (SEO) - Dam Safety Branch requested access to CWCB's emergency dam failure/action funds (\$50,000). The action was necessary due to a pattern of monsoonal precipitation in the area and an undersized spillway. This resulted in the State Engineer authorizing emergency actions pursuant to statute.

Two Buttes is a high hazard dam located in Baca County, northeast of Springfield, CO. The dam was constructed in 1910 and has been owned by Colorado Parks and Wildlife (CPW) since the 1970's. It is part of the Two Buttes State Wildlife Area.

In the 1980's the SEO placed a storage restriction on the dam based on the hazard classification and an inadequate spillway capacity. The dam filled very rapidly in early August and DNR declared a dam emergency, which allowed CPW quickly hire contractors and an engineering firm to help solve the problem. CPW worked with the SEO to widen the existing earthen spillway to protect the dam. The spillway was widened by 125-ft, (approx. 58,000 cyds of excavation). This solution removed the immediate threat and allows CPW to store to gage height 32ft. CPW is working on a incremental damage assessment and hazard classification for the dam to help reduce the hazard classification from high to significant. (*Kirk Russell*)

**HICKENLOOPER NOMINATES FEDERAL REPRESENTATIVE TO ARCA:** On August 23, 2012, Governor Hickenlooper sent a letter to President Obama requesting that James Rizzuto of La Junta be designated as the next Federal Representative to the Arkansas River Compact Administration (ARCA). The Bylaws of the Administration provide that the President's representative serve as the Chairman and preside at meetings. Mr. Rizzuto has served in the Colorado General Assembly, and is a lifelong resident of the Arkansas Valley. His nomination letter is included as Attachment 4. (*Brent Newman*)

## **~PLATTE RIVER BASIN~**

**PLATTE RIVER RECOVERY PROGRAM:** The Platte River Recovery Implementation Program ("Program") Governance Committee has not met since the last CWCB meeting. However, a Notice to Proceed (NTP) was issued on August 30, 2013 to begin the J2 Reregulating Reservoir Project. CWCB staff participated in Water Advisory Committee, Technical Advisory Committee, Land Advisory Committee, and Finance Committee conference calls and meetings. The next Governance Committee meeting will be held on September 10-11, 2013 in Kearney, NE. For more information, please visit: <http://www.platteriverprogram.org/Pages/default.aspx>. (*Suzanne Sellers*)

## **~SAN JUAN/SAN MIGUEL-DOLORES RIVER BASIN~**

**DOLORES RIVER MANAGEMENT COORDINATION WORKSHOP:** On Friday, October 18, a Dolores River Management Coordination (DRMC) Workshop will be held at the Naturita Community Center in Naturita, CO. The Colorado Water Conservation Board (CWCB), the Colorado River Water Conservation District (CRWCD) and the Southwestern Water Conservation District (SWCD) are convening this one-day workshop to bring together

various stakeholders to discuss Dolores River management issues. The discussion will include: existing and proposed Wild and Scenic suitability for reaches of the Dolores River from McPhee Reservoir Dam to the Colorado state line; the existing and proposed Instream Flows (ISF) water rights for portions of the Dolores River, and other alternative protections for portions of the Dolores River. (*Suzanne Sellers & Brent Newman*)

## ~AGENCY UPDATES~

**2013 IMPLEMENTATION OF 2012 ISF TEMPORARY LEASES:** In 2012, the CWCB approved three temporary instream flow (“ISF”) leases under the Colorado Water Trust’s Request for Water 2012 program, and one interagency agreement to loan water for ISF use with Colorado Parks and Wildlife. On September 4, 2013, the CWCB Director executed an agreement with the Colorado Water Trust and Aspen Shorefox, LLC to implement the temporary lease of the Bunte Highline Ditch for a second year (see table below). CWCB and CPW staff members continue to monitor conditions on the White River and if the need arises, will notify the Division of Water Resources of releases from the Reservoir for ISF use (see table below). A renewal of the lease with the Yampa Water Conservancy District and Colorado Water Trust of water stored in Stagecoach Reservoir is on the Board’s agenda (#13). (*Linda Bassi*)

ISF Reaches Benefited	Lessor	Ditch-Reservoir / Priority	Amount Leased
<b>Colorado River</b> (5-90CW300 and 5- 80CW446, 447 and 448) <ul style="list-style-type: none"> <li>Willow Creek to Fraser River, 3.4 miles</li> <li>Windy Gap to Williams Fork, 14.7 miles</li> <li>Williams Fork to Troublesome Creek, 8 miles</li> <li>Troublesome Creek to Blue River, 8 miles</li> </ul>	Aspen-Shorefox, LLC	<b>Bunte Highline</b> (Priority No. 168): 1911 (Priority No. 459): 1955 (Priority No. 491): 1955	17.82 cfs 14.14 cfs 8.04 cfs
<b>Big Beaver Creek</b> (5-77W3652E) Outlet of Lake Avery Reservoir (a/k/a Big Beaver Creek Reservoir) to confluence with the White River <b>White River</b> (5-77W3652C) Confluence of North Fork and South Fork of White River to confluence with Piceance Creek	Colorado Parks and Wildlife	Lake Avery Reservoir a/k/a Big Beaver Creek Reservoir	3,000 AF

**UPDATE ON TEMPORARY LEASE FROM WINTER PARK RANCH WATER AND SANITATION DISTRICT:** At its July 2013 meeting, the Board ratified the Director’s acceptance of a temporary lease of water from the Winter Park Water and Sanitation District (“District”) for ISF use on St. Louis Creek and the Fraser River. The ISF water rights that will benefit from the lease are:

Case No.	Stream	Segment	Approp Date	Segment Length	Amount
5-90CW316	St. Louis Creek	King Creek to Tyron Ditch div <sup>1</sup>	11-27-1990	4.2 miles	6 cfs (5/15 – 9/15) 3.5 cfs (9/16 – 5/14)
5-90CW315	Fraser River	St. Louis Creek to Ranch Creek	11-27-1990	4.2 miles	17 cfs (5/15 – 9/15) 11 cfs (9/16 – 5/14)
5-90CW308	Fraser River	Ranch Creek to Crooked Creek	11-27-1990	0.7 miles	17 cfs (5/15 – 9/15) 11 cfs (9/16 – 5/14)
5-90CW308B	Fraser River	Crooked Creek to Colorado River	11-27-1990	13.2 miles	30 cfs (5/15 – 9/15) 19 cfs (9/16 – 5/14)

CWCB staff has coordinated with the Colorado Water Trust and the District to install two staff gages (one on St. Louis Creek and one on the Fraser River) to enable implementation of the lease. In late August, leased water was used to supplement the lower ISF reach on the Fraser River. (*Linda Bassi*).

**COLORADO LAW INSTITUTE HOSTING CLE:** The Colorado Law Institute of CLE International will be holding their Second Annual Local Conference in Denver on October 21, 2013 at the Grand Hyatt Hotel. This conference focuses on the challenges facing managers on the Colorado River, and features a keynote address by Mike King, Executive Director of the Colorado Department of Natural Resources. Ted Kowalski of the CWCB staff will also be presenting, along with several agency partners from across the state. For more information visit <https://cle.com/upperbasin>. (*Brent Newman*)

**USCID WATER MANAGEMENT CONFERENCE IN DENVER:** The U.S. Society for Irrigation and Drainage Professionals will be hosting a Water Management Conference in Denver on October 22-25, 2013 at the DoubleTree by Hilton Denver. The title of the conference is “The Agriculture/Urban Water Interface - Conflicts and Opportunities”. CWCB staffers will be presenting at the conference, which will investigate how “urban and irrigation interests can work together to meet future water needs given limited supplies. For more information on the conference visit <http://www.uscid.org/13coconf.html>. (*Brent Newman*)

**FREE NASA ONLINE COURSE FOR WATER PROFESSIONALS:** From October 17 – November 14, 2013, NASA will be offering a free online course as part of their outreach and education to water users. The course contains an overview of freely available NASA earth science data and web-tools for decision-making and water resources management from regional to global scales. It will help professionals assess which NASA data and decision support tools are best suited to their environmental management needs. This course is intended for water resources managers, water user associations, NGOs, international development agencies, and private sector organizations. Topics covered include remote sensing, atmosphere and land models, satellites, sensors, and models, soil moisture and evapotranspiration, reservoir height and ground water, and web tools for data access and imaging. Information about this free course can be found at: <http://water.gsfc.nasa.gov/index.php?section=23> (*Joe Busto*)

**WATERSHED/WILDFIRE ASSESSMENTS:** Staff has been presenting to various organizations around the state (including Basin Roundtables) on the importance of pre-fire mitigation strategies. Staff is recommending that communities consider Watershed/Wildfire



Assessments. The CWCB Colorado Watershed Restoration Program is a source of potential grant funding for these Assessments.

Watershed/Wildfire Assessments provide strategies for water providers, land management agencies, private landowners, environmental and watershed groups, state and local governments, local fire authorities, and water users to identify and prioritize the type and specific location of treatments necessary to reduce the risk of impacts that occur to hydrologic processes in a post-fire environment. The plans provide specific actions needed to protect reservoirs, intakes, water transportation and distribution structures, and other facilities from high-severity wildfires. Assessments identify locations of hazardous fuels and areas prone to post-fire flooding. Fuel treatments can be designed to reduce the risk to water infrastructure. Pre-fire mitigation strategies should identify locations for sediment check structures, contour log felling, sediment catchment basins, constructed alluvial fans, and other treatments designed dissipate flood energy. *(Chris Sturm)*

**FLOOD MITIGATION PLAN UPDATE:** CWCB has contracted with AMEC to update the State of Colorado's Flood Mitigation Plan (Plan). This plan will be used to meet the requirements of the State of Colorado's Natural Hazard Mitigation Plan and will comply with all Federal Emergency Management Agency (FEMA) guidelines and criteria for natural hazard mitigation planning. It will also include an updated flood vulnerability assessment which provides the necessary data to create a comprehensive mitigation strategy. This will be used to meet FEMA requirements but will also guide the State in determining risk and vulnerability of assets and how to mitigate impacts.

Critical to the update of the Plan is an analysis of events since 2010, actions taken during those events, how those events impacted Colorado, and any recommended actions that should be taken during future events. The update of the risk assessment and mitigation strategies will focus on post-wildfire flooding.

This project will result in an updated Flood Mitigation Plan that will be incorporated into the Colorado State Multi-Hazard Mitigation Plan. Multiple state agencies will be included in the Plan preparation process and it will ultimately be adopted by the Governor. The Plan is scheduled to be completed by November 2013. *(Jamie Prochno)*

**POST-WILDFIRE FLOOD INSURANCE WORKSHOPS:** CWCB has been coordinating with communities affected by wildfires this summer to provide information to citizens about flood insurance. Because wildfires can cause increased erosion and flooding, this outreach is an important part of post-fire communication to residents. Additionally, Congress passed legislation adding an exception to the standard 30-day wait for new flood insurance policies for property owners affected by flooding resulting from wildfires on federal land. Flood Insurance Workshops were held in South Fork and Walsenburg to explain the basics of flood insurance and changes to legislation affecting Colorado. *(Jamie Prochno)*

**CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE:** Over the last few years of research/projects along with evaluating this grant program, CWCB staff is identifying trends in water efficiency & drought planning and implementation. It is an on-going discussion as staff considers a guideline update for this grant program.

One grant application was received, considered & reviewed since the July 2013 Director's Report

- **City of Lafayette** – Pre Rinse Spray Nozzle Replacement

One grant has been approved since the last Board meeting:

- **St Charles Mesa Water District** – Water Meter Replacement (\$49,616.66)

Deliverables to the CWCB are as follows:

- **East Larimer County Water District** – Water Rate Study – *submitted 75% Progress Report*
- **City of Longmont** – Rebate Program – *submitted Final Report*
- **Left Hand Water District** – Commercial Audit Program – *submitted Final Report (Ben Wade)*

**WATER EFFICIENCY & DROUGHT PLANS UPDATE:** The Office of Water Conservation & Drought Planning (OWCDP) continues to work with the following providers to approve their Water Efficiency and Drought Management Plans:

## **DROUGHT MANAGEMENT PLANS**

### **Plans in review**

- **Pagosa Area Water and Sanitation District** – The District submitted a draft Drought Management Plan in January, CWCB has reviewed the plan and provided feedback to the District and they are working to incorporate CWCB comments. (**Taryn Finnessey & Ben Wade**)

## **WATER EFFICIENCY PLANS**

### **Approved Plans**

The following plans have been given *conditional approval*. CWCB staff will continue to work with these entities until their respective Water Efficiency Plans achieve approval status.

- **City of Trinidad**
- **Meridian Metro District**
- **City of Loveland**
- **City of Englewood**

### **Water Efficiency Plans in review**

- **Monument, Palmer Lake and Tri-View Metro District**–Received on July 16, this regional plan is in review
- **Town of La Junta** – Final review of the Plan was completed by CWCB staff in April 2011 and additional comments were sent back to the Town in May 2011. Resubmission pending.
- **South Adams County Water & Sanitation District** – CWCB received the Plan on November 3, 2011. CWCB staff reviewed the plan and sent comments to the District on January 30, 2012. Resubmission pending. (*Kevin Reidy & Ben Wade*)



**GOVERNOR'S WATER AVAILABILITY TASK FORCE:** The next Water Availability Task Force on September 18, 2013 from 9:30-11:30am at the Colorado Parks & Wildlife Headquarters, 6060 Broadway, Denver, CO in the Bighorn Room. Please check the website (<http://cwcb.state.co.us/public-information/flood-water-availability-task-forces/Pages/main.aspx>) for additional information. (Ben Wade)

**WATER CONSERVATION TECHNICAL ADVISORY GROUP (WCTAG) UPDATE:** The WCTAG met on August 28<sup>th</sup> and had a couple of presentations. First, Amelia Nuding from Western Resource Advocates presented on an innovative program to bring water and energy utilities together around collaborative projects that save water and energy. To date, she has met with several Front Range water utilities in order to team them up with Xcel energy. Second, the group had a discussion regarding the outdoor water conservation recommendations made by the IBCC Water Conservation Subcommittee in their 2010 Letter to Governors. Brenda O'Brien from Green Industries of Colorado and Drew Beckwith from Western Resource Advocates brought forth several ideas for the group to discuss. The group focused on the idea of pursuing a statewide set of certifications for green industry professionals. Additionally, the group thought a set of model landscape/irrigation standards would also be needed for local jurisdictions to adopt or adapt to their needs. This discussion will continue over the coming months. The WCTAG will have a workshop to run through the 1051 Web Portal on Sept. 18th with a testing phase to follow after feedback has been incorporated. (Kevin Reidy)

**1051 REPORTING WEB PORTAL UPDATE:** The Web Portal is on schedule with the consulting team building the database and website. Kevin Reidy provided the team with comments and feedback on the layout and data categories along with creating a list of reports that the CWCB wants to be built in. As mentioned in the WCTAG report, there will be a workshop to unveil the portal to the group and to work through the design, content and functionality of the portal with the group. A testing period will follow for the next few months with the final ready in January 2104. (Kevin Reidy)

**UPDATE TO THE 2008 CLIMATE CHANGE IN COLORADO REPORT:** CWCB is in the process of contracting with Western Water Assessment for a comprehensive update to the 2008 *Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation*. The IPCC is releasing its Fifth Assessment Report (AR5) starting in fall 2013, based on the latest generation of climate models, the output of which is already accessible today. The release of these new reports will capture the attention of numerous decision makers across Colorado, and we believe that having an updated Climate Change in Colorado report available at the same time will be critical to helping address climate change concerns across the state.

Although the new IPCC and NCA reports will not overturn the 2008 report's key findings about the character and impacts of future climate change, they will add important nuance and detail. In particular, these syntheses now cover critical climate-related impacts and feedbacks that were not addressed in the 2008 report, such as dust-on-snow events and bark beetle epidemics. (Taryn Finnessey)

**THE AGRICULTURAL EMERGENCY DROUGHT (AED) GRANT PROGRAM:** The Agricultural Emergency Drought (AED) Grant Program provides up to \$1 million annually for emergency drought-related water augmentation purposes to Colorado's agricultural water users. The program is open to agricultural organizations located in areas where a disaster emergency

has been proclaimed due to drought. Grant funds are used to offset the added costs of leasing water during drought years.

All requests are reviewed by the AED grant committee. The committee is comprised of the Director of the CWCB, the State Engineer, the Commissioner of Agriculture and the Executive Director of the Department of Natural Resources. *(Taryn Finnessey)*

Here is a summary of the FY 2014 requests to date:

<b>SPONSOR</b>	<b>REQUESTED AMOUNT</b>	<b>RECOMMENDED AMOUNT</b>
Lower Arkansas Water Management Association	\$ 103,899.28	\$ 103,899.28
Logan Well Users, Inc.	\$ 339,827.00	\$ 339,437.66
Lower Arkansas Valley Water Conservancy District	\$ 95,940.54	\$ 95,940.54
Arkansas Groundwater Users Association	\$ 200,821.00	\$ 200,821.00
Colorado Water Protective and Development Association	\$ 245,238.00	\$ 115,874.85
<b>FUNDING SUMMARY</b>		
<b>TOTAL GRANT AMOUNT AVAILABLE TO DATE (FY14)</b>		<b>\$1,000,000</b>
<b>RECOMMENDED FUNDING (if pending grants are approved as recommended)</b>		<b>\$885,973.33</b>
<b>REMAINING FUNDS AVAILABLE (if pending grants are approved as recommended)</b>		<b>\$144,026.67</b>

**REQUESTS FOR ADMINISTRATION OF ISF WATER RIGHTS:** From April through September 2013, staff, on behalf of the Board, placed calls for administration of the following ISF water rights. Staff was alerted to low flow conditions via the flow alert system. The Division Engineers have worked diligently to enforce the calls through the curtailment of junior rights and/or through the implementation of various augmentation plans.

<b>STREAM NAME</b>	<b>CASE NUMBER</b>	<b>DATE OF FORMAL WRITTEN CALL</b>
Slate River	4-80CW092	September 4, 2013
Elk River	6-77W1279 6-77W1331	August 21, 2013
Pine Creek	2-77W4674	May 13, 2013
Taylor River	4-87CW264	April 19, 2013

The call letters and detailed information on the Board's rights that were administered can be found on the CWCB's web page at:

<http://cwcb.state.co.us/StreamAndLake/Physical/AdministrativeCalls/> *(Jeff Baessler)*

**RECENTLY DECREED ISF WATER RIGHTS:** On June 27, 2013, the Division 1 Water Court decreed an instream flow water right to the CWCB on Forrester Creek in Case No. 1-12CW272 for 1.7 cfs (5/1-8/31), 1.1 cfs (9/1-10/31) and 0.7 cfs (11/1-4/30), with an appropriation date of March 21, 2012. The upstream terminus is the headwaters and the lower

terminus is the Forrester Creek Ditch headgate. This ISF reach is approximately 6.87 miles long and flows in a northeasterly direction through parts of Larimer County.

On June 27, 2013, the Division 1 Water Court decreed an instream flow water right to the CWCB on Grace Creek in Case No. 1-12CW273 for 5.5 cfs (5/1-8/15), 3.6 cfs (8/16-10/31) and 2.0 cfs (11/1-4/30), with an appropriation date of March 21, 2012. The upstream terminus is the confluence with the North Fork and South Fork of Grace Creek and the lower terminus is the Grace Creek Ditch headgate. This ISF reach is approximately 2.46 miles long and flows in a northeasterly direction through parts of Larimer County. *(Rob Viehl)*

**STREAM AND LAKE PROTECTION SECTION DE MINIMIS CASES:** The following table summarizes applications that have the potential to injure the Board's instream flow water rights, but the impact is considered de minimis. In these cases, the cumulative impact to the Board's right is less than 1%. Pursuant to ISF Rule 8(e) (the de minimis rule), staff has not filed a Statement of Opposition in this case and has provided the required notification to the Division Engineer and applicant. *(Rob Viehl)*

Case No.	Applicant	Stream/ Case Number	ISF Amount	<u>Percent</u> Injury	Cumulative % Injury	Previous Cases
7-13CW3004	John M. Parkinson	Florida River/ 7-77W1763	7 cfs (summer) 14 cfs (winter)	0.1226 % 0.0495 %	0.9888 % 0.4681 %	24
7-13CW3004	John M. Parkinson	Florida River/ 7-77W1764	12 cfs (summer) 20 cfs (winter)	0.0715 % 0.0347 %	0.3023 % 0.1123 %	11

**NEW CWCB EMPLOYEE:** Please join us in welcoming Jennifer Egger to the CWCB. Jennifer officially joined the CWCB on August 26, 2013 in the role of the Front Desk Administrative Assistant. We look forward to working with Jennifer and having her as a part of our team! *(Tina Heltzel)*

## **~ATTACHMENTS~**

- **01 Instream Flow and Natural Lake Level Program – Summary of Resolved Opposition Cases**
- **02 Finance – Current Prequalified Project List and Loan Prospect Summary**
- **03 Finance – Design and Construction Status Report**
- **04 Nomination Letter – James Rizzuto to Arkansas River Compact Administration**
- **05 Nomination Letter – John McCloy to Colorado River Adaptive Management Work Group**
- **06 Colorado River Basin Study Next Steps – M & I Conservation and Reuse Workgroup - Scope of Work and Membership List**
- **07 Appointment of James Eklund to Colorado River Basin Salinity Control Forum and Advisory Council**
- **08 Colorado River Basin States Letter - *Comments Following the Glen Canyon Dam Long-Term Experimental and Management Plan Environmental Impact Statement Stakeholder Workshop Held August 5-7, 2013, in Flagstaff, Arizona***
- **09 Nomination Letter – James Eklund to Western States Water Council**
- **10 Finance - Colorado Water Conservation Board (CWCB) Non-Reimbursable Investments Status Report**
- **11 WSRA Open Grant Projects – Board Approved – Not Yet Contracted**
- **12 WSRA In Progress Projects**
- **13 WSRA Completed Projects**

**September 24-25, 2013 Board Meeting  
Instream Flow and Natural Lake Level Program  
Summary of Resolved Opposition Cases**

The Board's Instream flow ("ISF") Rule 8i. states that:

"In the event the pretrial resolution includes terms and conditions preventing injury or interference and does not involve a modification, or acceptance of injury or interference with mitigation, the Board is not required to review and ratify the pretrial resolution. Staff may authorize its counsel to sign any court documents necessary to finalize this type of pretrial resolution without Board ratification."

Staff has resolved issues of potential injury in the following water court cases and authorized the Attorney General's Office to enter into stipulations that protect the CWCB's water right(s):

**(1) Case No. 1-05CW295 Application of City of Lafayette**

The Board ratified this statement of opposition at its March 2006 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plans for augmentation and changes of water rights do not injure the Board's instream flow water rights on South Boulder Creek and Boulder Creek by expansion of use or by not replacing out-of-priority depletions in proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
1-80CW379A	South Boulder Creek	15/6	12/02/1980	South Boulder Creek	Boulder
1-74W7636	Boulder Creek	15	10/01/1973	Boulder Creek	Boulder

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

- "[d]iversions at the alternate points described in Paragraph Nos. 7(iv), 7(v), 7(vi) and 7(vii) shall only be made when the instream flow water right decreed to the CWCB in Case No. 80CW379A is satisfied, and diversions at the alternate point described in Paragraph No. 7(x) shall only be made when the instream flow water rights decreed to the CWCB in Case Nos. 80CW379A and 80CW379 are satisfied."
- "If an exchange involves moving water upstream on South Boulder Creek for diversion at the points described in Paragraph Nos. 7(iv), 7(v), 7(vi) and 7(vii), the exchange shall only be operated when the instream flow right decreed to the CWCB in Case No. 80CW379A is satisfied. If an exchange involves moving water upstream on South Boulder Creek for diversion at the point described in Paragraph No. 7(x), the exchange shall only be operated when the instream flow rights decreed to the CWCB in Case Nos. 80CW379A and 80CW379 are satisfied. To the extent that an exchange up South Boulder Creek involves the reach of Boulder Creek between 75th Street and the confluence of Boulder Creek and South Boulder Creek, the exchange shall only be operated when the instream flow right decreed to the CWCB in Case No. W-7636-74 is satisfied."

**(2) Case No. 4-08CW180 – Application of Jackson Shaw Taylor River Ranch, LLC**

The Board ratified this statement of opposition at its March 2009 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plans for augmentation and change of use do not injure the Board's instream flow water rights on Spring Creek and

the Taylor River by expansion of use or by not replacing out-of-priority depletions in proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
4-84CW368	Spring Creek	7.5	5/4/84	Taylor River	Gunnison
4-87CW264	Taylor River	200/80	10/2/87	Taylor River	Gunnison

The Decree was entered on August 21, 2013.

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following:

- The decree now includes maps and descriptions of all facilities including four flow-through systems that dewater the instream flow reaches on the Taylor River and Spring Creek. Curtailment language for CWCB calls of these flow-through systems is included in the decree.
- Applicant withdrew its plan for augmentation claim, including a claim to augment a domestic well with water to be provided downstream.
- CWCB granted a C.R.S. Section 37-92-102(3)(b) exception for the Rarick Gulch diversion.

### **(3) Case No. 5-95CW272B – Application of City of Colorado Springs and City of Aurora**

The Board ratified this statement of opposition at its March 1996 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed change of water rights and exchange, and plan for augmentation, does not injure the Board's instream flow water rights within the Eagle River basin by not replacing out-of-priority depletions in proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case was bifurcated. The surface components decree (95CW272A) was entered on March 16, 2011.

The Board holds 17 instream flow water rights in the upper Eagle River basin that could have been injured by this application.

The remaining groundwater component of this case was dismissed without prejudice per Order on 8/23/2013.

### **(4) Case No. 5-03CW292 – Application of Eagle Park Reservoir Company**

The Board ratified this statement of opposition at its March 2004 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plan for augmentation does not injure the Board's instream flow water rights on the Eagle River, by not replacing out-of-priority depletions in proper time, place, or amount.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
5-78W3805	Eagle River	12/6	5/12/78	Eagle River	Eagle
5-78W3811	Eagle River	15/8	5/12/78	Eagle River	Eagle
5-78W3788	Eagle River	25/11	5/12/78	Eagle River	Eagle
5-78W3796	Eagle River	50/20	5/12/78	Eagle River	Eagle
5-80CW134	Eagle River	85/35	3/17/80	Eagle River	Eagle
5-80CW126	Eagle River	110/45	3/17/80	Eagle River	Eagle
5-80CW124	Eagle River	130/50	3/17/80	Eagle River	Eagle

5-79CW363	Egeria Creek	4	12/05/79	Colorado River	Routt
5-95CW290	Egeria Creek	8/2	11/06/95	Colorado River	Routt

This case was dismissed without prejudice by Order dated September 3, 2013.

**(5) Case No. 5-04CW202 – Application of Wildcat Ranch Association and the Snowmass Water and Sanitation District**

The Board ratified this statement of opposition at its March 2005 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plans for augmentation and exchange do not injure the Board's instream flow water rights on Snowmass Creek and the Roaring Fork River by not replacing out-of-priority depletions in proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
5-76W2943	Snowmass Creek	9/4 cfs	1/14/76	Roaring Fork River	Pitkin
5-92CW280	Snowmass Creek	3 cfs	9/15/92	Roaring Fork River	Pitkin
5-76W2943A	Snowmass Creek	12 cfs	1/14/76	Roaring Fork River	Pitkin
5-92CW281	Snowmass Creek	10.5 cfs	9/15/92	Roaring Fork River	Pitkin
5-76W2943B	Snowmass Creek	12 /11cfs	1/14/76	Roaring Fork River	Pitkin
5-85CW646	Roaring Fork River	55/30	11/08/85	Roaring Fork River	Pitkin
5-85CW639	Roaring Fork River	145/75	11/08/85	Roaring Fork River	Pitkin

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following:

- As a result of time spent by Applicant and CWCB clarifying the Applicants' intent and claims in this case, augmentation plan assumptions were detailed in the decree.
- Exchange reaches and amounts were clarified and the following Term is included in the decree:  
 "The exchange or any portion thereof described herein shall only operate in priority, and shall only operate at times and to the extent that all existing decreed instream flow rights decreed in Case Nos. 76CW2943, 92CW280, 76W2943A, 92CW281, 76W2943B, 85CW646, 85CW639 located within the pertinent exchange stream reaches are being satisfied. Applicants shall curtail out-of-priority diversions pursuant to this decree at times when they are unable to augment by exchange. The exchange shall be operated under the assumption that diversions are 100% depletive to Snowmass Creek."

**(6) Case No. 5-10CW060 – Application of River Valley Ranch HOA and Town of Carbondale**

The Board ratified this statement of opposition at its July 2010 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plans for change of water rights do not injure the Board's instream flow water rights on the Crystal River by expansion of use. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
5-75W2720	Crystal River	100/60	5/1/1975	Roaring Fork	Pitkin, Garfield

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following:

- Applicant and CWCB spent some time clarifying the Applicants' intent and claims in this case and how they may impact the instream flow. Clarifications were included in the decree.
- The Plan for Augmentation claim was withdrawn.
- In the decree, sources and diversion rates were specified. Allowed uses of the Bowles & Holland Ditch were specified.

**(7) Case No. 5-11CW092 – Application of Upper Eagle Regional Water Authority**

The Board ratified this statement of opposition at its September 2011 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plans for augmentation do not injure the Board's instream flow water rights on the Eagle River by not replacing out-of-priority depletions in proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
5-80CW126	Eagle River	110/45	3/17/1980	Eagle	Eagle
5-80CW124	Eagle River	130/50	3/17/1980	Eagle	Eagle
5-80CW134	Eagle River	85/35	3/17/1980	Eagle	Eagle

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

- "When the exchanges are out of priority, the Applicant shall replace its out-of-priority surface diversions or depletions, as appropriate, and all out-of-priority ground water depletions to the stream from upstream replacement sources as necessary to prevent injury to such senior water rights."
- "Delayed ground water depletions will be accounted for and replaced in accordance with the daily well lagged depletion factors set forth on Table 1, attached hereto, which indicates the amount of a day's well pumping that depletes the stream in subsequent days."
- "The CWCB holds water rights to preserve the natural environment in the Eagle River in Case Nos. 80CW124, 80CW126 and 80CW134 within all or part of the subject exchange reaches, and such instream flow water rights are senior in priority to the exchanges decreed herein."
- "[i]f the Applicant desires to offset any of its other out of priority diversions during such a call with return flows from the use of any water right augmented under this plan, then the Applicant must demonstrate to the satisfaction of the Division Engineer the timing and amount of return flows accruing to the stream at or above the location of the augmented water right's point of diversion or, for any groundwater right, the point of depletion to the stream, taking into account the location of use and the timing and amount of any lagged return flow or any lagged depletions attributable to the water right."

**(8) Case No. 5-12CW104 – Application of Colorado Mountain Resorts**

The Board ratified this statement of opposition at its September 2012 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed plans for augmentation and changes of water rights do not injure the Board's instream flow water rights on Ranch Creek and the Fraser River by expansion of use or by not replacing out-of-priority depletions in proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.



The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
5-90CW306	Ranch Creek	4.0/1.5	11/27/1990	Colorado Headwaters	Grand
5-90CW306A	Ranch Creek	7.0/1.5	11/27/1990	Colorado Headwaters	Grand
5-90CW305	Ranch Creek	8.0/5.0	11/27/1990	Colorado Headwaters	Grand
5-90CW308	Fraser River	17/11	11/27/1990	Colorado Headwaters	Grand
5-90CW308B	Fraser River	30/19	11/27/1990	Colorado Headwaters	Grand

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following:

- Applicant and CWCB spent some time clarifying the Applicants' intent and claims in this case and how they may impact the instream flow. Clarifications were included in the decree.
- In the decree, the augmentation plan was described in detail, including the location of depletions along the stream reach.
- Direct flow and storage claims were detailed in the decree.
- Maps were included in the decree showing all structures and dry up location.

**(9) Case No. 5-12CW154 – Application of Byers Peak Ranch, LLLP**

The Board ratified this statement of opposition at its January 2013 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed change of water rights do not injure the Board's instream flow water rights on St. Louis Creek by expansion of use. The application was filed under the "simple change" statute, C.R.S. 37-92-305(3.5). Applicant filed a Rule 56(h) motion for determination of question of law whether this application qualifies as a "simple change" even with an intervening instream flow water right. The court ruled against the applicant and dismissed the case.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
5-90CW316	St. Louis Creek	6/3.5	11/27/1990	Colorado	Grand

This case was dismissed per Order on 8/22/2013.

**(10) Case No. 7-02CW136 – Application of Sherry Tyner, LLC**

The Board ratified this statement of opposition at its March 2003 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed change of water rights does not injure the Board's instream flow water right on the Florida River by expansion of use.

The CWCB holds the following ISF water rights that could have been injured by this application:

<b>CWCB Case No.</b>	<b>Stream/Lake</b>	<b>Amount (cfs)</b>	<b>Approp. Date</b>	<b>Watershed</b>	<b>County</b>
7-77W1763	Florida River	7/14	1/19/1977	Animas	La Plata
7-77W1764	Florida River	12/20	1/19/1977	Animas	La Plata

An Order to Dismiss without prejudice was entered on August 7, 2013.

# STATE OF COLORADO

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## Colorado Water Conservation Board

### Department of Natural Resources

1313 Sherman Street, Room 721

Denver, Colorado 80203

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Fax: (303) 866-4474

www.cwcb.state.co.us



TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E. Loan Marketing  
Finance & Administration Section

DATE: September 13, 2013

SUBJECT: **Directors Report, September 24-25, 2013 Board Meeting**  
**Finance– Current Prequalified Project List and Loan Prospect Summary**

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John W. Hickenlooper  
Governor

Mike King  
DNR Executive Director

James Eklund  
CWCB Director

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The Finance Section compiles a list of prequalified projects for the Water Project Loan Program. In order to be included on this list, potential borrowers must submit a Loan Application and two years of financial statements to the CWCB staff. In addition, Borrowers requesting to be placed on the Prequalification Project List have a defined project, have performed preliminary engineering, and have a reasonable estimate of the project costs.

Projects on this list fit the initial criteria of the Water Project Loan Program; however, the list does not constitute loan approval. In order to receive a loan, borrowers must additionally submit a completed Loan Feasibility Study for review by CWCB staff. Staff will then prepare a recommendation to the Board for approval at a future CWCB meeting. Projects will remain on this list for one year from the date of the application or until Board approval of a loan.

## Prequalified Project List

BORROWER	PROJECT NAME	APPLICATION DATE	BASIN	PROJECT DESCRIPTION	PROJECT COST	LOAN AMOUNT
<b>Previously Approved Applications</b>						
Huertano County Water Conservancy District	Regional Augmentation Project	June 1, 2013 <i>To be presented at September 2013 Board meeting</i>	Arkansas	This project involves the replacement of the outlet pipe and spillway repair at Crowley Reservoir.	\$2,000,000	\$1,800,000
Donald Shahan	Crowley Dam Rehabilitation	May 1, 2013	San Juan / Dolores	This project involves the replacement of the outlet pipe and spillway repair at Crowley Reservoir.	\$260,000	\$234,000
Lone Cabin Ditch and Reservoir Company	Lone Cabin Dam Repair Project	March 1, 2013	Gunnison	Lone Cabin Reservoir is currently under a storage restriction by the SEO due to slumping issues on the dam. The Company intends to repair the dam to restore its full storage capacity and is looking for WSRRA grant funding in addition to the loan.	\$364,000	\$327,000
		<i>To be presented at September 2013 Board meeting</i>				
Cottonwood Water and Sanitation District	WISE Partnership	January 1, 2013	Metro	The Water Infrastructure and Supply Efficiency Partnership is a regional water supply project between Aurora, Denver Water, and South Metro to combine excess water supplies and system capacities to create a more sustainable water supply.	\$120,000,000	\$4,600,000
Castle Pines North Metropolitan District	WISE Partnership	January 1, 2013	Metro	The Water Infrastructure and Supply Efficiency Partnership is a regional water supply project between Aurora, Denver Water, and South Metro to combine excess water supplies and system capacities to create a more sustainable water supply.	\$120,000,000	\$8,400,000

Dominion Water and Sanitation District	WISE Partnership	January 1, 2013	Metro	The Water Infrastructure and Supply Efficiency Partnership is a regional water supply project between Aurora, Denver Water, and South Metro to combine excess water supplies and system capacities to create a more sustainable water supply.	\$120,000,000	\$32,400,000
Pinery Water and Sanitation District	WISE Partnership	January 1, 2013	Metro	The Water Infrastructure and Supply Efficiency Partnership is a regional water supply project between Aurora, Denver Water, and South Metro to combine excess water supplies and system capacities to create a more sustainable water supply.	\$120,000,000	\$11,400,000
Rangeview Metropolitan District	WISE Partnership	January 1, 2013	Metro	The Water Infrastructure and Supply Efficiency Partnership is a regional water supply project between Aurora, Denver Water, and South Metro to combine excess water supplies and system capacities to create a more sustainable water supply.	\$120,000,000	\$6,300,000
Stonegate Village Metropolitan District	WISE Partnership	January 1, 2013	Metro	The Water Infrastructure and Supply Efficiency Partnership is a regional water supply project between Aurora, Denver Water, and South Metro to combine excess water supplies and system capacities to create a more sustainable water supply.	\$120,000,000	\$7,600,000
Rio Grande Water Conservation District	Atkins Ranch Water Right Purchase	January 1, 2013	Rio Grande	This project is the purchase of a water right that was historically used for irrigation and changing the water right to provide replacement water for well depletions.	\$1,800,000	\$1,500,000

Rio Grande Water Conservation District	Treasure Pass Transmountain Diversion Water Rights Purchase	January 1, 2013	Rio Grande	This project is the purchase of a privately held transmountain diversion to provide water to replace injurious well depletions to the Rio Grande River.	\$2,335,000	\$2,100,000
Totals					\$126,759,000	\$77,661,000

The Finance Section also compiles a list of potential borrowers/projects for the Water Project Loan Program. This list represents borrowers that have contacted the CWCB about a potential need for funding but have not submitted a loan application and/or a loan feasibility study.

## LOAN PROSPECTS

Basin	Last Contact	BORROWER	PROJECT NAME	PROJECT COST	LOAN AMOUNT
South Platte					
	11-Jan	East Larimer County Water District	Rigdon Storage Project		\$3,000,000
	11-Oct	NISP Participants	NISP		\$30,000,000
	13-Sept	Chatfield Reallocation Participants	Chatfield Reallocation Participants		\$70,000,000
	11-Dec	Pinehurst Country Club	Harriman Reservoir	\$5,000,000	\$500,000
	12-Feb	McKay Lateral	Ditch Lining Project		\$50,000
	12-Jun	Foothills Park & Recreation	Reservoir Expansion	\$10,000,000	\$900,000
	12-Oct	Shamrock Irrigation Company	Reservoir Rehabilitation		\$100,000
				<b>TOTAL</b>	<b>\$104,550,000</b>
Arkansas					
	11-Sep	Ditch and Reservoir company	Big Johnson Reservoir		\$8,000,000
	12-Oct	Highline Canal Company	Water Rights Purchase	\$4,500,000	\$4,100,000
	12-Feb	Colorado City Metro District	Beckwith Dam Repair		\$500,000
	13-Apr	City of Walsenburg	Reservoir(s) Rehabilitation		\$6,000,000
				<b>TOTAL</b>	<b>\$18,600,000</b>
San Miguel/Juan					
	11-Feb	City of Ouray	Red Mountain Ditch Rehabilitation	\$200,000	\$200,000
				<b>TOTAL</b>	<b>\$200,000</b>
Colorado					
		Highland Ditch Co	Ditch Rehabilitation Project	\$200,000	\$200,000
		Ian Carney - Felix Tornare	Polaris Reservoir Rehabilitation	\$500,000	\$500,000
				<b>TOTAL</b>	<b>\$700,000</b>
Gunnison					
	12-Oct	Fire Mountain Canal & Reservoir Co.	New Reservoir		\$500,000
				<b>TOTAL</b>	<b>\$500,000</b>
Rio Grande					
	13-Sept	Manasa Land & Irrigation Co.	Ditch Rehabilitation		\$1,000,000
				<b>TOTAL</b>	<b>\$1,000,000</b>

Yampa					
				<b>TOTAL</b>	<b>\$0</b>

Information shown is based on current staff knowledge and will likely change as Loan Prospects develop

### Recent inquiries:

Platteville Irrigating & Milling Company – Ditch rehabilitation project  
 Enduring Hydro – Hydroelectric Project  
 Pinery Water and Wastewater District – Pump station rehabilitation  
 Wadley Farms Filing No. 3 HOA – Water rights purchase  
 Falls Creek Ranch Association – Dam rehabilitation  
 Colorado Springs Flycasting Club – Dam rehabilitation  
 Stonewall Springs – Reservoir construction  
 Two Rivers Water and Farming – Augmentation project  
 Cedar Springs Improvement Association – Reservoir rehabilitation  
 North Poudre Irrigation Company – Reservoir rehabilitation

# STATE OF COLORADO

## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

John W. Hickenlooper  
Governor

FROM: Kirk Russell, P.E., Chief  
Finance & Administration Section

Mike King  
DNR Executive Director

DATE: September 13, 2013

James Eklund  
CWCB Director

SUBJECT: **Directors Report- September 24-25, 2013 Board Meeting  
Finance – Design & Construction Status Report**

The CWCB Loan Program has Substantially Completed thirteen (13) projects in Calendar Year 2013 as shown in Table 1. There are currently 51 projects authorized to receive loan funding totaling \$195 million. There are 36 projects currently under contract and in the Design and Construction phase totaling \$109 million.

The attached spreadsheet summarizes the status of the projects. A detailed description about each project is provided in the digital version of the Director's Report.

**TABLE 1**

	<b>Borrower</b>	<b>Project</b>	<b>County</b>	<b>Loan</b>	<b>Complete</b>
1	Big Elk Meadows Assoc.	Raw Water System Improvements	Boldr/Larimr	\$272,700	2/1/13
2	Center of CO Water Cons Dist	Smelter Pipeline Res Enlargement	Park	\$404,000	2/1/13(a)
3	Henrylyn Irrigation District	Horse Creek & Prospect Res Rehab	Weld	\$2,184,327	2/1/13(b)
4	Two Rivers Water Co	Orlando Reservoir Rehabilitation	Huerf/Pueb	\$1,184,882	3/1/13
5	Parkville Water District	Canterbury Tunnel Repair	Lake	\$1,838,200	2/1/13
6	Farmers Res & Irrigation Co	Milton Res & Barr Lake Imprv Proj.	Adms/Weld	\$3,535,000	4/1/13
7	Ogilvy Augmentation Co	Well Augmentation	Weld	\$1,010,808	4/1/13
8	Montezuma Valley Irr Co	May Lateral Pipeline	Montezuma	\$5,292,400	4/1/13
9	Montezuma Valley Irr Co	Lone Pine & May Lateral Improv.	Montezuma	\$339,600	4/1/13
10	Fort Morgan Res & Irr Co	Pipeline – Augmentation Retiming	Morgan	\$1,494,800	5/1/13
11	Fort Morgan Res & Irr Co	River Diversion Rehab Project	Morgan	\$1,308,960	5/1/13
12	New Salida Ditch Co	Ditch Rehabilitation	Chaffee	\$365,620	8/1/13
13	La Veta, Town of	La Veta Dam Rehabilitation	Huerfano	\$372,690	9/1/13(c)
		Total		\$19,600,000	

Calendar Year 2013 has added or preserved 3,317AF of reservoir storage [(a) 300AF, (b) 3,000AF, (c) 17AF]



## BIG ELK MEADOWS ASSOCIATION RAW WATER SYSTEM IMPROVEMENTS PROJECT



*Before and after photos of the Meadow Lake outlet structure*

### Project Description

The Big Elk Meadows Association requested a loan for improvements to its raw water system which serves Big Elk Meadows, a 205-lot subdivision with 160 residences distributed across 460 acres. During an SEO inspection of the Association's raw water system and review of its water accounting practices it was determined the outlet conduit from Meadow Lake Dam was collapsing and becoming inoperable and it was determined that the Association had no accurate means to gauge flows and accurately control reservoir release rates, violating the terms of its 1995 decree regarding return flows. The SEO required that the Association improve their raw water system and accounting protocol in order to function safely and in compliance with its decrees. Project improvements included: Meadow Lake Dam outlet replacement, raw water monitoring equipment installation, and installation of an ISH Reservoir augmentation outfall. The project provides the Association the means to monitor and control reservoir releases while satisfying downstream obligations per their augmentation plan.

### Project Data

**Sponsor:** Big Elk Meadows Association

**County:** Boulder/Larimer

**Water Source:** West Fork of the Little Thompson River

**Substantial Completion:** February 1, 2013

**Terms of Loan (Contract # C150327):** \$272,700 for 30 years @ 4.50%

**Design Engineer:** Gauthiere Engineering, Greeley, CO

**Contractor:** T&G Enterprises (Ackerman Excavating), Lyons, CO

**Project Elements:** 500 CY of excavation/material placement, place 300 CY rip-rap, place 25 CY of concrete (2 structures), install multiple butterfly valves (6" – 12")



**CENTER OF COLORADO WATER CONSERVANCY DISTRICT  
SMELTER PIPELINE RESERVOIR ENLARGEMENT PROJECT**



*Before and after photos from Smelter Pipeline Reservoir Dam*

### **Project Description**

The Center of Colorado Water Conservancy District (CCWCD), a Title 37 Special District, co-owns and manages a blanket augmentation plan across Park County with the Upper South Platte Water Conservancy District. The CCWCD purchased Smelter Pipeline Reservoir in 2005 to increase its augmentation capacity in the upstream reach of the basin. When purchased, the reservoir had significant seepage issues and its diversion headgate was deteriorated and marginally operational. The enlargement of the reservoir from 21 AF to 28 AF increased CCWCD's storage capacity and enabled it to more efficiently implement its augmentation obligation across Park County. Included in the project was the lining of the reservoir, replacement of the diversion headgate, and modification of the dam outlet works to accommodate the increased capacity.

### **Project Data**

**Sponsor:** Center of Colorado Water Conservancy District

**County:** Park

**Water Source:** Michigan Creek

**Substantial Completion:** February 1, 2013

**Terms of Loan (Contract #C150335):** \$404,000 (\$404,000 drawn) for 10 years @ 2.50%

**Design Engineer:** TZA Water Engineers, Lakewood, CO

**Contractor:** Hudick Excavating, Inc., Castle Rock, CO

**Project Elements:** 35,000 CY of native material excavation and placement, 150,000 SF of 30 mil PVC liner, 300,000 SF of 8oz. geotextile layer, 750 LF 8" PVC, 850 LF 6" PVC, and installation of a 4" flow meter and valve box

## HENRYLYN IRRIGATION DISTRICT HORSE CREEK AND PROSPECT RESERVOIR REHABILITATION PROJECT



*Prospect Reservoir Dam pre-project debris (inset) and the rehabilitated Horse Creek Reservoir outlet flume*

### Project Description

The Henrylyn Irrigation District, formed in 1907, utilizes Horse Creek and Prospect Reservoirs in the annual delivery of more than 19,000 acre-feet of irrigation water to over 32,000 acres of agricultural land in Weld County. The reservoirs, which are separated by 25 miles, are in-line reservoirs fed by the Denver-Hudson Canal. For Horse Creek Reservoir the project consisted of lining the outlet works, installing additional toe drain, and resurfacing/re-grading the dam crest. Rehabilitation efforts for Prospect Reservoir, which is currently under a 1.5-foot storage restriction due to stability concerns, consisted of a lining for the outlet works, toe drain rehabilitation and improvements, resurfacing of the dam crest, regrading the dam embankment, and rehabilitating the face of the dam. The project will restore the storage capacity of Prospect Reservoir while increasing the efficiencies of both outlet works and providing addition stability and maintenance access.

### Project Data

**Borrower:** Henrylyn Irrigation District

**County:** Weld

**Water Source:** Denver-Hudson Canal

**Substantial Completion:** February 1, 2013

**Terms of Loan (Contract #C150252):** approved for \$2,184,327 (\$2,150,597.05 drawn) for 30 years @ 2.25%

**Design Engineer:** Smith Geotechnical, Fort Collins, CO

**Contractor:** Zak Dirt, Inc., Longmont, CO

**Project Elements:** Rip-rap lined outlet channel and concrete headwall/flume, toe drain installation and repair, dam embankment fill placement, toe drain pump installation, piezometer installation, concrete dam rehabilitation



**TWO RIVERS WATER COMPANY  
ORLANDO RESERVOIR REHABILITATION PROJECT**



*Finished project photos of the Orlando Reservoir and the Cucharas No. 5 spillway improvements.*

### **Project Description**

The Two Rivers Water Company is requested a CWCB loan to restore aging water infrastructure in order to support the company's agricultural production. Loan funds were used to modify the spillway at the Cucharas Dam. This temporarily brought the spillway up to SEO standards and allowed the company to store a restricted level of water and avoided a pending breach order. Loan funds were also used to repair the outlet works at the Orlando Reservoir No. 2 where a new 30-inch outlet pipe with a new headwall and trash rack system was installed. Funds were also used to construct a new headgate on the Orlando Canal where there had previously been a temporary sand dam. This structure was replaced with a new sheet pile wall.

### **Project Data**

**Sponsor:** Two Rivers Water Company

**County:** Huerfano & Pueblo

**Water Source:** Huerfano River

**Substantial Completion:** March 1, 2013

**Terms of Loan (Contract # C150328):** \$1,184,882 for 20 years @ 2.50%

**Design Engineer:** Applegate Engineering, Denver, CO

**Contractor:** SLV Earth Movers, Monte Vista, CO

**Project Elements:** Cucharas No. 5 Reservoir spillway improvements (concrete removal of ogee crest spillway to lower spillway level), installation of a new 30-inch outlet works pipe at the Orlando Reservoir, and Orlando Ditch headgate rehabilitation.

**Parkville Water District  
CANTERBURY TUNNEL REPAIR PROJECT**



**Project Description**

The Project included the construction of a vertical bore, installation of a well pump station and 1.5 miles of 10 inch pipeline. The Project will allow the District to access water from the Canterbury Tunnel which provided a high quality and reliable water supply until the late 1990's. The tunnel was constructed during the late 1920's to provide mine drainage. In 1961, the District accessed the water at the portal and pumped it into the existing District's distribution system. The tunnel produced high quality groundwater at a constant rate and a year-round temperature of approximately 50 degrees. In 2003, a portion of tunnel collapsed. The project involved the installation of a vertical bore/well into the tunnel. A pump was installed to withdraw water from the tunnel and a pipeline was installed to convey the tunnel water to the Evans Gulch Reservoir. The pipeline connects into an existing District pipeline near Evans Gulch Reservoir.

**Project Data**

**Sponsor:** Parkville Water District

**County:** Lake

**Water Source:** Canterbury Tunnel

**Terms of Loan:** \$1,838,200.00 for 3 years @ 4.00%

**Substantial Completion:** February 1, 2013

**Design Engineer:** W. W. Wheeler, Englewood, CO

**Contractor:** Stan Miller, Inc., Breckenridge, CO

**Project Elements:** 250 foot vertical bore/well, well pump house and electrical equipment. 8,300 feet of 10-inch HDPE pipe.



**Farmers Reservoir and Irrigation Company  
MILTON SPILLWAY/OUTLET REHABILITATION & BARR LAKE IMPROVEMENTS**



### Project Description

Farmers Reservoir and Irrigation Company operates a ditch and reservoir system extending 3,500 square miles along the Front Range corridor, from Golden to Kersey including Barr Lake and Milton Reservoir. This project included replacing the upstream outlet gate structure and a portion of the piped outlet works at Milton Reservoir and enlarging the existing spillway. In addition, Barr Lake spillway was enlarged along with the raising the perimeter dike. The construction components were completed in late 2011.

### Project Data

**Sponsor:** Farmers Reservoir and Irrigation Company

**County:** Adams & Weld

**Water Source:** Beebe Seep Canal,  
Platte Valley Canal,  
O'Brian Canal

**Terms of Loan:** \$3,535,000 for 30 years @ 3.70%

**Substantial Completion:** April 1, 2013

**Design Engineer:** Ecological Resource Consultants, Inc

**Contractor:** TEZAK, Canon City, American West Construction, Denver

**Project Elements:** Milton Dam outlet works consist of: (2) new slide gates, new hydraulic operators, a new gate control house, SCADA system, and repair of a section of 44-inch steel-lined conduit. Milton Spillway work consists of: enlarging the spillway from 350 feet to 586 feet and lowering the spillway by 1.5 feet. Barr Spillway work consists of: increasing the current spillway from an informal low depression to a 185 feet wide and 700 feet long concrete spillway with riprap at the far downstream end.

## Ogilvy Augmentation Company AUGMENTATION PROJECT



### Project Description

The Ogilvy Augmentation Company was established in 2005 to augment wells that operate under the Ogilvy Irrigating and Land Company's service area. Approximately 1,400 acres of land are irrigated by the Company north of Kersey. There are 17 wells in the Augmentation Company that operate under its temporary substitute water supply plan (SWSP). The Project's purpose is to create a permanent water supply for the Augmentation Company to obtain a permanent augmentation plan. The Project included the purchase of water rights; construction of a recharge pond, and installation of monitoring devices. The Augmentation Company filed for its permanent augmentation plan and will construct a storage reservoir under a separate CWCB loan contract.

### Project Data

**Sponsor:** Ogilvy Augmentation Company

**County:** Weld

**Water Source:** Cache La Poudre

**Terms of Loan:** \$523,584 for 30 years @ 2.50%

**Substantial Completion:** April 1, 2013

**Design Engineer:** NoCo Engineering Inc., Loveland

**Contractor:** Four C Sons, Kersey

**Project Elements:** Purchased 6 shares of Greeley Irrigation Company stock; construction of a recharge pond; and installation of measurement structures and flow meters.



**Montezuma Valley Irrigation Company  
MAY LATERAL PIPELINE PROJECT**



The Irrigation Company manages the delivery of irrigation water to the approximately 46,000 acre service area. The Company installed approximately five (5) miles of 36-inch pipe in the existing May Lateral Ditch alignment. The Company's staff performed the installation and welded the HDPE pipe together. The installation of pipe will improve delivery and significantly reduce leakage. The May Lateral water is diverted from the Dolores River and is routed through the McPhee Reservoir prior to delivery to shareholders. The new pipeline will carry approximately 18 cfs to the 105 shareholders that depend on the May Lateral for irrigation water.

**Project Data**

**Sponsor:** Montezuma Valley Irrigation Company

**County:** Montezuma

**Water Source:** Dolores River

**Terms of Loan:** \$2,979,825 for 30 years @ 2.25%

**Substantial Completion:** April 1, 2013

**Design Engineer:** AgriTech Consulting

**Contractor:** Montezuma Valley Irrigation Company

**Project Elements:** Five (5) miles of 36-inch HDPE pipe and associated valves and meters.



**Montezuma Valley Irrigation Company  
LONE PINE AND MAY PIPELINE IMPROVEMENTS PROJECT**



### Project Description

The Montezuma Valley Irrigation Company is a non-profit corporation established in the State of Colorado in 1920. The Company manages the delivery of irrigation water to a service area of over 30,000 acres. The Company obtained a loan to address long-term maintenance concerns through this project including: trash and debris removal in delivery pipelines, pipeline pressure management, and water management issues. The Company began construction in the spring of 2012 and completed construction in the spring of 2013.

### Project Data

**Sponsor:** Montezuma Valley Irrigation Company

**County:** Montezuma

**Water Source:** Dolores River

**Terms of Loan:** \$338,603 for 30 years @ 2.75%

**Substantial Completion:** April 1, 2013

**Design Engineer:** Applegate Group, Inc., Glenwood Springs, CO

**Contractor:** Montezuma Valley Irrigation Company

**Project Elements:** The construction associated with this project included the installation of a trash screen on the Lonepine Pipeline, a pressure reducing valve trim package on the Lonepine Pipeline, and the installation of solar panels on the May Pipeline. Final engineering on the May Pipeline trash screen was also included in the project.

## Fort Morgan Reservoir and Irrigation Company GROVES PIPELINE PROJECT



### Project Description

The Project involved installing one 24" pipe from the South Platte River extending three miles to recharge ponds on Groves Farms' land; installing two pumps to pump water from the river through the pipeline; constructing seven recharge/augmentation ponds on Groves Farms' land. This system allows the Company to recapture and re-time the Company's excess augmentation credits that accrue to the South Platte River. Through the new pipeline, new junior diversions may be made and delivered to the new ponds. These junior diversions will produce augmentation credits that will accrue to the South Platte River and may be used immediately for augmentation or may be re-timed. The Company received a WSRA Grant of \$670,000 to offset the project cost.

### Project Data

**Sponsor:** Fort Morgan Reservoir & Irrigation Company

**County:** Morgan

**Water Source:** South Platte River

**Terms of Loan:** \$1,494,800 for 30 years @ 2.9%

**Substantial Completion:** May 1, 2013

**Design Engineer:** Civil Design Group, Greenwood Village CO

**Contractor:** Interstate Irrigation Company, Yuma CO

**Project Elements:** 3-miles of 20" PVC pipe, 275 ft of 30" PVC pipe, wet well and two 4,000 GPM pumps, electric power, and seven augmentation ponds.



**Fort Morgan Reservoir and Irrigation Company  
RIVER DIVERSION REHABILITATION PROJECT**



**Project Description**

The Project replaces portions of the river diversion structure with a 6ft tall and 100ft Obermeyer pneumatic spillway gate system. In addition, a 30ft long section of 5ft tall bladder replaced the current intake gates. The remaining diversion was left intact. The South Platte River diversion is critical to the Company's operations and delivers surface water to approximately 15,000 acres of irrigated land between Weldona and Brush, and provides water to a recharge and augmentation plan that provides augmentation water for approximately 90 irrigation wells.

**Project Data**

**Sponsor:** Fort Morgan Reservoir & Irrigation Company

**County:** Morgan

**Water Source:** South Platte River

**Terms of Loan:** \$1,308,960 for 30 years @ 1.85%

**Substantial Completion:** May 1, 2013

**Design Engineer:** Nation Engineering Services LLC, Fort Collins CO

**Contractor:** Ransom Boone Excavating, Fort Morgan CO

**Project Elements:** 6ft tall and 100ft Obermeyer pneumatic spillway gate system and a 5ft tall 30ft long bladder intake gate.

**New Salida Ditch Company  
DITCH REHABILITATION PROJECT**



**Project Description**

The Ditch Company delivers water to agricultural users from the Arkansas River through a diversion in Browns Canyon. The Ditch runs parallel to the River for 1.25 miles and has historically been difficult for the Company to maintain and has suffered frequent breaks. In 2005, the Company undertook a maintenance project designed to mitigate erosion along the ditch. During the maintenance effort, sand and gravel were accidentally deposited into the River and the Company was cited with violations from the Colorado Department of Public Health and Environment (CDPHE). As a resolution to this dispute, the Company agreed to enclose a portion of the Ditch to prevent the potential for discharges of material due to ditch breaks in this area in the future. This Project installed 3,200 linear feet of 42-inch HDPE pipe in the existing ditch alignment.

**Project Data**

**Sponsor:** New Salida Ditch Company

**County:** Chaffee

**Water Source:** Arkansas River

**Terms of Loan:** \$365,620 for 30 years @ 2.5%

**Substantial Completion:** August 1, 2013

**Design Engineer:** Colorado River Engineering, Inc, Rifle CO

**Contractor:** Y&K Excavation, Inc, Salida, CO

**Project Elements:** 3,200 LF of 42-inch HDPE pipe and access structures.



## TOWN OF LA VETA NORTH LAKE DAM REHABILITATION PROJECT



*Finished project photos of the North Lake Dam outlet works and toe drain system.*

### Project Description

The Town of La Veta is responsible for supplying its residents with potable water. The town stores raw water in two reservoirs (North Lake and South Lake) to supplement the diversions from the Cucharas River in times of low flow and in periods of drought. North Lake reservoir exhibited growing signs of distress over the years and the SEO issued a 2.5-foot restriction on the dam in March 2011. The restriction cost the Town 17 AF of storage capacity. The La Veta Dam project included the replacement of outlet works and the installation of a toe drain filter system; thereby restoring the full capacity of the reservoir.

### Project Data

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**Sponsor:** Town of La Veta

**County:** Huerfano

**Water Source:** Cucharas River

**Substantial Completion:** September 1, 2013

**Terms of Loan (Contract # C150329):** \$372,690 for 30 years @ 3.0%

**Design Engineer:** Chris Manera, P.E., Colorado River Engineering Inc.

**Contractor:** Glacier Construction, Greenwood Village, CO

**Project Elements:** North Lake Dam Rehabilitation improvements included the removal and replacement of the outlet tower and pipe. It also included the installation of a new toe drain filter system.

September 13, 2013

**Colorado Water Conservation Board  
Water Project Loan Program  
Project Design Construction Status Report**

Current Projects in Design or under Construction			Loan		Annual Delivery Yield (AF)	Storage Effect (AF)	Design	Construction		Status Description/Update		
Borrower/Project	Contract	County	Amount	Size			Status	Start/End	Status	PM		
1 Bergen Ditch & Reservoir Company > Bergen Reservoir No. 2 Rehabilitation C150344	344	Jefferson	\$ 2,020,000	726AF	800	726	30%	2014 - 2015	0%	AM	Bergen soliciting bids for engineering/geotech. Delay is to fill other reservoirs in order to drain Bergen #2.	
2 Central CO WCD - WAS > Augmentation Water Supply Project C150337	337	Weld/ Adams/ Morgan	\$ 3,030,000	20,400AF	20,400		50%	Apr 13 - Apr 15	0%	AM	Purchased a portion of the water rights on 4/25/13	
3 Colorado Parks & Wildlife > Beaver Park Reservoir Rehabilitation C150343	343	Rio Grande	\$ 10,000,000	4,434AF	4,434	2,201	Ph1 100% P2 60%	Summer '13 & Summer '14	30% 0%	KR	Phase 1 Alsand Construction \$2M. Mob. 7/15, Raise spillway, Grout rt. Abutment. Phase 2 design 60%. Const. expected 2014, Lt abutment, reove timber cribbing, new outlet & valves.	
4 Crystal Lakes Water and Sewer Association > Lower Lone Pine Lake Enlargement Project C150325	325	Larimer	\$ 2,363,400	100 AF	10	100	80%	Apr 12 - Aug 14	0%	AM	The proejct was bid in August. Construction will begin in late September 2013.	
5 Dillon, Town of > Old Dillon Reservoir Enlargement C150295	295	Summit	\$ 1,515,000.00	286 AF	321	140	100%	Sep 10 - Jul 13	99%	KR	Construction is complete and accepted. SC expected in the Summer 2013	
6 Eckhardt Farms Inc > Water Rights Purchase C150338	338	Weld	\$ 1,336,230.00	694AF	694		N/A	Jan 13 - Jan 17	0%	AM/ PM	The 1st of the 2 water rights purchases is expected to occur in mid 2013.	
7 Farmers' High Line Canal and Reservoir Company > System Rehabilitation Project C150314	314	Adams/ Jefferson	\$ 1,410,768.00	31 Miles	24,000		100%	Feb 11 - Feb 14	80%	JH	The Co. received a loan increase of nearly \$900K in November 2012. Siphons complete. Clear Creek diversion 50% complete will resume in fall 2013.	
8 Fisher Ditch Company > Ditch Infrastructure Project C150319	319	Denver	\$ 454,500	7,623 AF	7,623		100%	Nov 12 - Dec 13	20%	JH	The Broadway Pipeline task was completed December 2012. The Headgate Rehabilitation task is scheduled for construction this winter pending permitting issues. Sandout gate installation scheduled for this winter. Timing of the Federal Piping are T.B.D.	
9 Georgetown, Town of > Outlet Works Modification Project C150321	321	Clear Creek	\$ 2,976,975	208 AF	208		50%	Jan 14 - Jul 14	0%	AM	Final design is underway. Construction is expected to begin in the spring of 2014.	
10 Greeley Irrigation Company > Greeley Canal No. 3 Rehabilitation C150239	239	Wled	\$ 2,233,867.00	18,000 AF	18,000		90%	Feb 08 - Jul 13	90%	KR	Nearly complete. The Company is working on their SCADA system and the realignment and reshaping of various sections of existing channel.	
11 Gypsum, Town of > LEDE Ditch and Reservoir Rrehabilitation C150296	296	Eagle	\$ 2,689,731.00	685 AF	1,200	254	100%	Jul 13 - Jul 14	15%	KR	The Town received a WSRA grant for an enlargement of the Reservoir. The supply pipeline completed in Sept 2010. Permitting effort continues with construction expected in summer 2013. Wildlife mitigation plan to be approved.	
12 Joseph W. Bowles Reservoir Company > Bowles No. 1 Dam Rehabilitation C150290	290	Jefferson	\$ 1,703,870.00	2,062 AF	900		100%	Aug 10 - Jan 14	90%	JH	Dam construction project was completed in 2011. Ditch construction underway and to be complete fall 2013.	
13 Henrylyn Irrigation District > Prospect Res Dam Facing Project C150358	358	Weld	\$ 2,967,279	2,400LF	39,950	7,480	50%	Oct 13 - Oct 14	0%	JH		
14 Lake Canal Reservoir Company > North Gray Reservoir Rehab Project C150299	299	Larimer/ Weld	\$ 116,625.00	75 AF	333	75	20%	Sep 15 - Jan 14	0%	AM/ JH	The Company's engineer is working on the design.	

## Design and Construction Status Report

Current Projects in Design or under Construction				Loan	Annual Delivery Yield (AF)	Storage Effect (AF)	Design	Construction		Status Description/Update		
Borrower/Project		Contract	County	Amount	Size			Status	Start/End	Status	PM	
15	Left Hand Ditch Company > Allen Lake and Lake Isabelle Repair Project C150336	336	Boulder	\$ 1,157,157		22,700AF		75%	Nov 12 - Aug 13	70%	AM	Allen Lake construction was completed in August 2013. Lake Isabelle repairs are underway.
16	Lower Latham Reservoir Company > Well Augmentation Project C150304	304	Weld	\$ 3,811,573.00	5,705 AF	5,705		100%	Nov 09 - Jul 11	85%	KR	The Company has completed its water rights purchase and the construction of the augmentation ponds.LLRC obtained it's irrigation well augmentation decree and it will re-focus it's attention on the recharge facility work.
17	Mancos Water Conservancy District > Inlet and Outlet Canal Rehabilitation C150120	120	Montezuma	\$ 5,486,531.00	15,840 LF	9,000		75%	Jan 04 - Jan 14	95%	KR	Rehabilitation of ditch system involving retaining walls and access road along the ditch was complted in 2009. Additional 1000ft of ditch lining under construction. Construction to be completed in October 2013.
18	Monte Vista, City of > Augmentation Water Rights Acquisition C150309	309	Rio Grande	\$ 1,693,770.00	321 AF	1,212		n/a	Oct 10 - Jul 13	50%	KR	The City purchased Anderson Ditch rights and will file a water court application to enable the use of those rights to replace depletions. Contracted with the San Luis Valley Irr. Dist. for storage space in the Rio Grande Res. City continues negotiations to purchase additional water.
19	North Delta Irrigation Company > NDIC Tunnel Repair Project C150331	331	Delta	\$ 808,000	1,500LF	17,735		100%	Jan 12 - Dec 12	99%	KR	Construction of tunnel pipe was completed in the summer of 2012. Additional work is required in order to achieve adequate flows.
20	Ordway Feedyard, LLC > Raw Water Line Extension Project C150349	349	Crowley	\$ 2,525,000	4.2Mi	1,500		100%	May 13 - Nov 13	90%	AM	Grant funds have been spent in full. Construction of pipeline is progressing with completion expected in the fall of 2013.
21	Overland Ditch and Reservoir Company > Overland Reservoir Rehabilitation C150206	206	Delta	\$ 1,130,000.00	6,200 AF	17,000	971	50%	Permitting	0%	KR	Project on-hold until fens can be addressed in enlarged reservoir area.
22	Owl Creek Reservoir Company > Owl Creek Reservoir Rehabilitation C150089	89	Weld	\$ 1,125,000.00	1200 AF	1,200	1,200	99%	On Hold	0%	TF	The Company received bids and does not have enough funds to complete the project. The Company has expended approximately \$450,000 to-date for permitting, soils, and design and will need an additional \$600,000 to complete the project. A project partner is being sought.
23	Penrose Water District > Water Rights Purchase and Pipeline Installation C150237	237	Fremont	\$ 8,844,570.00	30,624 LF	339		80%	Oct 10 - July 14	50%	KR	Water rights purchased in 2005. Water court application filed in 2006. Brush Hollow Res. Closing in 2011. Ark river well field purchased in 2012. Final design underway. Construction fall 2013 thru 2014
24	Pisgah Reservoir and Ditch Company > Mount Pisgah Dam/Wrights Reservoir Rehab C150341	341	Teller	\$ 161,345	2,192AF	86,000		75%	Spring 14 - Jan 15	0%	JH	After SEO design review, scope of Project increased.
25	Platte Valley Irrigation Company > Equalizer Reservoir Project C150235	235	Weld	\$ 2,388,650.00	431 AF	52,401	431	100%	Nov 10 - Jul 13	5%	KR	
26	Riverside Ditch and Allen Extension Company > Ditch System Rehabilitation C150301	301	Chaffee	\$ 186,345.00	3,250 LF	3,260		85%	Jul 10 - Dec 13	80%	KR	Ditch lining phase of the project was completed in December 2010. Additional phases will be constructed in the fall 2013. Utilizing NRCS La Junta Fld office for design.
27	Riverside Reservoir and Land Company > Riverside Reservoir Spillway Enlargement C150291	291	Weld	\$ 2,838,100.00	64,000 AF	105,000		80%	Sep 10 - Jan 15	0%	JH	The engineer is re-evaluating design options with support from the SEO.
28	Roxborough Water & Sanitation Dist. > Raw Water Supply Project C1503346	346	Douglas	\$ 18,538,550	1,141AF	1,141		99%	Oct 13 - Jun 14	0%	AM	Project Bill (SB-181) approved.

## Design and Construction Status Report

Current Projects in Design or under Construction			Loan	Annual	Storage	Design	Construction		Status Description/Update		
Borrower/Project	Contract	County	Amount	Size	Delivery Yield (AF)	Effect (AF)	Status	Start/End	Status	PM	
29 Sanchez Ditch and Reservoir Company > Sanchez Reservoir Outlet Rehabilitation Project C150342	342	Costilla	\$ 1,128,776	104,000AF	15,000		20%	2014 - 2015	0%	AM	Project is in final design phase.
30 Santa Maria Reservoir Company > Siphon and Canal System Rehabilitation Project C150350	350	Hinsdale/ Mineral	\$ 1,405,163	6,300AF	6,300		100%	2014 - 2015	0%	AM	Construction was delayed until the 2014 construction season due to forest fires in the area.
31 Terrace Irrigation Co > Spillway Replacment Project C150332	332	Conejos	\$ 2,724,721	2,000AF	15,340	2,000	100%	Jul 12 - Jul 13	99%	KR	Construction by ASI Contractors is complete. ASI presented claim for \$700K additional work. Denied by TIC and URS. Waiting for SEO final approval
32 Thunderbird W&S Dist > Lambert Ranch Water Rights Purchase C150320	320	Douglas	\$ 318,150.00	896 AF	55		100%	N/A	0%	KR	Closing has been delayed until 2013 due to easement access to purchased wells.
33 Tri-County Water Conservancy District > Ridgway Reservoir Micro Hydro Project C150324	324	Ouray/ Mont/ Delta	\$ 13,130,000	8 MW	35,000		100%	Jul 12 - Dec 13	80%	KR	Construction is underway with energy production expected by October 2013. Project Bill funding now available to Dist.
34 Twenty Two Road Lateral Company > Twenty Two Road Lateral Replacement Project C150344	345	Mesa	\$ 517,848	13,000LF	1,334		100%	Jan 13 - May 13	99%	KR	Construction complete. SC scheduled for mid 2014.
35 Union Ditch Company > Well Augmentation Project C150127	127	Weld	\$ 312,595.00	206 AF	206		75%	Sep 06 - Jan 14	80%	KR	One recharge pond at the Miller Feedlot Site was complited with an accompanny diversion structure on the Union Ditch.
36 Upper Arkansas Water Conservancy District > Reservoir Rehabilitation C150192	192	Chaffe/ Custer	\$ 3,520,000.00	500 AF	500	200	100%	Jun 05 - Jan 14	90%	KR	The project requires Forest Service special use permit and an environmental assessment prior to construction. The initial phase of construction was awarded to ASI, Buena Vista, CO, and completed in May 2007. The enlargement effort is delayed due to NEPA permitting

Projects Under Contract SubTotal = \$ 108,570,089 494,101 15,778

## Projects Not Under Contract

a	Southeastern CO Water Conserv. District > Arkansas Valley Conduit		Crowley	\$ 60,600,000	138 Miles	6,555		In Contracting	KR	Pending Federal Appropriation
b	Lake Durango Water Authority > Source Water Supply Project C150317	317	LaPlatta	\$ 2,525,000	309 AF	309		In Contracting	KR	A condition of contract approval is to have an agreement in place for use of the Outlet Tower in Lake Nighthorse
c	McDonald Ditch Company > Ditch Diversion and Headgate Replacement C150334	334	Rio Grande	\$ 70,700	5,018AF	5,018		In Contracting	JH	Increased loan amount and collateral change must return to for approval in Sept 2013.
d	Town of Ridgway > Lake Otonowanda Rehabilitation Project C150340	340	Ouray	\$ 606,000	363AF	280	254	In Contracting	KR/ JH	



## Design and Construction Status Report

Current Projects in Design or under Construction				Loan	Size	Annual Delivery Yield (AF)	Storage Effect (AF)	Design	Construction		Status Description/Update
Borrower/Project		Contract	County	Amount				Status	Start/End	Status	
e	Greeley, City of > High Park Fire Restoration Project C150347	347	Larmier	\$    2,020,000	5,500AC	9,000	726	In Contracting		KR/ JH	
f	San Luis Valley Water Conservancy District > Anaconda Ditch Water Right Acquisition C150348	348	Alamosa	\$      839,000	260AF	386		In Contracting		AM	
g	Missouri Heights - Mountain Meadows Irrigation Company > Irrigation Ditch lining Project C150351	351	Eagle/ Garfield	\$      454,500	3,500LF	4,480		In Contracting		KR	
h	Boxelder Basin Regional Stormwater Authority > Larimer and Weld Canal Crossing Structure Project C150352	352	Larmier/ Weld	\$    1,010,000	Weir	-		In Contracting		AM	
i	Boxelder Basin Regional Stormwater Authority > East Side Detention Facility Project C150353	353	Larmier/ Weld	\$    7,171,000	1,800AF	-		In Contracting		AM	
j	Grand Mesa Water Conservancy District > Peak Res. & Blanche Park Res. Rehabilitation C150354	354	Delta	\$      227,250	155AF	400	155	In Contracting		AM	
k	Two Rivers Water & Farming Company > Arkansas Storage Facility C150355	355	Huerfano/ Cucharas	\$    9,999,000	4,110AF	-	4,110	In Contracting		AM	To be deauthorized in November of 2013.
l	Bellyache Ridge Metro District > Well Replacement Project C150356	356	Eagle	\$      169,175	1,900ft	11	-	In Contracting		AM	
m	Boulder & Lefthand Irrigation Company > Tracy Lateral Pipeline C150357	357	Boulder	\$      159,075	4,110AF	2,869	-	In Contracting		JH	
n	Fowler, Town of > Augmentation Pipeline Project C150359	359	Otero	\$      277,245	2,400LF	177	-	In Contracting		AM	
o	East Mesa Water Company > Ditch Piping Project C150360	360	Pitkin/ Garfield	\$      555,500	1,450LF	9,669	-	In Contracting		KR	

Not Under Contract SubTotal = \$ 86,683,445 39,154 5,245

Grand Total = \$ 195,253,534 533,255 21,023

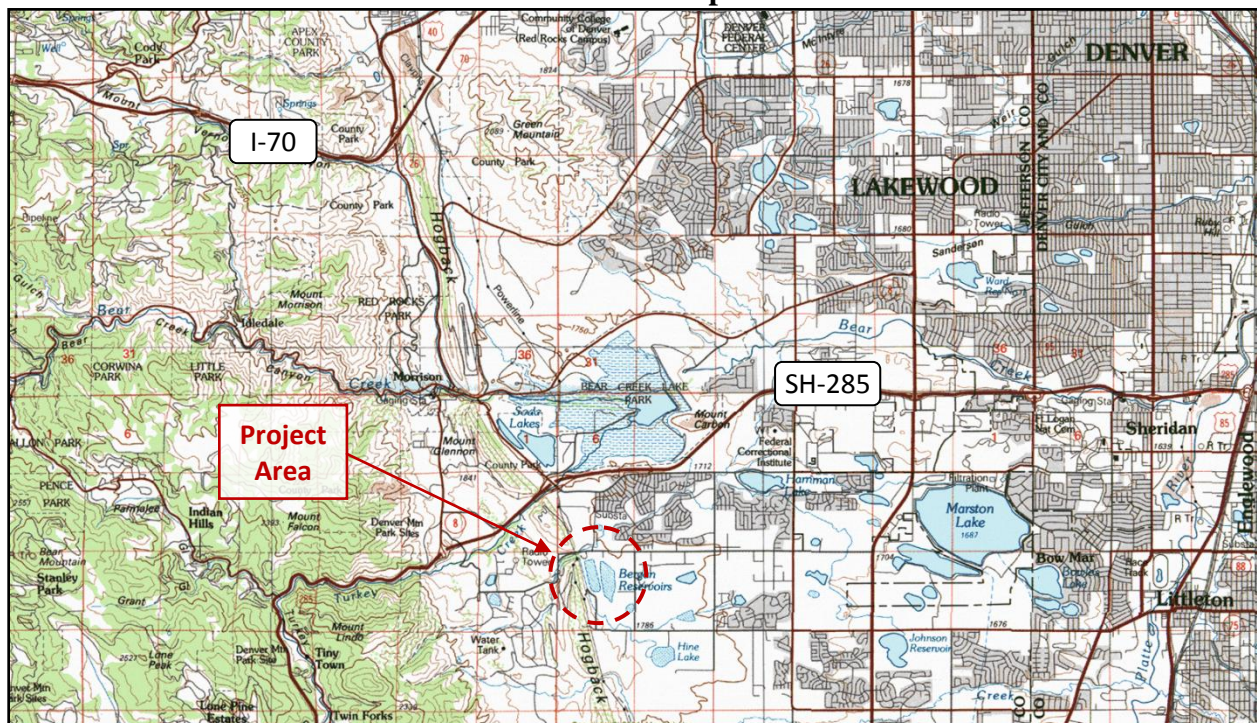
C150344

## Water Project Loan Program – Project Data Sheet

<b>Borrower:</b>	Bergen Ditch & Reservoir Company	<b>County:</b>	Jefferson
<b>Project Name:</b>	Bergen Reservoir No. 2 Rehabilitation	<b>Project Type:</b>	Dam Rehabilitation
<b>Drainage Basin:</b>	South Platte, District 9	<b>Water Source:</b>	Turkey Creek
<b>Total Project Cost:</b>	\$2,225,000	<b>Funding Source:</b>	Construction Fund
<b>Type of Borrower:</b>	Blended - (64% high-income muni, 36% middle-income muni)	<b>Avg. Annual Diversion:</b>	800 AF
<b>CWCB Loan:</b>	\$2,020,000 (w/ 1% service fee)	<b>Interest Rate:</b>	3.15%
		<b>Term:</b>	30 years

The Bergen Ditch and Reservoir Company utilizes Bergen Ditch to divert water off Turkey Creek and deliver it to shareholders through a series of open and piped ditches, reservoirs, pumps and pipelines. The Company owns three reservoirs, Bergen No.1, Bergen No. 2 and Polly Deane. Bergen No. 2 was originally constructed in 1874. The dam has an ongoing history of slumping and seepage issues. In 2007 the dam's outlet works were damaged and temporary repairs were made in 2009. Ongoing SEO inspection reports have monitored seepage, stability, erosion and outlet concerns over recent years. Following the latest inspection report the SEO verbally recommended the Company consider rehabilitation of the dam or face the possibility of a storage level restriction. This project consists of full replacement of the outlet works and rehabilitation of the dam.

## Location Map

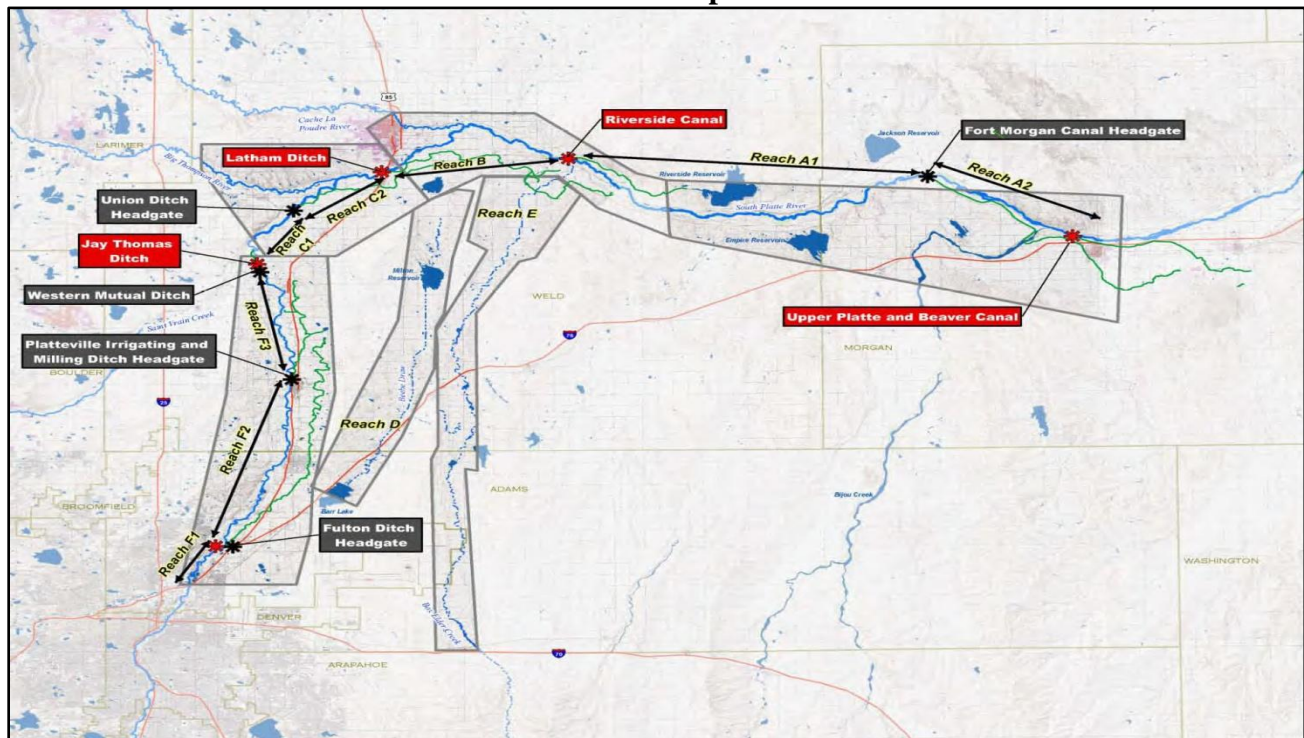


### Water Project Loan Program – Project Data Sheet

<b>Borrower:</b>	Well Augmentation System of the Central Colorado Water Conservancy District	<b>County:</b>	Weld, Adams, Morgan		
<b>Project Name:</b>	Water Rights Purchase & Gravel Pit Storage Project	<b>Project Type:</b>	Water Rights Purchase & Augmentation Facility		
<b>Drainage Basin:</b>	South Platte	<b>Water Source:</b>	South Platte Basin		
<b>Total Project Cost:</b>	\$3,333,400	<b>Funding Source:</b>	Construction Fund		
<b>Type of Borrower:</b>	Agricultural	<b>Annual Depletions Covered:</b>	20,400 AF		
<b>CWCB Loan:</b>	\$3,030,000 (w/ 1% service fee)	<b>Interest Rate:</b>	1.75%	<b>Term:</b>	30 years

The Well Augmentation Subdistrict (WAS) of the Central Colorado Water Conservancy District is located in Adams, Weld, and Morgan counties. WAS is a special district created by the Weld County District Court on January 8, 2004, pursuant to the applicable provisions of the “Water Conservancy Act”, Section 37-45-101, C.R.S. It has the power to acquire and sell water rights, construct and operate facilities, exercise eminent domain, levy taxes, and contract with other agencies. WAS has operated an augmentation plan since 2004, covering approximately 78 square miles and 214 predominantly agricultural member wells. WAS has an average annual depletion of 20,400. WAS has requested a loan for purchasing more water and storage rights to enable WAS to issue a pumping quota to member wells for the first time since 2006. The WAS General Fund will cover the remaining project expenses.

### Location Map

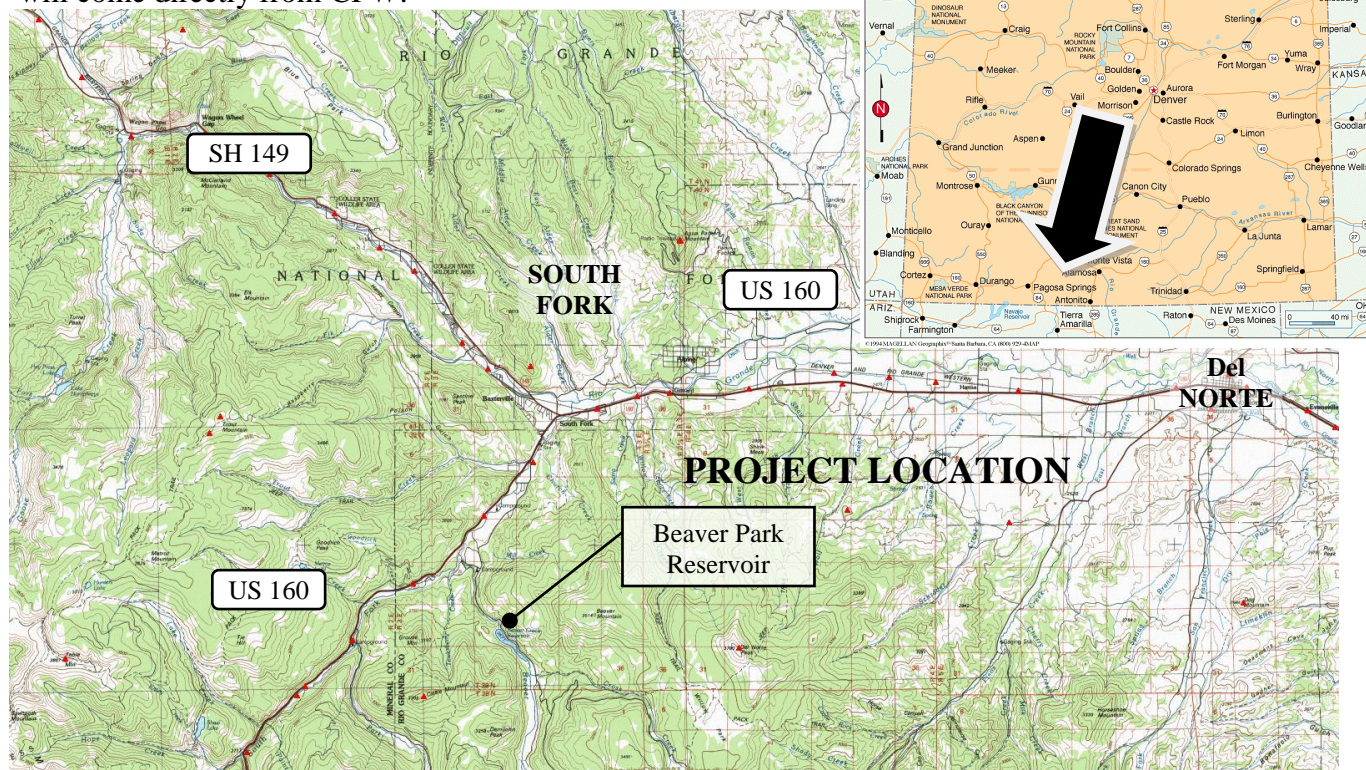




### CWCW Water Project Loan Program Project Data Sheet

**Borrower:** Colorado Parks and Wildlife**County:** Rio Grande**Project Name:** Beaver Park Dam**Project Type:** Reservoir Rehabilitation**Drainage Basin:** Rio Grande Basin**Water Source:** Beaver Creek**Total Project Cost:** \$15,939,606**Funding Source:** Construction Fund**Type of Borrower:** State Agency**Average Annual Diversion:** 4,434 AF**Restricted Capacity Reclaimed:** 2,201 AF**CWCB Loan:** \$10,000,000**Interest Rate:** 0%    **Term:** 30-year

Colorado Division of Parks and Wildlife (CPW) is applying for a loan for the Beaver Park Dam Rehabilitation Project (Project). Beaver Park Reservoir (Reservoir) was originally constructed in 1914 and provides for general recreation, fishing, and water storage. In 2010, a sinkhole along the left abutment was observed by the State Engineer's Office (SEO), which resulted in the SEO placing a 20 foot fill restriction on the Reservoir. The restriction resulted in the Reservoir's capacity being reduced from 4,758 to 2,557 acre-feet. To remove the restriction, CPW intends to construct a downstream filter/drain system, an upstream high density liner, and a spillway chute. The total Project cost for the alternative selected is \$15,939,606. The General Assembly authorized CPW for a \$10,000,000 loan, at a 0% interest rate, through the 2012 Projects Bill (SB12S-002) to assist in constructing the Project, contingent upon final loan approval by the Colorado Water Conservation Board (CWCB). The remaining funds to construct the Project will come directly from CPW.



## Water Project Loan Program – Project Data Sheet

**Borrower:** Crystal Lakes Water and Sewer Association

**County:** Larimer

**Project Name:** Lower Lone Pine Reservoir Enlargement

**Project Type:** Reservoir Enlargement

**Drainage Basin:** South Platte, District 1

**Water Source:** North Lone Pine Creek  
(tributary to Cache la Poudre River)

**Total Project Cost:** \$2,600,000

**Funding Source:** Construction Fund

**Type of Borrower:** Lower-Income Municipal

**Avg. Annual Diversion:** 271 AF

**CWCB Loan:** \$2,363,400 (w/ 1% service fee)

**Interest Rate:** 4.00% **Term:** 30 years

The Crystal Lakes Water and Sewer Association (Association) is requesting a loan to enlarge Lower Lone Pine Lake Reservoir from 10.5 AF to 100.5 AF. The enlargement will be used to store Upper Lone Pine Reservoir (no yet constructed) water rights in Lower Lone Pine Reservoir for the purpose of augmentation of well water consumption for residences of Crystal Lakes. The Crystal Lakes subdivision, a private community located in Larimer County, was established in 1969 and includes 1,656 lots distributed over 4,800 acres. More than 800 residences are currently served by the Association. The decreed augmentation plan specifically links the allowable use of water to the amount of augmentation water held in storage. Without increased storage capacity the community is likely to face routine water restriction. No change in use of the Upper Lone Pine Reservoir rights has been requested, only an alternate place of storage.

### Location Map

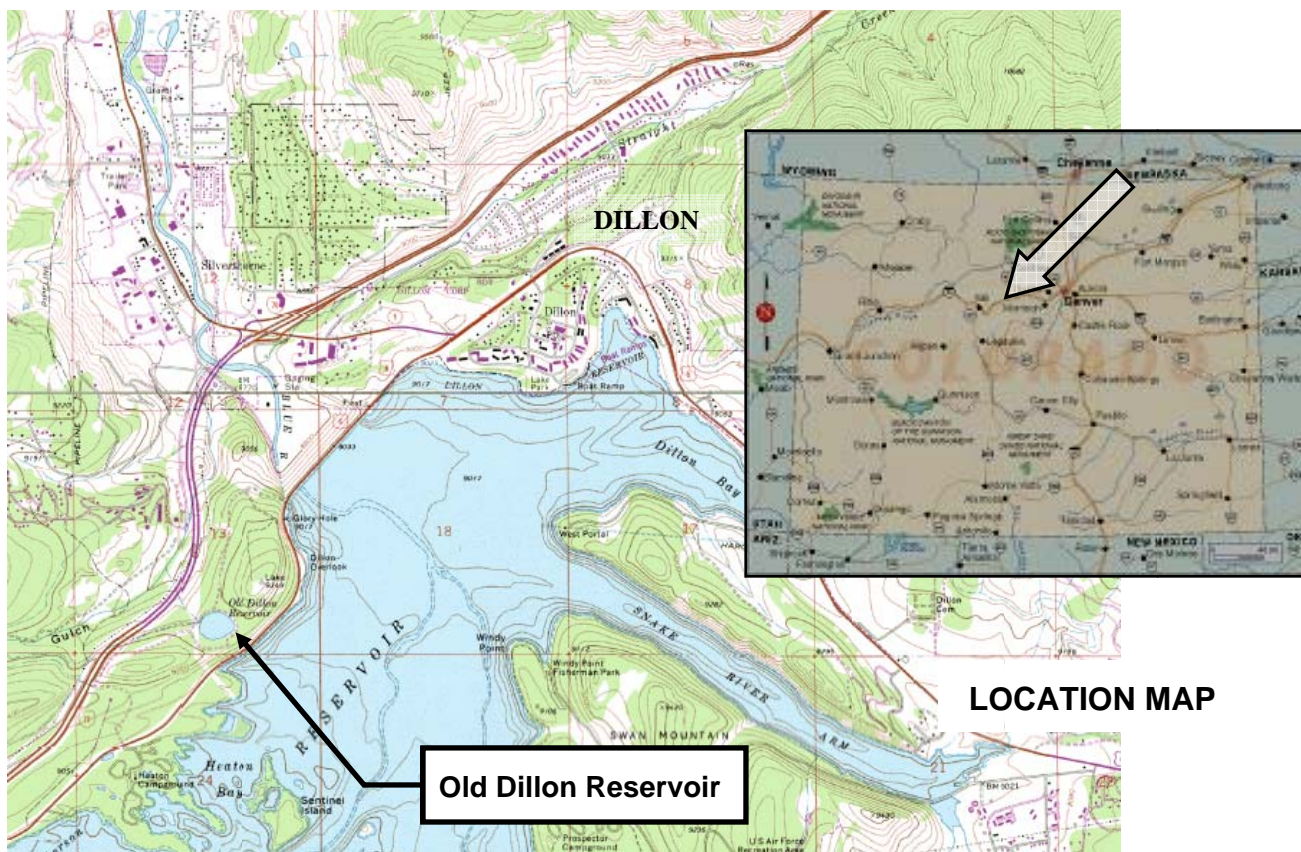




# CWCB Construction Loan Program Project Data Sheet

**Borrower:** Town of Dillon**County:** Summit**Project Name:** Old Dillon Reservoir Enlargement **Project Type:** Reservoir Enlargement**Drainage Basin:** Colorado River**Water Source:** Salt Lick Gulch**Total Project Cost:** \$6,315,000 Total Cost  
\$1,667,000 Town's Portion**Funding Sources:** Construction Fund**Type of Borrower:** Municipal Middle Income**Average Delivery:** 321 AF**New Storage:** 109 AF (Restricted + New)**Loan Amount:** \$1,515,000 (Including 1% fee)**Interest Rate:** 4.0% **Term:** 30 years

The Town of Dillon is applying for a loan to participate in the enlargement of the Old Dillon Reservoir. In 2004, the Town, Summit County and Town of Silverthorne signed an agreement to enlarge the reservoir. The Town's participation cost is approximately 27% of the construction costs and 20% of the Engineering costs. The Town and the County initiated a feasibility study in 1995. The Reservoir was originally constructed as a 46 AF raw water storage reservoir filled via the Dillon Ditch, which diverts from Salt Lick Gulch. The Reservoir site is southwest of the Dillon Reservoir Dam. In the summer of 2008, the SEO issued an order to drain the Reservoir due to concerns over the integrity of the north dam. The Reservoir is currently not available for storage. Permitting is underway and construction of the enlargement is scheduled to occur in 2010.



### CWCB Water Project Loan Program Project Data Sheet

**Borrower:** Eckhardt Farms Inc.**County:** Weld**Project Name:** Water Rights Purchase**Project Type:** Water Rights Purchase**Basin:** South Platte **District:** 1**Water Source:** Western Mutual Ditch**Total Project Cost:** \$1,470,000**Funding Source:** Construction Fund**Type of Borrower:** Agricultural**Average Annual Diversion:** 694 AF**CWCB Loan:** \$1,336,230 (w/ 1% service fee) **Interest Rate:** 1.75% **Term:** 30-years

Eckhardt Farms Inc. is located in Weld County near LaSalle, Colorado. The farming Corporation has been incorporated since 1993. It farms 3,000 acres and generates revenues from crops of hay, wheat, corn, sugar beets, onions, and pinto beans. In the past, the Corporation was able to irrigate with well water. The wells it used are part of Central Colorado Water Conservancy District's – Well Augmentation Subdistrict and have not been able to be pumped since 2005. Since that time the Corporation has been leasing shares in the Western Mutual Ditch Company. Through this loan, the Corporation intends to purchase the water it has been leasing for the past seven years and continue to use it for agricultural production.





### CWCB Water Project Loan Program Project Data Sheet

**Borrower:** Farmers' High Line Canal and Reservoir Company

**County:** Adams/Jefferson

**Project Name:** System Rehabilitation

**Project Type:** Ditch Rehabilitation

**Drainage Basin/District:** South Platte / 7

**Water Source:** Clear Creek

**Total Project Cost:** \$2,430,000

**Funding Source:** Construction Fund

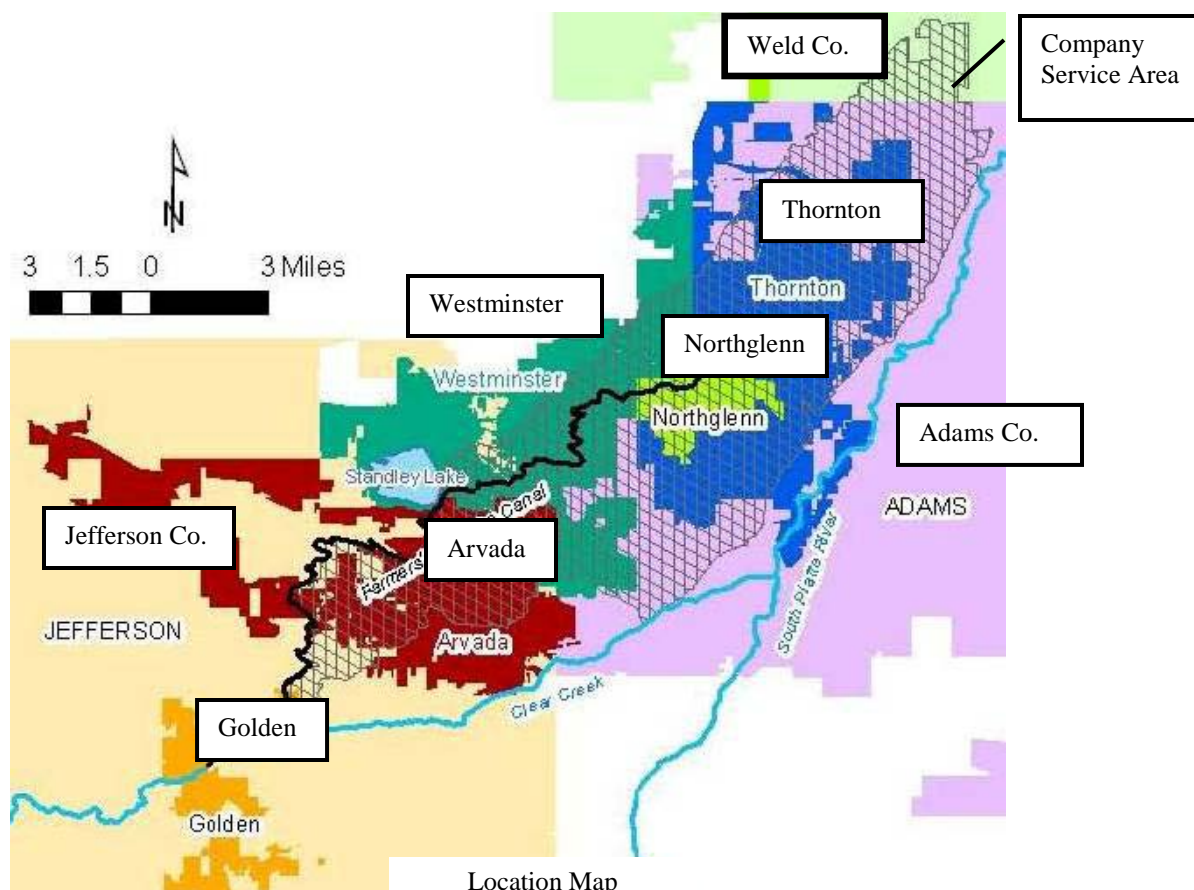
**Type of Borrower:** Municipal

**Water Delivery:** 24,000 AF/yr

**CWCB Loan:** \$2,209,597 (incl. 1% loan fee)

**Interest Rate:** 4.65%    **Term:** 30 years  
(Blended rate)

The Farmers High Line Canal and Reservoir Company (Company) is a ditch company that was established in 1885. It diverts water off of clear creek and it delivers water through a 31 mile canal running from Golden to Northglenn, through Arvada and Westminster. The Company has completed a canal evaluation and engineering planning study and identified a list of improvements it intends to do with the CWCB loan proceeds. These items include: replacement of corroded drain pipes, replacement of three siphons, headgate rehabilitation, SCADA control system installation at the headgate, diversion dam rehabilitation, and tree removal along the ditch. This work is expected to be completed between the fall of 2010 through the winter of 2014.



Location Map



## Water Project Loan Program – Project Data Sheet

**Borrower:** Fisher Ditch Company

**County:** Denver

**Project Name:** Ditch Infrastructure Improvements

**Project Type:** System Rehabilitation

**Drainage Basin:** South Platte, District 7

**Water Source:** Clear Creek

**Total Project Cost:** \$500,000

**Funding Source:** Construction Fund

**Type of Borrower:** Blended  
(middle-income muni, high-income muni, commercial)

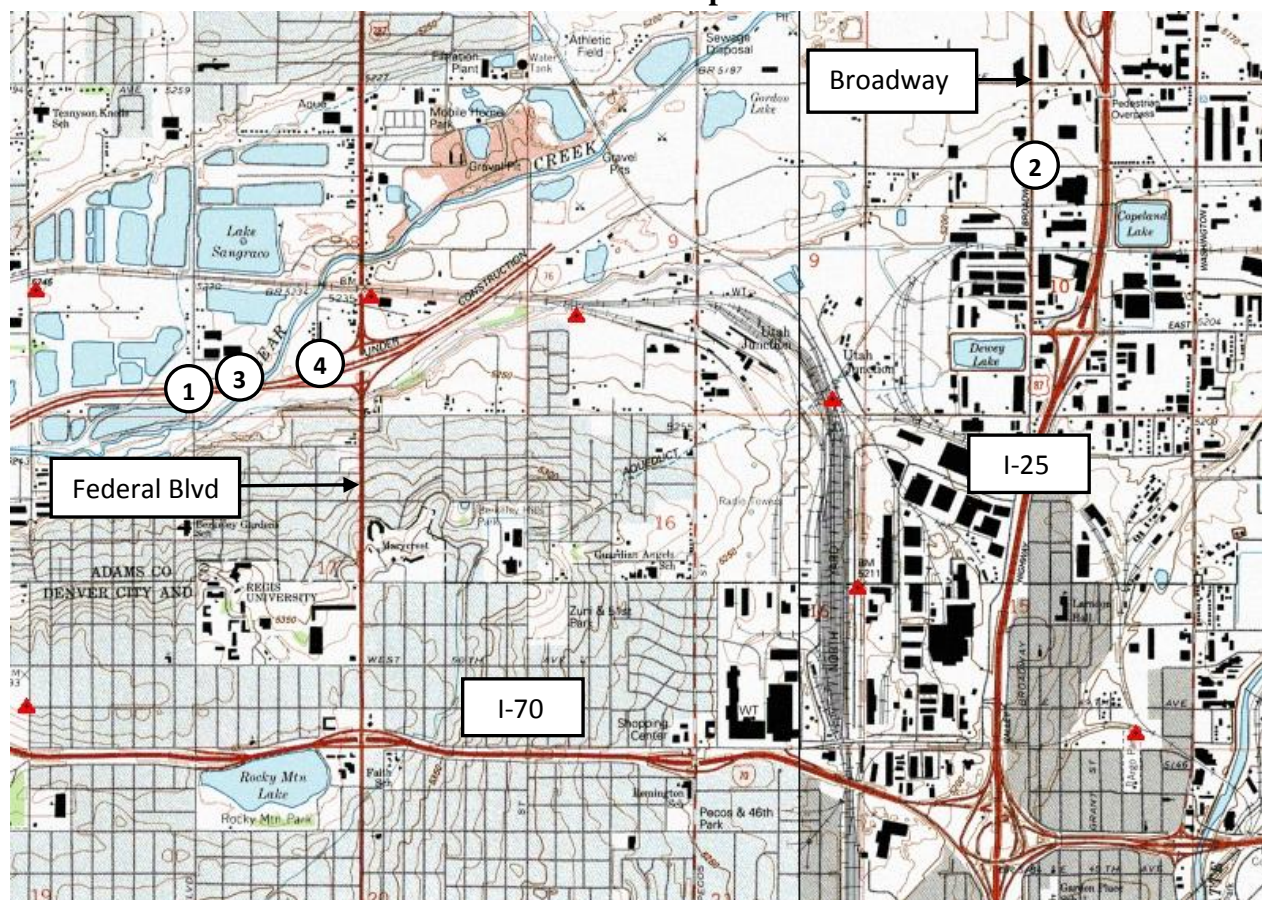
**Avg. Annual Diversion:** 7,623 AF

**CWCB Loan:** \$454,500 (w/ 1% service fee)

**Interest Rate:** 5.95%    **Term:** 30 years

The Fisher Ditch Company (Company) utilizes the Fisher Ditch to supply water to its 28 shareholders for the purpose of irrigation, augmentation and industrial uses. The ditch has been in place for over 100 years and annual maintenance of its aging infrastructure is becoming a burden and inhibiting its ability to provide a reliable supply of water. The Company is requesting a loan from the CWCB for four system rehabilitation tasks: 1) headgate rehabilitation, 2) replacement of 650 LF of damaged CMP with RCP, 3) installation of a sand-out pipe and gate, and 4) burying 1,500 LF of open ditch with plastic irrigation pipe. This Project will restore reliable water deliveries while reducing annual maintenance costs.

### Location Map





# **CWCB Water Project Loan Program Project Data Sheet**

**Borrower:** Town of Georgetown  
(Water and Sewer Enterprise)

**County:** Clear Creek County

**Project Name:** Outlet Works Modification Project **Project Type:** Dam Rehabilitation

**Drainage Basin/District:** South Platte / 7

**Water Source:** Clear Creek

**Total Project Cost:** \$3,275,000

**Funding Source:** Construction Fund

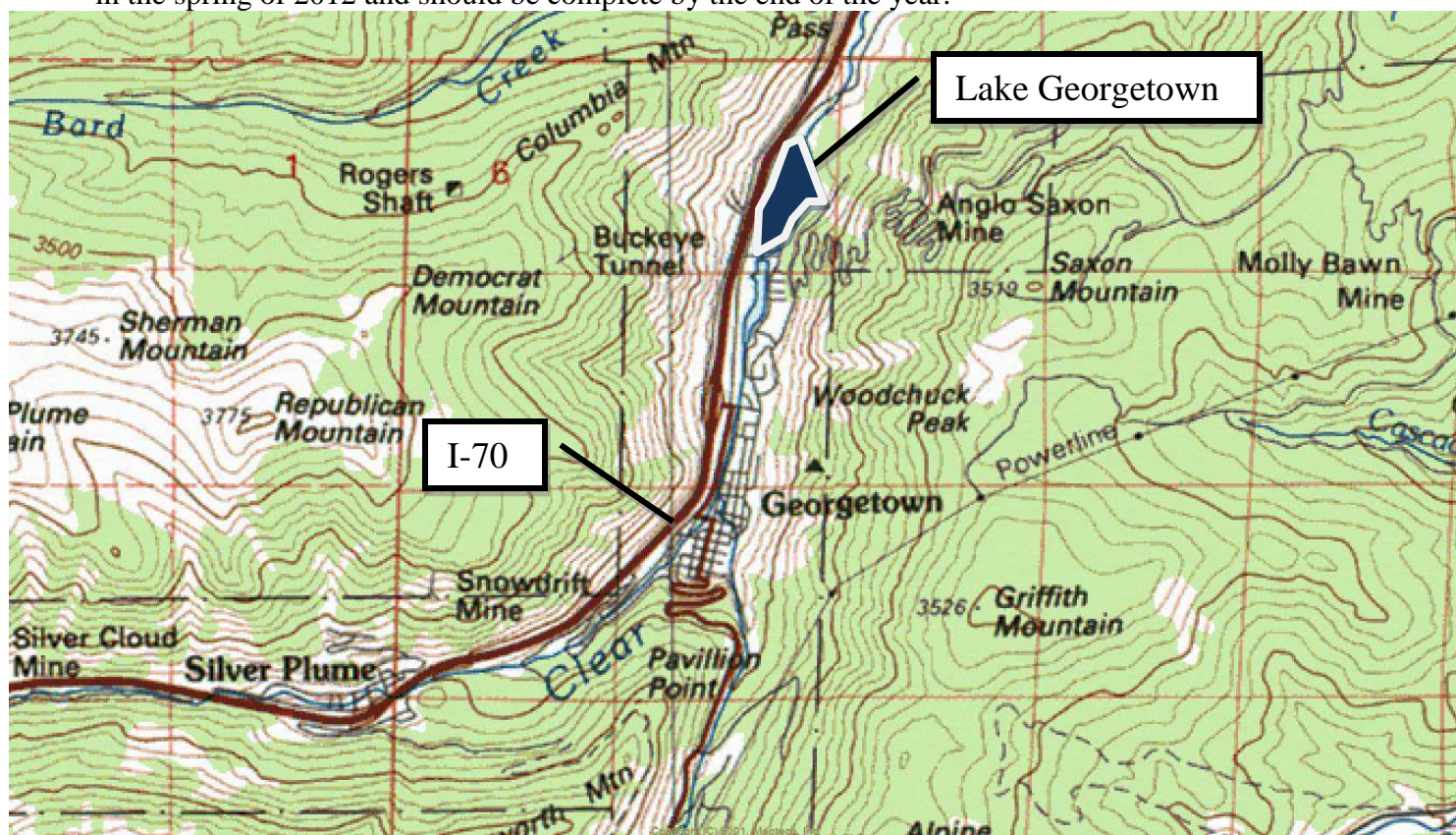
**Type of Borrower:** Middle-Income Municipal

**Average Diversion:** 208 AF

**CWCB Loan:** \$2,976,975 (w/ 1% service fee)

**Interest Rate:** 4.5% **Term:** 30 years

The Town of Georgetown is located on Clear Creek, along the I70 corridor, east of the continental divide. The Town needs to increase the outlet works capacity at Georgetown Lake Dam. The outlet works currently can release up to 260 cfs. In order to comply with an October 2010 court order regarding Georgetown Lake operations, up to 500 cfs must be released so the Town can meet the terms of its augmentation plan. The CWCB loan will be used to pay for the engineering costs and for the construction costs associated with the outlet works project. Construction is expected to begin in the spring of 2012 and should be complete by the end of the year.



## Water Project Construction Loan Program - Project Data

<b>Borrower:</b> Greeley Irrigation Company	<b>County:</b> Weld
<b>Project Name:</b> Greeley Canal No. 3	<b>Project Type:</b> Ditch Rehabilitation
<b>Drainage Basin:</b> South Platte	<b>Water Source:</b> Cache La Poudre River
<b>Total Project Cost:</b> \$2,457,500	<b>Funding Sources:</b> CWCB, GIC
<b>Type of Borrower:</b> Agricultural/Municipal	<b>Aver. Delivery:</b> 18,000 acre-feet
<b>CWCB Construction Fund Loan:</b> \$2,233,867 (incl. 1% loan fee)	<b>Interest Rate:</b> 2.85% <b>Term:</b> 30 years

GIC provides irrigation water to a service area of 2,367 acres in Weld County, generally within the City of Greeley and east of the City. GIC operates the Greeley Canal No. 3, constructed in 1870 by the Union Colony. In 1875, the Union Colony deeded an undivided 3/8ths interest in the Canal to the then Town of Greeley. In 1882, the GIC was incorporated and the Union Colony quit-claimed its remaining 5/8ths interest in the Canal to GIC. About 1,100 acres of the 3,500 original irrigated acres have been subject to dry-up, and water converted to augmentation use. Present canal usage is roughly 1/3 City of Greeley, 1/3 agricultural irrigation, and 1/3 augmentation. GIC facilities consist of a river diversion structure, approximately 13 miles of earthen canal, check structures, delivery headgates, spill structures, trash screens, and other minor structures. A portion of these facilities are in need of repair, upgrades, or replacement. GIC diverts water from the Cache la Poudre River west of Greeley and the canal terminates east of approx. 12 miles downstream. Average annual headgate diversions are 18,678 acre-feet. GIC also receives about 1300-1400 acre feet annually from Fossil Creek Reservoir. Combined delivery from direct flow diversions and storage is about 18,000 AF. The GIC Board is undertaking a number of phased improvements to the canal including: 1) repairs to, and partial replacement of, the river diversion; 2) piping or lining of portions of the canal; 3) consideration of canal automation using supervisory control and data acquisition (SCADA) equipment; 4) tree removal and tree pruning; 5) canal realignment, reshaping, and straightening; and 6) removal or repair of selected headgates and installation of new headgates. This is the first step of a phased canal modernization, that would have the effect of improving overall canal operations and operational efficiency; increasing consistency of shareholder headgate deliveries; decreasing operational liabilities; and reducing unnecessary operational spills.



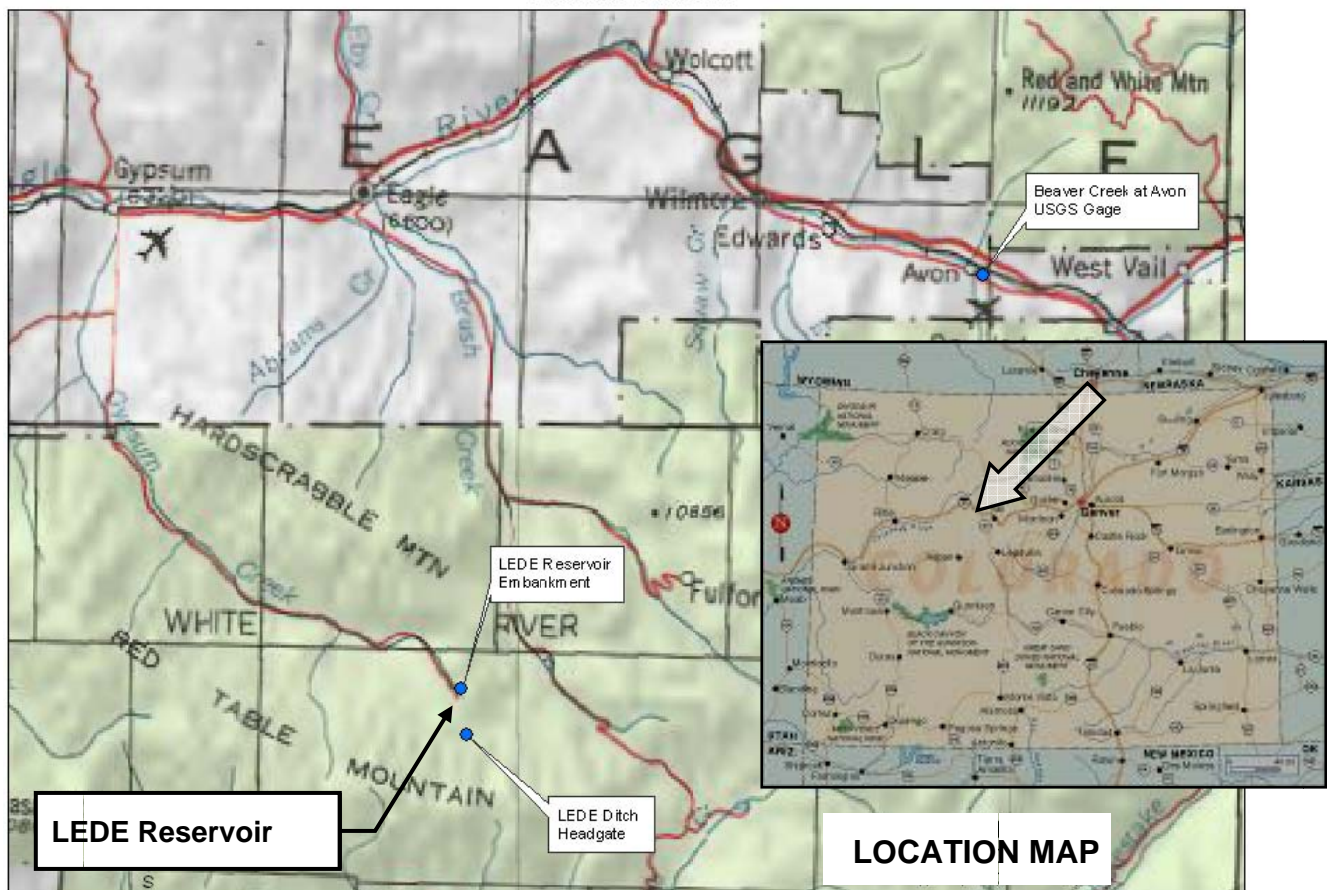


## CWCB Construction Loan Program Project Data Sheet

**Borrower:** Town of Gypsum**County:** Eagle**Project Name:** LEDE Ditch & Reservoir  
Upgrade Project**Project Type:** Reservoir Rehabilitation**Drainage Basin:** Colorado River**Water Source:** Gypsum Creek**Total Project Cost:** \$3,162,000**Funding Sources:** Construction Fund**Type of Borrower:** High Income Municipal**Average Delivery:** 1,200 AF**New Storage:** 254 AF**Loan Amount:** \$2,689,731 (Including 1% fee)**Interest Rate:** 4.5%      **Term:** 30 years

The Town of Gypsum purchased the LEDE Ditch and LEDE Reservoir water rights in 2006. The original water rights are decreed for irrigation uses, and provide storage for up to 947 AF in the reservoir. The Reservoir was built to a capacity of 431 AF. The Town seeks to increase capacity to 685 AF in order to accommodate continued agricultural irrigation, and for future water supplies to the Town. This upstream storage is required to assist in managing Gypsum Creek water rights calls and dry year operations. The reservoir storage will become even more important as the Town's population continues to increase. The Town wishes to repair and improve the reservoir to utilize its potential, and to protect valuable senior storage rights in the reservoir. The reservoir is located in the headwaters of Gypsum Creek, south of Gypsum within the White River National Forest. Design and permitting is expected to occur in 2009/2010 with pipeline construction starting in late 2009 and dam construction starting in 2011.

General Locations



# CWCB Construction Loan Program Project Data Sheet

**Borrower:** Joseph W. Bowles Reservoir Company **County:** Jefferson

**Project Name:** Bowles Reservoir No. 1 Dam Rehab **Project Type:** Reservoir Rehabilitation

**Drainage Basin:** South Platte

**Water Source:** Bear Creek

**Total Project Cost:** \$1,874,000

**Funding Sources:** Construction Fund

**Type of Borrower:** Blended Ag & Municipal  
& Commercial

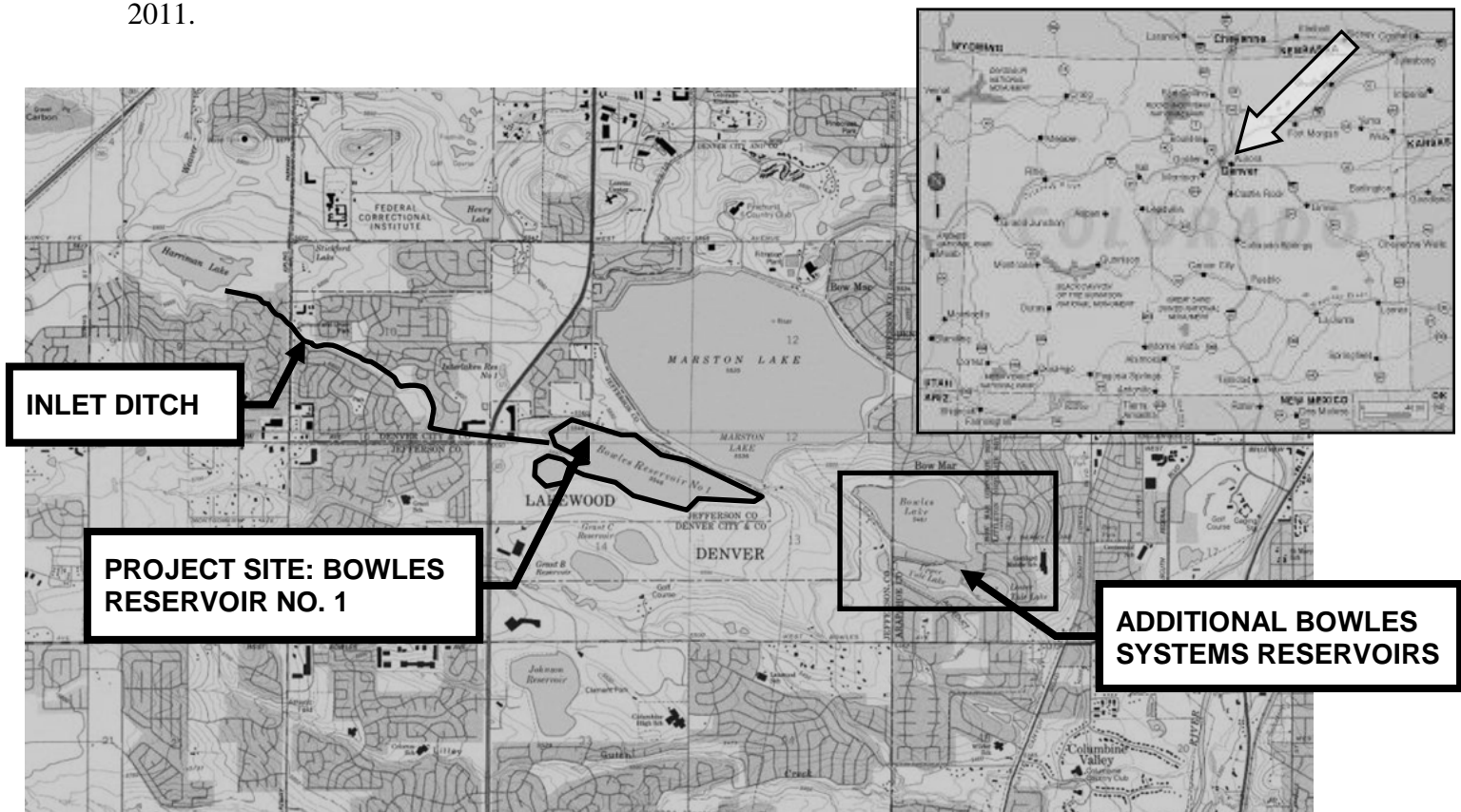
**Average Delivery:** 900 AF

**Loan Amount:** \$1,703,870 (Including 1% fee)

**Interest Rate:** 4.65%

**Term:** 30 years

The Joseph W. Bowles Reservoir Company (Company) owns and operates Bowles No. 1 Reservoir, located in the southwest metropolitan area of Denver. The Company was formed in 1906 and currently has 50 shareholders who use the water for golf courses, parks, open space, and some individual ranches for irrigation water. The Company is applying for a loan to implement several repairs to correct dam-safety deficiencies and improve the long-term performance of Bowles No. 1 Dam and to rehabilitate the deteriorating reservoir inlet ditch. The dam rehabilitation includes widening the crest, reconstructing the upstream slope, and installing a seepage collection and toe drain system on the downstream slope. Work on the inlet ditch includes removing trees, reconstructing the ditch cross section and alignment, placing slope protection in high erosion areas, and installing a flow control pipe that will provide for discharge of excessive ditch flows into an existing spillway and drainage structure. The Company plans on submitting the final design to the SEO by February 2010 and beginning construction in August 2010 with completion by February 2011.



# CWCB Water Project Loan Program Project Data Sheet

C150358

**Borrower:** Henrylyn Irrigation District**County:** Weld**Project Name:** Prospect Reservoir Dam Facing Project**Project Type:** Reservoir Rehabilitation**Drainage Basin/ District:** South Platte / 1**Water Source:** South Platte River**Total Project Cost:** \$3,264,400**Funding Source:** Construction Fund**Type of Borrower:** Agricultural**Average Annual Diversion:** 39,950 AF**CWCB Loan:** \$2,967,279  
(with 1% service fee)**Interest Rate:** 1.75% **Term:** 30-years

The Henrylyn Irrigation District was formed in 1907 under the Irrigation District Law of 1905. The District consists of 32,745 acres of irrigated farm land in Weld County. Their service area starts about 2 miles west of Hudson and extends generally east and south along I-76, to about 9 miles east of Keenesburg. Prospect Reservoir is an off-stream reservoir constructed in 1914 and has a Significant Hazard Large (Class 2) Dam with a height of 45 feet, a crest width of 18 feet, and a length of 5,300 lineal feet. The Prospect Reservoir Dam Facing Project will increase the erosion protection and dam stability by replacing a deteriorating concrete face at a 2:1 slope with a riprap face at a 3:1 slope. Construction is expected to commence in the fall of 2013.





# **CWCB Construction Loan Program Project Data Sheet**

**Borrower:** Lake Canal Reservoir Company

**County:** Larimer and Weld

**Project Name:** North Gray Reservoir  
Rehabilitation

**Project Type:** Reservoir Rehabilitation

**Drainage Basin:** South Platte River

**Water Source:** Box Elder Creek

**Total Project Cost:** \$128,300

**Funding Sources:** Construction Fund

**Type of Borrower:** Blended Agricultural  
Municipal & Commercial

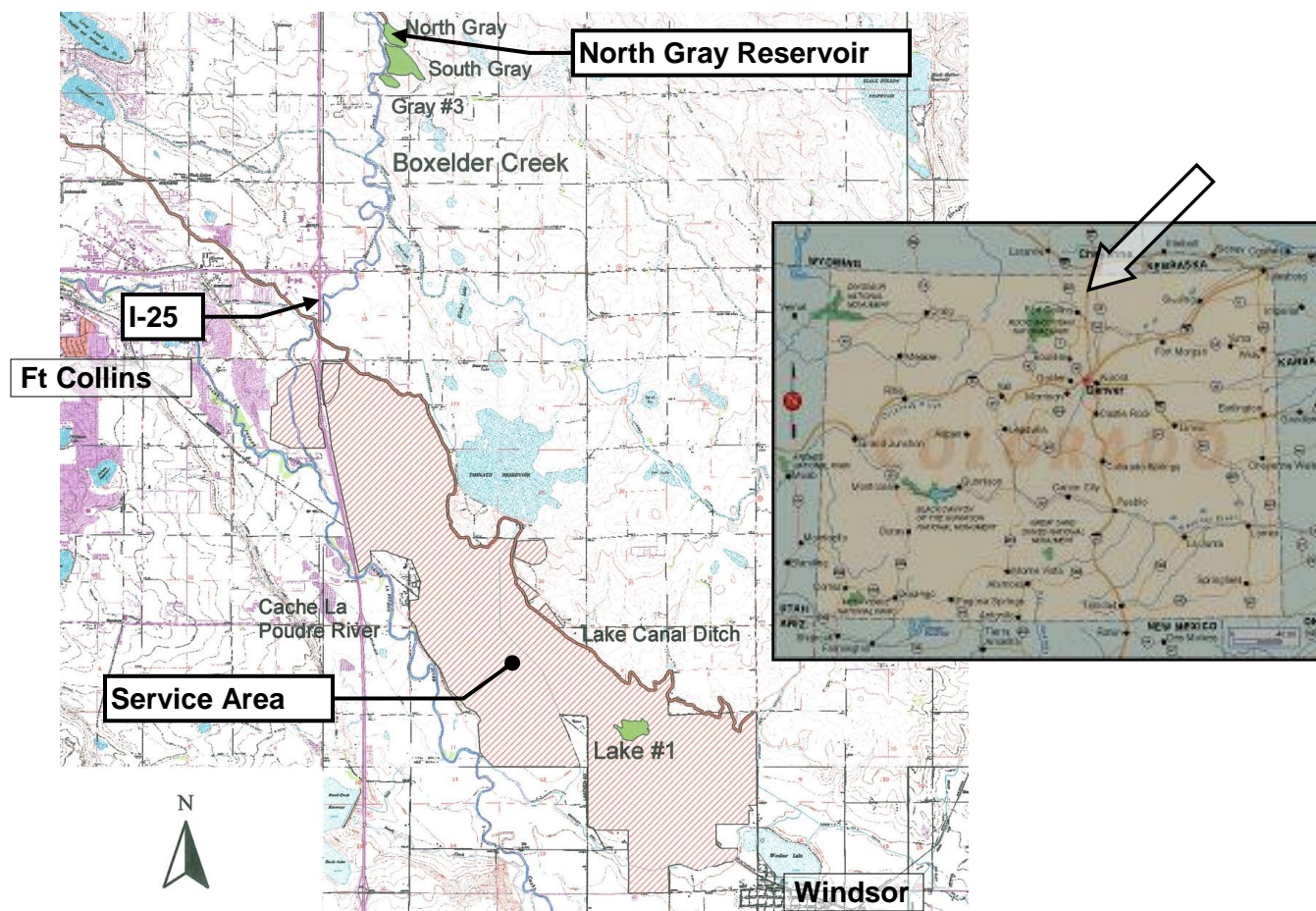
**Details:** 333 AF Stored  
75 AF Recovered

**Loan Amount:** \$116,625 (Including 1% fee)

**Interest Rate:** 2.10% **Term:** 30 years

The Lake Canal Reservoir Company is requesting a CWCB loan to construct a new spillway on North Gray Reservoir. The reservoir is currently under a storage restriction by the Office of the State Engineer (SEO). The existing spillway is a corrugated metal pipe that has corroded through. The existing pipe will be removed and the area will be backfilled. A new concrete cutoff wall and riprap lined channel will be constructed to replace the old spillway. Project design and SEO review is expected to be completed by July 2012. Construction is planned for September through November of 2012.

Note: Because this reservoir is on the SEO's restricted reservoir list and the Company is predominately owned by agricultural interests, this loan qualifies for a 1.0% interest rate reduction. The blended rate of 3.10% was reduced to 2.10%.





**Water Project Loan Program - Project Data**

**Borrower:** Left Hand Ditch Company

**County:** Boulder

**Project Name:** Allen Lake and Lake  
Isabelle Repair Project

**Project Type:** Dam Rehabilitation

**Drainage Basin:** South Platte, District 5

**Water Source:** Left Hand and St. Vrain Creek

**Total Project Cost:** \$1,273,000

**Funding Source:** Construction Fund

**Type of Borrower:** Blended  
(46% ag, 38% mid-muni, 16% high-muni)

**Avg. Annual Delivery:** 22,700 AF

**CWCB Loan:** \$1,157,157 (incl. 1% loan fee)

**Interest Rate:** 2.45%    **Term:** 30 years

The Company diverts water from Left Hand and St. Vrain creeks to provide irrigation water for a 15,000-acre service area in Boulder County. The water delivery system includes an elaborate network of ditches, laterals, reservoirs and headgates. Two of the Company's five reservoirs, Lake Isabelle and Allen Lake, are in need of repair. Lake Isabelle lies within the Indian Peaks Wilderness which is operated by the Forest Service. The outlet works are deteriorated and unreliable. This project will reconstruct the outlet works while placing the control valve at a more accessible location. The second reservoir, Allen Lake, is located just north of Boulder and west of Highway 36. Its dam was constructed at a 2:1 slope, and is even greater in various locations due to years of wave action displacing rip-rap and eroding the dam face. This project will flatten out the slope and re-armor it with rock rip-rap.

**LOCATION MAP**





### Water Project Loan Program - Project Data

**Borrower:** Lower Latham Reservoir Company      **County:** Weld

**Project Name:** Well Augmentation Proj. (Ph III)      **Project Type:** Water Rights Purchase & Construction of Recharge Facilities

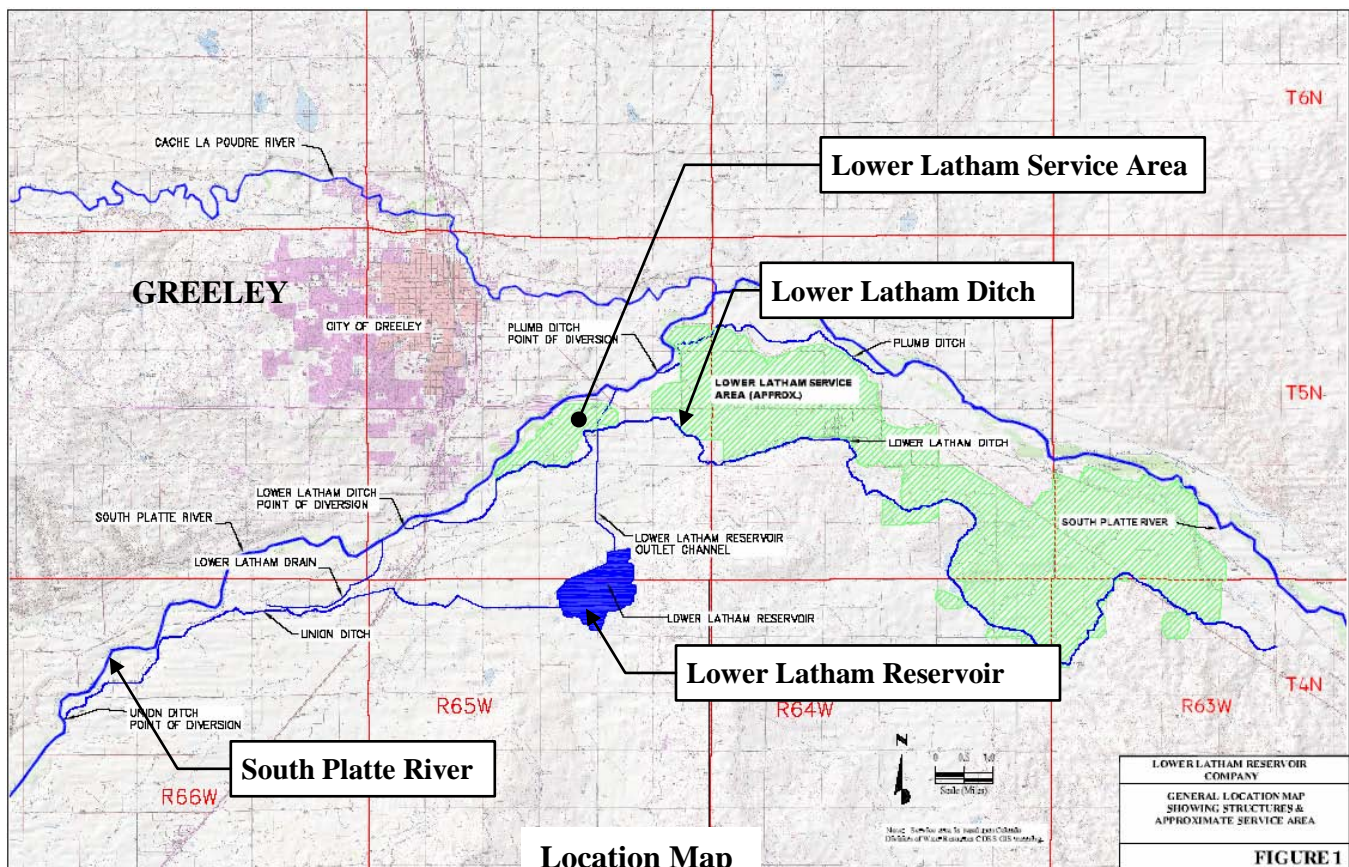
**Drainage Basin:** South Platte      **Water Source:** South Platte River

**Total Project Cost:** \$4,193,150      **Funding Sources:** Construction Fund

**Type of Borrower:** Agricultural      **Aver. Delivery:** 5,705 AF

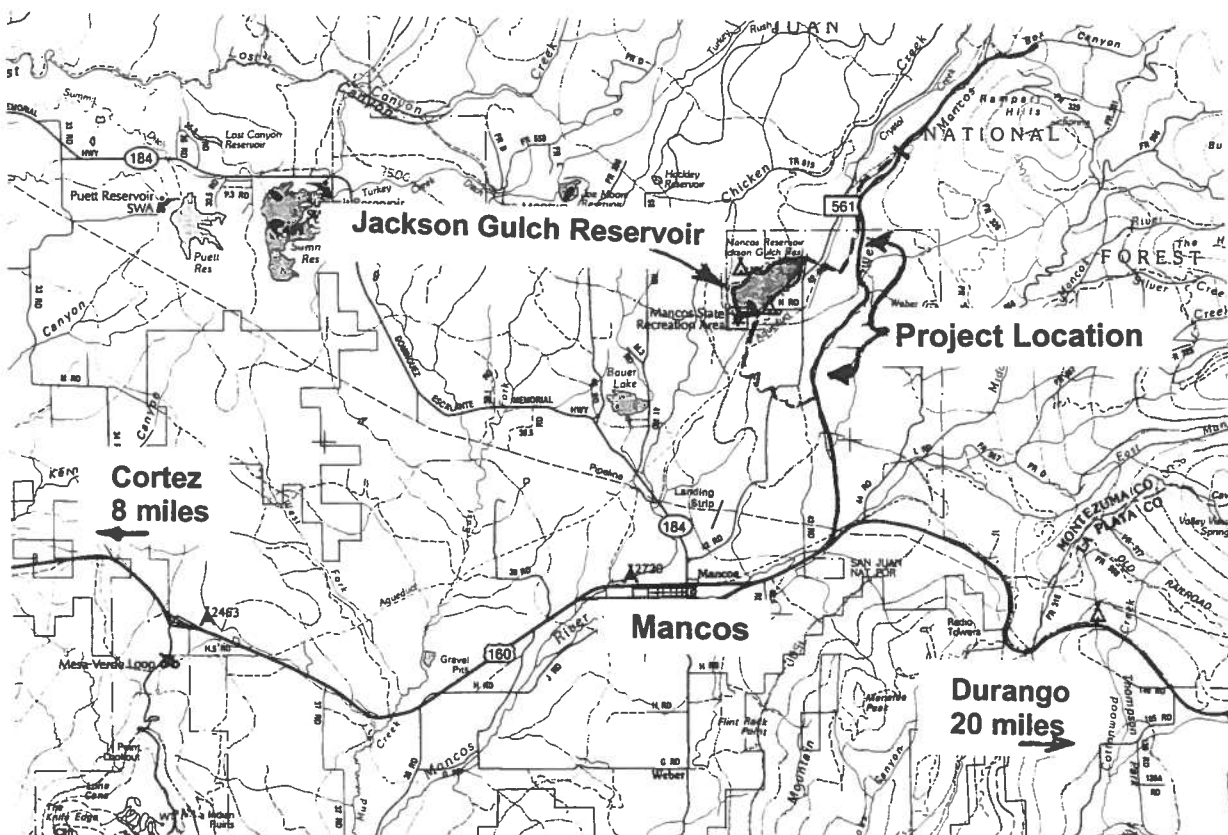
**CWCB Loan:** \$3,811,573 (incl. 1% loan fee)      **Interest Rate:** 2.75%      **Term:** 30 years

The Lower Latham Reservoir Company (Company) is acquiring five shares of Lower Latham Ditch Company, for the purpose of providing augmentation water for existing shareholder wells. It is also constructing groundwater recharge facilities and other system improvements to utilize these shares and shares acquired in phases I & II of the project (both of which were financed by the CWCB). The Company provides augmentation water for 84 wells in Weld County by replacing out-of-priority pumping depletions. 39 of these wells were formerly in the GASP Augmentation Plan, and the remaining 45 wells are covered in the Augmentation Plan of Central Colorado Water Conservancy District's GMS. The Company is attempting to cover the former GASP wells, and supplement coverage of the GMS wells with their own augmentation plan. In 2003, the Company filed a permanent well augmentation plan that is pending. The Company has concluded that additional replacement sources are necessary to provide sufficient replacement water during extended drought years. A 2010 SWSP for the Company was revised and submitted to the SEO in December 2009.



**Water Project Construction Loan Program-Project Data****Borrower:** Mancos Water Conservancy District**Project Name:** Mancos Project**Project Type:** System Rehabilitation**County:** Montezuma **Drainage Basin:** San Juan **Water Source:** West Mancos River**Total Project Cost:** \$6,619,550**Funding Sources:** Borrower and CWCB**Type of Borrower:** Agricultural/Municipal**Median Household Income:** Low**CWCB Loan:** \$5,486,531**Interest Rate:** 2.8% **Term:** 30 years**Annual Volume of Water delivered:** 9,000 acre-feet

The Mancos Water Conservancy District is located in Montezuma county and supplies supplemental and full service irrigation water to a 13,496-acre service area. District facilities were constructed over 50 years ago, and are in need of rehabilitation. The Mancos Water Conservancy District was formed in 1941 under the Water Conservancy Act of 1937. It has the power to acquire water rights, construct and operate facilities, levy taxes, and issue debt subject to the provisions of TABOR. The District has completed the feasibility study. Project funding will come from a \$5,486,531 loan from the CWCB, and the remainder from the District.

**Location Map**



### Water Project Loan Program - Project Data

**Borrower:** City of Monte Vista  
(Water Activity Enterprise)

**Project Name:** Augmentation Water Rights  
Acquisition

**Drainage Basin:** Rio Grande

**Total Project Cost:** \$1,863,500

**Type of Borrower:** Low-Income Municipal

**CWCB Loan:** \$1,693,770 (incl. 1% loan fee)

**County:** Rio Grande

**Project Type:** Water Rights Purchase

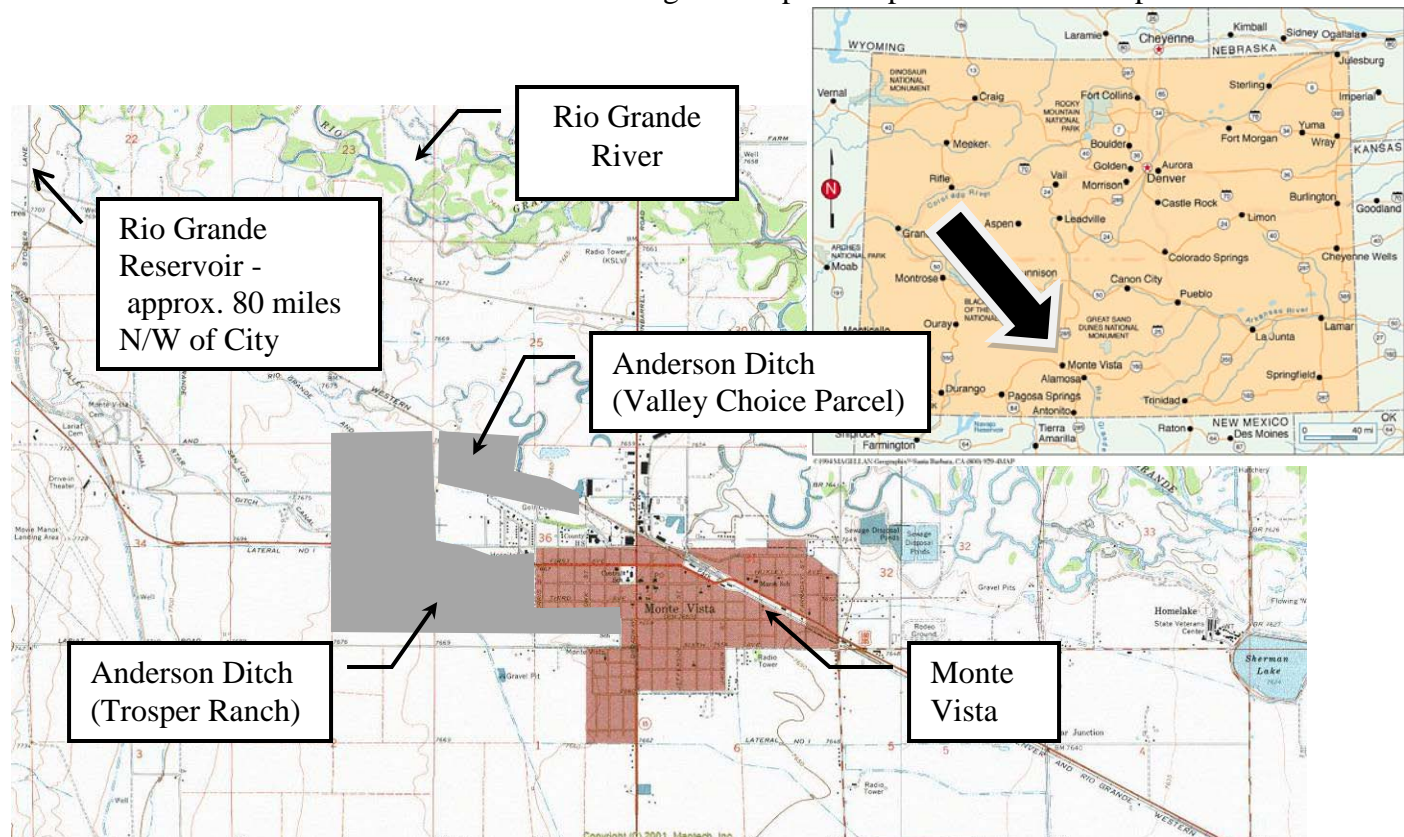
**Water Source:** Rio Grande River

**Funding Source:** Construction Fund

**Aver. Demand:** 1,212 AF/year

**Interest Rate:** 4.0%    **Term:** 30 years

The City of Monte Vista, by and through its water activity enterprise, provides water to 4,300 residents in the San Luis Valley. The City's water system consists of five wells in a confined aquifer and three wells in an unconfined aquifer. Upcoming rules from the Office of the State Engineer will require water users in the San Luis Valley to replace depletions from pumping of wells in both the confined and unconfined aquifers tributary to the Rio Grande River. The water rights currently owned by the City are insufficient to fully replace the City's depletions. The City needs an additional 321 AF of replacement water. In order to meet this need, the City is purchasing Anderson Ditch water rights and storage in the Rio Grande Reservoir to store both the excess credits from the water it is purchasing and to store additional water it intends on leasing. Upon loan approval, the City plans on executing purchase agreements with the sellers of the Anderson Ditch rights and will then file in water court to enable the use of those rights to replace depletions as soon as possible.



Location Map

## Water Project Loan Program – Project Data Sheet

**Borrower:** North Delta Irrigation Company

**County:** Delta

**Project Name:** NDIC Tunnel Repair Project

**Project Type:** Ditch Rehabilitation

**Drainage Basin:** Gunnison River Basin, District 40

**Water Source:** Gunnison River

**Total Project Cost:** \$1,210,000

**Funding Source:** Construction Fund/WSRA

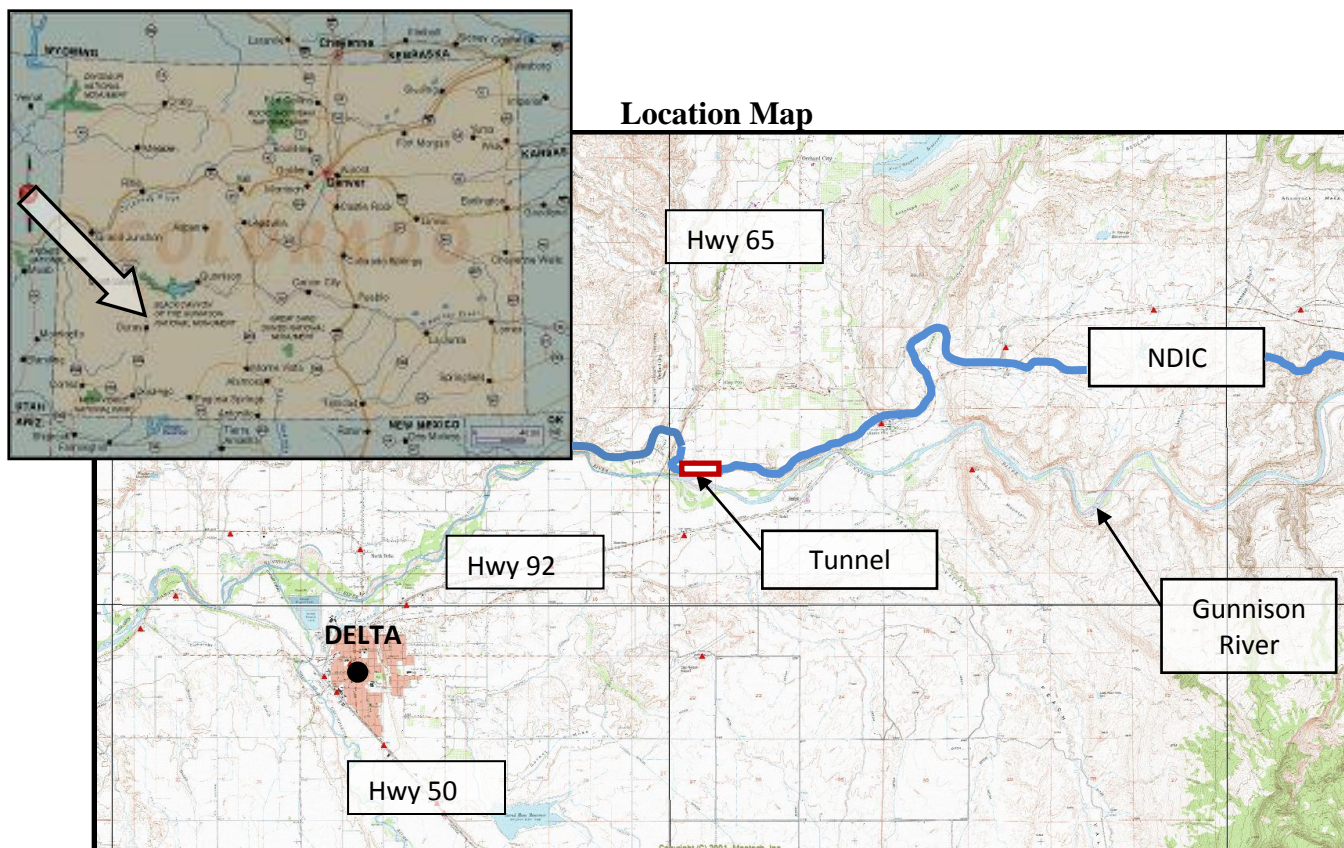
**Type of Borrower:** Blended  
(70% Agricultural, 30% Low-income municipal)

**Avg. Annual Delivery:** 17,735 AF

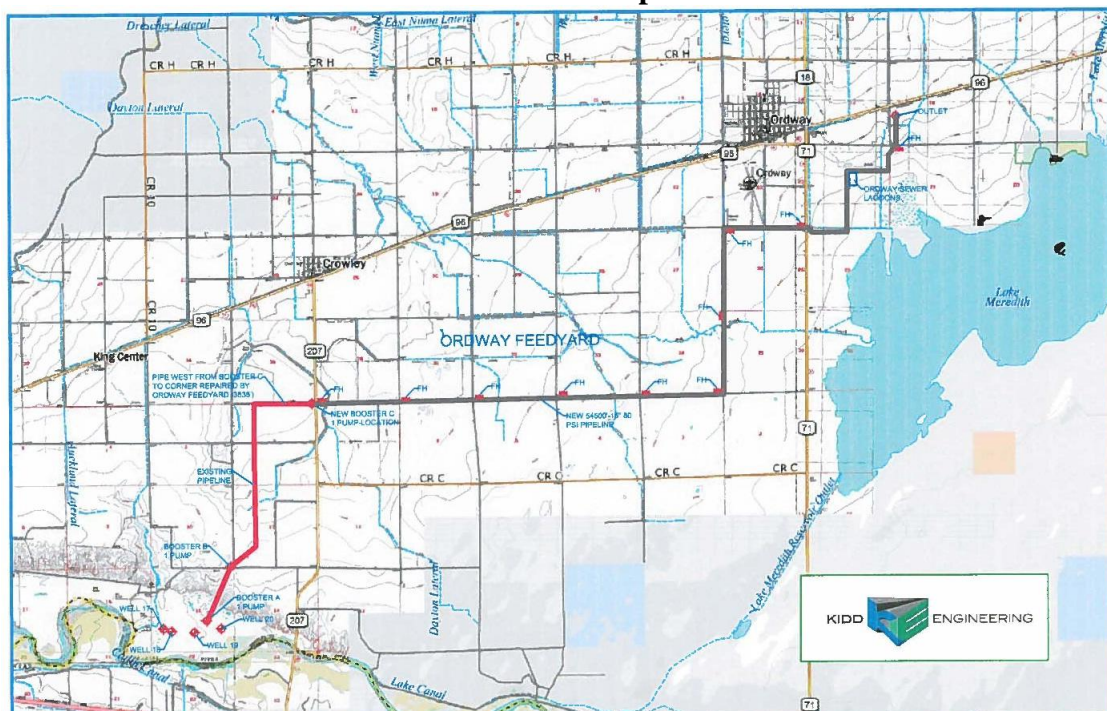
**CWCB Loan:** \$808,000 (w/ 1% service fee)

**Interest Rate:** 3.10% **Term:** 30 years

The North Delta Irrigation Company is responsible for supplying water to its 174 shareholders for the irrigation of 2,300 acres of land. The water is delivered through the North Delta Irrigation Canal. A two-mile stretch of the twenty-three mile canal is located along the steep hillside paralleling the Gunnison River, and includes three tunnels. The longest tunnel, 1,450 feet in length, experienced a collapse in July 2011, blocking deliveries to 94% of its shareholders. This project will repair the tunnel by removing the blockage, installing 1,500 LF of 54" fused HDPE and underdrain system, and backfilling the HDPE with grout. Additional funding for the project includes an \$800,000 WSRA grant approval from the Gunnison Basin Round Table.





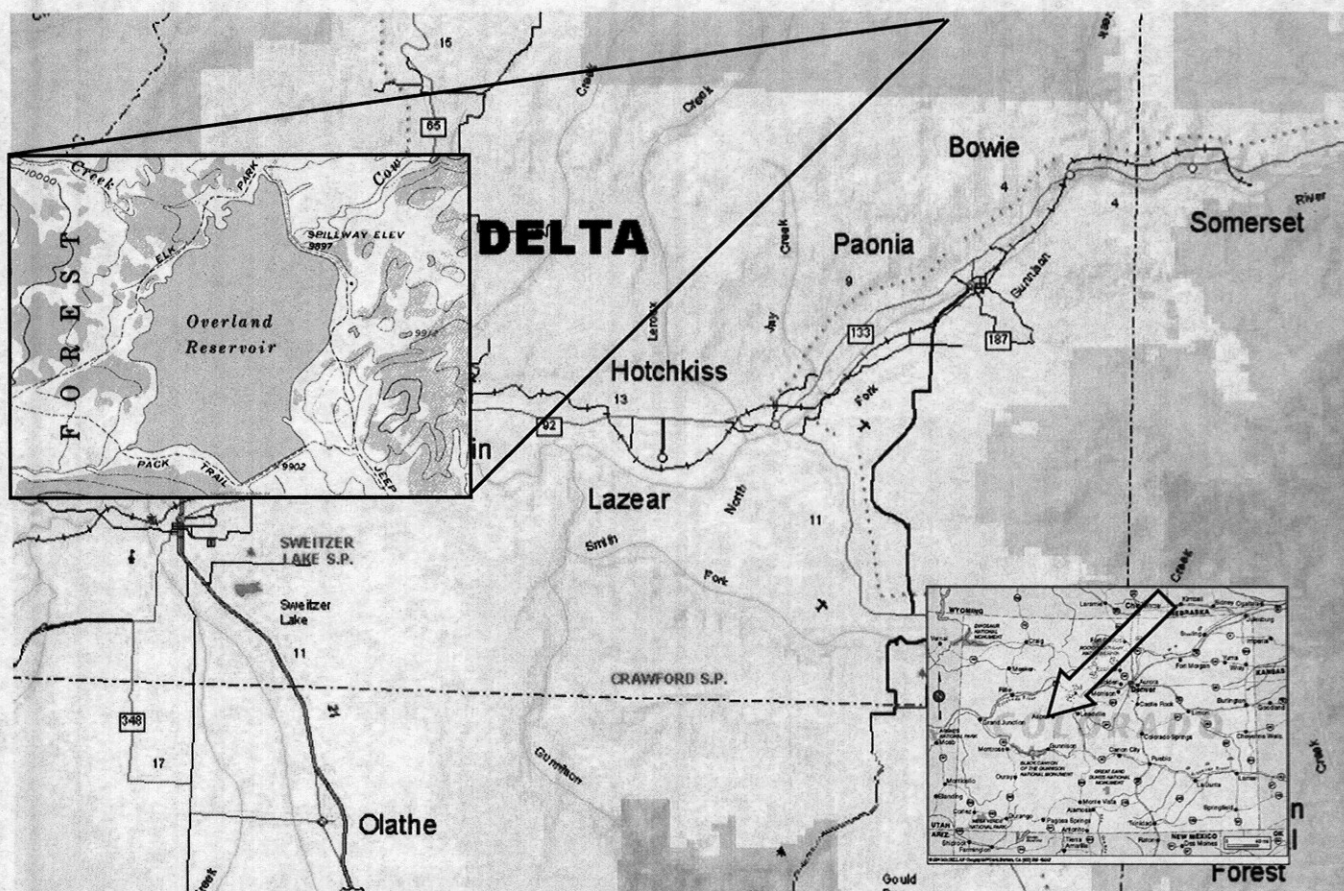




# **CWCB Construction Loan Program Project Data Sheet**

<b>Borrower:</b> Overland Ditch and Reservoir Co.	<b>County:</b> Delta
<b>Project Name:</b> Overland Reservoir Enlargement	<b>Project Type:</b> Reservoir Enlargement
<b>Drainage Basin:</b> Gunnison River Basin	<b>Water Source:</b> Cow Creek
<b>Total Project Cost:</b> \$1,255,555	<b>Funding Sources:</b> CWCB & Local Bank
<b>Type of Borrower:</b> Agricultural	<b>Average Delivery:</b> 17,000 acre-feet
<b>Loan Amount:</b> \$1,130,000	<b>Interest Rate:</b> 2.5% <b>Term:</b> 30 years

The Overland Reservoir Company is a non-profit mutual ditch company established in the State of Colorado in 1895. The Company owns and operates the Overland Reservoir for the 120 shareholders and delivers an average of 17,000 AF of irrigation water annually. The Reservoir is located in Delta County in the Gunnison National Forest at an elevation of 10,000 feet. The Reservoir has a current storage capacity of 6,200 AF and will be increased to 7,171 AF with this project. The reservoir was built in 1905 and required significant repair work in 1987 by the Company with financial assistance from CWCB and the Bureau of Reclamation. This project consists of raising the spillway elevation by 3.8 feet, installing toe drains, increasing the dam crest width and adding necessary embankment protection. Construction is scheduled to begin in the summer of 2007.



LOCATION MAP

Owl Creek Reservoir Company  
November 20, 2001

Agenda Item 22E

## WATER PROJECT CONSTRUCTION LOAN PROGRAM-PROJECT DATA

**Borrower:** Owl Creek Reservoir Company/J. Gale and Valerie A. Moody

**Project Name:** Owl Creek Reservoir Project      **Project Type:** Rehabilitation

**Drainage Basin:** Owl Creek Tributary    **County:** Larimer    **Water Source:** Owl Creek

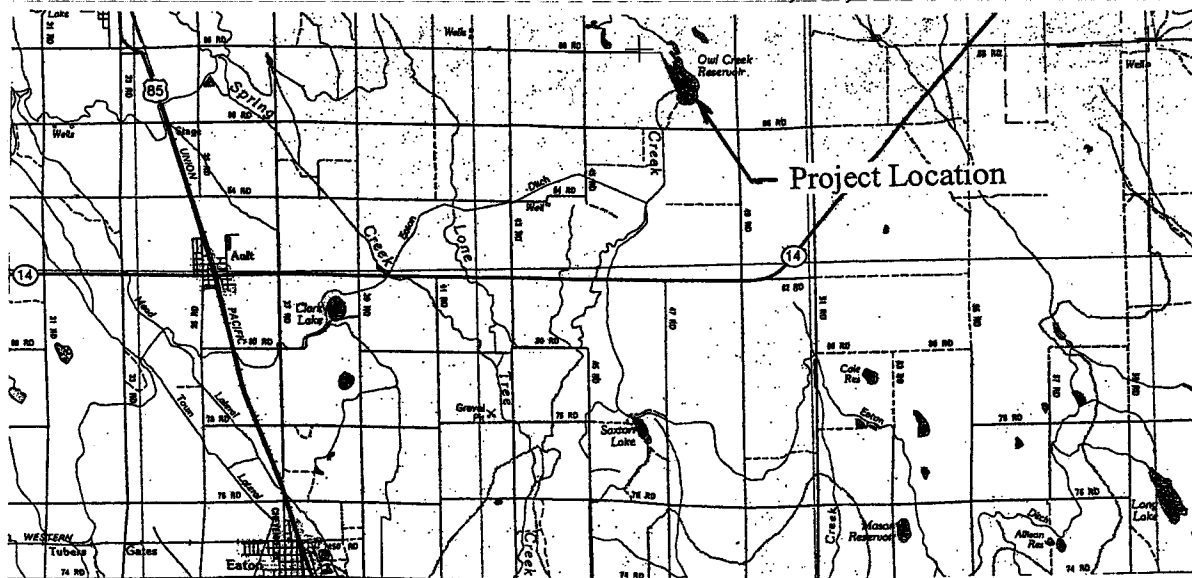
**Total Project Cost:** \$1,250,000      **Funding Source:** CWCB

**Type of Borrower:** Agricultural      **Median Household Income:** N/A

**CWCB Construction Fund Loan:** \$1,125,000    **Interest Rate:** 3.25%

**Term:** 30-years      **CWCB Grant:** \$0      **Reservoir Volume:** 1,200 acre-feet

Owl Creek Reservoir is land located in Weld County, Colorado, approximately 6 miles east and 3 miles north of the Town of Ault. The reservoir was originally constructed in 1896 to store water for irrigation. The dam was constructed of a granular material, that over the years suffered structural damage due to seepage. In 1983 sand boils appeared along the toe of the dam giving evidence that piping was occurring along the dam embankment. Given the condition of the dam embankment and the potential for failure, the dam was intentionally breached in 1983. The proposed project involves rehabilitating the existing facility to meet the State of Colorado's "Rules and Regulations for Dam Safety and Dam Construction", therefore permitting the storage of approximately 1,200 acre-feet of water. The Applegate Group, Inc., has completed preliminary design plans and specifications for the project. Proposed funding for the project consists of a CWCB Construction Fund Loan for \$1,125,000.



Location Map

### Water Project Construction Loan Program - Project Data

**Borrower:** Penrose Water District (PWD)  
Water Activity Enterprise

**County:** Fremont

**Project Name:** Penrose Raw Water Acquisition  
and Development Project

**Project Type:** Water Rights Purchase and  
Raw Water Pipeline

**Drainage Basin:** Arkansas

**Water Source:** Arkansas – Pleasant Valley Ditch

**Total Project Cost:** \$9,730,000

**Funding Sources:** CWCB, PWD, DOLA

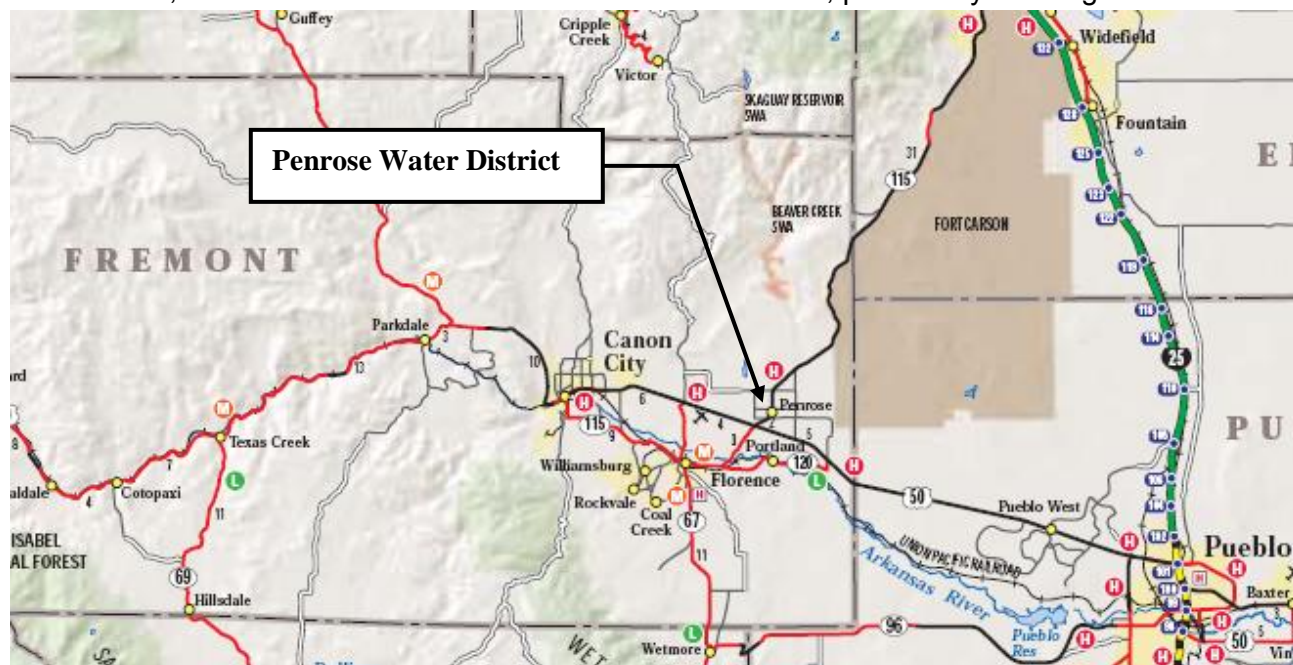
**Type of Borrower:** Municipal/Low

**Aver. Delivery:** 339 AF consumptive use

**CWCB Construction Fund Loan:** \$8,844,570  
(incl. 1% loan fee)

**Interest Rate:** 3.25%    **Term:** 30 years

The PWD currently provides domestic water to approximately 4,000 people with 1,700 taps in and around the Town of Penrose, with existing demand of 489 acre-feet per year. PWD's water supply is obtained by a lease with the Beaver Park Water, Inc. (BPW) who owns and operates Brush Hollow Reservoir. The 1990 lease has a 30-year term, and provides an increasing amount of water each year, 751 AF in 2006, leveling out at 1,000 AF in 2020. In drought years, the amount available to PWD is further reduced below the contract amount. Future build-out demand in 2040 is projected to be 1,200 acre-feet for about 8,000 residents and 3,240 taps. The proposed Enterprise project includes the acquisition of 10/12<sup>th</sup> of the Pleasant Valley Ditch water rights near Howard, with a change in use and change in point of diversion approximately 50 miles downstream to Sec. 13, T19S, R69W. Water will be obtained through the installation of 7 shallow alluvial wells immediately north of the Arkansas River, and then pumped approximately 5.8 miles through a 12-inch transmission line to Brush Hollow Reservoir. As part of the project, Brush Hollow Reservoir will be enlarged by raising the dam four feet. Because of the drought, there has been reduced availability of water from BPW. The project and water rights purchase will supplement the existing BPW lease, and lessen PWD's reliance on BPW leased water, particularly in drought situations.

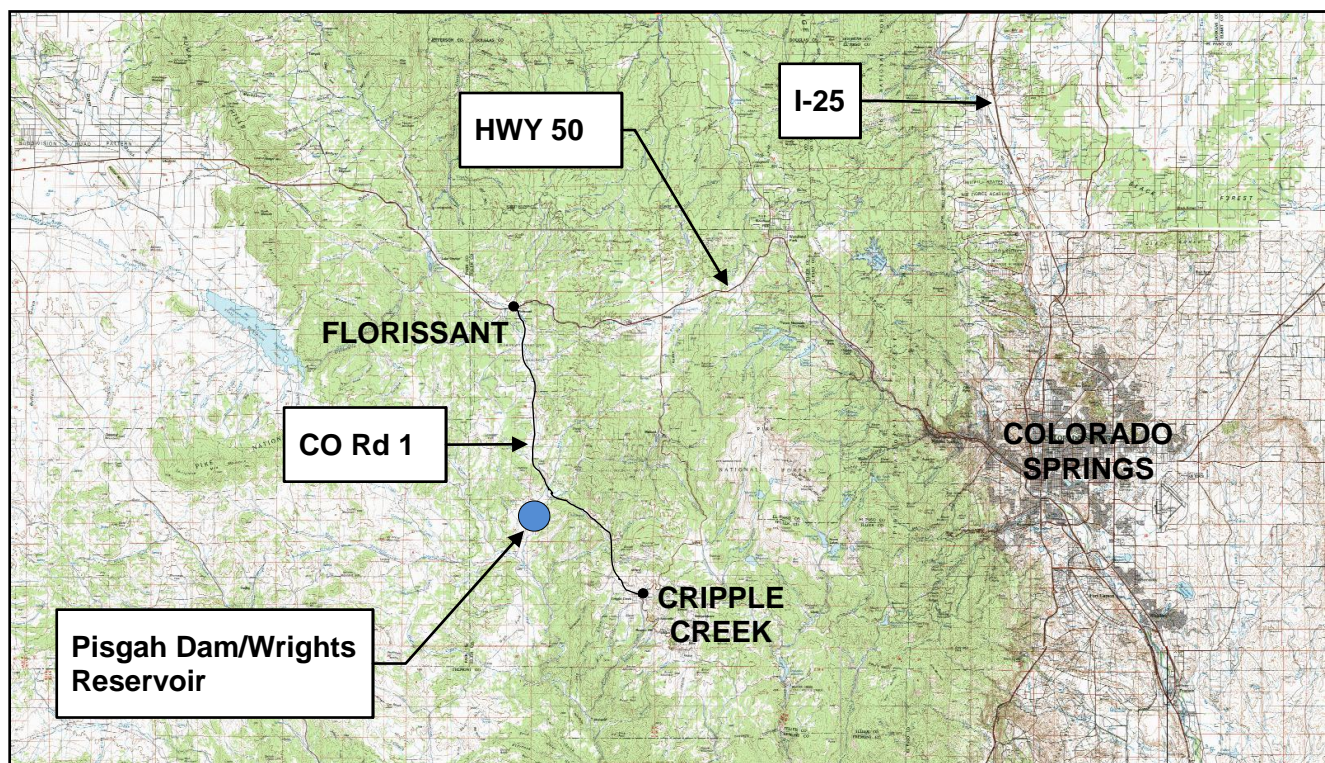


Location Map



**Water Project Loan Program - Project Data Sheet****Borrower:** Pisgah Reservoir and Ditch Company **County:** Teller**Project Name:** Mt. Pisgah Dam/Wrights  
Reservoir Outlet Works Rehabilitation**Project Type:** Reservoir Rehabilitation**Drainage Basin:** Arkansas River, District 12**Water Source:** Fourmile Creek**Total Project Cost:** \$362,690**Funding Sources:** Construction Fund &  
WSRA Grant**Type of Borrower:** Blended  
(93% Ag, 7% low-income Muni)**Average Water Delivery:** 86,000 AF**Water Storage:** 2,192 AF**Loan Amount:** \$161,345 (Including 1% fee) **Interest Rate:** 1.75% **Term:** 30 years  
**WSRA Grant Amounts:** \$25,000 Arkansas Basin & \$136,345 Statewide

The Pisgah Reservoir and Ditch Company is applying for a \$161,345 loan to modify the inlet/outlet works and replace existing control valves on Pisgah Dam, in compliance with an SEO conditional order. By complying with the SEO recommendations the Company can avoid a storage level restriction on the reservoir. The Company has 25,000 shares issued amongst 573 current shareholders. The purpose of the Company is to provide raw water for the irrigation of approximately 20,000 acres of agricultural land across an 18 mile stretch from Manzanola to La Junta. Primary shareholders include Catlin Canal Company, Canon Heights Irrigation and Reservoir Company, Park Center Water District, City of Rocky Ford, Colorado Parks and Wildlife, and individual agricultural users.

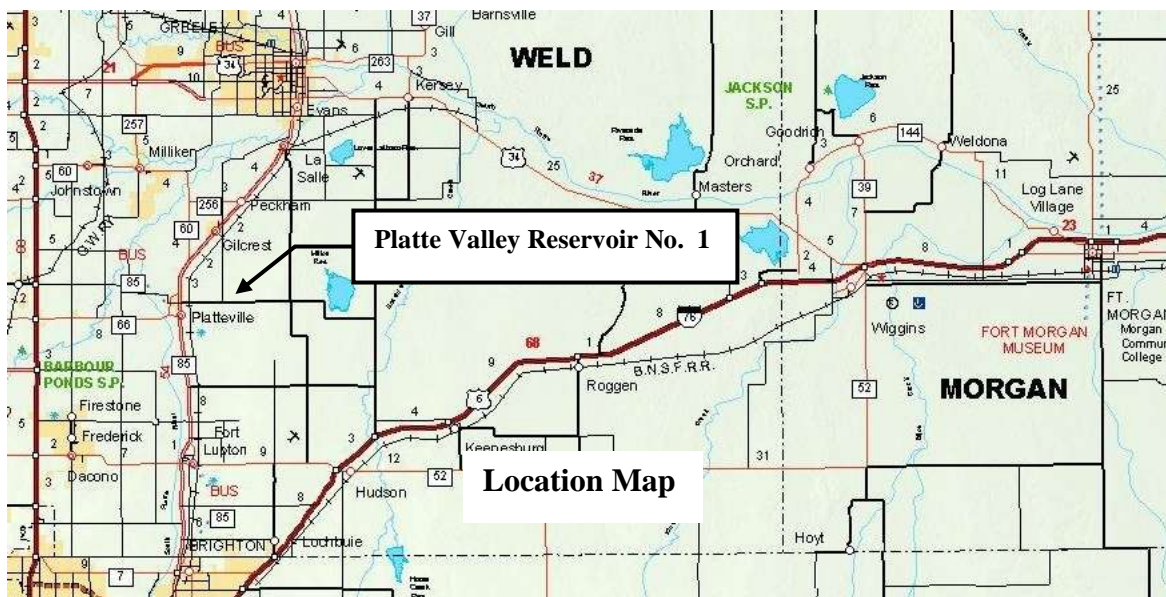
**LOCATION MAP**



## Water Project Construction Loan Program - Project Data

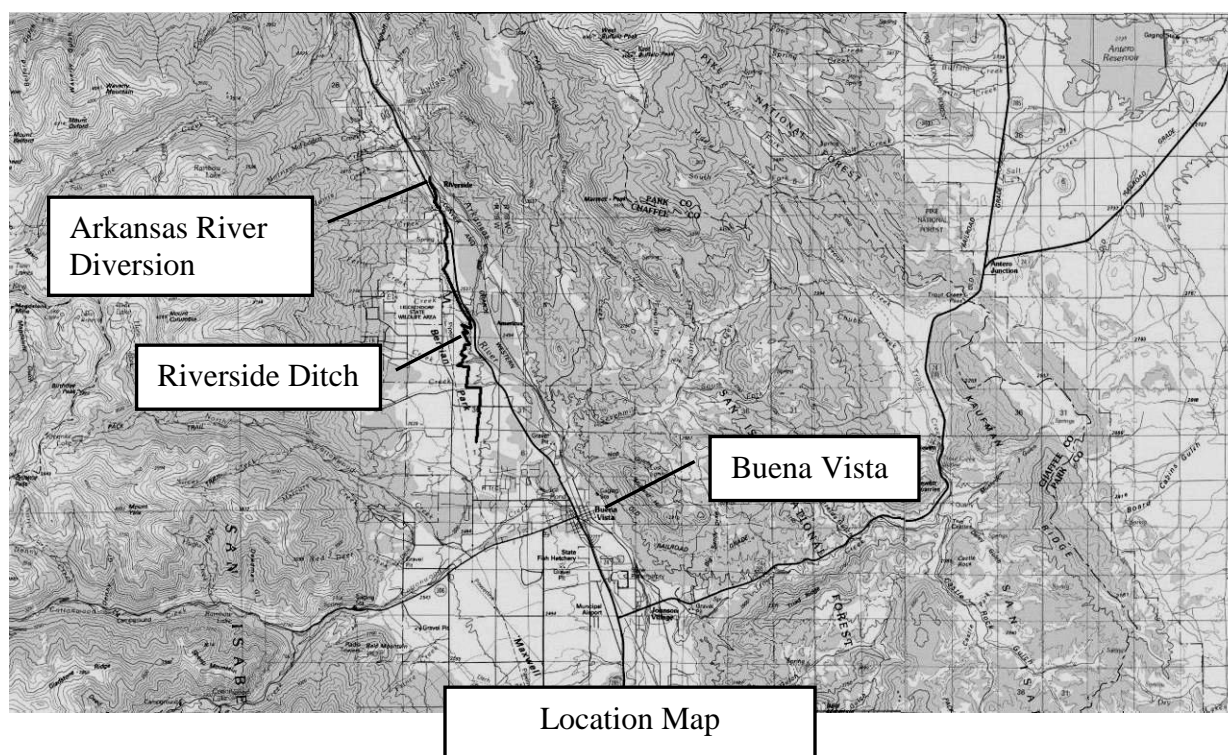
<b>Borrower:</b> Platte Valley Irrigation Company	<b>County:</b> Weld
<b>Project Name:</b> Platte Valley Reservoir No. 1	<b>Project Type:</b> New Equalizer Reservoir
<b>Drainage Basin:</b> South Platte	<b>Water Source:</b> Evans Ditch No. 2
<b>Total Project Cost:</b> \$2,628,600	<b>Funding Sources:</b> CWCB, PVIC
<b>Type of Borrower:</b> Agricultural	<b>Aver. Delivery:</b> 52,401 acre-feet
<b>CWCB Construction Fund Loan:</b> \$2,388,650 (incl. 1% loan fee)	<b>Interest Rate:</b> 2.25% <b>Term:</b> 20 years

PVIC is a Colorado mutual ditch company and non-profit corporation serving approximately 14,832 acres of irrigated farm land in Weld County east of Platteville. PVIC diverts water for irrigation from the South Platte River near Fort Lupton and shares a jointly owned headgate with Farmers Reservoir and Irrigation Company (FRICO), as well as about 10 miles of the jointly owned Platte Valley Canal. Flow is divided at a bifurcation structure and PVIC water is carried in the Evans No. 2 Ditch. Average annual diversions are 52,401 acre-feet. PVIC needs an equalizer on the ditch to allow for more efficient management of the water, as well as additional measurement and control structures on their main ditch. They have purchased a 80 acre property to construct a reservoir. PVIC needs to improve the flow measuring capability of various reaches in the ditch, as directed by Water Court, in order to claim recharge credits in their system. The reservoir will have a junior water right for storage of water directed to PVIC's recharge program. In an average year the reservoir is expected to store 300 acre feet, with a 300 acre feet refill. Construction will consist of a 431 acre-foot reservoir with a 14 foot high dam embankment with 10:1 upstream slopes and 3:1 downstream slopes. The reservoir bottom will be lined using clay from the required excavation as necessary to exclude groundwater. The outlet will be a 48 inch RCP, configured to act as the principal spillway. The project also includes relocation of an existing section of Evans No. 2 Ditch below the split from the Platte Valley Canal, modification of the existing bifurcation structure, and construction of three (3) new Parshall Flumes in various reaches of the ditch, as directed by the Water Court.



**Water Project Loan Program - Project Data****Borrower:** Riverside Ditch & Allen Extension Co.**County:** Chaffee**Project Name:** Phased Canal Improvements**Project Type:** Ditch Rehabilitation**Drainage Basin:** Arkansas**Water Source:** Arkansas River**Total Project Cost:** \$205,000**Funding Source:** Construction Fund**Type of Borrower:** Agricultural**Average Diversion:** 3,250 acre-feet**CWCB Loan:** \$186,345 (Including 1% fee)**Interest Rate:** 2.75% **Term:** 30 years

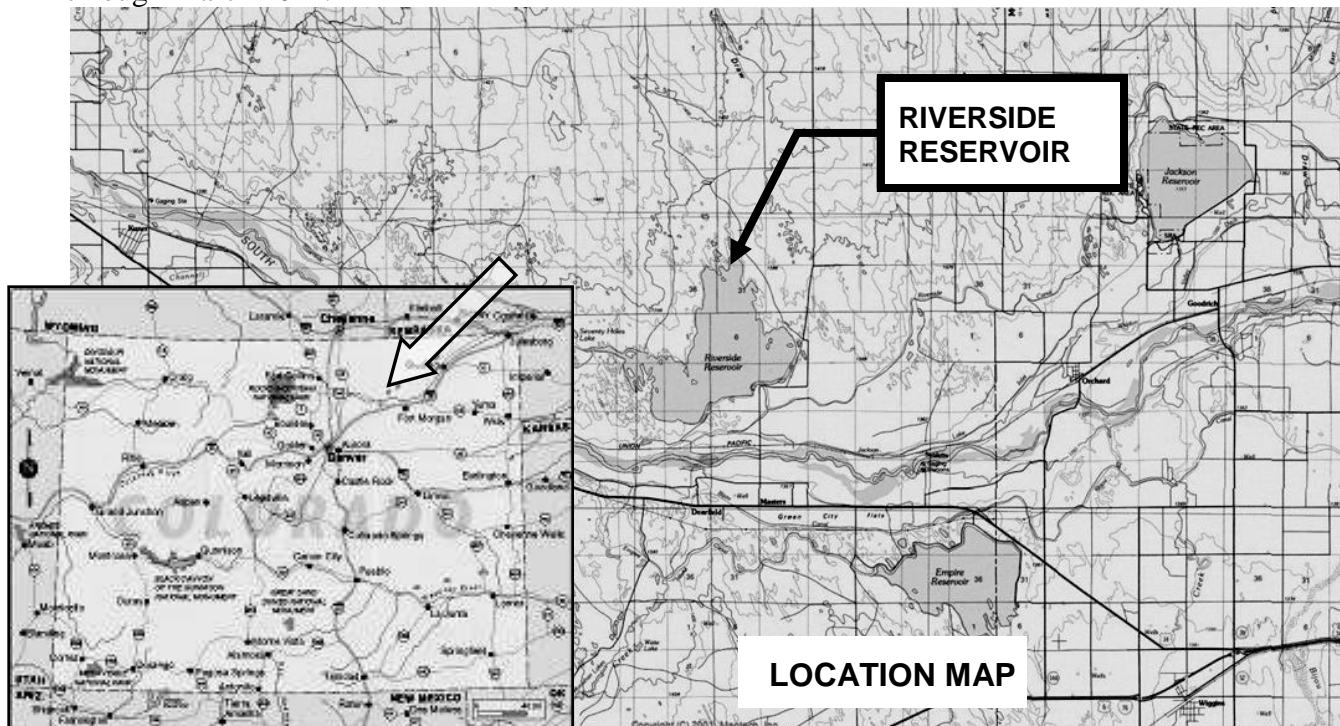
The Riverside Ditch and Allen Extension Company (Company), located near Buena Vista, owns and operates the Riverside Ditch (canal) that provides irrigation water to a 450 acre service area within Chaffee County. A significant portion of the Company's structures along the 125 year old canal are aged and in need of repair or replacement. The Company intends to complete a number of phased improvements to the canal that include: repairs to the river diversion; lining of portions of the canal to reduce seepage; installation of canal monitoring using SCADA equipment; phreatophyte removal; repair/replacement of aging headgates; and installation of standardized flumes. The proposed improvements would benefit the shareholders by improving overall canal efficiency, thereby increasing the consistency of shareholder headgate deliveries. These improvements will also benefit the Company through increased operator safety. Improvements are expected to be completed between the winter of 2009 and spring of 2012.



# **CWCB Construction Loan Program Project Data Sheet**

**Borrower:** Riverside Reservoir and Land Co.**County:** Weld**Project Name:** Emergency Spillway Project**Project Type:** Reservoir Rehabilitation**Drainage Basin:** South Platte**Water Source:** South Platte River**Total Project Cost:** \$3,120,000**Funding Sources:** Severance Tax Trust Fund  
Perpetual Base Account**Type of Borrower:** Agricultural**Average Delivery:** 39,000 AF (from Reservoir storage) (105,000 Total AF for Company)**Loan Amount:** \$2,838,100 (Including 1% fee)**Interest Rate:** 2.5%**Term:** 30 years

The Riverside Reservoir and Land Company (Company) owns and operates the 64,000 acre-foot capacity Riverside Dam and Reservoir, an inlet canal known as Riverside Ditch, and a river diversion structure located near the town of Kersey, Colorado. The Company diverts water from the South Platte River, approximately 10 miles downstream of Greeley, Colorado. It stores water primarily during winter months for irrigation releases during the following water season. The Company, formed in 1902, delivers irrigation water to approximately 50,000 acres. The Company is applying for a loan to install a spillway at Riverside Reservoir (Reservoir). The Reservoir is not equipped with an emergency spillway, which is required by the DWR's *Rules and Regulations for Dam Safety and Dam Construction*. There is currently a nominal restriction of 0.05 feet (200 AF of storage loss) due to the lack of a spillway. In order to enhance the safety of the Reservoir and prevent further storage restrictions, the Company plans on constructing an emergency spillway. The final design is expected to be complete in January 2010 with construction occurring from July 2010 through March 2011.





### CWCW Water Project Loan Program Project Data Sheet

**Borrower:** Roxborough Water and Sanitation District, Water Activity Enterprise

**County:** Douglas

**Project Name:** Raw Water Supply Project

**Project Type:** Water Acquisition

**Basin:** South Platte **District:** 8

**Water Source:** South Platte

**Total Project Cost:** \$26,313,150

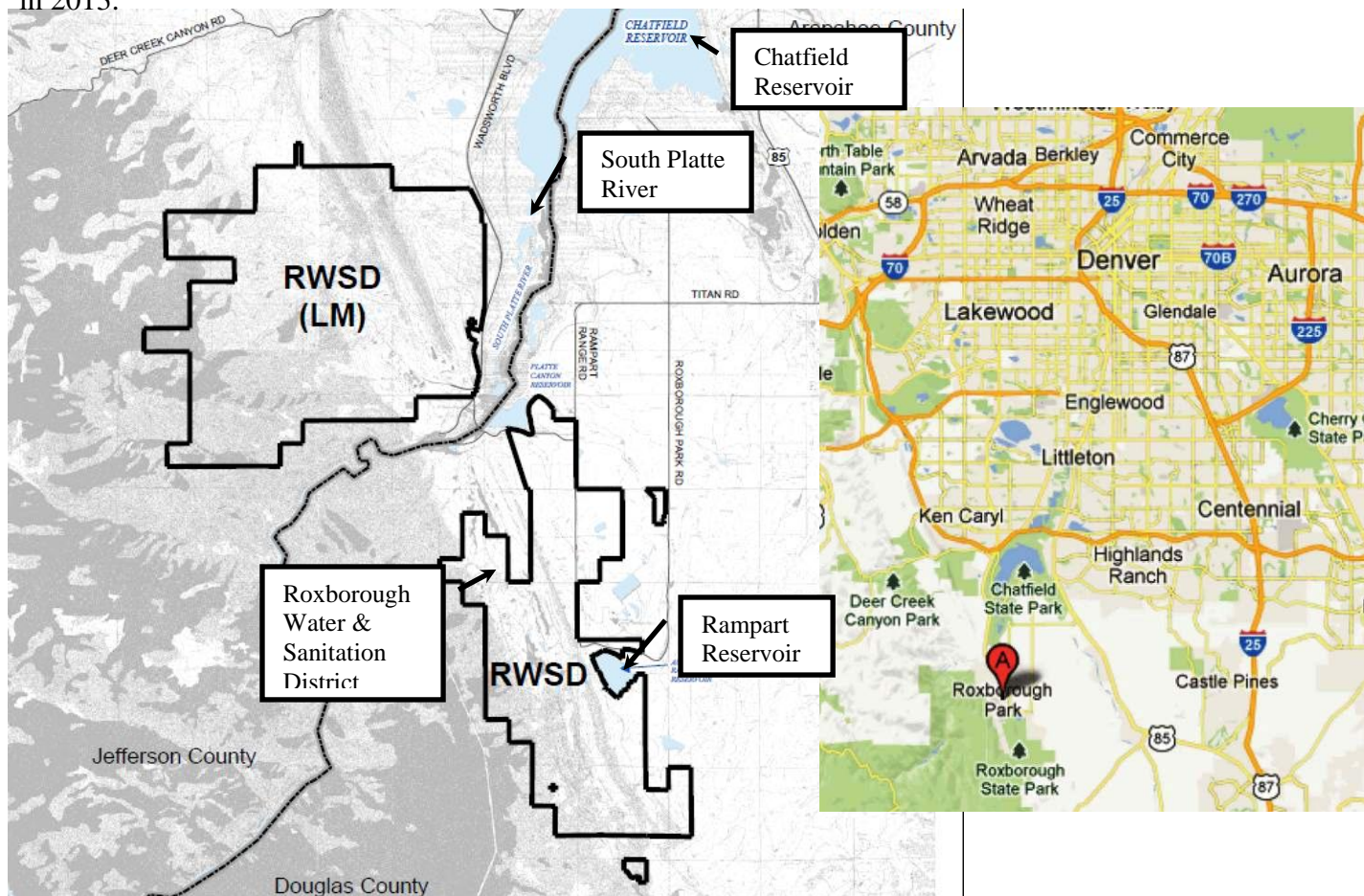
**Funding Source:** Construction Fund

**Type of Borrower:** High-income municipal

**Average Annual Diversion:** 1,141 AF

**CWCW Loan:** \$18,538,550 (w/ 1% service fee) **Interest Rate:** 3.25% **Term:** 30-years

The Roxborough Water and Sanitation District is applying for a loan for the Raw Water Supply Project. Since 1972 the District has been leasing water from Aurora through an agreement that expires in 2022. After many years of discussion, the District has reached an agreement with Aurora to purchase a permanent raw water supply. The agreement is based on the use of Aurora's existing and future raw water supplies and infrastructure. Through this agreement, the District is paying a connection fee for 3,400 Equivalent Residential Units. Aurora will deliver up to 1,800 AF annually through its existing system for treatment by the District. In addition, 285 AF will be delivered annually for irrigation customers within the District. The agreement is expected to be implemented in 2013.



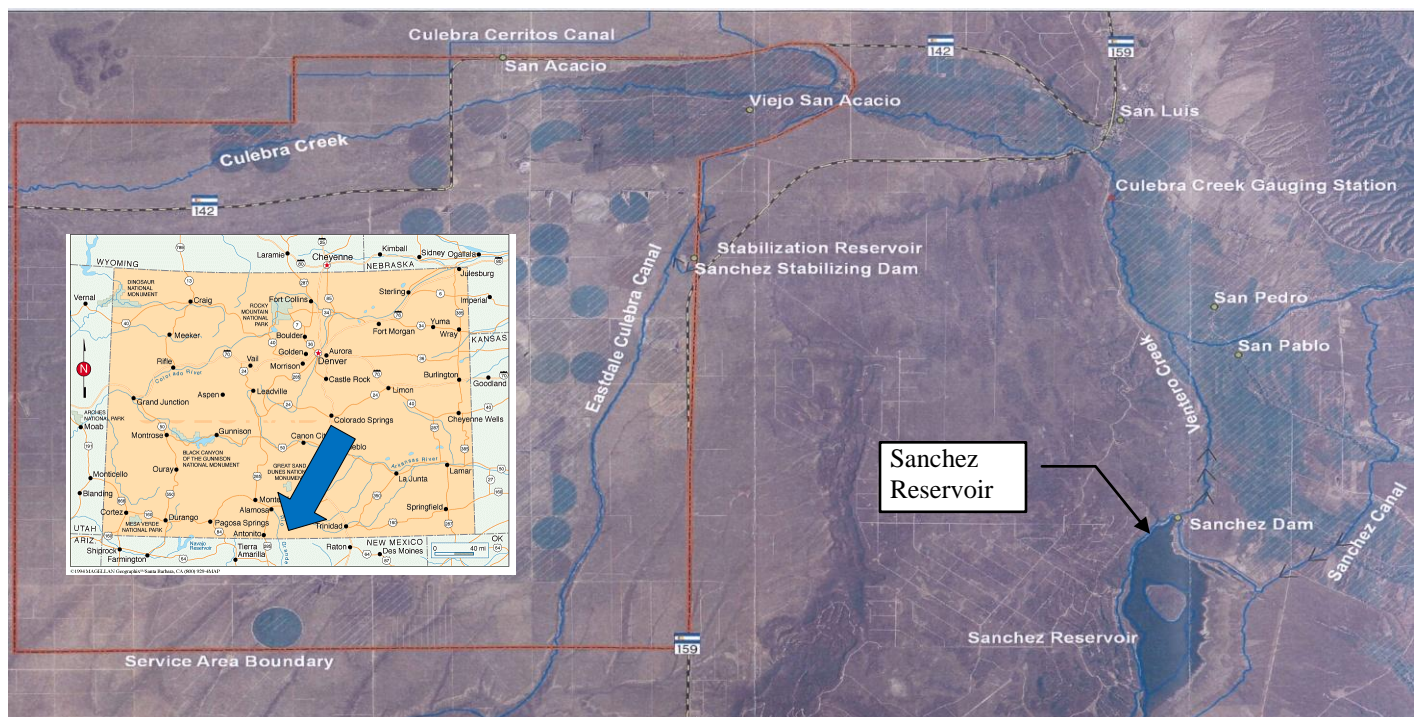


## CWCB Construction Loan Program Project Data Sheet

**Borrower:** Sanchez Ditch and Reservoir Co.**County:** Costilla**Project Name:** Sanchez Reservoir Outlet Rehabilitation Project**Project Type:** Dam Rehabilitation**Basin / District:** Rio Grande / 24**Water Source(s):** Ventero Creek**Total Project Cost:** \$2,032,000**Funding Sources:** Construction Fund & WSRA (Basin & Statewide funds)**Type of Borrower:** Agricultural**Average Diversions:** 15,000 AF

**Loan Amount:** \$1,128,776 (Including 1% fee)    **Interest Rate:** 1.75%    **Term:** 30 years  
**WSRA Grant Amounts:** \$55,000 Rio Grande Basin & \$859,400 Statewide

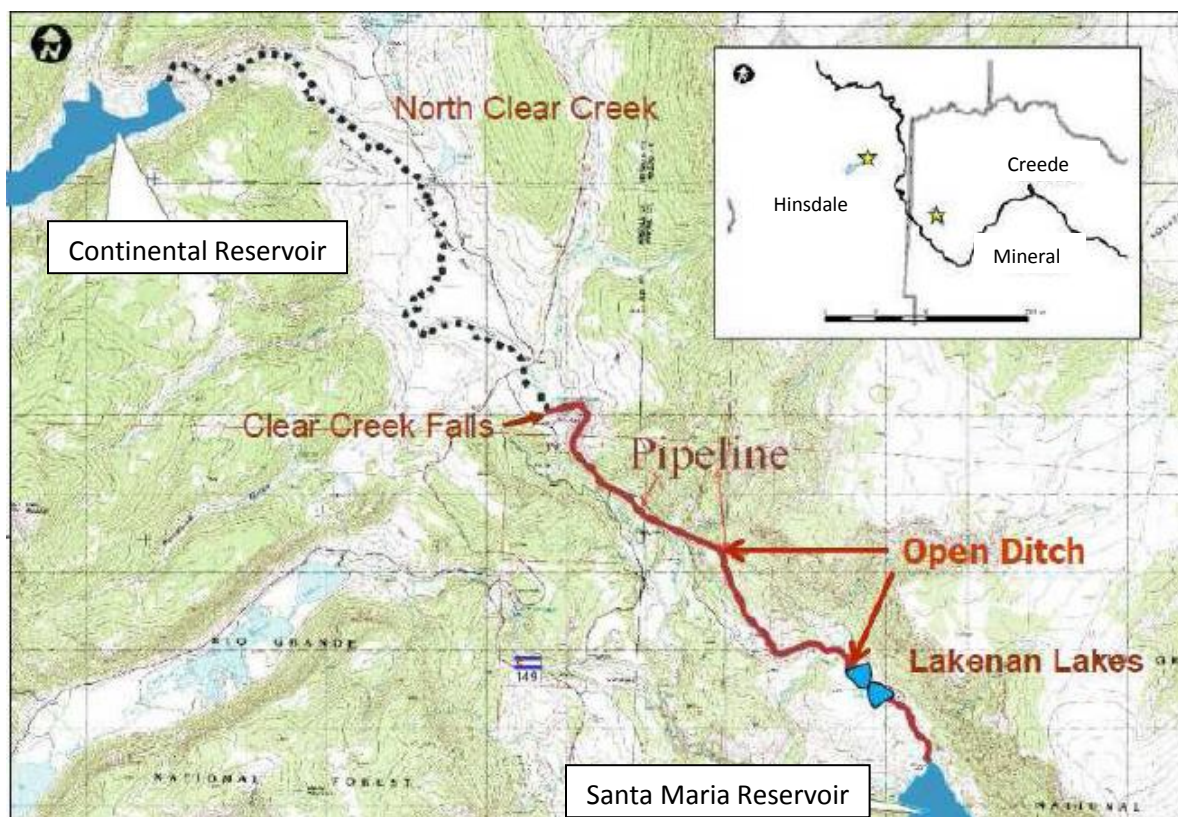
The Company provides irrigation water for users in Costilla County, southwest of the town of San Luis. The Company's primary storage reservoir is Sanchez Reservoir. The approximately 104,000 acre-foot reservoir was built in 1910. The reservoir's outlet includes a 135 foot tall concrete gate tower. In order to access the gates to operate the dam, a tramway/gondola runs along a cable and is powered by a portable gasoline generator. Because daily access to the tower is required during irrigation season, the reliability and safety of the gondola system has been a concern of the Company. Using loan and grant funds, the Company intends to address the safety and operational management concerns at the reservoir through the demolition of the gate tower; the installation of new control gates and operators; lining the existing outlet conduit with shotcrete; repairing the downstream outlet structure; and, installing a new perimeter drain and weir along the right side of the outlet structure to control seepage. The project schedule is estimated as: final design and State Engineer's Office (SEO) approval between January 2013 and January 2014; bid the project in May of 2014; award the bid by June of 2014; start construction in September of 2014; complete construction by March of 2015.



### Water Project Loan Program Project Data Sheet

<b>Borrower:</b>	Santa Maria Reservoir Company	<b>County:</b>	Hinsdale & Mineral
<b>Project Name:</b>	Santa Maria Siphon and Canal System Rehabilitation Project	<b>Project Type:</b>	Dam Rehabilitation & Ditch Rehabilitation
<b>Drainage Basin:</b>	Rio Grande / District 20	<b>Water Source:</b>	North Clear Creek
<b>Total Project Cost:</b>	\$1,855,000	<b>Funding Source:</b>	Construction Fund and Water Supply Reserve Account Grants
<b>Type of Borrower:</b>	Agricultural	<b>Avg. Annual Diversion:</b>	6,300 AF
<b>CWCB Loan:</b>	\$1,405,163 (w/ 1% service fee)	<b>Interest Rate:</b>	1.75%
		<b>Term:</b>	30 years

Santa Maria Reservoir Company owns and operates Continental Reservoir (27,000 AF) and Santa Maria Reservoir (43,500 AF), located in the Rio Grande River Basin near Creede, Colorado. Santa Maria and Continental operate in conjunction with each other via a century old conveyance system made up of a pipeline, siphon, and open ditch. For the past 20 years, Continental has been under a storage restriction due to seepage issues, limiting the storage to 15,000 AF. The Company is planning a two phased approach to rehabilitate its system. The first phase (the subject of this funding request) is the rehabilitation of the conveyance system between the reservoirs including repairs to the siphon and lining of the canal. Construction is expected to occur in the summer/fall of 2013.





### Water Project Loan Program – Project Data Sheet

**Borrower:** Terrace Irrigation Company

**County:** Conejos

**Project Name:** Spillway Replacement Project

**Project Type:** Reservoir Rehabilitation

**Drainage Basin:** Rio Grande River Basin, District 21

**Water Source:** Alamosa River

**Total Project Cost:** \$4,500,000

**Funding Source:** Construction Fund

**Type of Borrower:** Agricultural

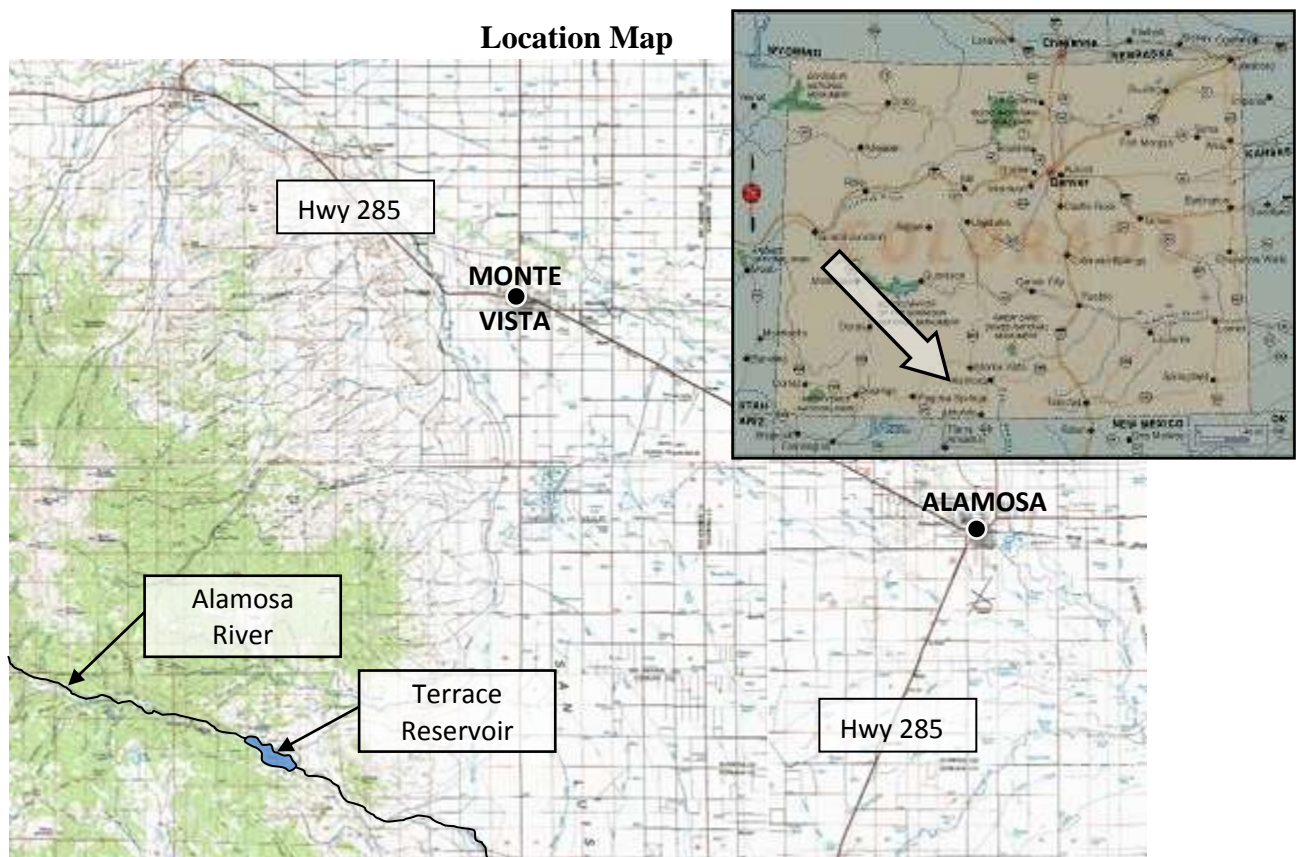
**Avg. Annual Delivery:** 15,339 AF

**CWCB Loan:** Project: \$1,010,000 (w/ 1% service fee)  
Consolidated: \$2,751,968

**Interest Rate:** 1.75% **Term:** 30 years  
(with a 1% Restricted Reservoir reduction)

The Company, responsible for supplying irrigation water to its shareholders for irrigation of 9,300 acres of agricultural lands, is also an active participant in the Alamosa River Instream Flow Project. The ISF Project is intended to restore flows and replace natural resources damaged by mining operations in the upper reaches of the Alamosa River. The Company relies on Terrace Reservoir to meet its irrigation demands throughout the later part of the irrigation season. The reservoir is currently under a restriction order from the SEO, reducing its available capacity by 2,000 AF. This project will replace the existing spillway and remove the SEO restriction order. Funding for this project includes grant money from WSRA (\$1,500,000) and the Summitville Natural Resource Damage (NRD) account (\$2,000,000). In return for NRD funding, the Company has agreed to donate 2,000 AF of storage in Terrace Reservoir towards instream flow storage to further the efforts of the ISF Project. Construction is expected to begin in summer/fall of 2012 and be completed by the end of 2013.

**Location Map**





## Water Project Loan Program – Project Data Sheet

**Borrower:** Thunderbird Water and Sanitation District

**County:** Douglas

**Project Name:** Lambert Ranch Water Rights Purchase

**Project Type:** Water Rights Purchase

**Drainage Basin:** South Platte, District 8

**Water Source:** Denver Basin Aquifer

**Total Project Cost:** \$350,000

**Funding Source:** Construction Fund

**Type of Borrower:** Middle-Income Municipal

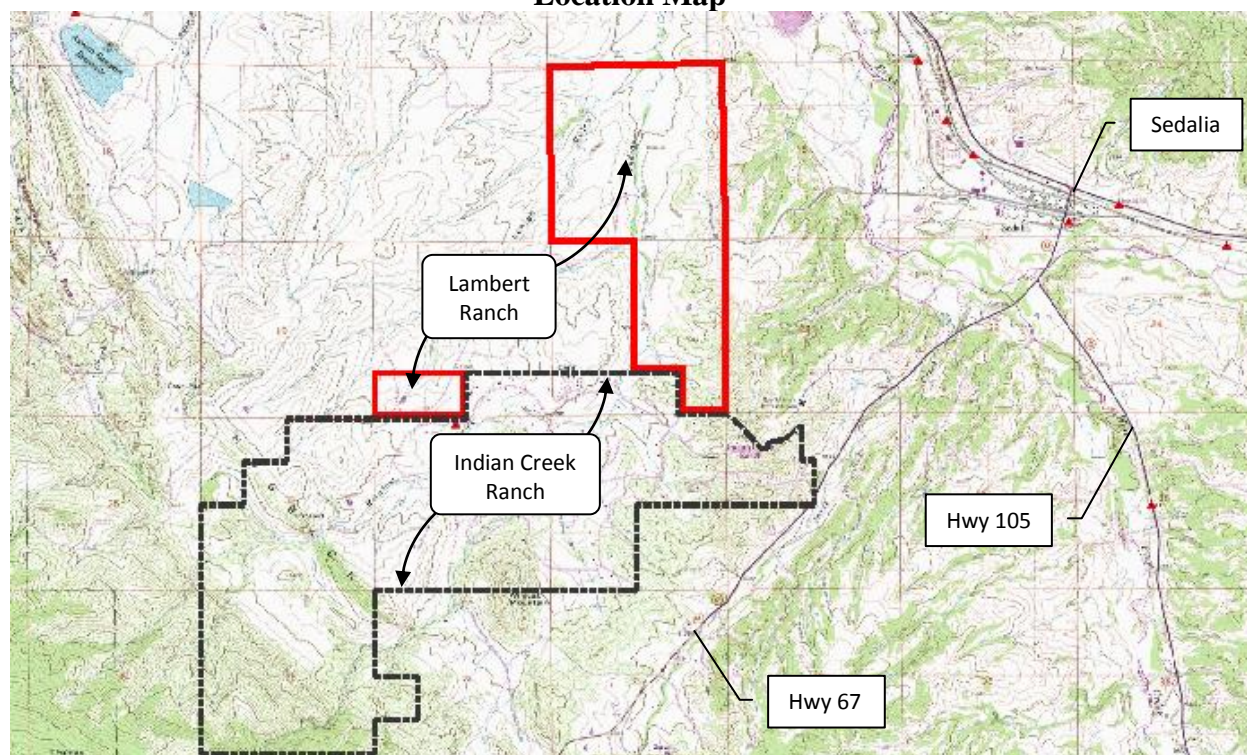
**Avg. Annual Delivery:** 55 AF

**CWCB Loan:** \$318,150 (w/ 1% service fee)

**Interest Rate:** 4.25%    **Term:** 20 years

The Thunderbird Water and Sanitation District (District) provides potable water service for the Indian Creek Ranch subdivision, consisting of 2,420 acres and 175 customers. The District is applying for a loan to purchase 895.9 AF of Denver Basin decreed ground water rights that underlie the property known as Lambert Ranch. On average, the District delivers approximately 55 AF annually. The increase would enable the District to enlarge its available supply; thereby increasing system reliability, providing the redundancy necessary to allow for system maintenance and protect against aquifer depletions.

**Location Map**





**CWCB Construction Loan Program**  
**Project Data Sheet**

**Borrower:** Tri-County Water Conservancy District **County:** Ouray, Montrose, Delta

**Project Name:** Ridgway Reservoir Micro-Hydro **Project Type:** Hydroelectric

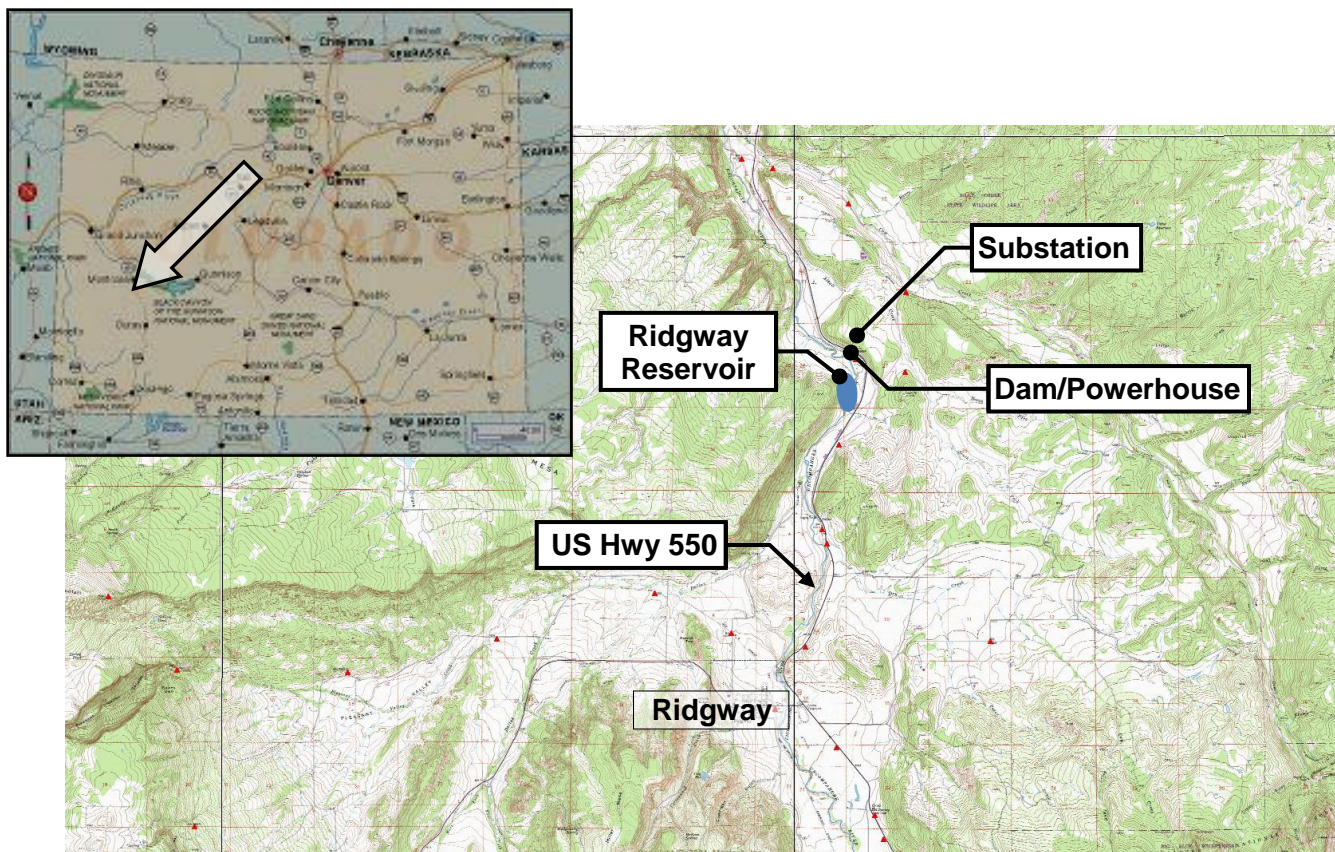
**Drainage Basin:** Gunnison, District 68 **Water Source:** Uncompahgre River

**Total Project Cost:** \$17,000,000 **Funding Sources:** Construction Fund, CWRPDA

**Type of Borrower:** Hydroelectric **Avg. Diversion:** 35,000 AF (84,410 AF of reservoir storage)

**Loan Amount:** \$13,130,000 (Including 1% fee) **Interest Rate:** 2.00% **Term:** 30 years  
> Increased from \$9,090,000 in Jan 2013

The Tri-County Water Conservancy District is requesting a CWCB loan for the construction of a 8MW hydroelectric power generating facility at Ridgway Reservoir. The project will be permitted through the "Lease of Power Purchase" process with the Bureau of Reclamation, allowing the incorporation of a hydropower facility into the existing outlet works of Ridgway Dam. The dam, constructed by the Bureau as part of the Dallas Creek Project, began storing waters of the Uncompahgre Basin in 1987. The District projects that the facility will produce an annual average of 22,600 MWh, which will be sold to the San Miguel Power Association/Tri-State Generation and Transmission and the City of Aspen/Municipal Energy Agency of Nebraska through a Power Purchase Agreement. Construction is scheduled to begin in the spring of 2013 and take approximately 2 years to complete, with energy production expected by summer 2014.





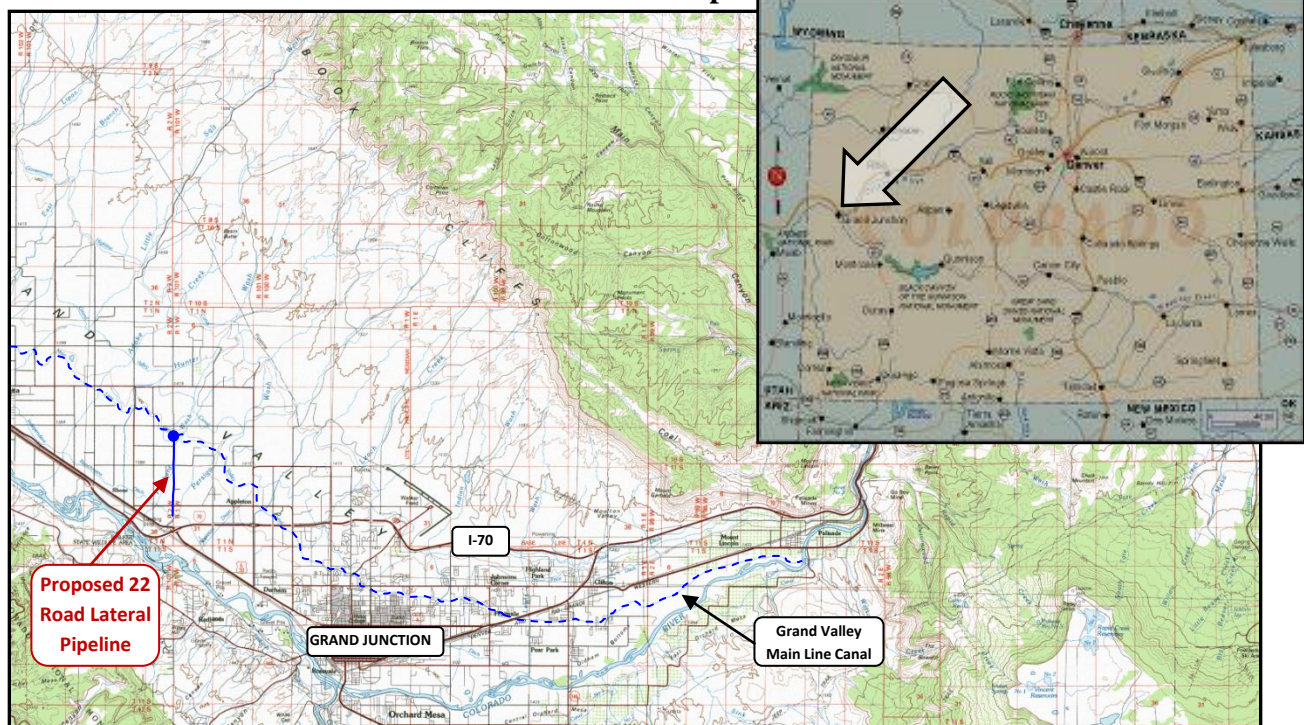
## CWCB Water Project Loan Program

## Project Data Sheet

**Borrower:** Twenty Two Road Lateral Company**County:** Mesa**Project Name:** 22 Road Lateral Ditch Replacement**Project Type:** Ditch Rehabilitation**Drainage Basin:** Colorado / District 72**Water Source:** Colorado River (via GVIC)**Total Project Cost:** \$532,875**Funding Source:** Construction Fund,  
NRCS (\$398,970)**Type of Borrower:** Blended**Avg. Annual Diversion:** 1,334 AF**CWCB Loan:** \$512,720 (\$517,848 w/ 1% service fee)  
Long Term \$113,750 (\$118,878 w/ 1% service fee)**Interest Rate:** 2.35% **Term:** 30 years

The Twenty Two Road Lateral Company uses the Twenty Two Road Lateral to deliver water to its members for the purpose of irrigating pastures, residential landscapes and gardens. The Lateral is a weathered concrete lined open channel. Cracks and gaps in the concrete lining have resulted in ever growing maintenance costs while reducing the efficiency of the Lateral. The Company is requesting a CWCB loan in conjunction with a \$398,970 NRCS grant, through the Colorado River Basin Salinity Control Program, to remove 13,000 LF of deteriorated concrete panel-lined channel and install 16,200 LF of plastic irrigation pipe, ranging from 3 to 18 inches in diameter. By piping the Lateral the District will reduce its annual maintenance expenses while increasing the reliability and efficiency of its deliveries.

## Location Map





## Water Project Construction Loan Program-Project Data

**Borrower:** Union Ditch Company (UDC)

**County:** Weld

**Project Name:** UDC Recharge Project

**Project Type:** Well Augmentation

**Drainage Basin:** South Platte

**Water Source:** South Platte River

**Total Project Cost:** \$344,000

**Funding Sources:** CWCB, UDC

**Type of Borrower:** Agricultural

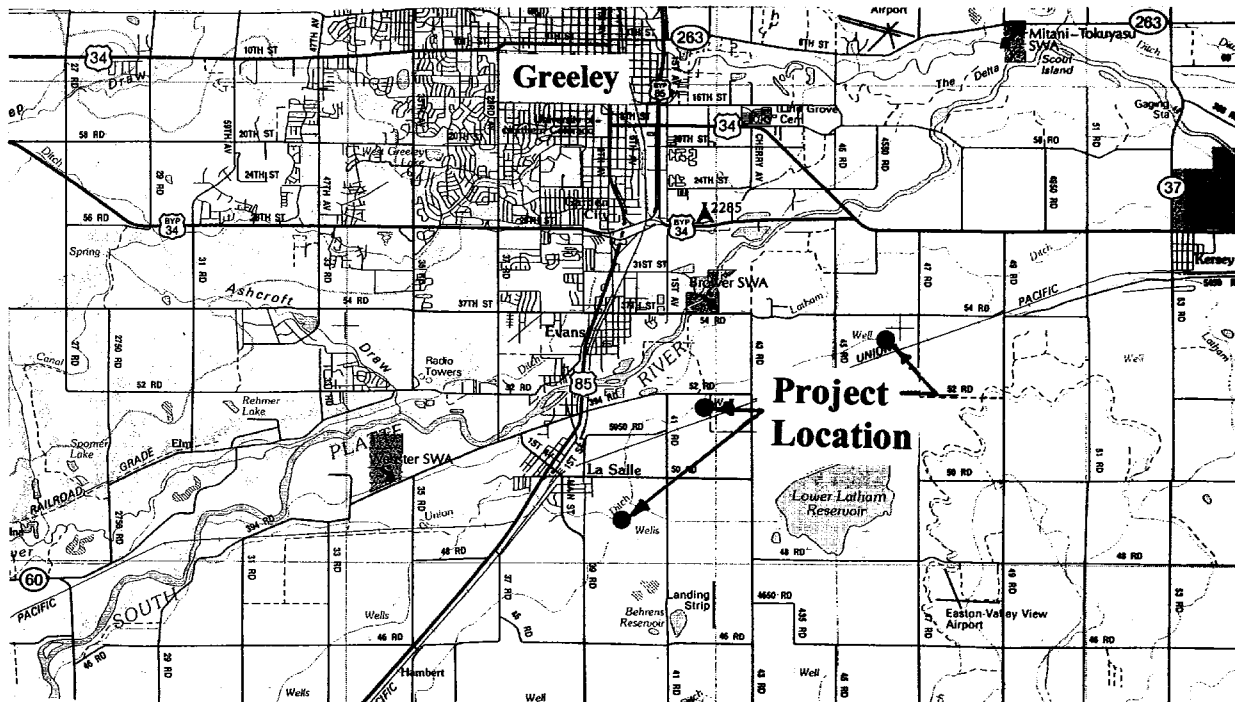
**Aver. Delivery:** 206 acre-feet (consump. use)

**CWCB Construction Fund Loan:** \$309,500

**Interest Rate:** 2.50%

**Term:** 30 years

UDC operates the Union Ditch providing direct flow irrigation water to an area of 5,500-acres east of the Town of LaSalle and south of Greeley. Water is diverted from the South Platte River at a headgate east of the Town of Milliken. UDC operates approximately 15 miles of ditch and typically delivers about 29,000 acre-feet of irrigation water per year. UDC has filed an application for an Augmentation Plan to provide replacement water for 40 junior wells owned by shareholders, formerly serviced by GASP, to replace out-of-priority irrigation well depletions. As part of the Augmentation Plan UDC will need 50 AF of developed recharge storage capacity to offset the depletions. The project involves the development of three recharge structures, with the top priority site, the Mecure #1 Site (20 AF) developed initially in 2004, and the remaining two sites totaling 30 AF developed in 2005. Each pond would be filled by water that is diverted from the Union Ditch. The construction of each site will include pond excavation, flow measurement structures (flumes on feeder canals or meters for pumps), headgate structures for feeder canals, and monitoring and reporting measurement equipment (SCADA). The ponds will be relatively shallow in depth (< 10 feet) and will include an earthen embankment around the perimeter of the pond.



Location Map

# **CWCB Construction Loan Program PROJECT DATA SHEET**

**Borrower:** Upper Arkansas Water Conservancy District      **County:** Chaffee/Fremont/Custer

**Project Name:** North Fork Reservoir Rehab/Expansion      **Drainage Basin:** Arkansas River

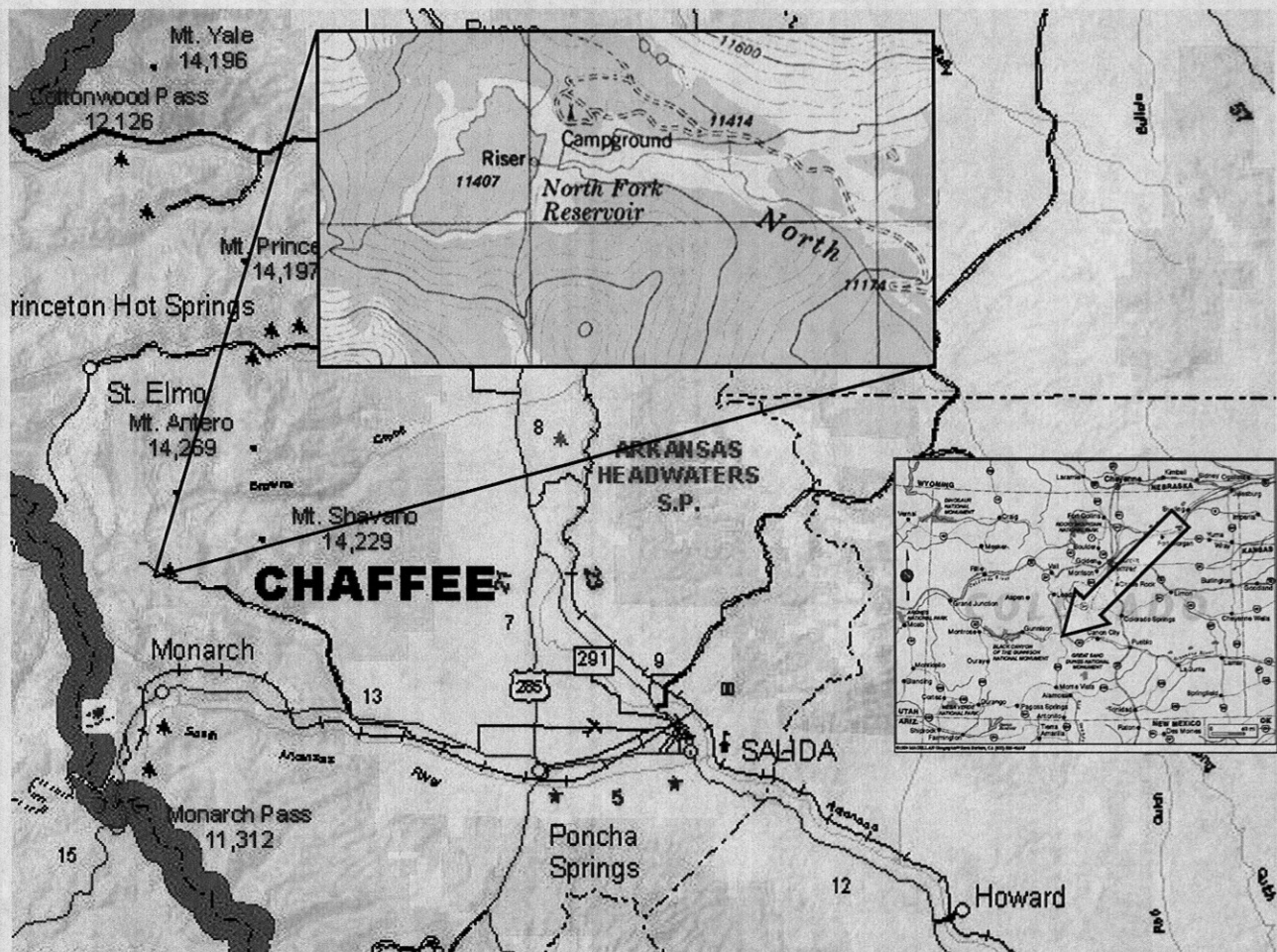
**Project Type:** Dam and Spillway Modifications      **Water Source:** N. Fork of S. Arkansas

**Total Project Cost:** \$3,309,850      **Funding Sources:** CWCB & Company

**Loan Amount:** \$2,980,000      **Current Reservoir Storage:** 500 acre-feet

**Type of Borrower:** Low Municipal/Agricultural      **Interest Rate:** 3.0%      **Term:** 30 years

The Upper Arkansas Water Conservancy District is located in Salida, Colorado, and serves to protect and develop water supplies in Chaffee, Western Fremont and Custer Counties. The District has operated the North Fork Reservoir since 1979 for domestic, municipal, industrial, recreational and augmentation purposes. The reservoir is at elevation 11,400 feet and is located 10 miles from Maysville on the North Fork of the South Arkansas River. The District plans to repair the outlet gate, improve the access for construction, increase the spillway capacity, mitigate seepage along the right abutment, and raise the dam height by 15 feet. This will increase the capacity of the reservoir from 595 AF to 1095 AF. The enlargement will also require the relocation of portions of a campground. The reservoir is located on Forest Service property and currently has a Special Use Permit authorizing the repair work. The enlargement work will require a NEPA study prior to Forest Service permitting.



LOCATION MAP

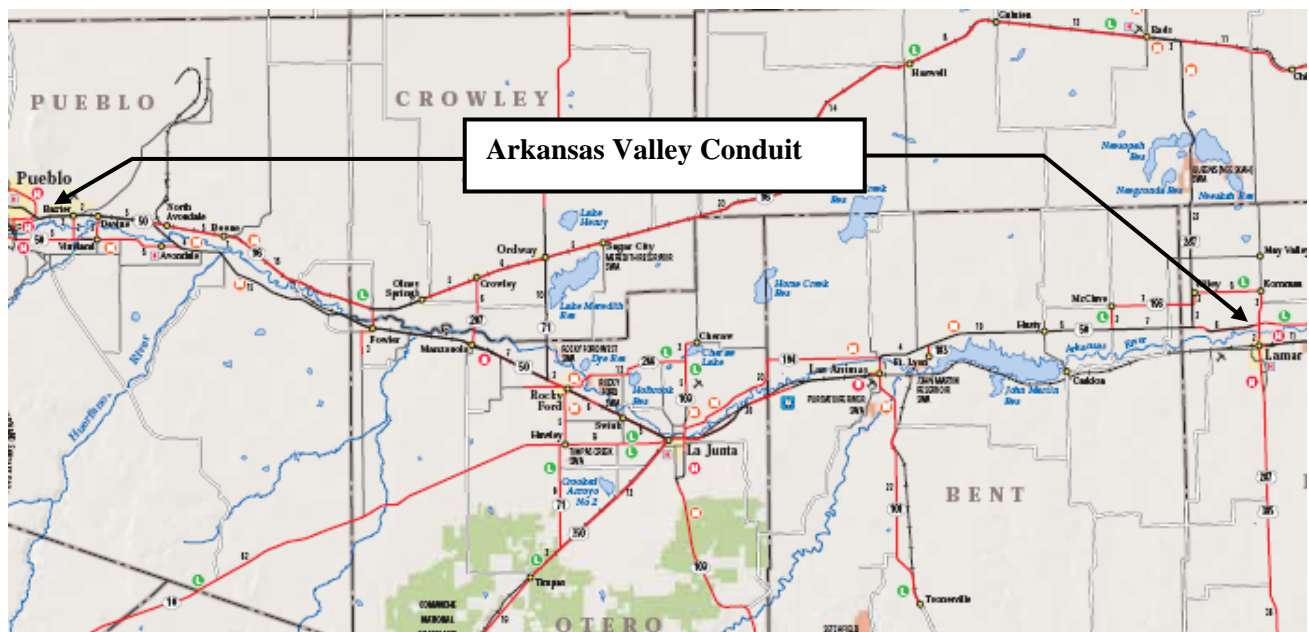
## **Projects Not Under Contract**



## Water Project Construction Loan Program - Project Data

<b>Borrower:</b> SECWCD - Enterprise	<b>County:</b> Pueblo, Crowley, Otero, Bent, Prowers
<b>Project Name:</b> Arkansas Valley Conduit	<b>Project Type:</b> Water Supply Pipeline
<b>Drainage Basin:</b> Arkansas	<b>Water Source:</b> Arkansas – Fry-Ark Project
<b>Total Project Cost:</b> \$300,000,000	<b>Funding Sources:</b> CWCB, Federal
<b>Type of Borrower:</b> Municipal/Low	<b>Aver. Delivery:</b> 6,555 AF (2005 demand)
<b>CWCB Construction Fund Loan:</b> \$60,600,000 (incl. 1% loan fee)	<b>Interest Rate:</b> 3.25% <b>Term:</b> 30 years

The Arkansas Valley Conduit is designed to bring relatively clean raw water to 41 water providers in the lower Arkansas Valley, who currently either take water from the Arkansas River, and/or pump from shallow and/or deep aquifers. This pumped water has quality problems and requires significant treatment before it meets Clean Drinking Water standards. The conduit will begin at Pueblo Reservoir Dam, where a 30.94 cfs municipal outlet is already in place and reserved for the specific use of the conduit. The conduit will gravity flow approximately 138 miles down the Arkansas River Valley to Lamar. The conduit water will flow by the St. Charles Mesa Water District where it will enter a water filtration plant. As the conduit moves down the valley, spurs will take off the main line to deliver water to local and regional water providers. The conduit will receive its water from the USBR Fryingpan-Arkansas Project. Currently, about 5,779 acre-feet of water per year is available for entities East of Pueblo in an average year. Additionally, Return Flows are retained by the District and can be exchanged back up to Pueblo Reservoir for delivery. These Return Flows can provide up to an additional 1,600 acre-feet of water. Storage is available to these entities in Pueblo Reservoir because they are in the SECWCD service area. This storage will help provide water in the years when less than average water is provided by the Fry-Ark Project. The water will be provided strictly for municipal and industrial purposes. Final chlorination or treatment will be left up to each water provider. The conduit is currently planned to be paid 80% (approximately \$240 million) by the federal government.



Location Map

**CWCB Water Project Loan Program  
Project Data Sheet**

**Borrower:** Lake Durango Water Authority**County:** La Plata**Project Name:** Source Water Supply Project**Project Type:** Water Rights  
Purchase/Infrastructure**Drainage Basin:** San Juan / Dolores**Water Source:** ALP**Total Project Cost:** \$3,000,000**Funding Source:** Construction Fund and  
WSRA Statewide Funds**Type of Borrower:** Low-income Municipal**Average Delivery:** 309 AF**CWCB Loan:** \$2,525,000 (w/ 1% service fee)  
**WSRA Grant:** \$500,000**Interest Rate:** 4.0%    **Term:** 30 years

The Lake Durango Water Authority serves 1,435 taps in southwest La Plata County. A safe yield analysis has indicated that the Authority can only supply water to 792 taps in a drought year. This was an issue in the 2002-2003 drought, so the Authority is seeking additional supply and storage to safely serve its customers. The Authority is planning on purchasing 100 AF of A-LP water from the Colorado Water Resources and Power Development Authority, constructing a pump station at Lake Nighthorse, building an access road, and installing a pipeline to bring water from Lake Nighthorse to Lake Durango (where the Authority currently stores the majority of its water).



0 0.4 0.8 1.6 2.4 Miles

2009 NAIIP aerial imagery provided by  
the US Farm Service Agency





### Water Project Loan Program - Project Data

**Borrower:** The McDonald Ditch Company

**County:** Rio Grande

**Project Name:** McDonald Ditch Diversion  
and Headgate Replacement Project

**Project Type:** Ditch Rehabilitation

**Drainage Basin:** Rio Grande, District 20

**Water Source:** Rio Grande River

**Total Project Cost:** \$650,000 (Construction)  
Engineering provided by NRCS

**Funding Source:** Construction Fund

**Type of Borrower:** Agricultural

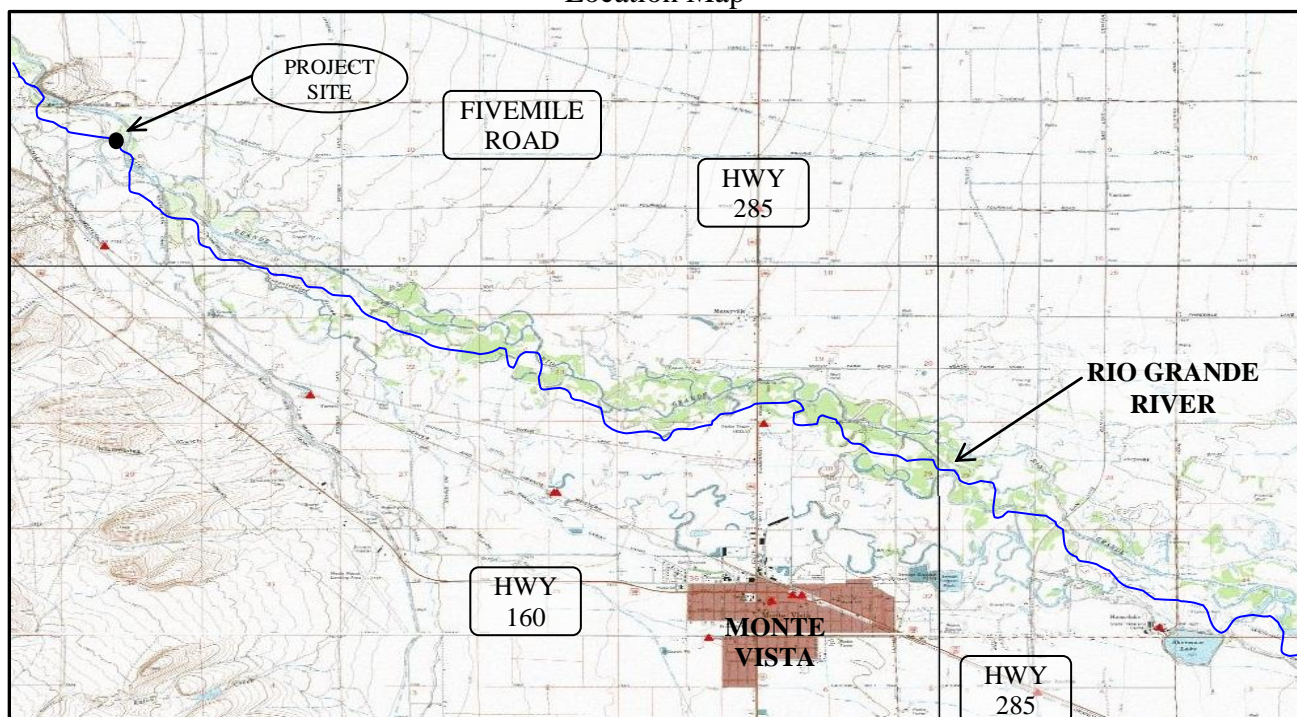
**Avg. Annual Diversion:** 5,018 AF

**CWCB Loan:** \$70,700 (incl. 1% loan fee)

**Interest Rate:** 2.50% **Term:** 20 years  
(reduced from a 2.75% 30-year ag. rate)

The existing diversion structure and ditch headgate, constructed over forty years ago, were poorly designed, are rapidly deteriorating, and present a growing maintenance burden for the Company. The diversion structure was constructed from concrete rubble, dirt, wooden debris, and an old bridge pier. The diversion is inefficient, aging, and functions poorly. The headgate consists of a rusted single slide gate that is set back from the river and uses a section of an old metal fence as a screening device. Sediment and debris are prone to build up around the gate, decreasing its efficiency while increasing maintenance costs. Both the diversion and headgate were highlighted as rehabilitation priorities in a study performed in 2001. The study analyzed the condition of riparian habitats and structures along a 91-mile reach of the Rio Grande from the town of South Fork to Alamosa that triggered a more localized effort known as the Plaza Project. This project provides an environmentally sensitive solution for increasing the efficiency of the ditch with a less maintenance intensive diversion and headgate. Construction is scheduled to begin in November of 2012.

Location Map



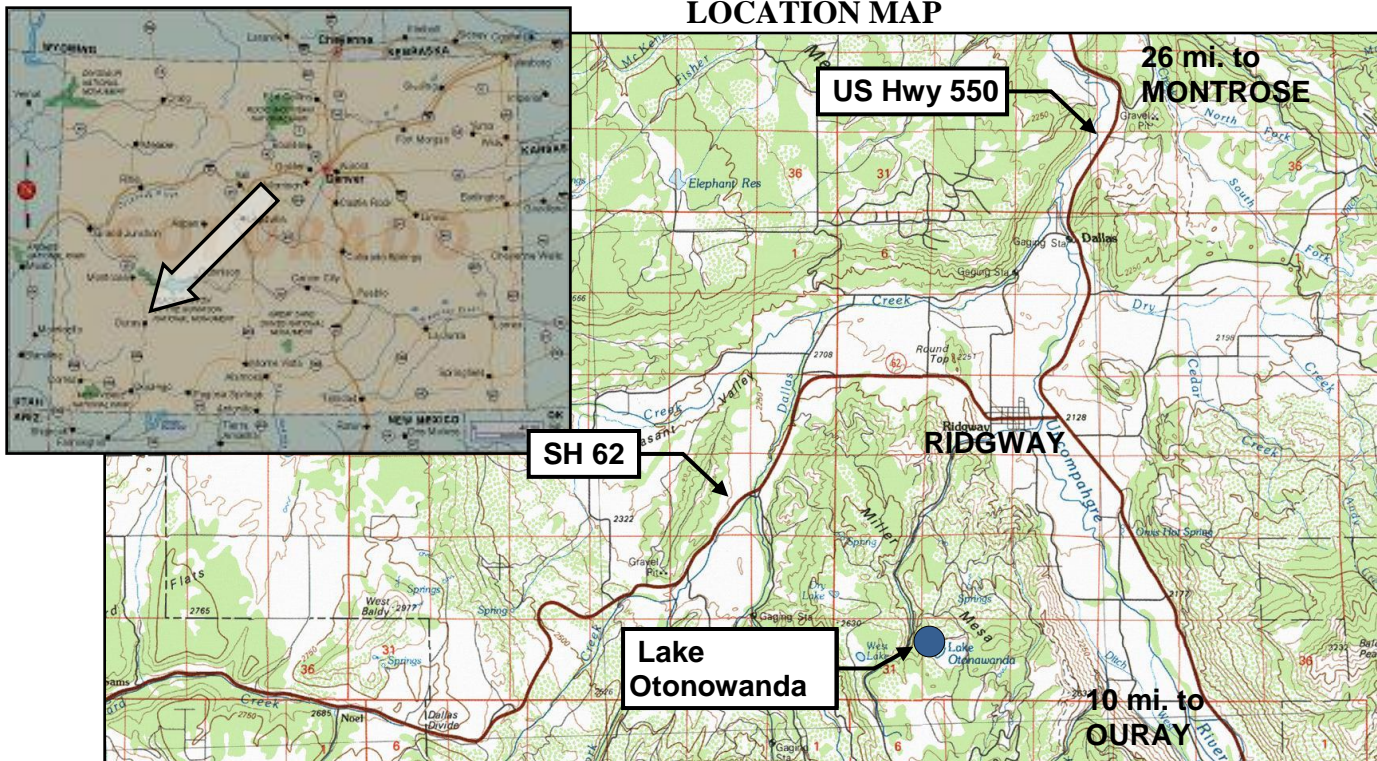


# CWCB Construction Loan Program Project Data Sheet

**Borrower:** Town of Ridgway**County:** Ouray**Project Name:** Lake Otonowanda Rehabilitation Project**Project Type:** Reservoir Enlargement**Drainage Basin:** Gunnison, District 68**Water Source:** Ridgway Ditch**Total Project Cost:** \$2,080,843**Funding Sources:** Construction Fund, WSRA, DOLA, CO River District**Type of Borrower:** middle-income municipal**Avg. Diversion:** 280 AF (363 AF of reservoir storage)**Loan Amount:** \$606,000 (Including 1% fee)**Interest Rate:** 3.0%**Term:** 30 years**WSRA Grant Amounts:** \$60,000 Gunnison Basin & \$540,000 Statewide

The Town of Ridgway is requesting a CWCB loan for rehabilitation improvements and enlargement of Lake Otonowanda to ensure a reliable water supply of raw water is available under future drought conditions. Otonowanda is the primary storage facility for the town, responsible for treating and delivering potable water to 695 SFE. Otonowanda, with a current capacity of 109 AF, does not have a functional outlet works; therefore, no way to control reservoir discharge. During 2002, all of the Town's water rights fell out of priority due to extended drought conditions and the Town was dangerously close to running out of water. The improvements to the reservoir, including: replacement of the outlet works, reservoir lining and a 254-AF enlargement, will provide the Town the ability to store more of its adjudicated water rights and a controlled means to release the water, firming the Town's water supply in the event of future call outs.

## LOCATION MAP





# CWCB Water Project Loan Program Project Data Sheet

**Borrower:** City of Greeley,  
Water and Sewer Enterprise

**County:** Larimer

**Project Name:** High Park Fire Restoration

**Project Type:** Watershed Protection

**Basin:** South Platte **District:** 3

**Water Source:** Cache La Poudre

**Total Project Cost:** \$7,400,000

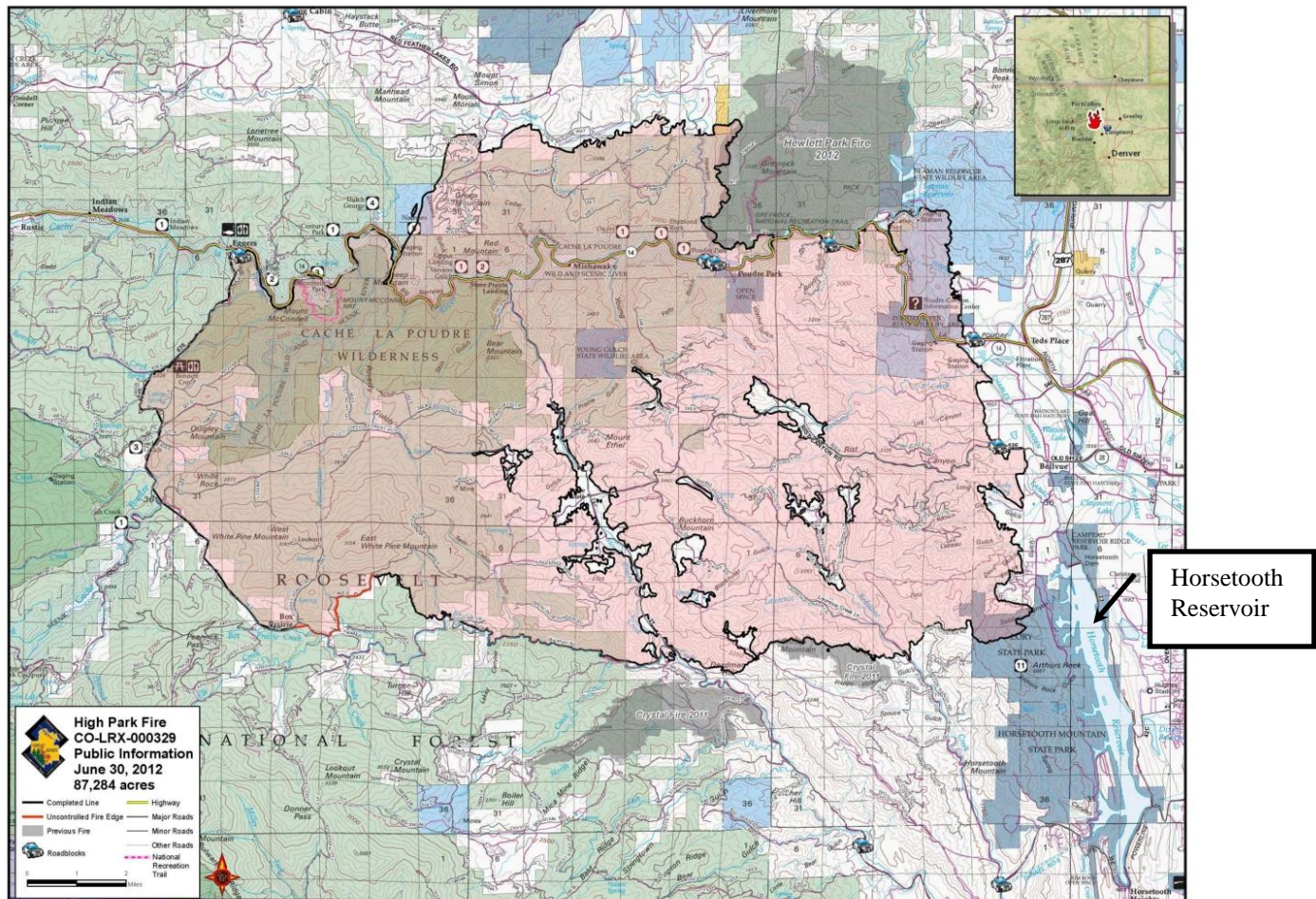
**Funding Source:** Severance Tax Trust Fund  
Perpetual Base Account

**Type of Borrower:** High-income municipal

**Average Annual Diversion:** 9,000 AF

**CWCB Loan:** \$2,020,000 (w/ 1% service fee) **Interest Rate:** 0% **Term:** 20-years

The City of Greeley is applying for a loan for to protect portions of the Poudre watershed damaged by the High Park Fire that damaged 87,000 acres in the summer of 2012. Through the Burned Area Emergency Response (BAER) report 5,500 acres of non-federal land were identified as needing treatment including aerial application of seeded mulch for soil stabilization; and check structures to catch ash, debris and sediment; and, contour felling to reduce flash flood risk. Because much of the City's municipal water supply diversions are within the burn perimeter, watershed restoration is critical. Efforts began immediately after the fire was contained in July of 2012. These efforts are expected to resume in the spring of 2013 as soon as weather permits.





**Water Project Loan Program - Project Data Sheet**

**Borrower:** San Luis Valley Water Conservancy District

**County:** Alamosa

**Project Name:** Anaconda Ditch Water Right Acquisition

**Project Type:** Water Rights

**Drainage Basin / District:** Rio Grande / 20

**Water Source:** Rio Grande River

**Total Project Cost:** \$923,000

**Funding Sources:** Construction Fund

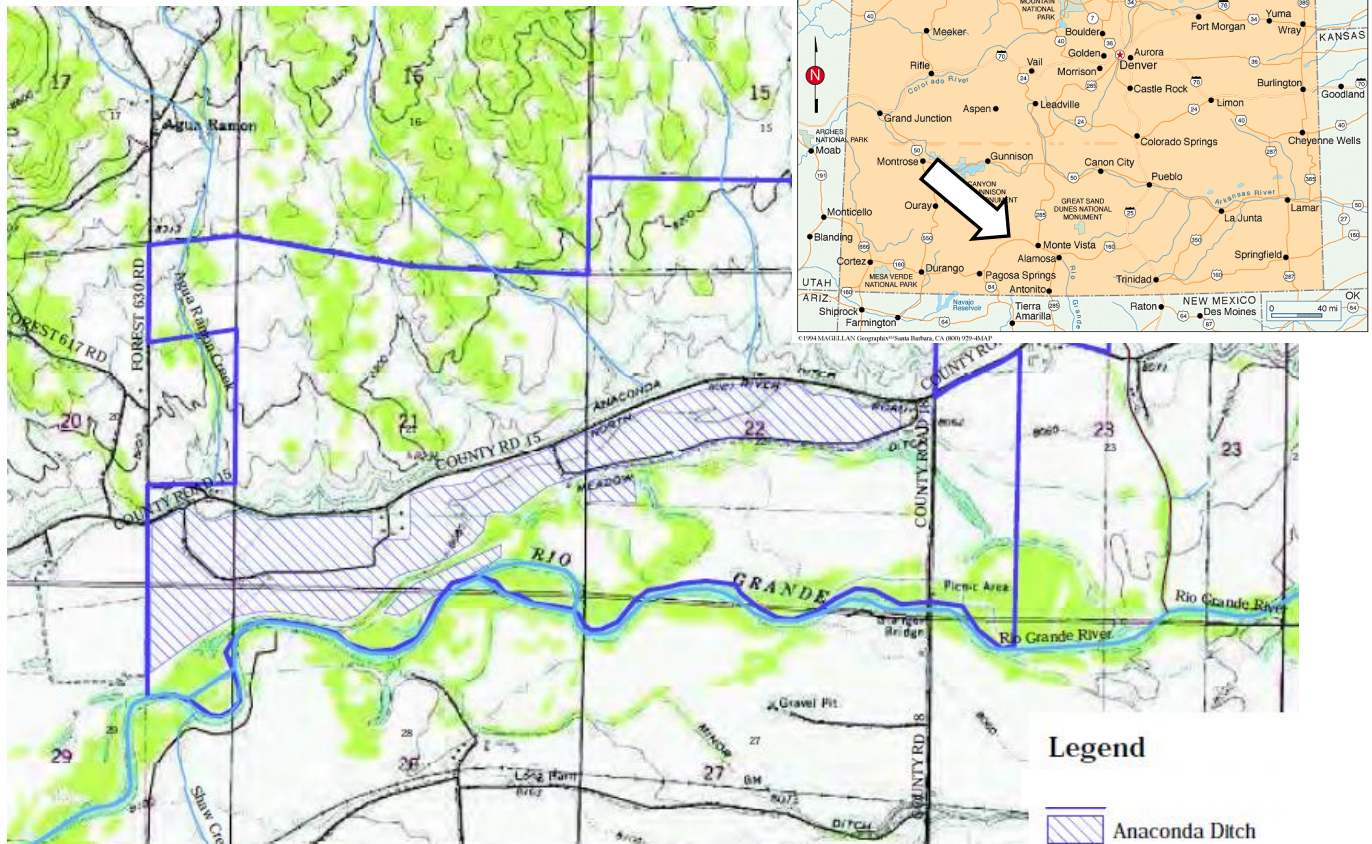
**Type of Borrower:** Municipal Low Income

**Average Delivery:** 386 acre-feet

**CWCB Loan:** \$839,000 (Including 1% fee)

**Interest Rate:** 2.5% **Term:** 30 years

The San Luis Valley Water Conservancy District (District) operates an augmentation program servicing portions of Rio Grande, Alamosa, Saguache, Hinsdale and Mineral Counties. The augmentation program was developed to offset river depletions from wells serving residential and commercial uses in the area. The District intends to acquire additional water rights to add to its existing program, including the subject of this loan request, the Anaconda Ditch water rights. The District is purchasing a 58% interest in the ditch providing an estimated 260 acre-feet. The purchase will be finalized once the water rights have been through water court. The decree is expected in the fall of 2013.





**CWCB Water Project Loan Program**  
**Project Data Sheet**

**Borrower:** Missouri Heights - Mountain Meadows  
**County:** Eagle, Garfield  
Irrigation Company

**Project Name:** Irrigation Ditch Lining Project

**Project Type:** Ditch Rehabilitation

**Drainage Basin:** Colorado

**Water Source:** Roaring Fork

**Total Project Cost:** \$550,000

**CWCB Funding Source:** Construction Fund

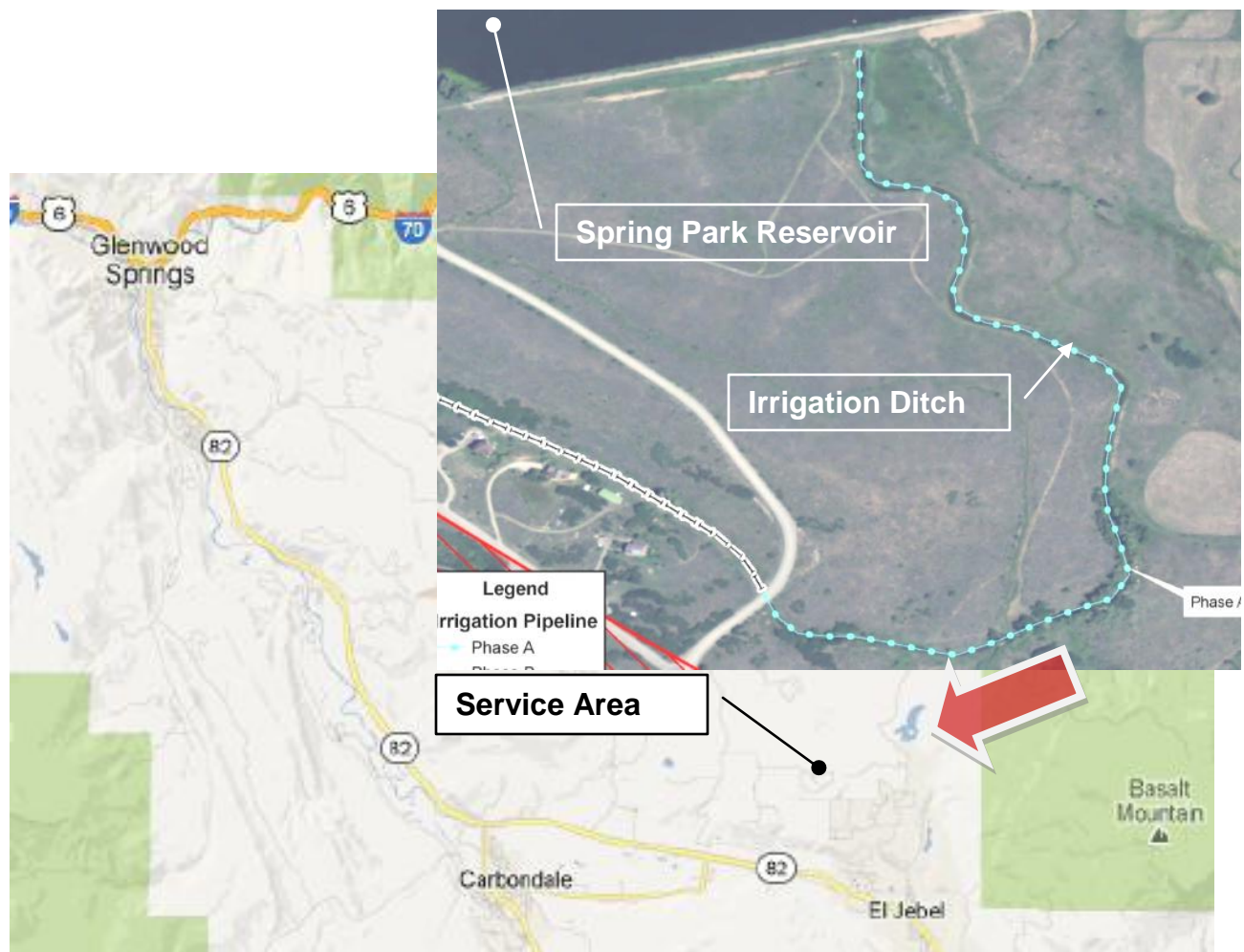
**Type of Borrower:** Agricultural/High Income

**Average Annual Diversion:** 4,480 AF

**CWCB Loan:** \$454,500 (w/ 1% service fee)

**Interest Rate:** 2.2% Blended **Term:** 30yr

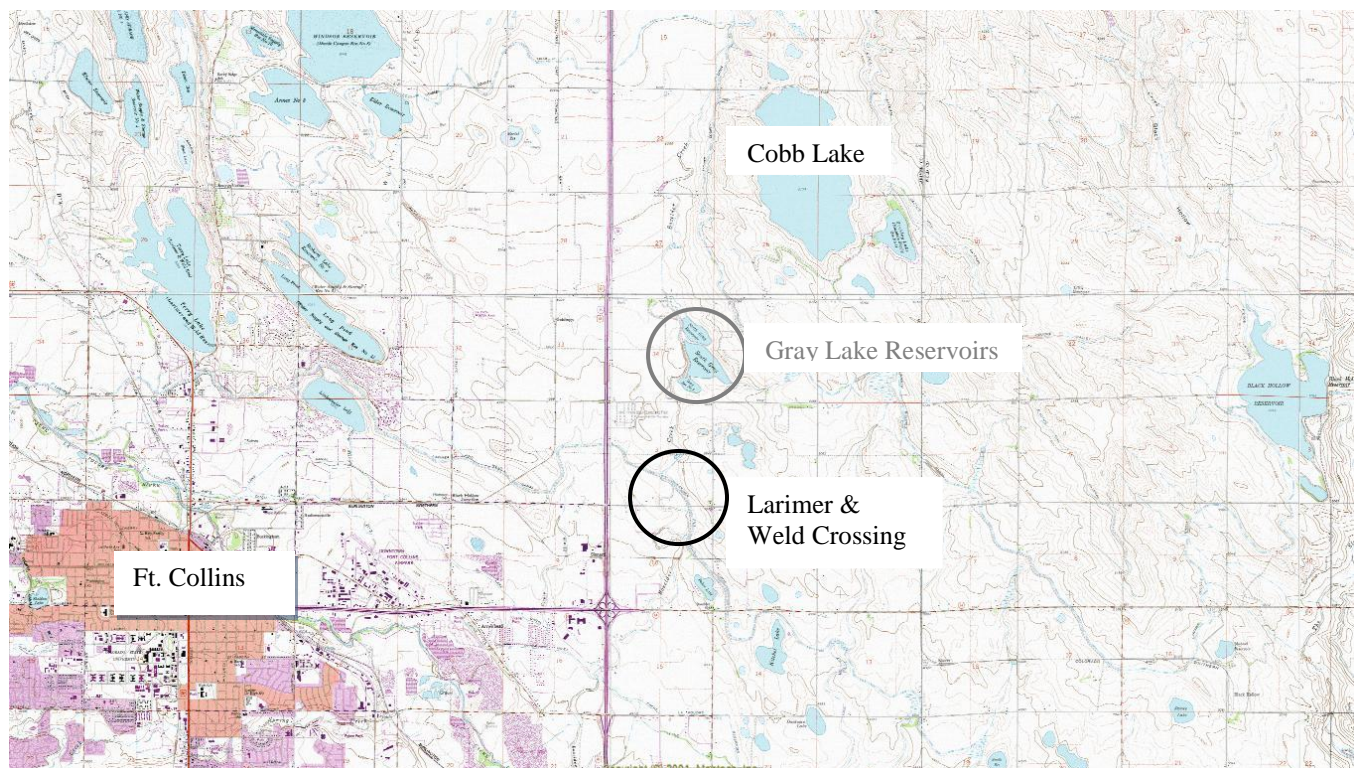
Missouri Height Mountain Meadows Irrigation Company provides irrigation water to approximately 1,500 acres of ranch land located 12 miles northeast of Carbondale. The Company worked with the Natural Resources Conservatio service (NRCS) to evaluate losses within its ditch. A one-mile section has been identified as an area of high seepage, with losses estimated at 30%. The NRCS is providing technical design assistance. The Company has applied for grant funding from additional sources. Construction is anticipated to occur in the fall of 2013.



### CWCB Water Project Loan Program Project Data Sheet

<b>Borrower:</b> Boxelder Basin Regional Stormwater Authority <b>Project Name:</b> Larimer-Weld Canal & Boxelder Creek Crossing Structure <b>Drainage Basin / District:</b> South Platte / 3  <b>Total Project Cost:</b> \$1,139,000  <b>Type of Borrower:</b> Middle Income Municipal  <b>CWCB Loan:</b> \$1,010,000 (with 1% service fee)	<b>County:</b> Larimer  <b>Project Type:</b> Flood Control  <b>Water Source:</b> Boxelder Creek  <b>Funding Source:</b> Construction Fund  <b>Average Annual Diversion:</b> N/A  <b>Interest Rate:</b> 2.75% <b>Term:</b> 15-years (rate reduced from 3.0% for middle income municipal)
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The Boxelder Basin Regional Stormwater Authority was formed in 2008, through an IGA between the City of Fort Collins, Larimer County and the Town of Wellington, to facilitate the construction of regional flood control projects to reduce the threat of flooding and remove areas from the FEMA floodplain in the Boxelder Creek basin. The crossing structure will provide conveyance for 100-year flows from Boxelder Creek across the Larimer-Weld Canal in a safe and controlled manner. Currently the Boxelder Creek 100-year flows inundate the Larimer and Weld Canal and cause it to overflow west of I-25 into the Cooper Slough drainage within the City of Fort Collins. The design of the crossing structure calls for the construction of a side-flow spillway. Construction is expected to occur between the fall of 2014 through the spring of 2014. Repayment for the project will come from stormwater service and system development fees collected by the Authority.

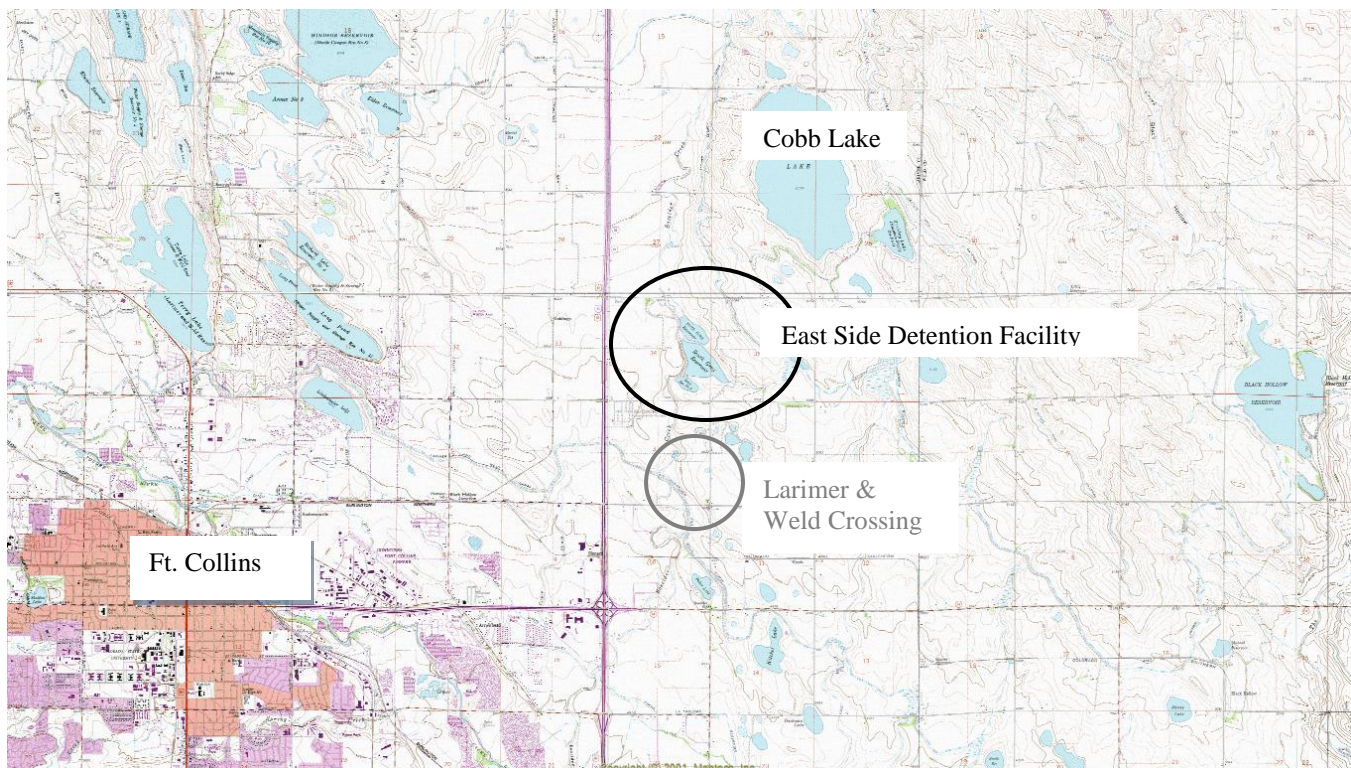




**CWCB Water Project Loan Program  
Project Data Sheet**

<b>Borrower:</b> Boxelder Basin Regional Stormwater Authority	<b>County:</b> Larimer
<b>Project Name:</b> East Side Detention Facility	<b>Project Type:</b> Flood Control
<b>Drainage Basin/ District:</b> South Platte / 3	<b>Water Source:</b> Boxelder Creek
<b>Total Project Cost:</b> \$8,761,000	<b>Funding Source:</b> Construction Fund
<b>Type of Borrower:</b> Middle Income Municipal	<b>Average Annual Diversion:</b> N/A
<b>CWCB Loan:</b> \$7,171,000 (with 1% service fee)	<b>Interest Rate:</b> 2.75% <b>Term:</b> 15-years (Reduced from 3.0% for middle income municipal)

The Boxelder Basin Regional Stormwater Authority was formed in 2008, through an IGA between the City of Fort Collins, Larimer County and the Town of Wellington, to facilitate the construction of regional stormwater improvements to reduce the threat of flooding and remove areas from the FEMA floodplain in the Boxelder Creek basin. The East Side Detention Facility is a key component in the Authority's master plan. The detention facility will provide 1,800 AF of detention storage and will decrease downstream flows from approximately 6,700 cfs to 2,400 cfs. The reduced flow rate will allow 100-year flows to be contained in the current cross-section of Boxelder Creek and will eliminate the flow that occurs in the 100-year flood plain below the proposed detention facility. Construction is expected to take one year beginning in December of 2013. Repayment for the project will come from stormwater service and system development fees collected by the Authority.





**CWCB Water Project Loan Program**  
**Project Data Sheet**

**Borrower:** Grand Mesa Water Conservancy District

**County:** Delta

**Project Name:** Peak Reservoir and Blanche Park Reservoir Rehabilitation

**Project Type:** Reservoir Rehabilitation

**Drainage Basin/ District:** Gunnison / 40

**Water Source:** Surface Creek

**Total Project Cost:** \$640,000

**Funding Source:** Construction Fund/  
WSRA Gunnison Basin Funds

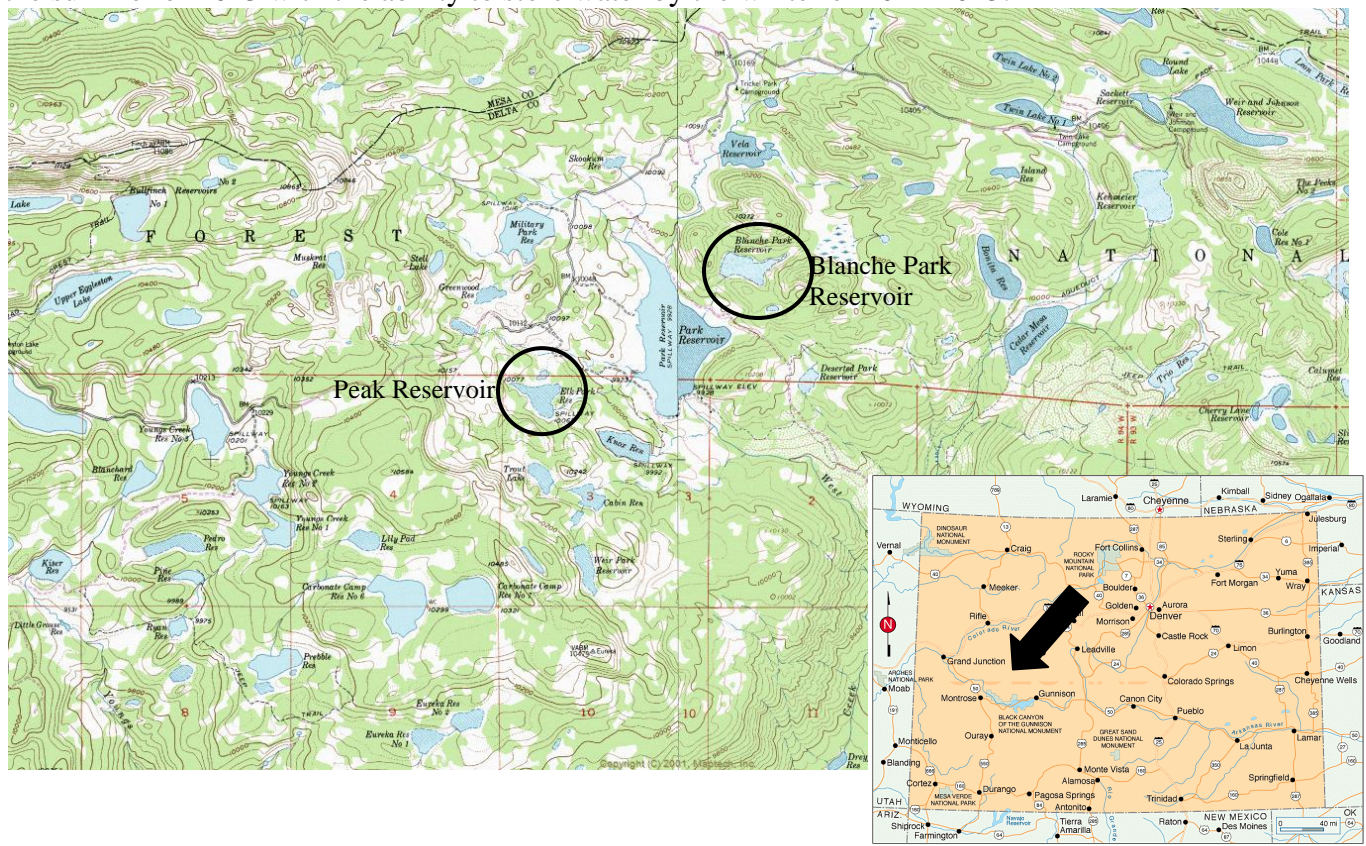
**Type of Borrower:** Municipal/Agricultural

**Average Annual Diversion:** 400 AF  
**Storage Added:** 155 AF

**CWCB Loan:** \$227,250  
(with 1% Service Fee)

**Interest Rate:** 1.55% \* **Term:** 20 years  
(Reduced from 1.8% blended rate)

The Grand Mesa Water Conservancy District owns several reservoirs and a network of ditches to service agricultural users and municipal users including the Town of Orchard City and Cedaredge. It is requesting a loan to rehabilitate Peak Reservoir and Blanche Park. Both reservoirs are located in the Grand Mesa National Forest and have not been used in nearly 50 years. The District has already contributed \$352,500 towards Project costs and has also been awarded \$75,000 in Water Supply Reserve Account (WSRA) Gunnison Basin Roundtable grant funds. Peak Reservoir involves earthwork on the dam and new outlook works. Blanche Park reservoir work will be a complete rebuilding of the dam. Construction is expected to resume in the summer of 2013 with the ability to store water by the winter of 2014-2015.





**CWCB Water Project Loan Program**  
**Project Data Sheet**

**Borrower:** Two Rivers Water and Farming Company

**County:** Huerfano / Cucharas

**Project Name:** Arkansas Storage Facility

**Project Type:** New Reservoir Construction

**Drainage Basin/ District:** Arkansas / 14

**Water Source:** Arkansas River

**Total Project Cost:** \$12,459,000

**Funding Source:** Construction Fund

**Type of Borrower:** Agricultural

**Average Annual Diversion:** AF  
**Storage Added:** 4,110 AF

**CWCB Loan:** \$9,999,000  
(with 1% Service Fee)

**Interest Rate:** 1.25%\* **Term:** 10 years  
(Reduced from 1.75%)

Two Rivers Water and Farming Company currently farms 1,926 acres in Pueblo County and 150 acres in Huerfano County. It is developing a business model that integrates farming and wholesale water distribution through rotational fallowing. Fallowing agreements will be made between Two Rivers and municipalities making surplus irrigation water available for municipal use during droughts, and conversely making excess municipal water available for irrigation when the water supply is available. In order to make this model work, additional water storage is needed. Ultimately, Two Rivers intends to build 25,000 AF of gravel pit storage through a multi-phase project. The first phase will be the development of 4,110 AF of storage located adjacent to the Arkansas River 10 miles east of Pueblo. Design and permitting are scheduled to begin mid-2013 through mid-2014. Construction is expected to follow beginning in mid-2014.



# CWCB Water Project Loan Program Project Data Sheet

**Borrower:** Bellyache Ridge Metropolitan District **County:** Eagle

**Project Name:** Well Replacement Project

**Project Type:** Well Drilling

**Drainage Basin/ District:** Colorado / 37

**Water Source:** Groundwater

**Total Project Cost:** \$355,000

**Funding Source:** Construction Fund/  
DOLA Energy and Mineral Impact  
Assistance Fund

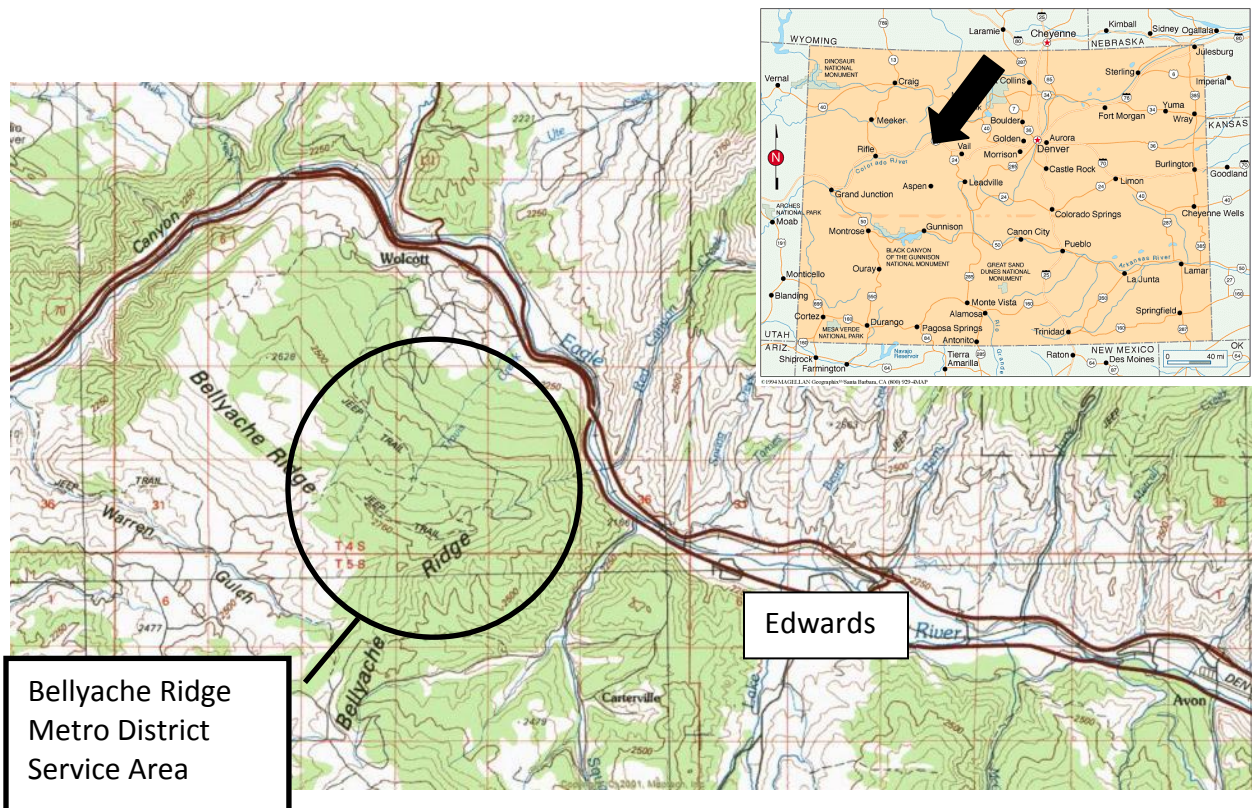
**Type of Borrower:** Municipal (High)

**Average Annual Diversion:** 11 AF

**CWCB Loan:** \$169,175  
(with 1% Service Fee)

**Interest Rate:** 3.0% **Term:** 30 years

The District is located in Eagle County approximately six miles west of Edwards, Colorado. The District's water system includes three wells that fill two storage tanks. From January through March of 2013, the District had to haul in water because declining well production was not able to keep up with demands. Spring storms recharged the groundwater supply such that the District has not hauled water since March, but unless a new well is drilled hauling water will likely be required in the future. A new replacement well will be drilled as soon as funding is available.





**CWCB Water Project Loan Program  
Project Data Sheet**

**C150357****Borrower:** Boulder and Left Hand Irrigation Company**County:** Boulder**Project Name:** Tracy Lateral Pipeline at the Wederquist "Y"**Project Type:** Ditch Rehabilitation**Drainage Basin/ District:** South Platte / 6**Water Source:** Boulder Creek**Total Project Cost:** \$175,000**Funding Source:** Construction Fund**Type of Borrower:** Municipal/Agricultural**Average Annual Diversion:** 2,869**CWCB Loan:** \$159,075 (with 1% service fee)**Interest Rate:** 2.35% **Term:** 30-years  
(Blended)

The Boulder and Left Hand Irrigation Company is a Mutual Ditch Company and Non-Profit Corporation. The Irrigation Company acquired Boulder and Left Hand Ditch Company in 1921, which had operated the ditch system since 1873. The Irrigation Company serves approximately 2,000 acres of farm land between Boulder, CO and Longmont, CO. The Tracy Lateral Pipeline at the Wederquist "Y" project will improve the hydraulic efficiency of the Tracy Lateral while reducing the operational and maintenance cost of the Irrigation Company by replacing a 1500 ft problem section of the Tracy Lateral with a pipeline. Construction is expected to commence in the fall of 2013.

**Project Site** —————○



**CWCB Water Project Loan Program  
Project Data Sheet**

**ATTACHMENT 3**

**C150359**

**Borrower:** Town of Fowler, Water Enterprise

**County:** Otero

**Project Name:** Augmentation Pipeline Project

**Project Type:** Augmentation

**Drainage Basin/ District:** Arkansas / 17

**Water Source:** Arkansas River

**Total Project Cost:** \$305,000

**Funding Source:** Construction Fund

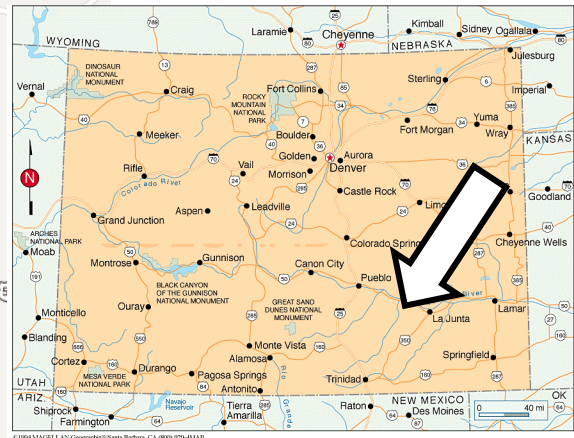
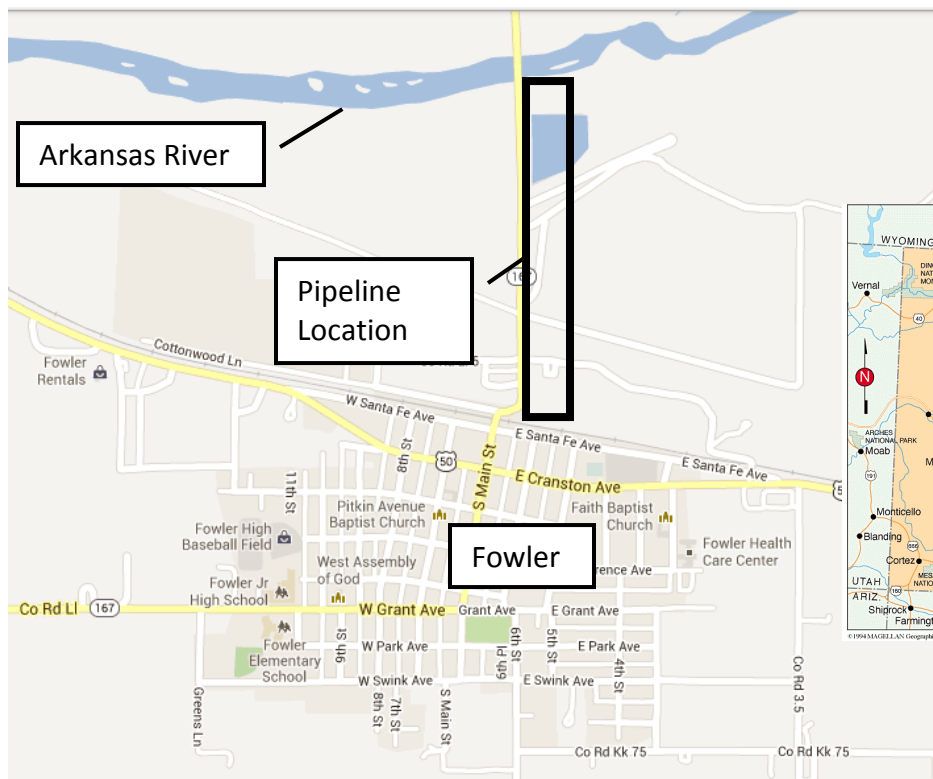
**Type of Borrower:** Municipal (Low)

**Average Annual Diversion:** 157 AF

**CWCB Loan:** \$277,245  
(with 1% Service Fee)

**Interest Rate:** 2.25% **Term:** 30 years

The Town is located in Otero County along Highway 50, approximately 35 miles east of Pueblo. It has approximately 1,185 residents. The Town's water system service area includes the Town and adjacent areas within unincorporated Otero and Crowley Counties for a total of 709 taps. Per a water court mandate, the Town must separate its augmentation water from its stormwater. The purpose of this project is to construct a diversion box to separate stormwater from augmentation water and to pipe the augmentation water to the Arkansas River. Construction of the Project is scheduled for the fall of 2013 with completion expected to occur by the end of the year.

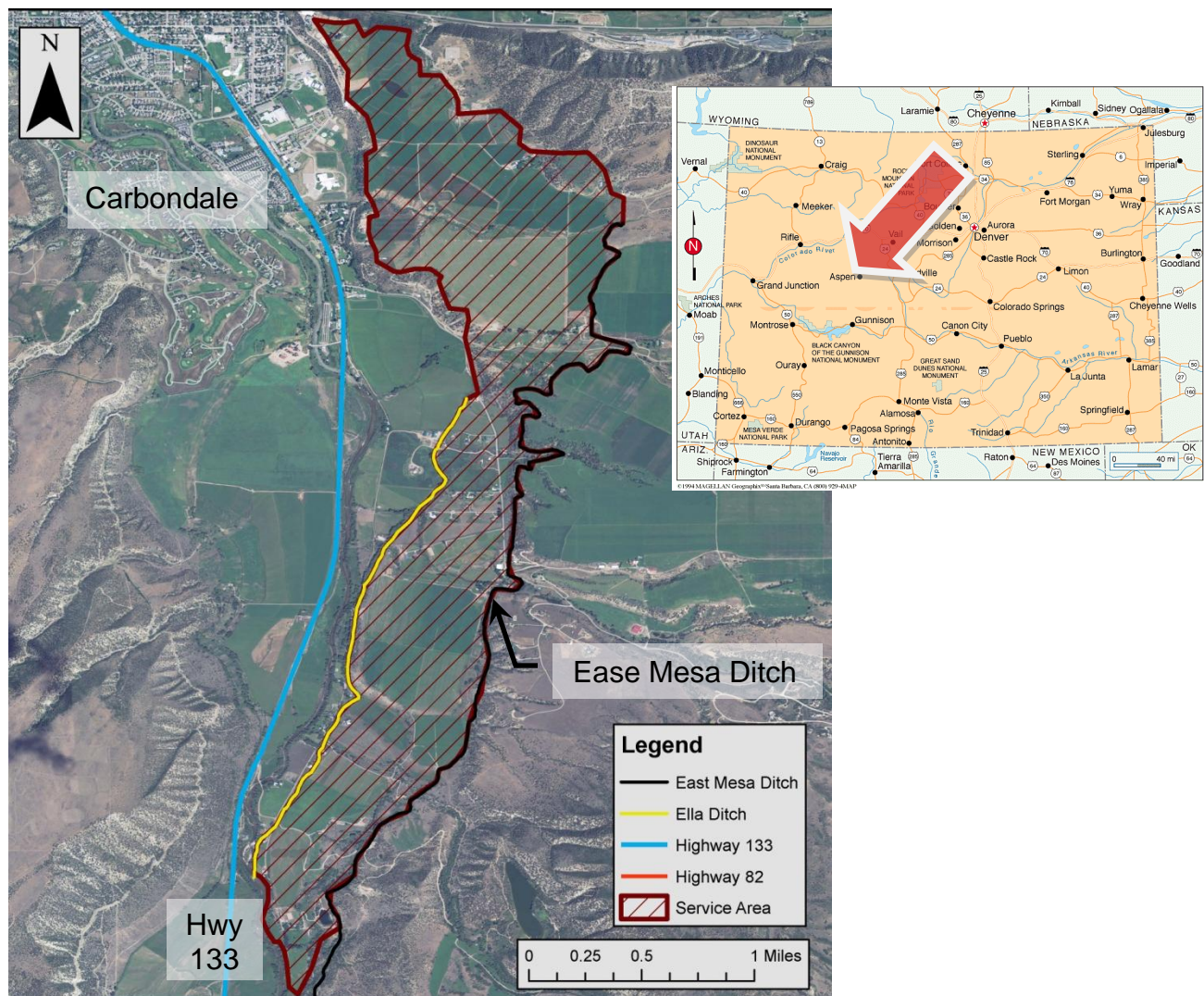




# CWCB Water Project Loan Program Project Data Sheet

**C150360****Borrower:** East Mesa Water Company**County:** Pitkin, Garfield**Project Name:** Ditch Piping Project**Project Type:** Ditch Rehabilitation**Drainage Basin/District:** Colorado/38**Water Source:** Crystal River**Total Project Cost:** \$550,000**Funding Source:** Construction Fund, NRCS**Type of Borrower:** Agricultural**Average Annual Diversion:** 9,669AF**CWCB Loan:** \$555,500 (initial loan)  
\$255,500 (long term - post construction loan w/service fee)**Interest Rate:** 1.75% **Term:** 30yr

This Company is located in the Crystal River Valley in the western portion of Pitkin County and provides irrigation water diverted out of the Crystal River. The earthen ditch enters a 650 foot long rock tunnel that is collapsing. The Company is working with the NRCS to realign the ditch to avoid the tunnel by putting the ditch into a new 1,450 foot HDPE pipe. The Company serves 12 shareholders and is primarily used to grow hay and forage crops for cattle ranching. The Company is approved for grant funding from NRCS and construction is anticipated to occur in the fall of 2013.





# STATE OF COLORADO

## OFFICE OF THE GOVERNOR

136 State Capitol  
Denver, Colorado 80203  
Phone (303) 866-2471  
Fax (303) 866-2003



John W. Hickenlooper  
Governor

August 23 2013

The Honorable Barack H. Obama  
President of the United States of America  
The White House  
1600 Pennsylvania Avenue  
Washington D.C., 20500

Dear President Obama:

This letter is submitted by the State of Colorado to request that you designate Mr. James T. Rizzuto of La Junta, Colorado to be the next Federal Representative to the Arkansas River Compact Administration ("Administration").

The Arkansas River Compact is an interstate compact ratified by Congress and adopted as statute by the States of Kansas and Colorado, apportioning the use of the waters of the Arkansas River between the two states. Article VIII, Section A of the Compact states:

To administer the provisions of this compact there is hereby created an interstate agency to be known as the Arkansas River Compact Administration herein designated as "the Administration".

Article VIII, Section C of the Compact states in part:

The President of the United States is hereby requested to designate a representative of the United States, and if a representative is so designated he shall be an ex officio member and act as chairman of the Administration without vote.

The Administration's Bylaws provide that the representative of the United States of America shall be the Chairman and shall preside at meetings. His duties shall be such as are usually imposed on such an officer and such as may be assigned to him by the Administration from time to time. Pursuant to the Bylaws, the Federal Representative is an ex-officio, non-voting member

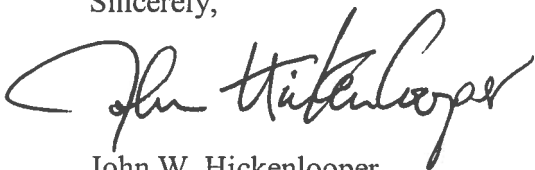
of the Administration's three standing committees. In addition, the Federal Representative helps to coordinate the roles of the several federal agencies which provide important assistance to the Administration, particularly the US Army Corps of Engineers and the US Geological Survey.

Since the Compact was adopted in 1949 the President has designated a Federal Representative. The guidance and leadership provided by the Federal Representative has been extremely helpful to the states over the last sixty years with only brief periods of vacancy. In September 2002 Mr. Robin Jennison of Hays, Kansas was designated as the most recent Federal Representative to the Administration. Both states very much appreciated his service up until the time he offered his resignation to you in May of 2011.

After considering the attributes of previous Federal Representatives the State of Colorado believes Mr. Rizzuto is well qualified to carry on the tradition of leadership and collegiality demonstrated by his predecessors. Mr. Rizzuto has been a respected member of the Colorado General Assembly, a distinguished educator, a successful businessman, and a community leader. His ability to guide diverse groups and lead them to consensus positions is well known. As a lifelong resident of the Arkansas Valley he has been a strong advocate for the rural communities and agricultural producers of the area. A copy of Mr. Rizzuto's resume is attached for your information.

Please have your staff contact Mr. Mike King, Executive Director of the Colorado Department of Natural Resources, if you need any further information about the Arkansas River Compact or my nomination of Mr. Rizzuto.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Hickenlooper", written in a cursive style.

John W. Hickenlooper,  
Governor of the State of Colorado

BCC:

Ms. Anne Castle, USDOJ

Mr. Mike King, DNR

## STATE OF COLORADO

## OFFICE OF THE GOVERNOR

136 State Capitol  
Denver, Colorado 80203  
Phone (303) 866-2471  
Fax (303) 866-2003



John W. Hickenlooper  
Governor

August 23, 2013

Anne Castle  
Assistant Secretary for Water and Science  
Chair, Colorado River Adaptive Management Work Group  
U.S. Department of the Interior  
1849 C Street NW  
Room 6648 MS-6640  
Washington, DC 20240

Dear Ms. Castle:

This letter is to request that Mr. John McClow, in his capacity as the State of Colorado Governor's Representative to the Upper Colorado River Commission and the Colorado River Basin States negotiations, be designated as Colorado's representative to the Colorado River Adaptive Management Work Group (AMWG). Mr. McClow will replace Ms. Gimbel who served in this capacity until June 10, 2013. We further request that Mr. Ted Kowalski continue to serve as Colorado's representative to the Technical Work Group and as the designated alternate for Mr. McClow. Mr. McClow can be reached at the following address:

John H. McClow  
Upper Gunnison River Water Conservancy District  
210 West Spencer, Suite B  
Gunnison, CO 81230  
Phone: (970)-641-6065  
Fax: (970)-641-1162  
Email: [jmcclow@ugrwc.org](mailto:jmcclow@ugrwc.org)

Colorado appreciates the work of the AMWG and the benefits it affords to water users in Colorado and throughout the Upper Colorado River Basin.

Sincerely,

John W. Hickenlooper  
Governor



cc: James Eklund, Director, Colorado Water Conservation Board  
AMWG members  
Larry Walkoviak, USBR

**Colorado River Basin Water Supply and Demand Study Next Steps****M&I Conservation and Reuse Workgroup****SCOPE OF WORK – PHASE 1**

- Task 1:** Review Basin Study to understand data and assumptions for demand, M&I conservation, and reuse (07/09/2013 - *webinar led by USBR*)
- Task 2:**
- a) Discuss Next Steps process, workgroup objectives, roles, ground rules
  - b) Discuss draft scope of work, schedule  
(08/14/2013 in *person meeting – San Diego*)
- Task 3:** Quantify conservation and reuse savings to date within the Study Area
- a) Historical savings data from 1980 forward to be obtained from existing reports, studies, planning documents and other readily available information
  - b) Data collection to focus on major metropolitan areas and cities outside metropolitan areas with 2010 population over 100,000; data for smaller cities will be incorporated as available
  - c) Data to be reported by region
    - 1. Regions: Arizona, Nevada, Colorado, Utah, Southern California, New Mexico, Wyoming (may be reported with Colorado)
    - 2. Data to be aggregated by major metropolitan area, watershed or planning area, etc. as determined most appropriate by the region
    - 3. Where available, savings data to be reported by source of savings (e.g., outdoor landscaping, CII, residential indoor, water loss, self-supplied industrial)
    - 4. Design templates for consistency of data
  - d) Estimate investments made in water use efficiency and reuse
  - e) Verify assumptions for water use efficiency and reuse in Study
- Task 4:**
- a) Provide supplemental qualitative and quantitative performance information on successful conservation and reuse programs that have been implemented within the Study Area and have potential to be expanded into other areas within Study Area
  - b) Provide list of reports documenting successful conservation and reuse programs that have been implemented outside the Study Area and may have potential for implementation within Study Area
- Task 5:** Provide information on projected future water savings
- a) Quantitative data from existing and planned programs identified in current planning documents

- b) Evaluate future reuse opportunities, yield and costs in Technical Report F, Section 5.3
- c) Evaluate future conservation opportunities, yield and costs in Technical Report F, Section 5.6

**Task 6:** Report on assessments of the impact of historical and future water savings on Colorado River demands

**Task 7:** Identify Phase 2 activities, including any feasible and appropriate action steps

**Primary Study documents:**

- Technical Report C and appendices – Water Demand Assessment
- Technical Report F and appendices – Development of Options and Strategies
  - Section 5.3 – Reuse
  - Section 5.6 – Municipal and Industrial Water Conservation

**Deliverables and Schedule**

- Draft report addressing Tasks 3 and 4 (by December 2013)
- Draft report addressing Tasks 5 and 6 (by March 2014)
- Final workgroup report (by June 2014)



## Coordination Team

9/3/2013

Name	Group	Affiliation
Bruce Hallin	AZ	Salt River Project
Chuck Cullom	AZ	Central Arizona Project (CAP)
Tom Buschatzke	AZ	Arizona Department of Water Resources (ADWR)
Bill Hasencamp	CA	Metropolitan Water District of Southern California (MWD)
Ed Smith	CA	Palo Verde Irrigation District (PVID)
Kevin Kelley	CA	Imperial Irrigation District (IID)
Tanya Trujillo	CA	Colorado River Board of California (CRB of CA)
Angela Rashid	CA - Alternate	Colorado River Board of California (CRB of CA)
Jan Matusak	CA - Alternate	The Metropolitan Water District of Southern California (MWD)
Bennet Raley	CO	Front Range Water Council
Dave Kanzer	CO	Colorado River Water Conservation District
Erin Wilson	CO	Colorado Water Users
Ted Kowalski	CO	Colorado Water Conservation Board (CWCB)
David Lytle	Fed	US Geological Survey
Rob Billerbeck	Fed	National Park Service (NPS)
TBD	Fed	Western Area Power Administration
Todd Brindle	Fed - Alternate	National Park Service (NPS)
Carly Jerla	Fed - Chair	Bureau of Reclamation (Reclamation)
Kaylee Nelson	Fed - Support	Bureau of Reclamation
Pam Adams	Fed - Support	Bureau of Reclamation
Jennifer Pitt	NGO	Environmental Defense Fund (EDF)
Peter Culp	NGO	Squire, Sanders & Dempsey LLP
Taylor Hawes	NGO	The Nature Conservancy (TNC)
Kevin Flanigan	NM	New Mexico Interstate Stream Commission
Colby Pellegrino	NV	Southern Nevada Water Authority (SNWA)
Jayne Harkins	NV	Colorado River Commission of Nevada (CRC of NV)
Kay Brothers	NV - Chair	Southern Nevada Water Authority (SNWA)
Chuck Lawler	Tribe	10 Tribes Partnership - Southern Ute Indian Tribe
Darryl Vigil	Tribe	10 Tribes Partnership - Jicarilla Apache Nation

Don Ostler	UCRC	Upper Colorado River Commission (UCRC)
Robert King	UT	Utah Division of Water Resources
John Shields	WY	Wyoming State Engineer's Office



# Colorado River Basin SALINITY CONTROL FORUM

## GOVERNORS

Janice K. Brewer, AZ  
Jerry Brown, CA  
John Hickenlooper, CO  
Brian Sandoval, NV  
Susana Martinez, NM  
Gary R. Herbert, UT  
Matthew H. Mead, WY

## FORUM MEMBERS

### Arizona

Thomas Buschatzke  
Larry R. Dozier  
Linda Taunt

### California

Pete Silva  
Gerald R. Zimmerman

### Colorado

James Eklund  
Steven H. Gunderson  
David W. Robbins

### Nevada

Leo M. Drozdoff  
John J. Entsminger  
McClain Peterson

### New Mexico

Estevan López  
Scott A. Verhines

### Utah

Gawain Snow  
Dennis J. Strong  
John Whitehead

### Wyoming

Dan S. Budd  
Patrick T. Tyrrell  
John F. Wagner

## EXECUTIVE DIRECTOR

Don A. Barnett

106 West 500 South, Ste. 101  
Bountiful, UT 84010  
(801) 292-4663  
[dbarnett@barnettwater.com](mailto:dbarnett@barnettwater.com)  
[www.coloradoriversalinity.org](http://www.coloradoriversalinity.org)

## MEMORANDUM 2013-53

**TO:** Forum Members

**FROM:** Don A. Barnett, Executive Director

**SUBJECT:** Forum Membership – Appointment of James Eklund to Replace Jennifer Gimbel as Colorado Forum and Advisory Council Member

**DATE:** July 23, 2013

At the Forum meetings in Grand Junction, it was with some sadness that we discussed Jennifer Gimbel's move from state government, and now ultimately on to Interior in Washington, DC. We will miss Jennifer, but wish her the best in her future endeavors and are glad to know that we will have a friend in Washington.

We now welcome Mr. James Eklund, the new Director of the Colorado Water Conservation Board, as a new Colorado member to the Colorado River Basin Salinity Control Forum and the Colorado River Basin Salinity Control Advisory Council. Attached hereto is a copy of the appointment letter from Governor Hickenlooper. Many of you already know James from his involvement in Colorado River matters. A biographical sketch is attached, and below is his contact information.

James Eklund  
Director, Colorado Water Conservation Board  
1313 Sherman Street, Room 723  
Denver, CO 80203  
303-866-3441  
[james.eklund@state.co.us](mailto:james.eklund@state.co.us)

We warmly welcome James to the Forum and Advisory Council and look forward to working with him in the future.

attachments

cc: Work Group, Federal Salinity Coordinators



## STATE OF COLORADO

## OFFICE OF THE GOVERNOR

136 State Capitol  
Denver, Colorado 80203  
Phone (303) 866-2471  
Fax (303) 866-2003



John W. Hickenlooper  
Governor

July 13, 2013

Michael L. Connor  
Commissioner of  
Reclamation  
U.S. Department of the  
Interior  
1849 C Street, N.W.  
Washington, D.C. 20240

Don Barnett, Executive  
Director  
Colorado River Basin  
Salinity Control Forum  
106 West 500 South,  
Suite 101  
Bountiful, UT 84010

Larry Dozier, Chairman  
Colorado River Basin  
Salinity Control Forum  
106 West 500 South,  
Suite 101  
Bountiful, UT 84010

Commissioner Connor, Director Barnett, Chairman Dozier:

This letter is to inform you that I hereby appoint Mr. James Eklund, Director of the Colorado Water Conservation Board, to the Colorado River Basin Salinity Control Forum and to the Colorado River Basin Salinity Control Advisory Council. Mr. Eklund is to assume the seat previously held by Ms. Jennifer Gimbel.

Mr. Eklund will join Mr. Steven H. Gunderson, Director of the Colorado Water Quality Control Division, and Mr. David Robbins, Colorado's citizen representative, who currently serve on both the Advisory Council and Forum, completing Colorado's delegation. Contact information for each of these individuals is enclosed.

Colorado greatly appreciates the significant water quality benefits that the Salinity Control Program provides to the Colorado River Basin, as well as the comity fostered by the cooperative multi-state and federal effort.

Sincerely,

John W. Hickenlooper  
Governor

**STATE OF COLORADO MEMBERS OF  
COLORADO RIVER BASIN SALINITY CONTROL FORUM  
AND  
COLORADO RIVER BASIN SALINITY CONTROL ADVISORY COUNCIL  
UPDATED JULY 2013**

James Eklund  
Director, Colorado Water Conservation Board  
1313 Sherman Street, Room 723  
Denver, CO 80203  
Phone: 303-866-3441  
Fax: 303-866-4474  
Email: [james.eklund@state.co.us](mailto:james.eklund@state.co.us)

Steven H. Gunderson  
Director, Water Quality Control Division  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Phone: 303-692-3500  
Fax: 303-782-0390  
Email: [steve.gunderson@state.co.us](mailto:steve.gunderson@state.co.us)

David W. Robbins  
Hill & Robbins  
100 Blake Street Bldg.  
1441 Eighteenth St.  
Denver, CO 80202  
Phone: 303-296-8100  
Fax: 303-296-2388  
Email: [davidrobbins@hillandrobbsins.com](mailto:davidrobbins@hillandrobbsins.com)



**Colorado River Basin State Representatives of Arizona, California,  
Colorado, Nevada, New Mexico, Utah, Wyoming, and the Upper Colorado  
River Commission**

August 26, 2013

*Via E-Mail*

*Anne\_Castle@ios.doi.gov*

The Honorable Anne J. Castle  
Assistant Secretary for Water and Science  
U.S. Department of the Interior  
Office of the Secretary  
1849 C. Street, NW, MS-6640  
Washington, D.C. 20240

***Re: Comments Following the Glen Canyon Dam Long-Term Experimental and  
Management Plan Environmental Impact Statement Stakeholder Workshop  
Held August 5-7, 2013, in Flagstaff, Arizona***

Dear Assistant Secretary Castle:

Representatives from a majority of the seven Colorado River Basin States and the Upper Colorado River Commission (collectively referred to as the “Basin States”) participated in the structured-decision analysis workshop for the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP) Environmental Impact Statement (EIS) hosted by the Department of Interior (DOI) on August 5-7, 2013. This letter provides comments regarding the structured-decision analysis process, and the development and use of resource goals, performance metrics, and quantitative models. We have previously submitted scoping comments relating to the LTEMP EIS (January 31, 2012) and the resource goals, performance metrics, and the structured-decision analysis process (April 15, 2013) and are looking forward to our continued technical discussions with DOI on the issues raised in those letters.

The Basin States acknowledge DOI’s efforts to prepare for and host the structured-decision analysis stakeholder workshop. Although we gained experience from the workshop exercise, the Basin States still have significant concerns about how the structured-decision analysis process has been developed, how it will be refined, and how the results will be used in connection with the LTEMP EIS. The Basin States appreciate that the outcomes of the structured-decision analysis process are just a few of the many factors the Secretary will consider in connection with the LTEMP EIS. However, the Basin States urge DOI to utilize its limited budget and available time to develop an appropriate effects analysis for the EIS.



The Honorable Anne J. Castle  
Assistant Secretary for Water and Science  
U.S. Department of the Interior

August 26, 2013

Page 2

DOI announced at the Glen Canyon Dam Adaptive Management Work Group on August 9, 2013 that it plans to issue a draft LTEMP EIS by next spring. If DOI decides to continue pursuing a structured decision-analysis process, DOI should be willing to significantly extend the EIS completion timeline and address our concerns about the process. We offer the following initial suggestions and comments based on the feedback received from the Basin State representatives who participated in the workshop:

1. The Basin States continue to assert that a mutually understood sideboard is that the LTEMP EIS should not result in an operational scenario that would modify annual deliveries. All alternatives must be fully consistent with and subject to the "Law of the River," including the water delivery requirements described and contemplated in the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (2007 Interim Guidelines). Further discussions regarding how DOI will model the water delivery requirements in the EIS are needed. We are also concerned that DOI has implemented the water delivery resource goal as a performance metric. When utilized in the structured-decision making process, the water delivery resource goal appears to be a tradeoff with other resource goals. Since DOI has stated the 2007 Interim Guidelines will not be modified, the water delivery resource goal must be used as a pre-screening metric rather than a performance metric.
2. Based on the results of the workshop, it is evident that accurately defining resource goals and establishing performance metrics is particularly challenging in the complex Colorado River system, where the resource goals can contradict each other. The proposition of providing mathematical expressions to unquantifiable factors is not a reliable or practical method in such a complex system.
3. The natural processes metric uses different baseline assumptions (post-dam versus pre-dam) for comparing alternatives. The process cannot provide meaningful input in an equitable manner when there are different assumptions as to the baseline upon which impacts are compared. We remain concerned that use of the natural processes resource goal is not appropriate. The LTEMP EIS is focusing on a plan for operating the dam; therefore, the structured-decision analysis process inappropriately uses a step that favors returning the ecosystem to a pre-dam condition.
4. To address concerns regarding the use of the quantitative models, at a minimum, DOI should have the newly developed models documented and peer reviewed. DOI must make the process transparent throughout this effort and should provide ample time for the Basin States and others to participate in the review process.

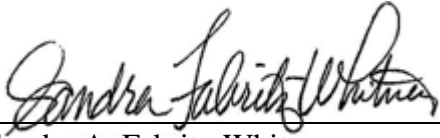
The Basin States have additional technical comments on the resource goals, performance metrics, and quantitative models that we are willing to provide through our technical teams. As has been our consistent position, we are interested in working with DOI on a strategy and timeline for the completion of a successful LTEMP EIS, and we appreciate the opportunity to provide these comments.

The Honorable Anne J. Castle  
Assistant Secretary for Water and Science  
U.S. Department of the Interior

August 26, 2013

Page 3

Sincerely,



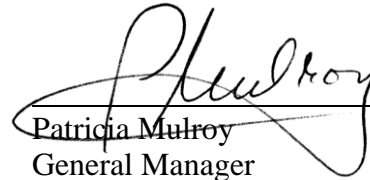
Sandra A. Fabritz-Whitney  
Director  
Arizona Department of Water Resources



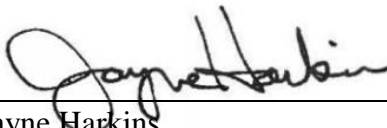
Dana B. Fisher, Jr.  
Chairman  
Colorado River Board of California



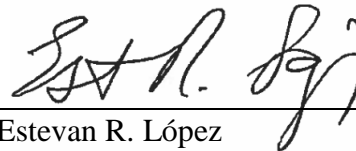
John H. McClow  
Colorado Commissioner  
Upper Colorado River Commission



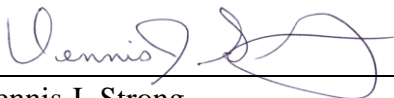
Patricia Mulroy  
General Manager  
Southern Nevada Water Authority



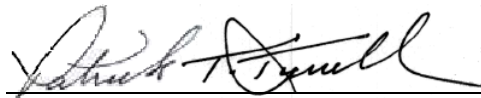
Jayne Harkins  
Executive Director  
Colorado River Commission of Nevada



Estevan R. López  
Director  
New Mexico Interstate Stream  
Commission



Dennis J. Strong  
Director  
Utah Division of Water Resources  
Utah Interstate Stream Commissioner



Patrick T. Tyrrell  
State Engineer  
State of Wyoming



Don A. Ostler  
Executive Director and Secretary  
Upper Colorado River Commission

cc: Mr. Glen W. Knowles, Chief, Adaptive Management Group, Bureau of  
Reclamation, Upper Colorado Region  
Mr. Rob Billerbeck, Colorado River Coordinator, National Park Service  
Dr. Kirk E. LaGory, Senior Program Manager, Argonne National Laboratory

**JOHN W. HICKENLOOPER**  
GOVERNOR



136 STATE CAPITOL  
DENVER, COLORADO 80203

TEL 303-866-2471  
FAX 303-866-2003

August 19, 2013

Tony Willardson  
Executive Director  
Western States Water Council Office  
5296 Commerce Drive, Ste 202  
Murray, UT 84107

Dear Mr. Willardson:

With the retirement of Paul Frohardt, and the appointment of James Eklund as the new director of the Water Conservation Board, please be advised that that I am appointing the following individuals to represent the State of Colorado on the Council:

Trisha Lea Oeth of Boulder, Colorado  
Administrator, Water Quality Control Commission  
Water and Wastewater Operators Certification Board  
Colorado Department of Public Health and Environment

James L. Eklund of Denver, Colorado  
Executive Director  
Colorado Water Conservation Board  
Colorado Department of Natural Resources

Resumes and contact information are attached for Ms. Oeth and Mr. Eklund. I would appreciate your ensuring that other council members are aware of these appointments.

Alternate members, Steve Gunderson, Hal Simpson and John Stulp will continue to serve.

Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "John W. Hickenlooper", is written over a faint, larger version of the same signature.

John W. Hickenlooper  
Governor



**Colorado Water Conservation Board**

**Construction Fund, Special Funds and Severance Tax Trust Fund Accounts  
Non-Reimbursable Investments Status Report  
Fiscal Year 2012-2013**

**Construction Fund – Non-Reimbursable Investments**

The Colorado Water Conservation Board (CWCB) Non-Reimbursable Investments Status Report has two sections. This section includes the non-reimbursable investment projects from the Construction Fund, Special Funds and Severance Tax Accounts. The following table summarizes the non-reimbursable investment projects in progress from July 2012 thru June 2013. This table provides the beginning and ending balances for funds available for each project during the fiscal year including amounts disbursed. Following this table, are project summaries provided by each project manager that detail the implementation and status of each project. Following this section is the Severance Tax Trust Fund Operational Account Grant Program status for the same period.

<b><u>No.</u></b>	<b><u>Manager</u></b>	<b><u>Project</u></b>	<b><u>July 1 Balance</u></b>	<b><u>Amount Disbursed</u></b>	<b><u>June 30 Balance</u></b>
1	Bassi	Acquisitions of Water for Instream Flow	\$1,000,000	\$0	\$1,000,000
2	Bassi	CWCB Stream Gaging	\$180,550	\$94,545	\$86,005
3	Bassi	Instream Flow Engineering Support Services	\$93,960	\$21,862	\$72,098
4	Bassi	Satellite Monitoring – State Eng Office	\$322,826	\$255,320	\$67,506
5	Bassi	Stream Gauge Fund	\$264,352	\$0	\$264,352
6	Browning	Chatfield Reservoir Reallocation Project	\$1,988,206	\$135,206	\$1,853,000
7	Browning	Chatfield Res Reallocation Implementation	\$5,000,000	\$0	\$5,000,000
8	Browning	Chatfield Reservoir Reallocation Study	\$35,249	\$18,234	\$17,015
9	Browning	Water Adaptation Partnership Program	\$460,000	\$0	\$460,000
10	Browning	Water Conservation Public Aware Research	\$150,000	\$115,201	\$34,799
11	Browning	Water Education Foundation	\$150,000	\$150,000	\$0
12	Feehan	Abandonment List Legal Support	\$300,000	\$164,092	\$135,908
13	Feehan	Animas-La Plata Project Water	\$24,000,000	\$23,899,210	\$100,790
14	Feehan	Rio Grande Cooperative Project	\$5,000,000	\$875,446	\$4,124,554
15	Feehan	Rocky Mountain Fen Demonstration Project	\$100,000	\$0	\$100,000
16	Feehan	Water Resource Info Center & Data Harvest	\$450,000	\$0	\$450,000
17	Houck	Chatfield Channel Improvement	\$160,834	\$0	\$160,834
18	Houck	Colorado Floodplain Map Modernization	\$1,097,761	\$193,790	\$903,971
19	Houck	Fish and Wildlife Resources Fund	\$2,016,212	\$219,246	\$1,796,966
20	Houck	Flood and Drought Response Fund	\$413,771	\$167,876	\$245,895
21	Houck	National Oceanic & Atmospheric Admin	\$154,862	\$154,862	\$0
22	Houck	Watershed Restoration	\$1,139,884	\$394,743	\$745,141
23	Houck	Weather Modification Program	\$578,942	\$437,541	\$141,401
24	Kowalski	Arkansas River Basin DSS	\$500,927	\$10,183	\$490,744
25	Kowalski	Ark River Surface Water Rules Tech & FA	\$27,177	\$0	\$27,177
26	Kowalski	Co River Comp - State Water Right Admin	\$268,091	\$247,591	\$20,500
27	Kowalski	Colorado Flood Decision Support System	\$74,189	\$0	\$74,189
28	Kowalski	Colorado River Augment Project Develop	\$75,000	\$0	\$75,000
29	Kowalski	Colorado River Delta in Mexico Consult	\$128,205	\$0	\$128,205

**ATTACHMENT 10**

<b><u>No.</u></b>	<b><u>Manager</u></b>	<b><u>Project</u></b>	<b><u>July 1 Balance</u></b>	<b><u>Disbursed</u></b>	<b><u>June 30 Balance</u></b>
30	Kowalski	Co Water Needs and Alternatives Analysis	\$2,092,480	\$142,479	\$1,950,001
31	Kowalski	Instream Flow Decision Support System	\$64,362	\$6,506	\$57,856
32	Kowalski	Litigation Fund	\$3,467,997	\$678,134	\$2,789,863
33	Kowalski	Lower So Platte Water Mgmt & Storage Site	\$500,000	\$0	\$500,000
34	Kowalski	Project Imaging System	\$138,974	\$19,884	\$119,090
35	Kowalski	Purgatoire River Channel Capacity-Improve	\$25,000	\$0	\$25,000
36	Kowalski	So Platte Groundwater Level Data Collection	\$500,000	\$115,542	\$384,458
37	Kowalski	South Platte River Alluvial Aquifer Study	\$910,900	\$360,514	\$550,386
38	Kowalski	South Platte River Decision Support System	\$1,688,411	\$28,320	\$1,660,091
39	Kowalski	Tamarisk Control Cost-Sharing Program	\$1,193,391	\$145,887	\$1,047,504
40	Kowalski	Water Planning Studies	\$115,593	\$8,320	\$107,273
41	Kowalski	Wild and Scenic Rivers Fund	\$499,822	\$109,088	\$390,734
42	Kowalski	Wild and Scenic Rivers Study	\$11,473	\$0	\$11,473
43	Mitchell	Alt Ag Water Transfer Sustainability Prgm	\$2,256,798	\$585,559	\$1,671,239
44	Mitchell	Climate Change Effects on Co Water Res	\$27,048	\$0	\$27,048
45	Mitchell	Co Drought Mitig & Response Plan Imp	\$77,798	\$33,580	\$44,218
46	Mitchell	Drought Mitigation Planning Technical Asst	\$52,316	\$34,320	\$17,996
47	Mitchell	Water Conservation Data Tracking Project	\$200,000	\$25,515	\$174,485
48	Russell	Closed Basin	<u>\$175,389</u>	<u>\$0</u>	<u>\$175,389</u>
<b>Total Balances for Non-Reimbursable Investments</b>			<u>\$60,128,750</u>	<u>\$29,848,594</u>	<u>\$30,280,156</u>

**Details of the Status of the above Projects are as follows:****1. Acquisitions of Water for Instream Flow**

Authorization: HB 08-1346

Water Source: Statewide Streams

Location: Statewide

Sponsor: CWCBC

Project Type: Water Acquisitions

Project Manager: Linda Bassi

Beneficiary: Statewide Water Users

In Fiscal Year 2012-2013, CWCBC did not spend any money from this funding source. CWCBC and the Colorado Water Trust recently executed a Master Task Order Contract under which the Trust will perform tasks related to the instream flow water acquisition program, including, but not limited to, preliminary evaluation of whether water rights offered for instream flow use will provide benefits to the ISF Program; hydrologic, engineering, and other technical analyses required to change acquired water rights to instream flow use; and economic valuation of water rights. The contract, which is in the state approval process, is for a term of up to 5 years and for an amount not to exceed \$500,000.

**2. CWCBC Stream Gaging**

Authorization: SB 01-157 to HB 06-1313

Water Source: Statewide Streams

Location: Statewide

Sponsor: CWCBC

Project Type: Stream Gaging

Project Manager: Jeff Baessler

Beneficiary: CWCBC Staff, and  
Statewide Water Users

As the state's water planning agency, CWCB relies upon gages operated by the Division of Water Resources (DWR), United States Geological Survey (USGS) and private entities in order to meet the needs of its mission critical program areas, including Water Supply Planning, Compact Protection, Decision Support System Development, Floodplain Management and Stream and Lake Protection. However, CWCB gaging needs are often different from those of the DWR and USGS. Although many existing gages provide needed data, the DWR's mission is to administer the state's water rights, while the USGS collects data for cooperating entities as well as for long-term scientific record purposes. As a result, stream gages are not always located where CWCB needs them, nor are they necessarily designed to fit CWCB data collection parameters. Implementation of this project enables CWCB to strengthen its cooperative efforts with the DWR and USGS to expand, refurbish, redesign and install new gages as well as develop new cost effective strategies to obtain data that will benefit both CWCB and statewide stakeholder interests.

In Fiscal Year 2012-2013, CWCB funded the following projects:

- USGS Gage ID 09152500: Gunnison River Near Grand Junction, Co - gage station operation and maintenance (O&M). This gage, which is of critical importance to CWCB programs and other stakeholders, was in danger of being temporarily discontinued by USGS. Although this gage is typically completely funded by USGS as part of the National Streamflow Information Program, federal sequestration of funds would have resulted in a discontinuation of the gage, which has been operating continuously since 1916. It is anticipated that NSIP funds will become available in 2014.
- Satellite telemetry and stream gaging equipment was purchased from Campbell Scientific, Sutron, and Rickly Hydrologic to support multiple existing and future gage installations throughout the state.
- Funding was provided to the Roaring Fork Conservancy to assist in the collection of stream flow and meteorological data in the Crystal River Watershed in Division 5.
- Cottonwood Creek below Road 361 near Buena Vista, CO - staff gage O&M. CWCB is cooperating with USGS on this staff gage which is used for ISF administration.

3. Instream Flow Engineering and Technical Support Services

Authorization: SB 05-084 to HB 10-1250

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Technical Services

Managers: Jeff Baessler

Beneficiary: Statewide

Funding is to provide temporary help with technical support for ongoing instream flow (ISF) projects, ISF recommendation investigations and to acquire as-needed engineering services for legal protection of ISF water rights. This fiscal year, a portion of the funding was used for engineering services related to the change of the acquired Breem Ditch water rights on Washington Gulch to ISF use.

4. Satellite Monitoring System – State Engineer's Office

Authorization: HB 93-1273 to SB 12S-002

Water Source: Statewide Streams

Location: Statewide

Sponsor: State Engineer's Office

Project Type: Stream Gaging

Managers: Jeff Baessler / Tom Ley

Beneficiary: Statewide Water Users

The Satellite Monitoring System includes funding for maintenance and refurbishment of the State Engineer's Satellite Monitoring System. The State Engineer is continuing to make progress in its replacement of out-dated data collection platforms and satellite telemetry transmission components and refurbishment/renovation of gaging stations. The funds support the continued operation of over 520 stream gages throughout the state.



In addition, CWCB and DWR coordinated to make \$38,000 of carry-over funds, originally authorized for use in Fiscal Year 2012-2013, immediately available for the emergency installation of four new stream gages for monitoring associated with the West Fork Complex Fire.

5. Stream Gage Fund

Authorization: SB 07-122

Water Source: Statewide Streams

Location: Statewide

Sponsor: CWCB

Project Type: Stream Gaging

Project Manager: Jeff Baessler

Beneficiary: Statewide Water Users

CWCB has begun to utilize this funding, in addition to the funds authorized under CWCB's Projects Bills in 2001 through 2006, for the installation of new CWCB gages around the state (see item 2 above). Although no expenditures were made from this fund last year, Staff has identified and is working on scoping out equipment needs and collaborative efforts with USGS and/or DWR on multiple gaging projects throughout the state. In addition, staff continues to work with various stakeholders to identify and plan for future stream gage installations that will aid Board programs with an objective of prioritizing gages that benefit multiple CWCB sections and stakeholders. When possible, matching funds or in-kind services will be requested from participating stakeholders. Funding from item 2 above (CWCB Stream Gaging) and these funds (Stream Gage Fund) will be utilized for these projects with the goal of first depleting funds still available under item 2.

6. Chatfield Reservoir Reallocation Project

Authorization: HB 08-1346

Water Source: South Platte River

Location: 10 miles South of Denver

Sponsor: CWCB, U.S. Army Corps of Engineers

Project Type: Study

Project Manager: Tom Browning

Beneficiary: Statewide Water Users

The purpose of this authorized funding is to act as "seed money" for implementation of the Chatfield Reservoir Reallocation Project (Project) in partnership with local water providers. The seed money may assist, to some extent, with finalization of FR/EIS study tasks, but more importantly will assist with the implementation phase of the Project. Implementation, pending Project approval by the federal government, will consist of contracting with the U.S. Army Corps of Engineers for water supply storage space in the reservoir and the completion of recreation modifications and environmental mitigation. This funding has been largely untapped for the time being so that it can be used in the most meaningful and efficient manner when appropriate. The funds are still greatly needed and will be encumbered appropriately for the intended purposes.

7. Chatfield Reservoir Reallocation Project Implementation

Authorization: SB 12S-002

Water Source: South Platte River

Location: 10 miles South of Denver

Sponsor: CWCB, U.S. Army Corps of Engineers

Project Type: Study

Project Manager: Tom Browning

Beneficiary: Statewide Water Users

This project provides for the first installment of the Chatfield Orphan Shares. Disbursement of the funds is pending a Federal Record of Decision and a signed water storage agreement with the U. S. Corps of Engineers.

8. Chatfield Reservoir Reallocation Study

Authorization: SB 97-008 to SB 07-122

Water Source: South Platte River

Location: 10 miles South of Denver

Sponsor: CWCB, U.S. Army Corps of Engineers

Project Type: Reservoir Supply Study

Project Manager: Tom Browning

Beneficiary: Colorado Water Users

This project involves a partnership with the U. S. Army Corps of Engineers (Corps) and local water providers to complete a Feasibility Report and Environmental Impact Study (FR/EIS) regarding the reallocation of up to 20,600 acre-feet of existing storages space in Chatfield Reservoir. The reallocation study is investigating several alternatives including impacts, mitigation needs, and costs. The Corps has determined that 20,600 AF of flood control space can be converted to multi-use space with no reduction in downstream flood control benefits.

The current water providers involved in the FR/EIS include the South Metro Water Supply Authority, Centennial W&S District, Town of Castle Rock, Roxborough Metro District, Castle Pines Metro District, Castle Pines North Metro District, Perry Park Country Club, Center of Colorado WCD, Mt. Carbon Metro District, City of Aurora, Central Colorado WCD, Western Mutual Ditch Company, and Denver Botanic Gardens. A large coalition of stakeholders has been assembled to allow for input on all aspects of the proposed reallocation, and affected DNR agencies are working closely together as well.

9. Water Adaptation Partnership Projects

Authorization: SB 09-125

Water Source: N/A

Location: Statewide

Project Type: Planning

Managers: Becky Mitchell/

Ray Alvarado / Michelle Garrison /

Joe Busto

Beneficiary: Statewide

Sponsor: CWCB

One of the goals of the Colorado Climate Action Plan is to prepare the state to adapt to unavoidable climate changes. To help meet that goal, CWCB has partnered with multiple state agencies and stakeholders to undertake Water Adaptation Projects to increase understanding of climate change; communicate the information to those who need to plan and implement adaptation strategies and build partnerships that will produce the models and data upon which actions are based. CWCB is working to implement its strategy in the following areas: enhance our climate observation systems with the goal of identifying long-term trends; scrutinize and detect bias in climate change models; fund partnerships to ensure new data is useful at a local planning level; adapt information for use in the Colorado Decision Support System; utilize information to meet federal drought planning requirements; and to improve forecasting and projections.

In FY2013/2014 this fund will also be utilized to update the “Climate Change in Colorado” report with the latest IPCC CMIP 5 data sets. This report will inform both the Colorado Water Plan as well as a statewide Climate Change Vulnerability Assessment that will be spearheaded by the Colorado Energy Office.

10. Water Conservation Public Awareness Research Study

Authorization: SB 07-122

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Research Study

Project Manager: Tom Browning

Beneficiary: Statewide Water Users

A comprehensive Statewide Water Conservation Public Awareness Research Study will be conducted to pinpoint critical attitudes and behaviors among Coloradans and those affected by recommended water efficiency best management practices. A combination of qualitative and quantitative research will be conducted strategically to benchmark statewide attitudes and perceptions about water efficiency. Since attitudes, microclimates, and water supplies vary in Colorado, the research studies will be segmented geographically according to the nine HB 05-1177 roundtable basins around the State. The water awareness strategy will focus on three research target groups for all regions, regulated community, stakeholders, and citizens. The research strategy would include a quantitative and qualitative survey, in-depth interviews, and focus groups.

BBC Research, supported by GBSM and various stakeholders, was selected and is under contract to conduct telephone surveys for this effort.

The study findings may be used as benchmarks for a future Water Conservation Public Awareness and Education Campaign, and as a resource from which to develop the most effective messaging and umbrella brand for the State's potential future water awareness and conservation efforts. Potential statewide marketing objectives include educating individual Coloradans of the importance of water conservation to their future as residents of the State and to complement and reinforce other local and regional water conservation public-awareness programs and activities; striving to make all Coloradans aware that their natural water resources are limited and not immune to the consequences of their individual behaviors. Similar research in other states indicates that the more people know about their water the more likely they are to conserve it.

11. Water Education Foundation

Authorization: HB 02-1152

Water Source: N/A

Location: Denver

Sponsor: Colorado Foundation for Water Education

Project Type: Education

Project Manager: Tom Browning

Beneficiary: Statewide

Each year, CWCB staff executes a grant contract with the Colorado Foundation for Water Education (Foundation) to provide funds for the on-going operation of the Foundation. CWCB Board members annually review and accept the Foundation's annual work plan in May. More information is available at [www.cfwe.org](http://www.cfwe.org) and [www.cwcb.state.co.us](http://www.cwcb.state.co.us).

12. Provision of Legal Support and Funding for Litigation Involving the Abandonment List

Authorization: SB 12S-002

Water Source: Statewide

Location: Statewide

Sponsor: Division of Water Resources

Project Type: Legal Support

Managers: Tim Feehan / Mike Sullivan

Beneficiary: Statewide

The State Engineer's Office continues to work with the Attorney General's Office in reviewing and providing necessary engineering support for water right abandonment cases. This effort will continue over the next five years or more. The \$100,000 funding for this effort is sufficient to meet the current litigation need.

13. Purchase of Colorado's Allotment of Animas-La Plata Project Water

Authorization: HB 10-1250

Water Source: Animas River

Location: Durango, CO

Sponsor: CWCB / USBR

Project Type: Water Purchase

Managers: Tim Feehan / Ted Kowalski

Beneficiary: State of Colorado

The Purchase Contract between the State of Colorado and the Bureau of Reclamation was fully executed on June 19, 2012. Pursuant to the terms of the Contract, the State made its initial \$12 million payment to the Bureau on June 20, 2012. In April of 2013, the State made an additional payment of approximately \$23,850,000, leaving a remaining principal balance of approximately \$850,000 for the State to purchase its full project water allocation of 10,460 acre feet.

Staff is currently working with BOR to finalize the dollar amount to be credited to the State for the 46 acres parcel donated by the State to BOR to construct the Durango Pumping Plant (DPP). The appraisal process for this parcel to determine value is currently in process and is anticipated to be complete by November 2013. The actual value established for this parcel will be credited towards the State's unpaid principal balance.



**14. Rio Grande Cooperative Project**

Authorization: SB 12S-002

Water Source: Rio Grande River

Location: Rio Grande County

Sponsor: CWCB / SLVID

Project Type: Reservoir Rehabilitation

Project Manager: Tim Feehan

Beneficiary: Rio Grande Water Users

The CWCB 2012 Projects Bill authorized and appropriated a \$5,000,000 grant to the San Luis Irrigation District for the rehabilitation of the Rio Grande Reservoir. The State has executed five contracts towards this effort, involving project design, project management, embankment material processing, federal land exchange, and seepage control. Total funds encumbered to-date is approximately \$4,000,000. The 2012 Projects Bill also authorized \$15,000,000 for additional rehabilitation work at Reservoir Grande Reservoir, to be reviewed by the CWCB Board to determine how much would be disbursed as a grant and how much as a loan. The remaining \$15,000,000 will be presented to the Board at the November 2013 or the January 2014 Board meeting for final review

**15. Rocky Mountain Fen Demonstration Project**

Authorization: SB 07-122

Water Source: N/A

Location: N/A

Sponsor: Colorado Mountain College

City of Aurora, Pueblo Board of Water Works

Project Type: Demonstration Project

Project Manager: Tim Feehan

Beneficiary: Statewide

Funding was awarded to the Colorado Mountain College-Timberline Campus for a demonstration project designed to explore the extent to which the harvest and transplantation of slow-forming organic peat soils, from an area of potential impact to specifically prepared receiver sites, can serve as mitigation of impacts to fens. The funding for the project is dependent on the project sponsor acquiring a 50/50 cost share from other outside sources to match the CWCB funds. To date, no matching funds have been acquired by the project sponsor, and therefore, no Construction Fund monies have been expended on this project. This project will most likely be de-authorized.

**16. Water Resource Information Center and Data Harvesting Initiative**

Authorization: SB 09-125

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Water Information

Project Manager: Tim Feehan

Beneficiary: Statewide

In 2009, the General Assembly authorized \$550,000 under SB09-125, Section 13, for CWCB to: (1) adopt and implement a standard for sharing/harvesting data among document management systems; (2) integrate the CWCB's and Colorado State University's (CSU) systems using the above standard; (3) join with other interested water entities who want to share their water-related information; and (4) provide funding for furthering CSU's digitization of documents, such as the Delph Carpenter collection.

The accomplishments of the CWCB Water Resource Information Center and Data Harvesting Initiative during Fiscal Year 2012 concentrated on appropriating money to CSU's digitization efforts, which included scanning, indexing and making available (through the CSU Water Resources Archive) papers, maps and slides from the Groundwater Data Collection, the David McComb Big Thompson Flood Collection, and from Delph E. Carpenter and Family, Rollin Q. Tenney, W.D. Farr, Louis G. Carpenter, Everett V. Richardson, Maurice L. Albertson, James R. Meiman, Robert E. Glover, James L. Ogilvie, Maurice L. Albertson, Edwin W. Mogren, Harvey Johnson, and/or the records of the Plumb and Daily Ditch Company, the Iliff and Platte Valley Ditch Company and Wright Water Engineers.

**17. Chatfield Channel Improvement**

Authorization: SB 79-537 – SB 90-41

Water Source: South Platte River

Location: Downstream of Chatfield Reservoir

Sponsor: CWCB

Project Type: Flood Control

Managers: Kevin Houck / Joe Busto

Beneficiary: CWCB – Metro Area

The original 1979 authorization listed was the original state and federal funding left over from the land purchase and construction of the Chatfield Downstream Channel Improvement Project (Project). The Project was to straighten the South Platte River to accommodate up to 5,000 CFS and once constructed, it was turned over to CWCB as the non-federal project sponsor. At the request of Littleton, the area between C470 and Mineral was excluded from the flood control project. This was once known as Littleton Floodplain Park and is now known as South Platte Park and is a great urban naturalist and educational amenity. The next reach is the CWCB/Corps Project that is the South Platte River from Mineral Avenue to Hampden Avenue. Annually the Flood Readiness Branch of the Omaha Corps of Engineers grades the Project. In recent years a South Platte Working group was convened with Englewood, Littleton, Sheridan, Arapahoe County and the Urban drainage and Flood Control District. The focus is to develop a multi-purpose project that includes flood control, recreation, and environmental benefits. Staff and UDFCD are working through design and planning documents and approvals with the U.S. Army Corps of Engineers. If approved and funded the annual O&M Manual from 1990 will need to be updated to accommodate the change in the way the river is managed. Recently one half mile of river in South Platte Park was rechanneled and in the CWCB reach we are planning for a park, trail, and repair and enhancement of two failed boat chutes near Oxford Avenue. About \$18,000 was spent this year on noxious weed removal and \$50,000 towards planning with Merrick and Company formerly McLaughlin White Water through agreements with UDFCD.

**18. Colorado Floodplain Map Modernization**

Authorization: SB 03-110 to SB 12S-002

Water Source: N/A

Location: Statewide

Sponsor: Statewide

Project Type: Floodplain Delineation

Project Manager: Thuy Patton

Beneficiary: CWCB – Statewide

This program is a federally funded but state-managed floodplain mapping program, with matching funding from state and local governments. Floodplain maps originally prepared as part of the Federal Emergency Management Agency's (FEMA's) National Flood Insurance Program (NFIP) are being updated and revised. The new maps are digital and are prepared in a countywide format. Beginning in Fiscal Year 2004, CWCB worked directly with FEMA and the affected local governments to start the process of updating and revising old Flood Insurance Rate Maps into the new digital format. Counties, which include the county and its incorporated communities, that have been completed or are in progress are: Boulder, Garfield, Pitkin, Fremont, Clear Creek, Pueblo, Weld, Summit, El Paso, Rio Grande, Montrose, Morgan, Prowers, Logan, Chaffee, Prowers, La Plata, Montezuma, Mesa, Delta, Elbert, Fremont, Las Animas, Larimer, Teller, Clear Creek, Park, and Gunnison Counties and the City of Boulder.

Starting in 2009 the program has transitioned to Risk Map, which will incorporate additional products to assist local communities in conveying flood risk hazards within their communities. FEMA floodplain maps will continue to be updated based on a watershed level instead of a countywide level.

The Denver Metropolitan area counties are all managed by the Urban Drainage and Flood Control District with technical and financial assistance from CWCB. All other studies are being managed by CWCB staff with consulting assistance from two engineering teams that were selected and contracted for this work.

The CWCB Map Modernization Fund has been instrumental for leveraging local and state funds to maximize federal grants to the program. Typically the local funding is contributed to CWCB at some point during the project duration. The local contribution is reflected as a donation as listed above. Colorado is seen as a floodplain mapping leader within FEMA Region VIII and within the country as a whole. The remaining balance does not reflect approximately \$597,760 that has been encumbered for projects currently in progress. The encumbered balance was transferred to Fiscal Year 2013 as these are multiple year projects. In addition, many projects have been placed on hold this past year due to new FEMA levee guidance which is scheduled for release at the end of the calendar year.

19. Fish and Wildlife Resources Fund

Authorization: SB 01-157, HB 02-1152

Water Source: Various

Location: Statewide

Sponsor: CWCB

Project Type: Grant Program

Managers: Ted Kowalski / Chris Sturm

Beneficiary: Statewide

In 1987, HB 87-1158 created the Fish and Wildlife Resources Account, also known as the "Mitigation" Account, in the Construction Fund. Procedures for obtaining mitigation grant approvals are found under section 37-60-122.2, CRS. SB 01-157 transferred the account into a special fund. Expenditures from the fund in Fiscal Year 2013 were to the Platte River Recovery Implementation Program. In addition, expenditures were made to the Fountain Creek Diversion Dam Fish Passage Design, sponsored by Colorado Springs Utilities. The design was completed \$11,378 under budget.

20. Flood and Drought Response Fund

Authorization: SB 01-157 to SB 12S-002

Water Source: All Colorado Streams

Location: Statewide

Sponsor: CWCB

Project Type: Response to Flood & Drought

Managers: Kevin Houck/Taryn Finnessey

Beneficiary: CWCB - Statewide

The Flood and Drought Response Fund (Fund) provides CWCB with opportunities to participate in flood and drought preparedness, response and recovery activities throughout Colorado. The Fund supports five elements of the program, which are Flood and Drought Forecasting and Preparation, Aerial Photography of Flooded Areas, Flood Documentation and Identification of Specific Hazards, Evaluations and Revisions of Floodplain Designations, and Development of Disaster and Recovery Mitigation Plans.

The Board has previously approved the staff's program mission and guidelines for the administration of the Fund. The program is administrated jointly by the CWCB's Flood Protection Section and the Water Supply Section and is fully operational at this time. In fact, four out of the five program elements were invoked and utilized during Fiscal Year 2013 with successful results. These activities included snowmelt flood preparation activities, long-term weather outlooks for flood and drought purposes, on the ground drought response, post-flood documentation for various flooding events, and floodplain evaluations to assess CWCB designated floodplains for validity. A portion of this work also proved to be valuable for the Colorado Flood Task Force and Water Availability Task Force.

Monies from this account were used for post-wildfire flood mitigation purposes for a number of the large wildfires that occurred in both 2012 and 2013. These include the High Park, Waldo Canyon, Black Forest, Royal Gorge, East Peak, and West Fork Complex Fires. Specific tasks include post-wildfire floodplain identification, identification of mitigation alternatives, flood warning, and public outreach.

It is important to note that a substantial amount of the funds in this account are intentionally held back each year in order to have funding available to respond to a serious flood and drought



disaster. When no disaster occurs, as was the case this fiscal year, a portion of the funds go unspent. It is important to emphasize that this does not mean that the funds are not needed; merely, it is the nature of how unpredictable natural hazards can be and that this fund provides flexibility to respond accordingly. The result is that occasionally significant monies are still remaining at the close of the period in years with low occurrence of flood and drought.

21. National Oceanic and Atmospheric Administration Statewide Precipitation Atlas Update

Authorization: SB 09-125

Water Source: N/A

Location: Statewide

Sponsor: CWCB / NOAA

Project Type: Scientific Study

Project Manager: Kevin Houck

Beneficiary: Statewide Water Users

Funds have been allocated for the purposes of partnering with the National Oceanic and Atmospheric Administration (NOAA) to update design rainfall information for the State of Colorado. Currently effective design rainfall information is over 35 years old, and using information from that age potentially results in overdesigning or underdesigning flood control and water supply facilities. Updates of the Rainfall Atlas will result in more current, proper design of these facilities from this point forward. NOAA is currently updating rainfall information around the country in groups of states. Colorado will be updated with a group of six Midwestern states. This account serves as the non-federal portion of this project. After lengthy contract negotiations, a contract with NOAA was signed on June 24, 2011. The project was completed in 2013 and the project now has a zero balance. Results of this project were presented to the CWCB Board at the May 2013 meeting in Grand Junction.

22. Watershed Restoration

Authorization: HB 06-1313 to SB 12S-002

Water Source: Various

Location: Statewide

Sponsor: CWCB

Project Type: Watershed Restoration

Project Manager: Chris Sturm

Beneficiary: Watershed Interests

The grant funding has been allocated to projects through the CWCB Colorado Watershed Restoration Program January 2009 - 2012 competitive grant cycles. The Lake Fork Gunnison Floodplain/Channel Design is complete, and it is the final project from the 2009 grant cycle. Active projects from the January 2010 grant cycle include South Platte River restoration design below Chatfield and Coal Creek channel stabilization in Crested Butte. Completed projects from the January 2011 grant cycle include channel stabilization on Trail Creek (Lake George) and Kerber Creek (San Luis Valley). Active projects from the 2011 grant cycle include North Massey Draw (Ken Caryl Ranch), Union Creek (Leadville), ditch diversion reconstruction (Relief Ditch) on the Gunnison River (upstream of Delta) and river restoration planning for Lightner Creek (Durango). Active projects from the January 2012 grant cycle include channel/floodplain restoration on Tarryall Creek, channel stabilization on the North Fork Gunnison River (Paonia), Phase II gully stabilization in the Campbell Valley (N. of Fort Collins), fen restoration near Ophir Pass (Silverton), a watershed assessment for the South Fork Arkansas River, and forest road restoration/erosion control in the Coal Creek Basin (Redstone).

Special allocations for the Waldo Canyon and High Park Fire Assessments totaled \$350,000. The Waldo Canyon Assessment is complete.

The dates for the 2013 and subsequent year grant cycles have changed. Grant applications are now due on September 30, 2013. This has created a lag in the program, and staff anticipates a larger than normal grant allocation for FY 2013-2014.

23. Weather Modification Program

Authorization: HB 04-1221 to SB 12S-002

Water Source: N/A

Project Type: Cost Share Grants

Location: Denver  
Sponsor: CWCB

Manager: Joe Busto  
Beneficiary: Statewide

This account houses funding from five states annually and the reporting on this program can be complicated since we partner to provide grants and technical assistance and we work more on a water year basis rather than a state fiscal year basis. New Mexico provided \$25,000, the Lower Basin States NV, CA, and AZ provided \$150,000 and the CWCB had \$175,000 for a total budget of \$350,000. Staff spent funding down from all sources to less than \$2,000. Grants for operations to six target areas, funding to design a less expensive style of remote generator, a radiometer lease for March to track cloud water in Gunnison, assistance with developing target/control reporting for all programs that yielded 1-7% increases estimated as required by new WM Rules, support for the five imported high elevation high seeding rate generators, and a study of snow data and its relevance to two types of seeding at four mountain passes yielded that there is less seeding potential in November and March for silver iodide which should help us refine operations. Also a seeding unit was combined and deployed at the Cedaredge water treatment plant that uses propane seeding until minus 5 Celsius and then uses Silver seeding for colder temperatures in an attempt to modify seeding operations for warming climate and increase the window of opportunity in the months of November, March, and April to have the ability to seed snowy periods of warmer storms in those months. The remake of Colorado equipment and programs has led to interest by the nine states on the Cloud Seeding Council and a tour of operations at the Grand Mesa is scheduled for mid September with CWCB staff and the City of Grand Junction as the local hosts.

24. Arkansas River Basin Decision Support System Feasibility Study and Phase 1 Implementation

Authorization: SB 07-122, HB 11-1274

Water Source: Statewide Streams

Location: Statewide

Sponsor: CWCB

Project Type: Decision Support System

Project Manager: Andy Moore

Beneficiary: Statewide Water Users

With \$200,000 authorized in SB 07-122, the feasibility study began in February 2010, and the final report was completed in December 2011. At the July 2011 Board Meeting, the feasibility study results were presented, and the plan for implementation of the ArkDSS was approved by the Board. \$500,000 for implementation of Phase 1 of ArkDSS was authorized in HB 11-1274, and \$250,000 was authorized in SB 12-S002. Work has begun on several aspects of ArkDSS, with coordination with several Roundtable projects and DWR Division 2 work, and a gage was installed on Fountain Creek. Requests for Proposals for more tasks will be released in the near future.

25. Arkansas River Surface Water Rules Technical and Financial Assistance

Authorization: SB 09-125

Water Source: Arkansas River

Location: Arkansas River Basin

Sponsor: CWCB

Project Type: Technical Assistance

Project Manager: Steve Miller

Beneficiary: Local Water Users

This project was authorized to offer technical assistance to entities complying with the State Engineer's Office (SEO) proposed Surface Water Irrigation Efficiency Improvement Rules. The Lower Arkansas Valley Water Conservancy District (LAVWCD) agreed to provide a basinwide compliance plan. In Phase I approximately \$100,000 was used to examine the basic feasibility of a compliance plan. In Phase II for approximately \$125,000 design and submission of the initial compliance plan was accomplished. The project is now essentially completed with the remaining grant funds used to assist the LAVWCD in acquiring replacement water supplies to cover sprinkler depletions. Final project accounting and payment is in process and will be completed by September 2013.

26. Colorado River Compact – State Water Right Administration Issues and Options Study

Authorization: HB 08-1346

Water Source: Colorado River

Project Type: Study

Location: Colorado River Basin  
Sponsor: CWCB

Project Manager: Michelle Garrison  
Beneficiary: Colorado River Compact

This project is a technical study to: 1) investigate and understand the amounts, locations and types of use of Colorado River and tributary water within the State in the Colorado River Basin in order to more fully understand the State's use of its allocations under the Colorado River Compact and Upper Colorado River Basin Compact, 2) develop and evaluate options to avoid, minimize or delay any curtailment of uses of Colorado River and tributary water in Colorado to meet the Upper Division States' non-depletion obligation under Art. III of the Colorado River Compact, and 3) identify, develop and evaluate approaches to curtailing water uses in Colorado, if curtailments are ever legally required to comply with Art. III of the Colorado River Compact; and to develop approaches to implement those curtailments in a way that will allow the maximum use of Colorado's allocations under the Colorado River Compact and Upper Colorado River Basin Compact and do so as equitably as possible.

Michelle Garrison, CWCB, and Mike Sullivan, Deputy State Engineer, serve as co-leads for the project along with Karen Kwon and Shanti Rosset O'Donovan, Attorney General's Office.

The initial data gathering and analysis is nearly complete. Current work is focused on exploring options for ensuring future compact compliance.

27. Colorado Flood Decision Support System

Authorization: SB 07-122 to HB 08-1346

Water Source: Statewide Streams

Location: Statewide

Sponsor: CWCB

Project Type: Decision Support System

Managers: Ray Alvarado/Kevin Houck

Beneficiary: Statewide Water Users

The work on the FloodDSS was completed in 2011 and the website went public in May 2011. The remaining funds will be used to enhance or support this website if needed.

28. Colorado River Augmentation Project Development

Authorization: HB 08-1346

Water Source: Colorado River

Location: Colorado River Basin

Sponsor: CWCB/ Seven Basin States

Project Type: Study

Project Manager: Ted Kowalski

Beneficiary: Colorado River Compact

The seven Colorado River Basin States (States) have been investigating potential ways to augment and increase the water supply of the Colorado River for several years. In January 2010, the Bureau of Reclamation awarded the States a \$1 million grant through the Basin Study Program, under the auspices of the Water Smart Program. The States provided a \$1 million match under that application. This study's focus was on identifying the current and projected water supply and demand throughout the entire Colorado River Basin and adjacent areas of the seven States that receive Colorado River water up to the year 2060. The general focus of the Study included a comprehensive review, evaluation and characterization of current and long-term water supply and demands, and identification and quantification of future augmentation needs and recommended options to address these needs. Both consumptive and non-consumptive uses associated with Colorado River water were examined. A review and analysis of the known and potential effects of drought, and climate change on the Colorado River and their implications on current and future water supplies and associated uses in the Basin were completed. Strategies were developed and refined as needed to move forward on any needed augmentation project for the Basin. The estimated total cost of the Study originally was between \$2 and \$3 million depending on the final scope, but the total final cost was closer to \$5 million. The seven basin states and the U.S Bureau of Reclamation (Reclamation) shared the costs of the study. This work began in February 2010, and continued through the end of 2012. Colorado has spent \$75,000 and the remaining funds will be disbursed, as needed, within the next year as we commence with implementation phases.



29. Colorado River Delta in Mexico Consultation

Authorization: HB 02-1152, HB 08-1346

Water Source: Colorado River and Tributaries

Location: Seven Colorado River Basin States  
and the Republic of Mexico

Sponsor: CWCB

Project Type: Compact Consultation

Project Manager: Ted Kowalski

Beneficiary: State of Colorado, Colorado  
River Basin States, and the Republic of  
Mexico

These funds were initially authorized for the CWCB staff and Colorado's Upper Colorado River Compact Commissioner to participate in the investigation of issues pursuant to Minute 306 of the *1944 Treaty between the United States and Mexico Concerning the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande* to assure that such investigations and any solutions that might be offered to comply with Minute 306 do not interfere with or otherwise jeopardize the terms of the Colorado River and Upper Colorado River Compacts. In addition, these funds were authorized to support the work between the United States and Mexico, who initiated a bi-national conversation about opportunities for bi-national cooperation on water projects that will have bi-national benefits. This effort resulted in the adoption of Minutes 316, 317, 318, and 319 over the last several years. These funds are being used for assistance associated with this bi-national process, and for travel and other incidental costs associated with implementation of this work.

30. Colorado Water Needs and Alternatives Analysis (Colorado River Water Availability Study)

Authorization: SB 07-122 to SB 12S-002

Water Source: Colorado River and its Tributaries

Location: Statewide

Sponsor: CWCB

Project Type: Water Availability Analysis

Project Manager: Ray Alvarado

Beneficiary: Statewide Water Users

Since the completion of Phase 1 of the study the Board approved the allocation of an additional \$2 million for the next phase of the study. CWCB staff is working with the Basin Roundtables to integrate the CRWAS into their basin implementation plans. One aspect of the second phase of CRWAS is the updating of alternative hydrology due to climate changes. A \$150,000 contract has been awarded to update the alternative hydrology with the new global climate modeling, CIMP5.

31. Instream Flow Decision Support System

Authorization: SB 03-110

Water Source: Statewide Streams

Location: Statewide

Sponsor: CWCB

Project Type: Decision Support System

Managers: Ray Alvarado / Jeff Baessler

Beneficiary: CWCB Staff, and  
Statewide Water Users

Work began in June 2013 on an update to the ISFDSS. A contractor has been hired to update the program to be compatible with current operating systems and GIS software. Work is proceeding on schedule.

32. Litigation Fund

Authorization: HB 95-1155 to HB 11-1274

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Legal Services

Managers: Ted Kowalski / Steve Miller

Beneficiary: CWCB Staff, and  
Statewide Water Users

Each year, CWCB staff reports to the Board and the General Assembly about the status of the fund, including all expenditures from the fund. For more information, please refer to the litigation account agenda item, which the Staff reports on each spring. In addition, the Board has authorized additional amounts that are not reflected in the ending balance but will be disbursed in the current fiscal year.

33. Lower South Platte Water Management and Storage Sites Investigation and Sustain Study

Authorization: HB 00-1419, SB 01-157

Water Source: South Platte River

Location: Logan and Sedgwick

Sponsor: CWCB

Project Type: Multi-Use Water Planning

Project Manager: Suzanne Sellers

Beneficiary: Statewide or Individual

Water User Group depending on project characteristics/operating rules

In the summer of 2000, the Colorado Water Conservation Board (CWCB), acting through the Water Supply Protection Section, completed a Reconnaissance Level Study of Water Management and Storage Sites in the lower South Platte River. The initial results of the study indicated several potential projects, which warranted future investigation and the CWCB authorized funding to conduct a feasibility level study of these “preferred alternative(s)”, and if warranted, to complete an engineering design of the selected alternative(s).

The overall purpose of the project is to identify water management and storage options in the lower South Platte River that could facilitate Colorado’s management of South Platte flows, including: 1) coordination with ground water recharge projects for in-state beneficial uses, water rights administration and South Platte River Compact administration; and 2) providing benefits for biological species of concern in Colorado and for participation in the Platte River Recovery Implementation Program.

Shortly after CWCB’s authorization of the project, staff and management were approached by representatives of the Ground Water Appropriators of the South Platte (GASP), one of the potential beneficiaries of a future project, and were asked to delay the feasibility study because of a pending water right filing. The sensitivity of the water right filing and GASP’s desire to implement one of the alternatives identified in the reconnaissance study lead staff and management to conclude that it would be prudent to delay implementation of the feasibility study.

Significant changes to the State Engineers authority to administer ground water diversion (Senate Bill 73) have dramatically changed water management in the South Platte River. While GASP was successful in acquiring land for one of the physical storage sites, they have experienced significant impacts from S.B. 73. As a result, GASP is no longer a viable entity. Former members of GASP and other water management interests have formed the Ovid Reservoir Company, but it is uncertain whether the new company will be able to complete the project. A feasibility study was completed for the reservoir site in December of 2011. The results of this study show that the reservoir is technically feasible and that several potential benefits exist for the project that warrants Colorado being a participant in the development of the project. The location of the reservoir site continues to offer potential advantages to address water user and endangered species issues/needs. Additional study for the reservoir will be required, including groundwater modeling, easement and river access analysis, and conveyance options for delivery to the reservoir.

Staff will continue to coordinate with the CWCB’s Board member from the South Platte Basin as to how best to proceed in the use of these funds. Given the complexity of the project, Staff recommends that the current authorization remain in place to allow coordination with the Ovid Reservoir Company for future work associated with the potential reservoir.

**34. CWCB – Imaging System Project**

Authorization: SB 99-173 to SB 05-084

Water Source: N/A

Location: Denver

Sponsor: CWCB

Project Type: Imaging System

Project Manager: Ray Alvarado

Beneficiary: CWCB

In 1999, the General Assembly authorized \$270,000 under SB99-173, Section 8, for the CWCB's participation in the Department of Natural Resource's Electronic Document Imaging System, which corresponds with the statewide transition to electronic imaging of documents. CWCB's purpose of acquiring an imaging system was (1) to make information easily accessible to staff and the public, and (2) to minimize the amount of office space required to store paper records.

The expenditure associated with the CWCB Imaging System Project during Fiscal Year 2013 concentrated on system operating and maintenance.

**35. Purgatoire River Channel Capacity and Improvement Study**

Authorization: HB 08-1346

Water Source: Purgatoire River

Location: Trinidad Dam

Sponsor: CWCB/US Army Corps of Engineers

Purgatoire River WCD (PRWCD)

Project Type: Study

Project Manager: Steve Miller

Beneficiary: PRWCD Water Users

This project involved two phases with the PRWCD as the lead sponsor. In Phase 1, \$25,000 was used to determine the volume of reservoir flood releases that could be safely passed through the PRWCD service area and to identify remedial actions that could improve channel capacity. It was determined that the channel was not as degraded as originally feared and flows as high as 5,000 cfs could be routed through the district with minimal risk of damages.

Phase 2 funds were initially intended to be used to mitigate serious capacity problems that might be identified in Phase 1. With the minimal flood hazard risk found in Phase 1, it was determined to use the remaining funds for riparian restoration efforts in the modeled reaches of the Purgatoire River which will provide conveyance improvements at lower flows. CWCB entered into an agreement with the PRWCD to assist in channel improvements in the vicinity of the City of Trinidad using the Phase 2 funds. The project, with multiple sponsors and participants, will remove minor channel and streambank obstructions and includes native re-vegetation and improved river corridor access. The District is still pursuing these activities and coordinating with the Corps of Engineers for necessary review and permits. Due to continuing permitting issues these funds were not utilized in FY 2012-2013. If these issues cannot be resolved in FY 2013-2014, the funds will be de-obligated, and the PRWCD will be invited to reapply for a channel enhancement grant through the Board's watershed restoration programs at such time as all necessary environmental clearance has been obtained.

**36. South Platte Groundwater Level Data Collection and Analysis**

Authorization: SB 12S-002

Water Source: N/A

Location: South Platte Basin

Sponsor: CWCB

Project Type: Data Collection/Planning

Project Manager: Andy Moore

Beneficiary: Local Water Users

This is a cooperative effort with the Division of Water Resources in the collection of alluvial water level data in the Sterling and LaSalle/Gilcrest areas. This was in response to reported high groundwater levels in those areas in 2011. Continuous water level monitoring equipment has been installed in 20 observation wells with the results being available online. This is a two year effort with an independent analysis and interpretation of the potential causal relationships, leading to recommendations. The SPDSS alluvial groundwater model will also be extended to include data up to 2012. This data extension work will be contracted out by October 2013.



37. South Platte River Alluvial Aquifer Study

Authorization: HB 12-1278

Water Source: South Platte River

Location: South Platte Basin

Sponsor: General Assembly /CWCB/CWI

Project Type: Study

Project Manager: Ray Alvarado

Beneficiary: Local Water Users

In 2012, the Colorado Legislature passed HB 12-1278, which commissions a study of the interaction of the South Platte alluvial aquifer by the Colorado Water Institute at Colorado State University. This is an independent study which will report to the legislature by December 31, 2013.

38. South Platte River Decision Support System

Authorization: SB 99-173 to SB 09-125

Water Source: South Platte River

Location: South Platte Basin

Sponsor: CWCB

Project Type: Decision Support System

Project Manager: Ray Alvarado

Beneficiary: Statewide Water Users

The alluvial groundwater model for the basin was completed with the technical report being available on the CWCB website. The historical calibration of the lower South Platte surface water model identified several issues that are currently being addressed. The St. Vrain, Big Thompson, Boulder Creek and the Denver metro area river basins are currently under contract to start the surface water modeling effort. It is anticipated that this modeling effort will be completed by March 2015.

39. Tamarisk Control Cost-Sharing Program

Authorization: HB 08-1346 to SB 12S-002

Water Source: Various

Location: Various

Sponsor: CWCB

Project Type: Phreatophyte Control

Managers: Steve Miller / Chris Sturm

Beneficiary: Statewide Water Users

This activity combines two distinct \$1 million authorizations from the Construction Fund. HB08-1346 created what is now called the Phase 1 TRO Grant Program. Grants ranging from \$10,000 to \$100,000 were awarded to the entities in the following table in 2009. All but the Ute Mountain Tribe's project have been completed and paid in full. The Ute's will complete their project by December 31, 2013. Any remaining funds from the 2008 authorization have been rolled into the 2012 program described below. Grant recipients have a continuing obligation to provide monitoring and maintenance reports for the next 3 years with the first submission due by December 31, 2013. Staff will be posting the final reports from each project on the Board's website.

Phase 1 TRO Control Project Grants					
App #	Applicant	Project Name	Grant Amount	Final Payment	Percent Complete
NW2	City of Grand Junction	Watson Island Complex Restoration	\$100,000	\$99,970	100
SE3	Branson-Trinchera Cons. Dist.	Purgatoire River Watershed Riparian Restoration	\$100,000	\$100,000	100
NE4	Yuma County Pest Control Dist.	Republican River Watershed Riparian Restoration	\$100,000	\$99,897	100
SW3	The Nature Conservancy	Dolores Restoration	\$100,000	\$100,000	100
SW1	Ute Mountain Ute Tribe	Ute Mountain Tribe TRO	\$75,000	Est. \$75,000	75
SE4	Sangre de Cristo RC&D	Upper Arkansas Watershed Riparian Restoration	\$75,000	\$54,370	100

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NE1	Boulder County Parks & Open Space	Boulder County Collaborative TRO	\$85,000	\$85,000	100
NW1	Delta County Noxious Weed Program	Delta County River Restoration	\$40,000	\$39,960	100
NW3	Western Colorado Conservation Corps	Island Acres TRO	\$10,000	\$10,000	100
NE2	Sedgwick County Cons. Dist.	TRO Removal, Wildlife Approval	\$10,000	\$10,000	100
SW2	Dolores Cons. Dist.	McElmo Creek Tamarisk Removal	\$25,000	\$25,000	100
NE3	Weld County Weed Div.	TRO - Cache La Poudre River	\$30,000	\$30,000	100
SE1	SE Colorado WCD	ARKWIPP Riparian Restoration	\$150,000	\$123,004	100
Subtotal control projects = \$852,201					
Science & Administration Projects					
Tamarisk Coalition		2010 Grand Junction Symposium	\$5,000	\$5,000	100
Tamarisk Coalition		Reno Research Symposium	\$5,000	\$5,000	100
Tamarisk Coalition		Technical services for grant administration	\$25,000	\$25,000	100
Sangre de Cristo RC&D		CSU Feasibility/Monitoring Study	\$25,000	\$24,812	100
Tamarisk Coalition		Salt Wash Monitoring & Demo	\$25,000	\$25,000	100
CSU Weed Lab		Knapweed strategies for reveg areas	\$15,000	\$15,707	100
Tamarisk Coalition		Arkansas Beetle Monitoring	\$25,000	\$15,000	100
Subtotal science projects = \$125,000					
Phase 1 Program Total Cost = \$977,201					

Senate Bill 12S-002 authorized an additional \$1 million grant program, the Invasive Phreatophyte Control Program, which is now managed by the Watershed and Flood Protection Section. In January 2013, seven applications to the Invasive Phreatophyte Control Program (IPCP) were awarded funding totaling \$499,743. IPCP applicants and funding requests/awards can be seen in the table below. Additionally, The Tamarisk Coalition was awarded \$21,000 for technical assistance related to managing IPCP. Remaining funds will be released in a new grant cycle beginning September 30, 2013.

40. Water Planning Studies

Authorization: SB 99-173, SB 09-125

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Water Planning

Project Manager: Ted Kowalski

Beneficiary: Statewide

The Dolores Water Conservancy District (District), Ute Mountain Ute Tribe (UMUT), and CWCB are performing a joint reconnaissance level study to evaluate potential water supplies to serve the (UMUT). This study includes the Totten Reservoir and the potential new construction of the Plateau Creek Reservoir to store approximately 21,000 AF of water. The study is a cost-share project between all parties. Harris Engineering, Durango, Colorado, was hired to conduct the study and has performed a considerable amount of work to-date. One of the potential water sources for the UMUT was Montezuma Valley Irrigation (MVIC) Company's Class B water under various storage scenarios. Unfortunately, MVIC and the District have recently resolved a lawsuit that was indirectly caused the above water study to be put on-hold. The Study has now been substantially completed; however some of the remaining funding may be made available for implementation. Remaining funds will be used by the Water Supply Planning Section.

**41. Wild and Scenic Rivers Fund**

Authorization: SB 09-125

Water Source: Various

Location: Various

Sponsor: CWCB

Project Type: Study

Project Manager: Suzanne Sellers

Beneficiary: Statewide

Within Colorado, a number of river segments have been classified as eligible for “wild and scenic” designation by various federal agencies and the federal agencies are now considering whether these rivers should be classified as suitable for wild and scenic designation. In response, a number of stakeholder groups have formed to explore alternatives for resource protection that would include wild and scenic designation as well as many other options. These groups exist in the San Juan River Basin, the Dolores River Basin, the Upper Colorado River Basin, and the Lower Colorado River Basin. To date, funds have been used within each of these different basins for facilitators, informational studies, and other operating expenses. In 2009, the General Assembly passed legislation establishing a fund for this project that is automatically refreshed every July 1 up to \$400,000 for work in this regard. This work is ongoing, and will likely continue to use funds for the next several years. Staff will continue to draw down the money in the Wild and Scenic Rivers Study (below) until it is depleted while continuing to tap into the Wild and Scenic Rivers Fund. Since the Wild and Scenic River Study account is nearly depleted, this Wild and Scenic Rivers Fund is needed to fund ongoing work including the implementation of: 1) the Upper Colorado River Wild and Scenic Alternative Management Plan, 2) the San Juan Basin’s basin-wide Regional Discussion, and 3) the Implementation, Monitoring and Evaluation Plan and other work by the Lower Dolores Plan Working Group in the Dolores River Basin.

**42. Wild and Scenic Rivers Study**

Authorization: HB 08-1346

Water Source: Various

Location: Various

Sponsor: CWCB

Project Type: Study

Project Manager: Suzanne Sellers

Beneficiary: Statewide

Within Colorado, a number of river segments have been classified as eligible for “wild and scenic” designation by various federal agencies and the federal agencies are now considering whether these rivers should be classified as suitable for wild and scenic designation. In response, a number of stakeholder groups have formed to explore alternatives for resource protection that would include wild and scenic designation as well as many other options. These groups exist in the San Juan River Basin, the Dolores River Basin, the Upper Colorado River Basin, the Lower Colorado River Basin, and the Gunnison Basin. To date, funds have been used within each of these different basins for facilitators, informational studies, and other operating expenses. In 2009, the General Assembly passed legislation establishing a fund for this project that is automatically refreshed every July 1 up to \$400,000 for work in this regard. This work will likely continue to use funds for the next several years. Staff will draw down the money in this Wild and Scenic Rivers Study account until it is depleted, while also tapping into the Wild and Scenic Rivers Fund (above). Since this Wild and Scenic River Study account is nearly depleted, it is expected that these funds will be used within the next several months to fund ongoing work including the implementation of: 1) the Upper Colorado River Wild and Scenic Alternative Management Plan, 2) the San Juan Basin’s basin-wide Regional Discussion, and 3) the Implementation, Monitoring and Evaluation Plan and other work by the Lower Dolores Plan Working Group in the Dolores River Basin.

**43. South Platte River and Arkansas River Basins Alternative Agriculture Water Transfer Sustainability Grant Program**

Authorization: SB 07-122 to SB 12S-002

Water Source: Statewide

Location: Statewide

Project Type: Alternative Methodologies

Project Manager: Becky Mitchell



Sponsor: CWCB

Beneficiary: All State River Basin Water Users

This grant program focuses on identifying and assisting in the development of agricultural transfer methods (ATM)/programs that reduce consumptive use by reducing the amount of irrigation water applied to the crops, change in the type of crops planted, reducing the number of irrigated acres from historic levels while lessening the impact to rural communities. Several types of agricultural transfers have been proposed as potential alternatives to the traditional agricultural transfers that often result in permanent dry-up of all or a large portion of irrigation systems as a means to obtain additional water supplies for emerging needs. Possible transfer methods include, but are not limited to: 1) interruptible water supply agreements; 2) long-term agricultural land fallowing; 3) water banks; 4) reduced consumptive use through efficiency or cropping changes while maintaining historic return flows; and 5) purchase by end users with leaseback under defined conditions.

The Board approved six grant applications that totaled \$1,500,000 at the May, July and November 2008 CWCB meetings. The Lower Arkansas Valley Water Conservancy District was awarded \$320,000 to assist in funding of the Super Ditch Company's rotational fallowing program. The Parker Water and Sanitation District was awarded \$477,500 to assist in funding of the Lower South Platte Irrigation Research and Demonstration Project. The Farmers Reservoir and Irrigation Company (FRICO) was awarded \$202,500 to assist in funding of the Alternative Water Transfers in the South Platte Basin using the FRICO System Project. CSU Extension Office was awarded \$80,350 to study the effects of fallowing. The Highline Canal Company was awarded \$70,000 to further fallowing lease agreements in their canal system. The Colorado Corn Growers Association was awarded \$349,650 to examine a variety of alternative methods within the South Platte Basin.

Since these projects were awarded their funding, much progress has been made by CWCB and the project sponsors in furthering alternatives to permanent water transfers in Colorado. Through these ATM grant projects, CWCB and others have identified numerous hurdles that must be overcome for these alternative water transfer methods to be successful in Colorado. Specifically, the major hurdles facing the implementation of ATM programs in Colorado include: (1) high transaction costs, (2) ability to transfer a portion of a water right (3) certainty of long-term supplies and (4) water rights administration.

In 2011-2012, the Board approved an additional \$1,482,000 in grants that continued to build upon the recent findings and develop solutions to the major hurdles.

44. Climate Change Effects on Colorado Water Resources Study

Authorization: HB 08-1346

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Study

Project Manager: Taryn Finnessey

Beneficiary: Statewide

Climate change has the potential to greatly impact Colorado's natural resources, including water resources. The Colorado Climate Action Plan laid out a number of goals, two of which included adaptation, and education and outreach. In accordance with these goals, CWCB partnered with a number of Front Range utilities to examine how changes in climate can impact Front Range municipal water resources. This study, "The Joint Front Range Climate Change Vulnerability," was published in spring 2012 by the Water Research Foundation. Additionally, CWCB worked with Western Water Assessment (WWA) and NOAA to produce a synthesis report entitled "Climate Change in Colorado" which was released in October of 2008, and will be updated in FY 13/14 with the latest CMIP 5 data sets. CWCB has also partnered with WWA and NOAA to hold a series of workshops entitled "Dealing with Drought in a Changing Climate" to educate Coloradans on the report findings, CWCB will likely do a similar series of workshops once the new updated report with the most recent data is complete.

**45. Colorado Drought Mitigation and Response Plan Implementation Program**

Authorization: HB 08-1346

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Drought Plan

Project Manager: Taryn Finnessey

Beneficiary: Statewide

In compliance with the Federal Emergency Management Agency (FEMA) requirements, CWCB completed a comprehensive revision to the State Drought Mitigation Response Plan, approved by the CWCB Members, Governor Hickenlooper and FEMA in 2010 and is updating that report in 2013. The plan is on track to be adopted by the board in September 2013. The plan builds on the 2010 plan by recommending a multitude of implementation projects that will bolster the State's drought mitigation and monitoring efforts as well as aid in the local drought planning process. In Fiscal Year 2013, CWCB held a Drought Impacts Tour for policy makers to see firsthand the impacts of drought and help to improve the communication between the producers and policy makers, another tour is scheduled for August 12, 2014 in the Arkansas River Basin which has suffer from exceptional drought for 3 years. . A large statewide drought conference was also held in Fiscal Year 2013 entitled "Building a Drought Resilient Economy Through Innovation" with nearly 200 attendees from the local, state and federal levels the conference received great accolades and was considered a big success.

**46. Drought Mitigation Planning Technical Assistance**

Authorization: SB 07-122

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Tech. Planning Asst.

Project Manager: Taryn Finnessey

Beneficiary: Statewide Water Users

The Drought Mitigation Planning Technical Assistance Program seeks to implement major issues identified in the 2004 and 2007 CWCB-commissioned Drought & Water Supply Assessment Study and the state approved Drought Mitigation and Response Plans. Issues included the need for future drought mitigation planning projects whereby public information and education, as well as technical assistance, in drought planning would be critical in addressing the availability and reliability of water supplies in the future. Among the key recommendations made in these studies is the need for technical support. Over the last three years CWCB has developed a number of resources to provide technical assistance to water providers and local communities in developing their drought plans. These include a drought planning tool box first developed in 2010 and updated in 2013, a Municipal Drought Planning Guidance document and a Sample Municipal Drought Management Plan. A series of workshops teaching providers how to utilize these tools was completed in May and June of 2011. Additional resources will likely be developed following the completion of the 2013 State Drought Mitigation and Response Plan.

**47. Water Conservation Data Tracking Project**

Authorization: HB 11-1274

Water Source: N/A

Location: Statewide

Sponsor: CWCB

Project Type: Research Study

Project Manager: Kevin Reidy

Beneficiary: Statewide Water Users

To better understand Colorado's future water supply needs and options, more local information must be incorporated into demand forecasts. The data tracking portion of this project has begun with the development of the HB10-1051 Water Conservation Data Portal. At present time, CWCB staff is working with Leonard Rice Engineers to verify all the data requirements and functional aspects of the portal. The next step is to build a working website portal that will be ready to view at a workshop for the Water Conservation Technical Advisory Group in September 2013. At that time, various water providers (covered entities) will test the tool for approximately 3-4

months to ensure it operates as intended with full access to the tool scheduled at the beginning of 2014.

48. U.S. Bureau of Reclamation / State Land Board Rights-of-Way – Closed Basin Project

Authorization: SB 79-537, HB 00-1419

Water Source: Closed Basin

Location: San Luis Valley N. of Alamosa

Sponsor: CWCB

Project Type: Right of Way Acquisition

Project Manager: Kirk Russell

Beneficiary: State of Colorado

This project is the acquisition of rights-of-way (ROW) for the Closed Basin Project (Project) in the San Luis Valley. In Fiscal Year 2010, CWCB, the State Land Board and the Bureau of Reclamation (BOR) completed all of the conveyance documents for assigning the easements and ROW in the Project to the BOR. The Project was completed, with the final assignment of the easements and ROW being recorded by the BOR in September 2010. The remaining funds can be returned to the Construction Fund.

***NOTE:*** *Severance Tax Trust Fund Operational Account Project Status begins on the following page.*

**Severance Tax Trust Fund Operational Account**

The following table summarizes the Severance Tax Trust Fund Operational Account projects authorized by the Long Bill and monitored by the Colorado Water Conservation Board Staff during the fiscal year. Details of the projects follow this summary.

<b><u>No.</u></b>	<b><u>Project</u></b>	<b><u>Project Manager</u></b>	<b><u>FY13 Amount</u></b>
<b>Interstate, Federal, and Water Information Programs</b>			
1	Work Related to Recreational Projects	Kowalski	\$ 79,360
2	Arkansas River Mainstem Transit Loss Model Modification	Miller	\$ 25,700
3	Recent Trends in Dust Deposition to Snowpack	Garrison	\$ 50,000
4	Lo Ark Valley Demonstration Recharge Pond	Miller	\$ 60,000
5	South Park Mineral Development Assessment	Moore	\$ 75,000
6	Douglas County Groundwater Resources Series	Moore	\$ 52,000
7	Investigation of Whitewater Parks on Aquatic Resources	Kowalski	\$ 46,000
8	Evaluating SPDSS Groundwater Flow Model	Alvarado / Moore	\$ 50,000
9	CoAgMet Station at the Paradox Salinity Control Unit	Miller	\$ 10,000
10	Upper Arkansas CoAgMet Equipment	Moore	\$ 5,000
11	Gunnison Salinity Study	Miller	\$ 5,000
<b>Finance and Administration Programs</b>			
12	Extreme Precipitation Analysis Tool Software	Mauss	\$ 91,720
13	Bull Creek Reservoir #4 Wetlands Study	Russell	\$ 16,750
14	Inundation Mapping for SEO Projects	Hernandez	\$ 18,000
15	DWR Equipment	Russell	\$ 15,000
<b>Stream and Lake Protection Programs</b>			
16	Case Management and Litigation Support	White	\$ 51,500
17	Effects of Future Water Development in Lo Yampa	Baessler	\$ 60,000
18	Instream Flow Program Outreach and Education	Baessler	\$ 10,600
19	Assessing the Movement of Native Fishes	Bassi	\$ 59,930
<b>Watershed and Flood Protection Programs</b>			
20	Multi-Objective Watershed Restoration Projects	Sturm	\$160,720
21	Flood Mitigation and Project Compliance	Houck	\$ 72,790
22	Colorado Dust on Snow	Busto	\$ 50,000
23	FEMA Coordinator Matching Program	Houck / Prochno	\$ 36,600
<b>Water Supply Planning, Drought, and Conservation Programs</b>			
24	Drought Mitigation and Response Plan Update 2013	Finnessey	\$ 75,000
25	Conservation and Drought Planning Program Mgmt	Finnessey	\$ 3,250
26	CoAgMet Operations and Maintenance	Finnessey	\$ 50,000
27	Co Household Preferences in Water Challenges	Reidy	<u>\$ 37,230</u>
<b>Total Severance Tax Expended for FY 13</b>			<b><u>\$1,267,150</u></b>



**Details of the Grants Provided for the above Projects are as follows:**1. Work Related to Recreational Projects

Water Source: N/A  
 Location: Statewide  
 Sponsor: CWCB

Project Type: Support Services  
 Managers: Ted Kowalski/Suzanne Sellers  
 Beneficiary: Statewide

A portion (\$40,000) of these funds were used for recreational studies related to the Upper Colorado River segments that are being considered for Wild and Scenic designation to assure that recreational boating and recreational fishing information is thorough and accurate. This year's recreation observations and intercept surveys began on April 25th at the Radium, State Bridge and Grizzly sites and will include 9 survey dates through the season.

2. Arkansas River Mainstem Transit Loss Model Modifications

Water Source: Arkansas River  
 Location: SE Colorado  
 Sponsor: CWCB

Project Type: Study  
 Project Manager: Steve Miller  
 Beneficiary: Reservoir Water Users

This project provided \$25,000 of new funding for an update of transit loss / travel time accounting tools previously developed for the Arkansas River between Pueblo Reservoir and the Kansas Stateline also using Board funding. In the update we worked with DWR Division 2 and the Southeastern Colorado Water Conservancy District to make those tools better able to incorporate real time streamflow data and produce results more useful for real time river administration. The updates are complete and the first implementation will be presented to water users at the spring 2014 meeting of the Pueblo Winter Water Program participants.

3. Recent Trends in Dust Deposition to Snowpack in the Rocky Mountains

Water Source: N/A  
 Location: Western Colorado  
 Sponsor: USGS

Project Type: Study  
 Project Manager: Michelle Garrison  
 Beneficiary: Local Water Users

The USGS is conducting this study on the effects of windblown dust deposition on snowpack, including albedo and snowmelt timing, in the Rocky Mountains. Snow samples were collected throughout the winter of 2012/2013. Analysis of snow samples, including dust deposition and snow chemistry, was performed. Modeling and further analysis are currently being conducted. A report will be drafted, peer-reviewed, and completed within a year.

4. Study of Pond Loss on Water Short Canals and Lower Arkansas Valley Demonstration Recharge Pond

Water Source: Arkansas River  
 Location: SE Colorado  
 Sponsor: LAVWCD

Project Type: Study  
 Project Manager: Steve Miller  
 Beneficiary: Sprinkler Irrigators

This project provided \$60,000 to the Lower Arkansas Valley Water Conservancy District to re-initiate a study of pond seepage rates which will be used to establish the appropriate accretion credits under the SEO's surface water irrigation efficiency rules. The Board's funds were used by the LAVWCD to design statistically valid study protocols, purchase meters at approximately 25 sites, and collect first year data of what will be a multi-year study. The required additional years of study will be funded by the LAVWCD from other sources. First year results have been reported to local water users and Division 2.

5. South Park Mineral Development Assessment

Water Source: N/A

Project Type: Study

Location: South Park  
Sponsor: CUSP

Project Manager: Andy Moore  
Beneficiary: Local Water Users

In anticipation of increased mineral development in South Park, the Coalition for the Upper South Platte is developing a baseline monitoring program and analyzing existing conditions related to water quality, subsurface characteristics, and critical natural resource areas. In this part of the project, four monitoring wells were installed to assist in obtaining background groundwater data in South Park.

6. Douglas County Groundwater Resources Series

Water Source: N/A  
Location: Douglas County  
Sponsor: CGS

Project Type: Study  
Project Manager: Andy Moore  
Beneficiary: Local Water Users

This multi-year effort addresses counties where development pressures are currently straining water resources and where comprehensive county-wide assessments have not been done. Douglas County was identified as a priority county for a groundwater assessment. This county is experiencing considerable development pressure that is dependent on groundwater. The proposed assessment will be comprehensive, addressing all aquifer types within the given county. This would include near-surface unconsolidated aquifers and bedrock aquifers as well as crystalline rocks in the highland areas.

7. Investigation of the Effects of Whitewater Parks on Aquatic Resources in Colorado, Year 2

Water Source: N/A  
Location: N/A  
Sponsor: CSU

Project Type: Study  
Managers: Ted Kowalski/Suzanne Sellers  
Beneficiary: CSU

CWCB provided funding for a second year of investigation on the impact of whitewater parks on aquatic resources. CSU will be submitting a report to CWCB that describes the results of the PIT tag study and associated hydraulic measurements. An analysis of the results discussing the impacts whitewater structures appear to be having on aquatic resources have been provided in the report along with practical whitewater park design recommendations.

8. Modeling the Influence of Conjunctive Water Use on Flow Regimes in the South Platte River Basin using the SPDSS Groundwater Flow Model

Water Source: N/A  
Location: N/A  
Sponsor: CSU

Project Type: Study  
Managers: Ray Alvarado / Andy Moore  
Beneficiary: CSU

This is a CSU research project that will focus on the critical linkages between groundwater pumping for irrigation and the coupled groundwater/surface water regimes in the South Platte River Basin. The study will rely on the use of the South Platte Decision Support System (SPDSS) alluvial groundwater flow model. The long-term goal of this project is to provide the Colorado Water Conservation Board (CWCB) with an independent evaluation of the SPDSS groundwater flow model, highlighting model capabilities, strengths and weaknesses. The proposed project will be carried out over three years. Year one of this effort has been completed with the year one technical report being completed.

9. CoAgMet Station at the Paradox Salinity Control Unit

Water Source: N/A  
Location: Paradox Valley, western Montrose County  
Sponsor: US Bureau of Reclamation

Project Type: Equipment purchase  
Project Manager: Steve Miller  
Beneficiary: Colorado R. Salinity Control

In cooperation with CSU's CoAgMet program severance tax funds were used to purchase all necessary equipment for a CoAgMet weather station and regulation evaporation pan to be

located at the USBR's Paradox Valley Colorado River basin Salinity Control Program Facility. The facility intercepts naturally occurring saline brine which would otherwise enter the Dolores River and disposes of it by deep well injection. The injection well has limited remaining life and studies are underway to develop alternate brine disposal alternatives. The CoAgMet and evaporation pan data will be used to evaluate the potential for use of evaporation ponds at Paradox. USBR has agreed to fund station operation during the study period. After the brine alternatives have been developed and implemented the CoAgMet station may continue to be operated as part of the statewide network by other interested parties.

10. Upper Arkansas CoAgMet Equipment

Water Source: N/A

Location: Various

Sponsor: CWCBC

Project Type: Data Collection/Planning

Project Manager: Andy Moore

Beneficiary: Statewide

The Colorado Agricultural Meteorological Network (CoAgMet) is a network of weather stations that provide data necessary for many water resources planning applications in Colorado. These funds were used for the operation and maintenance of four relatively new stations in the Upper Arkansas Basin.

11. Gunnison Salinity Study

Water Source: Gunnison River

Location: Delta County

Sponsor: Gunnison Selenium Management Program

Project Type: Education/Outreach

Project Manager: Steve Miller

Beneficiary: SMP Participants

The SMP is a required element for the continued operation of the Aspinall Unit pursuant to recently completed environmental compliance activities. The Board is a committed partner in the SMP in consideration of the benefits it provides to existing and future water users in the basin. The primary Board funding source to assist in controlling selenium loading has been the Species Conservation Trust Fund, but in this case \$5000 of FY2012-13 severance tax funds were used to pay for the services of SC Environmental. SCE conducted community outreach and education to water users with the goal of increasing voluntary participation in the SMP and related activities underway through the Colorado River Basin Salinity Control Program.

12. Extreme Precipitation Analysis Tool Software Verification Project

Water Source: N/A

Location: Various

Sponsor: DWR

Project Type: Software

Project Manager: Anna Mauss

Beneficiary: Statewide

The original software was developed by HDR Consultants under contract with DWR, in order to develop modern meteorological techniques for evaluating the safe spillway size for High and Significant Hazard dams. The West Slope version of the program was released in September 2006. Later EPAT was released for the entire State, excluding areas below 5,500 feet in elevation east of the Continental Divide, and with a basin area upper limit of 500 square miles. After several years of use, DWR staff has identified areas of concern with EPAT results, especially in areas along Colorado's Front Range. The work completed in FY2012-13 was a software review and documentation phase. This work will lead to further EPAT development. The EPAT software will allow spillways to be optimized for dam safety, resulting in minimizing cost to dam owners.

13. Bull Creek Reservoir #4 Wetlands Study

Water Source: Grand Mesa

Location: Grand Mesa National Forest

Sponsor: BCRC&PC

Project Type: Study

Project Manager: Kirk Russell

Beneficiary: Area Reservoir Owners

This funding is to perform monitoring of the effects of a periodic inundation of wetlands and fens associated within the Bull Creek Reservoir #4 rehabilitation. The information can and will be used to develop future requirements for water projects on the Grand Mesa. The work has been completed for this phase of the project.

14. Inundation Mapping for State Engineer's Office Projects

Water Source: Various

Location: Various

Sponsor: SEO

Project Type: Mapping Study

Managers: Kirk Russell / Jonathan Hernandez

Beneficiary: Local Water Users

These funds were for the preparation of flood inundation mapping for two different entities, totaling three dams. The effort included dam breach modeling to assess the extent of downstream impacts should the dam(s) fail. Deliverables included a letter report for the inundation mapping, digital files of the inundation limits, inundation maps and supporting hydraulic calcs prepared by a licensed professional engineer.

15. DWR Equipment

Water Source: N/A

Location: South Platte Basin

Sponsor: DWR

Project Type: Equipment Purchase

Project Manager: Kirk Russell

Beneficiary: Local Water Users

This project provides meter equipment and field data collection systems/recorders for integration into DWR's databases. The data collected is used by the DWR staff to avoid routine travel to the well sites around the South Platte Basin

16. Case Management and Litigation Support

Water Source: N/A

Location: Denver

Sponsor: CWCB

Project Type: Admin Support

Project Manager: Kaylea White

Beneficiary: Statewide

These funds were used to retain a part-time paralegal to assist the Section with ISF case management, including organizing case files, tracking court deadlines, prioritizing case review, and drafting pleadings, memos, correspondence and other documents as appropriate. The CWCB is a party in approximately 175 active water court cases. In these cases, the Stream and Lake Protection Section staff is responsible for: (1) protecting the CWCB's water rights, (2) obtaining decrees for new ISF water rights; or (3) obtaining decrees for changes of acquired water rights to ISF use. This project enables staff to focus on the substantive aspects of water court cases, and to resolve more cases in a timely manner.

17. Potential Effects of Future Water Development on Streamflow in Lower Yampa River, Phase 2

Water Source: Yampa River

Location: Yampa River Basin

Sponsor: USGS

Project Type: Study

Project Manager: Jeff Baessler

Beneficiary: Statewide Water Users

The lower Yampa River in northwestern Colorado is the largest, relatively unregulated river system in the upper Colorado River basin. Water from the Yampa River basin continues to be sought for a number of municipal, industrial, and energy uses; specifically, development and storage of peak streamflows during the snowmelt-runoff hydrograph. It is anticipated that future water development within the Yampa River Basin above the amount of water development covered under the Upper Colorado River Endangered Fish Recovery Implementation Program and the Programmatic Biological Opinion may require additional National Environmental Policy Act (NEPA) compliance and analysis of the effects of sediment transport on species. It has been shown in previous investigations by Elliott and others (1984) that reductions in peak streamflow magnitude and duration can significantly change the transport and storage of sediments within important reaches of the



Yampa River. This change in transport and storage may lead to changes in channel geometry, riparian vegetation, and aquatic habitat.

The data sets (topographic surveys of the streambed and flood plain, grain-size analysis of streambed sediment, and characterization of streamflow properties such as water-surface elevations and velocity profile) from Phase 1, which was completed in FY 2011, have now been published as a USGS Scientific Investigations Map. In addition, the iRIC (International River Interface Cooperative) two dimensional computational streamflow-hydraulics and sediment transport model flow-scenario calibration and sensitivity analysis will be completed later this Fall. Calibration of the model will involve 14 specific streamflow conditions within the reach (a range from 200 to 26,700 cubic feet per second). For example, base flow conditions will be modeled at flows of: 200; 500; 750; 1,000; and 1,500 cubic feet per second.

A future phase III study would finalize and publish all of the model results and could provide example applications of streamflow model use. One example could be a comparison of water years 2002 and 2011 peak-flow conditions (depth of water, water velocity, flood-plain inundation duration and extent, and sediment-transport conditions). The hydrodynamic model simulations could also be used by stakeholders to understand the potential effects of altered peak streamflow on sediment transport and storage in Deerlodge Park; an important alluvial-park reach of the Yampa River identified by the National Park Service.

18. Instream Flow Outreach and Education

Water Source: N/A  
Location: Denver  
Sponsor: CWCB

Project Type: Education  
Project Manager: Jeff Baessler  
Beneficiary: Statewide

This project is directed at increasing public awareness of new instream flow appropriations and acquisitions. As the Basin Roundtables work to address nonconsumptive needs and formulate Basin implementation plans, additional outreach and education activities can result in as increased collaboration and coordination between various stakeholders with regard to the ISF Program. In FY12-13, this project involved the development and distribution of ISF water rights tabulations, and provided a funding mechanism to aid staff in the increase in travel activities that were necessary.

19. Assessing the Movement of Native Fishes Relative to Temperature and Flow

Water Source: Dolores River  
Location: Dolores River  
Sponsor: Dolores WCD

Project Type: Equipment Purchase  
Project Manager: Linda Bassi  
Beneficiary: Statewide Water Users

These funds were used to purchase and install a PIT (Passive Integrated Transponder) tag array on the Dolores River above the confluence with Disappointment Creek. In conjunction with this installation, all native fish captured during fish surveys will be PIT tagged. The PIT tag array will track the upstream and downstream movement of tagged fishes. The system will be remotely operated and contain solar panels for a power source and a satellite modem to transmit data acquired when a fish swims over the antennas mounted on the bottom of the river channel. It will operate continuously and can track the date, time, and direction of individually tagged fish when they pass over the antenna. Understanding critical periods of native adult and juvenile fish movement relative to flow may allow water managers to prescribe more finely tuned flow recommendations within the constructs of the Dolores Project that can benefit the native fish community. Local stakeholders provided approximately \$30,000 in matching funds for this project, which will inform the work of the Lower Dolores Plan Working Group.

20. Multi-Objective Watershed Restoration Projects

Water Source: Various  
Location: Statewide

Project Type: Restoration Project  
Project Manager: Chris Sturm

Sponsor: CWCB

Beneficiary: Local Water Users

The Multi-Objective Watershed Restoration Project exists to augment funding for the Colorado Watershed Restoration Program (see Construction Fund – Non-reimbursable #22) and the Colorado Healthy Rivers Fund (Tax Check-off Program). It also exists to fund multi-objective projects in watershed protection, flood mitigation, and water supply of special interest to the CWCB, e.g. projects identified in the Non-Consumptive Needs Assessment. Projects funded in FY 12 – 13 include erosion control/channel restoration on Pikes Peak, Fourmile Fire flood mitigation (Boulder County), Uncompahgre River riparian re-vegetation (Ridgway), Swan River channel restoration (nr. Breckenridge), Colorado River watershed assessment (Eagle County), Chico Basin riparian re-vegetation (Arkansas Basin), and diversion dam design on Coal Creek (Crested Butte). Staff strives to support qualifying Multi-Objective Watershed Protection Projects throughout the entire state.

21. Flood Mitigation and Project Compliance

Water Source: N/A

Location: Various

Sponsor: CWCB

Project Type: Planning and Study

Project Manager: Kevin Houck

Beneficiary: CWCB

Funds from this account were used for a number of projects involving both hazard identification and mitigation. Funds were provided to Summit County, Ouray County, Park County, and Teller County to leverage local funds and other state funds to perform an all-hazard mitigation plan to address risks due to flooding and other natural hazards. Funds were also used to analyze the levee structure surrounding the unincorporated town of Elbert and recommend improvements to the structure and changes to the floodplain mapping for the area to more accurately depict the risk associated with the town. Funds were also used in partnership with the Nebraska Community Foundation to analyze various hydroclimatic indices in the North and South Platte River basins for the purposes of early seasonal water supply predictions. Finally, funds were used to produce a post-wildfire flooding and inundation study for the Waldo Canyon burn scar in partnership with El Paso County.

22. Colorado Dust on Snow Program

Water Source: N/A

Location: Statewide

Sponsor: CSAS

Project Type: Planning and Study

Project Manager: Joe Busto

Beneficiary: Statewide Water Users

On behalf of the Colorado water management community, the Center for Snow and Avalanche Studies (CSAS), based in Silverton, conducts the Colorado Dust-on-Snow applied science program (CODOS) at its Senator Beck Basin Study Area at Red Mountain Pass and at ten additional sites located throughout the Colorado mountains. Water Year 2013 combined challenging snowpack monitoring, as conditions rapidly diverged in late winter, with alarmingly intense and prolonged dust-on-snow events. CODOS began publishing internet-based Update products in early winter, in the face of sustained drought, followed by several sets of site-specific reports throughout the prolonged spring, providing the CODOS community with timely analyses and forecasts of dust effects on statewide snowpack conditions, snowmelt timing and rates, and snowmelt runoff behaviors. Additional email products informed the CODOS community of new dust-on-snow research publications and NOAA climate forecast products, and provided imminent dust event Alerts. Our final set of Season Summary reports described snowpacks impacted by extensive, and in some cases record, dust deposition. Snowmelt runoff onset timing varied by region but, once underway, most systems eventually exhibited a compressed, or “flashy” runoff cycle ending with a very rapidly declining descending limb to very low flow levels. Research published this spring has verified what our CODOS log of dust-on-snow events has so strongly suggested – over the past 17 years, dust deposition has increased throughout the western US and western Colorado has seen the largest increases of all. Dust-on-snow persists, and perhaps worsens, as a factor in the Colorado snowpack. CSAS wishes to continue to provide, and improve, these

CODOS products and services in WY 2014. A complete Water Year 2013 Summary Report is presented at: [http://snowstudies.org/dust/SBBSA/summary\\_2013.html](http://snowstudies.org/dust/SBBSA/summary_2013.html).

23. FEMA Coordinator Matching Program

Water Source: N/A  
Location: Various  
Sponsor: CWCB

Project Type: Matching Program  
Managers: Kevin Houck/Jamie Prochno  
Beneficiary: NFIP Interests

These funds are available to match the federal grant (75 federal / 25 non-federal) for the full-time position within the CWCB known as the Community Assistance Program (CAP) coordinator. This position works closely with FEMA and carries out the missions and objectives of the National Flood Insurance Program (NFIP) for Colorado. The CAP position is fully operational at this time and several highly successful workshops have been conducted in addition to the regular programmatic responsibilities and regular coordination with FEMA and local governments

24. Drought Mitigation and Response Plan Update 2013

Water Source: N/A  
Location: N/A  
Sponsor: CWCB

Project Type: Drought Planning  
Project Manager: Taryn Finnessey  
Beneficiary: Statewide

In compliance with the Federal Emergency Management Agency (FEMA) requirements, CWCB completed a comprehensive revision to the State Drought Mitigation Response Plan, approved by the CWCB Members, Governor Hickenlooper and FEMA in 2010 and is updating that report in 2013. The plan is on track to be adopted by the board in September 2013, the Governor later in 2013 and will be submitted to FEMA in January 2014 as part of the State's natural Hazards Mitigation and Response Plan. The plan has been developed using a stakeholder advisory committee and will undergo a 30 day public comment period July 22-August 20, 2013.

25. Conservation and Drought Planning Program Management

Water Source: N/A  
Location: N/A  
Sponsor: CWCB

Project Type: Drought Planning  
Project Manager: Taryn Finnessey  
Beneficiary: Statewide

In response to ongoing and persistent drought conditions the Office of Water Conservation and Drought Planning developed a drought response portal that can be found at [www.CO2H2O.co](http://www.CO2H2O.co). This portal features a searchable database of water providers with water restrictions in 2013 and a drought meter developed by CWCB to provide easily accessible drought information to the public. The meter can also be installed on local provider's websites free of charge. The website/portal creation was a collaborative effort between local water providers, DNR and CWCB.

26. CoAgMet Operations and Maintenance

Water Source: N/A  
Location: N/A  
Sponsor: CSU

Project Type: Planning  
Project Manager: Taryn Finnessey  
Beneficiary: Statewide / CSU

During the 2012-2013 fiscal year this severance tax grant supplemented the needs of the CoAgMet network to ensure functionality as well as making additional upgrades for drought monitoring capabilities. New sensors were purchased to supplement a depleted supply of aging sensors of various types including: temperature/relative humidity probes, pyranometers, anemometers and precipitation gages. The grant also paid for recalibration of sensors so that they could be redeployed into the network with new calibration to ensure data quality. In addition to the normal suite of sensors, soil moisture monitoring sensors as well as upgraded dataloggers to operate those sensors were also purchased using this grant. Funds helped to ensure that CoAgMet is maintained to the highest of standards for data collection and monitoring in Colorado.

**27. Colorado Household Preferences in Meeting Future Water Challenges**

Water Source: N/A

Project Type: Study

Location: N/A

Project Manager: Kevin Reidy

Sponsor: CSU

Beneficiary: CSU

State-of-the-art survey methods were employed to conduct a comprehensive investigation of residential Colorado households' water knowledge, preferences for meeting short term scarcity, addressing long term water development challenges and customer's willingness to pay for water initiatives to meet the municipal gap. More than 2,000 Colorado households were surveyed on their preferences for addressing short and long-term water scarcity issues. The central question of the research was "What are the preferences of Colorado households towards the various alternatives for closing the gap?" The summary of results were 1) After residential indoor water use, agricultural ranked as the highest priority to receive water during periods of drought; 2) In ranking the potential impacts of policies to address long-term water scarcity, households were most concerned about the potential dry-up of agricultural land; indicating they were less opposed to substantial price increases (base charges of \$15-\$30 per month and/or increases in the price of water by 25-50%) and reductions in the "greenness" of their communities (both private and public areas); 3) Households indicated a preference for a portfolio of policies that was relatively balanced in terms of the mix of price and non-price conservation, new supply development and ag-transfers. However, they tended to prefer mixes that were less reliant agricultural transfers.





Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	PM	Actions/Comments/Notes
<b>2013 July Board Approvals</b>									
Gunnison	Delta Conservation District	Curry Easements Woody Invasives Removal Project - West Side of the North Fork of the Gunnison River	Jul-13	\$8,865	\$0	\$8,865	Nonconsumptive		
Gunnison	Elmer L. Ferganchick	Bortia Reservoir Dam Outlet Pipe Rehabilitation	Jul-13	\$54,285	\$0	\$54,285	Agricultural	Jonathan Hem	
Gunnison	Grand Mesa Water Users Association	Replacement of Measuring Devices on Grand Mesa	Jul-13	\$40,000	\$0	\$40,000	Other	Jacob Bornstiel	
Rio Grande	Trout Unlimited	Keiber Creek Restoration Project	Jul-13	\$34,871	\$0	\$34,871	Nonconsumptive		
<b>2013 March Board Approvals</b>									
Arkansas	Southeastern Colorado Water Conservancy District	Arkansas River Basin Study	Mar-13	\$59,600	\$238,400	\$298,000	Other	Andy Moore	
Colorado	Mr. William Grange	Grace and Sheln Diversion Rehabilitation Project (Phase I & II - Alternatives Evaluation & Detailed Design)	Mar-13	\$40,500	\$0	\$40,500	Agricultural	Jacob Bornstiel	
Gunnison	Colorado Open Lands	Lake San Cristobal Inlet Preservation and Fishing Access Project	Mar-13	\$16,700	\$150,300	\$167,000	Nonconsumptive	Kirk Russell	
Rio Grande	Mogote-Northeastern Consolidated Ditch Company	Quantifying Mogote/Romero Flows & Effects on the Conejos System	Mar-13	\$16,700	\$268,300	\$285,000	Agricultural	Greg Johnson	
Rio Grande	SANGRE DE CRISTO ACEQUJA ASSOCIATION	Culebra Watershed Valiejos Ditch Headgate Replacement	Mar-13	\$10,000	\$90,000	\$100,000	Agricultural	Anna Mauss	
Rio Grande	Santa Maria Reservoir Company	SANTA MARIA RESERVOIR SIPHON & CANAL SYSTEM REHABILITATION	Mar-13	\$23,000	\$440,750	\$463,750	Agricultural	Anna Mauss	
South Platte	Ducks Unlimited, Inc.	Prewitt Reservoir Wetland Partnership	Mar-13	\$45,414	\$45,414	\$90,828	Nonconsumptive	Todd Doherty	
Yampa/White	Rout County Conservation District	Armstrong Creek Restoration Project	Mar-13	\$15,000	\$35,000	\$50,000	Nonconsumptive	Chris Sturm	
<b>2013 January Board Approvals</b>									
Arkansas	Purgatoire River Water Conservancy District	Purgatoire River Reach 3 Habitat Improvement Project	Jan-13	\$26,200	\$0	\$26,200		Chris Sturm	
<b>2012 September Board Approvals</b>									
Gunnison	Town of Ridgway	Town of Ridgway Lake Otonowanda Renovation Project	Sep-12	\$60,000	\$540,000	\$600,000	Municipal & Industrial	Kirk Russell	
Rio Grande	Sanchez Ditch & Reservoir Company	Sanchez Reservoir Phase 2 - Outlet Rehabilitation and Gate Tower Replacement	Sep-12	\$55,000	\$859,400	\$914,400	Agricultural	Anna Mauss	
<b>2011 September Board Approvals</b>									
Southwest	Lake Durango Water Authority	Lake Durango Water Authority/ Source Water Infrastructure	Sep-11	\$50,000	\$450,000	\$500,000	Municipal & Industrial	Kirk Russell	\$450K Statewide funds approved - May 11,2011 Board Meeting
<b>2011 July Board Approvals</b>									
Southwest	Pagosa Lake Property Owners Association	Pagosa Lakes Area Village Lake Dam Outlet Pipe Repair Project	Jul-11	\$25,000	\$0	\$25,000	Municipal & Industrial	Kirk Russell	
<b>2011 May Board Approvals</b>									
Colorado	Orchard Mesa Irrigation District	Canal #1 Check Structure Pilot Project at Dalton, Kiefer & Springer Properties	May-11	\$25,212	\$0	\$25,212	Agricultural	Jacob Bornstiel	
<b>2011 March Board Approvals</b>									
Gunnison	Grand Mesa Water Conservancy District, Water Enterprise Fund	The Rehabilitation of Blanche Park Reservoir	Mar-11	\$75,000	\$0	\$75,000	Agricultural	Anna Mauss	Todd Doherty & Jacob Bornstien - Project Managers 7/11/13 Per Peg Mason the applicant/grantee can not accept funds for this grant until Jan 2014 per Mario Trimble, Bond Council.
<b>2010 July Board Approvals</b>									
South Platte	Northern Colorado Water Conservancy District	Data Logger and Telemetry Installation Project	Jul-10	\$46,000	\$0	\$46,000	Agricultural	Ryan Edwards	

## WSRA Open Grant Projects - Board Approved - Not Yet Contracted

Updated 9/5/2013



Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	PM	Actions/Comments/Notes
<b>2010 May Board Approvals</b>									
Gunnison	Lake San Cristobal Water Activity Enterprise (LSCWAC)	Lake San Cristobal Outlet Structure	May-10	\$150,000	\$0	\$150,000	Municipal & Industrial	Kirk Russell	
<b>2009 July Board Approvals</b>									
Southwest	Town of Sawpit	Domestic Water System Construction	Jul-09	\$25,000	\$0	\$25,000	Municipal & Industrial	Anna Mauss	
				\$0	\$0	\$0			
				\$0	\$0	\$0			

WSRA IN PROGRESS PROJECTS



Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date
Arkansas	Colorado State Parks	Helena Diversion Structure/BV Boat Chute Improvement Project	Mar-11	\$35,000	\$290,000	\$325,000	Nonconsumptive	C150507	1/15/14
Arkansas	Lower Arkansas Valley Water Conservancy District	Super Ditch Delivery Engineering	Mar-11	\$0	\$225,837	\$225,837	Agricultural	C150490	12/31/13
Arkansas	City of Trinidad	North Lake Dam Rehabilitation Project	Mar-12	\$12,000	\$727,235	\$739,235	Municipal & Industrial	C150502	12/31/13
Arkansas	El Paso County by its Board of County Commissioners	Groundwater Quality Study - Phase 2 - Upper Black Squirrel Creek Alluvial Aquifer in the Arkansas River Basin	May-12	\$35,000	\$0	\$35,000	Municipal & Industrial	13BBC000018	3/31/15
Arkansas	Cross Creek Metropolitan District	Hale Reservoir Renovation – Final Design & Permitting	Sep-12	\$20,000	\$100,000	\$120,000	Municipal & Industrial	C150504	12/31/13
Arkansas	Pigгах Reservoir and Ditch Company	Mount Pigгах Dam/Wrights Reservoir Outlet Works Rehabilitation	Sep-12	\$25,000	\$136,345	\$161,345	Other	C150505	9/1/14
Arkansas	Upper Arkansas Water Conservancy District	Build, Assess, and Document Accounting and Administration Tools for Lease Following in the Arkansas River Valley	Sep-12	\$20,000	\$39,215	\$59,215	Agricultural	13BBC000017	1/31/15
Arkansas	Colorado Water Institute	Agricultural Economics and Water Resources: Methods, Metrics and Models - A Specialty Workshop	Mar-13	\$9,746	\$0	\$9,746	Education	C13BBC000025	12/31/13
Arkansas	Fountain Creek Watershed Greenway and Flood Control District	Fountain Creek Bank Restoration at the Frost Ranch	Mar-13	\$30,000	\$75,000	\$105,000	Nonconsumptive	150521	6/1/14
Arkansas	Crowley County Board of Commissioners	Ordway Cattle Feeders Water Line Extension, Phase II	Mar-13	\$50,000	\$22,500	\$72,500	Agricultural	C150515	4/16/14
Arkansas	Arkansas Groundwater Users Association (AGUA)	A Multi-Media Program for Reporting Crop and Turf Water Use Estimates from the Colorado Agricultural Meteorological Network (CoAgMet)	Mar-13	\$9,394	\$31,577	\$46,971		13BBC000024	12/31/15
Arkansas	McClave Water Association Inc.	Water Tank Replacement	Jul-13	\$64,300	\$0	\$64,300	Municipal & Industrial	14BBC000006	12/31/13
Arkansas Basin Total Request				\$310,440	\$1,653,709	\$1,964,149			
Number of Projects 12									
Arkansas/South Plate/Metro	Water Environment Research Foundation	Demonstration of Membrane Zero Liquid Discharge Process for Drinking Water Systems	Sep-08	\$25,000	\$700,000	\$725,000	Municipal & Industrial	C150456	9/30/14
Arkansas/South Plate/Metro Basin Total Request				\$25,000	\$700,000	\$725,000			
Number of Projects 1									
Colorado	Basalt Water Conservancy District	Missouri Heights	Sep-07	\$25,000	\$0	\$25,000	Needs Assessment	8000000049	3/31/14
Colorado	Town of Gypsum	L.E.D.E. Ditch and Reservoir Reconstruction	Sep-10	\$50,000	\$175,000	\$225,000	Municipal & Industrial	C150494	12/31/13
Colorado	Mesa Conservation District	Small Acreage Irrigation Audit Program	Mar-11	\$18,273	\$0	\$18,273	Agricultural	12BBC000001	6/30/14
Colorado	Colorado Mesa University	Colorado Water 2012	Jan-12	\$29,700	\$0	\$29,700	Education	12BBC000018	6/30/14
Colorado	Colorado State University	Investigation of Water Savings, Water Quality benefits and Profitability of Sub Surface Drip on Alfalfa in Grand Valley	Mar-12	\$46,894	\$0	\$46,894	Agricultural	12BBC000019	4/30/16
Colorado	Eagle River Watershed Council, Inc.	Colorado River Inventory & Assessment	May-12	\$30,000	\$0	\$30,000	Needs Assessment	13BBC000003	12/31/13
Colorado	Robinson Ditch Company	Robinson Ditch Piping Improvements	Sep-12	\$60,000	\$0	\$60,000	Agricultural	13BBC000014	1/31/15
Colorado	Blue River Watershed Group	Tennille Creek Restoration Project	Sep-12	\$17,500	\$332,500	\$350,000	Nonconsumptive	CC150523	7/31/15
Colorado	Eagle River Watershed Council, Inc.	Colorado River Restoration and Conservation Projects	Sep-12	\$20,000	\$90,000	\$110,000	Nonconsumptive	C150506	6/30/14
Colorado	Roaring Fork Water Conservancy	Crystal River Watershed – Assessment and Design of Restoration Projects	Sep-12	\$15,854	\$288,610	\$304,464	Nonconsumptive	C150520	1/31/17
Colorado	Tamarisk Coalition	Grand Valley Riparian Restoration Collaborative (GVRRC) Project	Sep-12	\$42,726	\$207,274	\$250,000	Nonconsumptive	C150513	1/30/17
Colorado	Grand County	Gore Canyon Whitewater Park at pump-house - Colorado River	Jan-13	\$100,000	\$400,000	\$500,000	Nonconsumptive	C150518	8/31/15
Colorado Basin Total Request				\$455,947	\$1,493,384	\$1,949,331			
Number of Projects 12									
Gunnison	North Fork Water Conservancy District (NFWCD) and Fire Mountain Canal and Reservoir Company (FMCC)	Sedimentation Management Study For Paonia Reservoir - North Fork of the Gunnison	Sep-07	\$79,000	\$230,000	\$309,000	Agricultural	C150414	8/22/13
Gunnison	Gunnison County	75 Ditch Diversion Improvement and Feature Enhancements	May-10	\$46,100	\$0	\$46,100	Nonconsumptive	12BBC000002	6/30/15

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Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date
Gunnison	LeRoux Creek Water Users Association (LCWUA)	Hanson Reservoir Outlet Rehabilitation	Jul-10	\$50,000	\$0	\$50,000	Agricultural	11000000068	6/30/14
Gunnison	Upper Gunnison River Water Conservancy District (UGRWCD)	Blue Mesa Reservoir	Mar-11	\$24,500	\$98,000	\$122,500	NONE	C150497/C150522	12/31/14
Gunnison	Colorado State University	Agricultural Weather Data Delivery Improvements to Uncompaghe Valley Irrigators	Sep-11	\$77,000	\$35,000	\$112,000	Agricultural	C150499	12/31/14
Gunnison	Colorado Mesa University	Gunnison Basin Roundtable Education Program	Mar-12	\$19,750	\$0	\$19,750	Education	121BC000020	6/30/14
Gunnison	Delta Conservation District	North Fork of the Gunnison Invasive Weed Removal	May-12	\$20,000	\$0	\$20,000	Other	131BC000007	12/31/13
Gunnison	Leon Park Reservoir Company	Leon Park Reservoir Dam Outlet Repair	Jul-12	\$31,372	\$0	\$31,372	Agricultural	131BC000022	1/31/14
Gunnison	Lake Fork Water Conservancy District	Henson Creek and Lake Fork Confluence Channel Improvements	Mar-13	\$28,975	\$260,111	\$289,086	Agricultural	C150521	8/26/18
<b>Gunnison Basin Total Request</b>				<b>\$376,697</b>	<b>\$623,111</b>	<b>\$999,808</b>			
<b>Number of Projects</b>				<b>9</b>					
Metro	South Metro Water Supply Authority	Aquifer Recharge Pilot Study	Sep-09	\$0	\$550,000	\$550,000	Municipal & Industrial	C150474	9/15/14
Metro	Douglas County Water Resource Authority	Rotary Sprinkler Nozzle Retrofit	Sep-10	\$0	\$250,000	\$250,000	Municipal & Industrial	C150471	12/31/13
Metro	Rural Water Authority of Douglas County	Rural Douglas County groundwater-level monitoring network	Sep-10	\$28,283	\$84,792	\$113,055	Municipal & Industrial	C150473	12/31/13
<b>Metro Basin Total Request</b>				<b>\$28,283</b>	<b>\$84,792</b>	<b>\$113,055</b>			
<b>Number of Projects</b>				<b>3</b>					
North Platte	USFS	Effects of Mt. pine beetle and forest mgmt on water quantity, quality, and forest recovery N.P. and Upper CO River Basins	Sep-08	\$212,306	\$164,618	\$376,923	Other	C150440	12/31/13
North Platte	Colorado Climate Center--CSU	Monitoring the effects of weather conditions on the evapotranspiration in N.P. Basin	Sep-08	\$50,409	\$50,409	\$100,818	Agricultural	C150438	6/30/14
North Platte	Ducks Unlimited, Inc.	North Park Irrigated Meadow Conservation Program - Phase I	May-10	\$20,000	\$0	\$20,000	Nonconsumptive	10000000126	6/30/14
North Platte	Loban, Hackleman and Olsen LLC	Serena Ditch - Structure for Water Control	Jul-12	\$57,539	\$0	\$57,539		OE131BC000011	12/31/13
North Platte	Greg Ray	Structure for Water Control	May-13	\$41,940	\$0	\$41,940	Agricultural	141BC000001	10/31/14
<b>North Platte Basin Total Request</b>				<b>\$382,194</b>	<b>\$216,027</b>	<b>\$597,220</b>			
<b>Number of Projects</b>				<b>5</b>					
Rio Grande	Lower Willow Creek Restoration Company	Lower Willow Creek Restoration Project	Sep-09	\$50,000	\$200,000	\$250,000	Nonconsumptive	C150467	12/31/14
Rio Grande	Colorado Rio Grande Restoration Foundation	2009 Rio Grande Riparian Stabilization Project - Phase 4	May-10	\$50,000	\$0	\$50,000	Nonconsumptive	C150486	12/31/14
Rio Grande	Colorado Rio Grande Restoration Foundation	McDonald Ditch - Plaza Project - Phase 2	Sep-11	\$20,000	\$275,000	\$295,000	Nonconsumptive	C150492	3/31/15
Rio Grande	Terrace Reservoir Irrigation Company, Inc.	Terrace Reservoir Spillway Replacement	Mar-12	\$75,000	\$1,425,000	\$1,500,000	Agricultural	C150500	12/31/14
Rio Grande	Cornejos Water Conservancy District	Cornejos River System Gauging Stations Project	Mar-12	\$20,000	\$387,280	\$407,280	Agricultural	C150501	6/30/14
Rio Grande	Rio Grande Headwaters Land Trust	Rio Grande Initiative: Haywood Ranch Conservation Easement	Sep-12	\$25,000	\$400,000	\$425,000	Agricultural	C150514	12/31/13
Rio Grande	Rio Grande Watershed Conservation and Education Initiative	The Rio Grande Basin "Narrowing the Gap" for Colorado's Water Future	Mar-13	\$23,500	\$0	\$23,500	Education	131BC000020	6/30/14
Rio Grande	Colorado Potato Administrative Committee (Area II)	Drip Irrigation Field Trial for Sustainable Potato Cropping in the San Luis Valley	May-13	\$40,000	\$0	\$40,000	Agricultural	131BC000026	12/31/13
<b>Rio Grande Basin Total Request</b>				<b>\$303,500</b>	<b>\$2,687,280</b>	<b>\$2,990,780</b>			
<b>Number of Projects</b>				<b>8</b>					
South Platte	Ducks Unlimited, Inc.	Weid County School Dist RE1 Wetland Partnership	Jul-08	\$42,110	\$0	\$42,110	Nonconsumptive	9000000063	12/31/13
South Platte	Ducks Unlimited, Inc.	S.P. Water protection and restoration	Sep-08	\$0	\$825,552	\$825,552	Nonconsumptive	C150432	5/22/14
South Platte	The Nature Conservancy of Colorado	Antikaree River Well retirement program, Republican River basin, CO.	Sep-08	\$19,984	\$79,936	\$99,920	Agricultural	9000000084	3/29/14



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Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date
South Plate	Lower South Plate Water Conservancy District	Lower South Plate Water Cooperative Organizational Analysis	Sep-10	\$60,977	\$200,000	\$260,977	Agricultural	C150476	6/30/14
South Plate	Ducks Unlimited, Inc.	Development of Decision Support Model for Identifying & Ranking Waterflow and Wildlife Related Recharge Projects along the South Plate River	Sep-10	\$0	\$85,421	\$85,421	Nonconsumptive	121BC00023	9/30/13
South Plate	Division of Water Resources	Ranking Waterflow and Wildlife Related Recharge Projects along the South Plate River	Mar-11	\$0	\$200,000	\$200,000	Other	C154209	5/31/14
South Plate	Ducks Unlimited, Inc.	Alluvial Aquifer Accretion/Depletion Analysis Tool	Sep-11	\$35,000	\$30,000	\$65,000	Nonconsumptive	131BC000004	8/31/14
<b>South Plate Basin Total Request</b>				<b>\$158,071</b>	<b>\$1,420,909</b>	<b>\$1,578,980</b>			
<b>Number of Projects</b>									
7									
South Plate/Metro	The Greenway Foundation	Denver South Plate River Implementation Project - Frontier/Overland Final Design	Sep-12	\$200,000	\$300,000	\$500,000	Nonconsumptive	C150509	12/13/13
<b>South Plate/Metro Basin Total Request</b>				<b>\$200,000</b>	<b>\$300,000</b>	<b>\$500,000</b>			
<b>Number of Projects</b>									
1									
Southwest	La Plata Water Conservancy District	La Plata River Water Resources Operations Model	Mar-11	\$0	\$148,823	\$148,823	Agricultural	C150477	12/31/13
Southwest	La Plata Archuleta Water District	Construction of Municipal Water Distribution Pipeline and Related Facilities	Sep-12	\$25,000	\$475,000	\$500,000	Municipal & Industrial	C150517	3/31/14
Southwest	Maneros Conservation District	Maneros River Habitat and Diversion Project - Phase 2	Sep-12	\$20,000	\$99,340	\$119,340	Nonconsumptive	C150511	3/1/15
Southwest	Montezuma Valley Irrigation Company	Improved Water User Conservation, Management and Operations through the Implementation of Water Accounting Software	Sep-12	\$52,500	\$0	\$52,500	Agricultural	131BC000012	12/31/14
Southwest	Red Mesa Dam & Reservoir Company	Red Mesa Dam & Reservoir – Spillway Alternatives Analysis	Sep-12	\$19,400	\$0	\$19,400	Agricultural	131BC000009	9/30/13
Southwest	Aminas Airpark Property Owners Association	Aminas Airpark Water Distribution System	Jan-13	\$20,000	\$0	\$20,000	Municipal & Industrial	131BC000021	12/31/13
Southwest	Aminas Consolidated Ditch Company	Aminas River Diversion Headgate Monitoring Study	Mar-13	\$14,500	\$0	\$14,500	Agricultural	131BC000023	12/31/13
<b>Southwest Basin Total Request</b>				<b>\$151,400</b>	<b>\$723,163</b>	<b>\$874,563</b>			
<b>Number of Projects</b>									
7									
Yampa/White	Town of Yampa	Town of Yampa Water Facilities Plan and storage tank upgrades	Sep-08	\$61,062	\$0	\$61,062	Municipal & Industrial	9000000090	6/30/14
Yampa/White	Bear River Reservoir Company	Bear River Reservoir Seepage Project	Sep-09	\$189,000	\$0	\$189,000	Agricultural	C150469	8/20/15
Yampa/White	Colorado Climate Center–CSU	Improvement of Lysimeter Operations and Consumptive Use Quantification in High-Altitude, Irrigated Meadows in the Yampa /White Basin	Sep-10	\$10,000	\$10,978	\$20,978	Agricultural	11000000058	6/30/15
Yampa/White	Moffat County	Yampa-White Basin Projects and Methods Analysis	Mar-11	\$38,000	\$152,000	\$190,000	Other	C150481	12/31/13
Yampa/White	The Friends of the Yampa	Yampa River Structures Project	Sep-11	\$50,000	\$0	\$50,000	Nonconsumptive	131BC000006	12/31/13
Yampa/White	Town of Rangely	Rangely Irrigation System Master Plan Study	Jan-13	\$12,500	\$0	\$12,500		131BC00000015	12/31/13
Yampa/White	Community Agriculture Alliance, Inc.	Development & Implementation of Water Education & Networking 3 year Program of Discussions, Forums, Workshops Tours	Jul-13	\$30,000	\$0	\$30,000	Education	141BC000008	11/30/15
<b>Yampa/White Basin Total Request</b>				<b>\$390,562</b>	<b>\$162,978</b>	<b>\$553,540</b>			
<b>Number of Projects</b>									
7									

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Basin	Applicant	Name of Water Activity	Meeting	Approved	Approved	Request	Type of Water Activity	Number	Expiration Date	Final Date Closed
Arkansas	Southeastern Colorado Water Activity Enterprise	Arkansas Valley Conduit		\$64,300	\$0	\$64,300	Municipal & Industrial	C150406		
Arkansas	El Paso County Water Authority	Upper Black Squirrel Creek Aquifer Recharge Investigation	Mar-07	\$45,200	\$0	\$45,200	Municipal & Industrial	8000000011		
Arkansas	El Paso County Water Authority	Ground Water Conference	Mar-07	\$24,721	\$0	\$24,721	Education	8000000010	10/10/07	6/30/09
Arkansas	Pueblo and El Paso Counties	Fountain Creek Vision Task Force	May-07	\$75,000	\$0	\$75,000	Needs Assessment	8000000084	6/30/09	6/30/09
Arkansas	Round Mountain Water and Sanitation District	Round Mountain Water & Sanitation District Water System Improvements Project	May-07	\$120,000	\$0	\$120,000	Municipal & Industrial	C150403	9/2/09	9/17/09
Arkansas	Lower Arkansas Valley Water Conservancy District	Rotational Land Following-Water Leasing Program -Lower Arkansas Super Ditch Company	Jan-08	\$150,000	\$0	\$150,000	Agricultural	C150425	6/30/10	5/15/10
Arkansas	Upper Big Sandy Ground Water Management District	Upper Big Sandy Water Balance	Jan-08	\$45,000	\$0	\$45,000	Needs Assessment	8000000100		5/6/09
Arkansas	Southeastern Colorado Water Conservancy District	Model Transfers- Agriculture to Urban, Arkansas Basin	Jan-08	\$23,860	\$0	\$23,860	Agricultural	8000000135		12/1/08
Arkansas	Greater Arkansas River Nature Association	Arkansas Headwaters Diversion Structure Improvement Project Arkansas River Basin	Mar-08	\$0	\$57,955	\$57,955	Nonconsumptive	9000000025		8/31/09
Arkansas	City of Las Animas	City of Las Animas Water System Improvements	Mar-08	\$100,000	\$200,000	\$300,000	Municipal & Industrial	C150424	12/31/09	9/23/09
Arkansas	Colorado State Parks	Colorado State Parks Zebra Mussel Response	Mar-08	\$0	\$1,000,000	\$1,000,000	Other	C150416	6/30/09	6/30/10
Arkansas	Upper Arkansas Water Conservancy District	Telemetry data collection platforms at six reservoirs plus flow control equipment & gauging at six reservoir outlet channels & nine streams with the Upper Ark River basin	Sep-08	\$75,000	\$210,332	\$285,332	Agricultural	C150439	12/31/11	9/7/11
Arkansas	Colorado State University	Geospatial Decision Support System for Integrated Water Management in the Arkansas River Basin	Sep-08	\$100,000	\$500,000	\$600,000	Needs Assessment	C150441	6/30/13	6/30/13
Arkansas	Lower Arkansas Valley Water Conservancy District	John Martin Wetlands & Neenahie Reservoir Nonconsumptive Needs Quantification	May-09	\$148,975	\$0	\$148,975	Needs Assessment	C150457	6/30/12	6/28/12
Arkansas	Upper Arkansas Water Conservancy District	UAWCD Hydrologic Water Balance Study	Sep-09	\$0	\$180,000	\$180,000	Needs Assessment	C150460	6/30/13	9/25/12
Arkansas	City of Pueblo	Bedload/Sediment Collection and Removal Technology - Fountain Creek	Sep-09	\$75,000	\$150,000	\$225,000	Nonconsumptive	C150465	6/30/13	6/30/13
Arkansas	Southeastern Colorado Water Conservancy District	Stakeholder's Cooperative Management Analysis for the Upper Arkansas River Basin	Jul-10	\$33,600	\$0	\$33,600	Nonconsumptive	11000000012	8/31/11	12/31/11
Arkansas	Fountain Creek Watershed Greenway and Flood Control District	Fountain Creek Fish Marking and Monitoring Study	Sep-10	\$7,000	\$28,000	\$35,000	Nonconsumptive	121BC000009	4/1/12	3/29/12
Arkansas	Purgatoire River Water Conservancy District	Trinidad/Purgatoire River Reach 4 Demonstration Project	Jan-11	\$75,000	\$0	\$75,000	Nonconsumptive	11000000131	12/31/12	12/31/12
Arkansas	Southeastern Colorado Water Conservancy District	The use of excess storage capacity in Blue Mesa Reservoir to avoid or reduce the impact of a Colorado River Compact curtailment in Colorado	Mar-11	\$24,500	\$98,000	\$122,500	Municipal & Industrial	C150496	6/30/13	3/7/13
Arkansas	Colorado Foundation for Water Education	Raising Awareness in 2012: A Statewide Celebration of Colorado Water	Mar-11	\$0	\$30,515	\$30,515	Education	11000000113	12/31/12	1/30/12
Arkansas	Sangre de Cristo RC&D Council Inc.	A Multi-Media Program for Reporting Crop and Turf Water Use Estimates from the Colorado Agricultural Meteorological Network (CogMNet)	May-11	\$0	\$0	\$0	Agricultural	121BC000006	6/30/15	
Arkansas	Lower Arkansas Valley Water Conservancy District	Colorado Water 2012	Jan-12	\$6,255	\$0	\$6,255	Education	131BC000005	8/31/12	8/2/12
Arkansas	Lower Arkansas Valley Water Conservancy District	Ag-Municipal Conservation Easement Demonstration	Sep-12	\$54,000	\$216,000	\$270,000	Agricultural	C150512	12/30/12	12/31/12
Arkansas Basin Total Request				\$1,247,411	\$2,670,802	\$3,918,213				
Number of Projects				24						
Arkansas/Colorado/Gunnison/Northern Plate/Rio Grande/Southeast/South Plate/Metro	Pikes Peak Regional Water Authority	Basin Roundtable Project Exploration Committee: Flaming Gorge	Sep-11	\$23,000	\$50,004	\$73,004	Other	131BC0000001	1/31/13	1/31/13
Arkansas/Colorado/Gunnison/Northern Plate/Rio Grande/Southeast/South Plate/Metro				\$23,000	\$50,004	\$73,004				
Number of Projects				1						

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Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date	Final Date Closed
ArkansasMetro	El Paso County Water Authority	Flaming Gorge Project Task Force Assessment	May-10	\$60,000	\$0	\$60,000	Other	110000000008	6/30/11	6/30/11
<b>ArkansasMetro Basin Total Request</b>										
<b>Number of Projects</b>				<b>1</b>						
ArkansasSouth	Pikes Peak Regional Water Authority	Rotating Agricultural Following Public Policy Working Group	Jul-11	\$20,000	\$0	\$20,000	Agricultural	121BC000015	3/31/13	3/31/13
<b>ArkansasSouth Plate Basin Total Request</b>				<b>\$20,000</b>						
<b>Number of Projects</b>				<b>1</b>						
Colorado	Eagle Park Reservoir Company	Engagement of Eagle Park Reservoir		\$100,000	\$400,000	\$500,000	Municipal & Industrial	C150401		
Colorado	Colorado River Water Conservation District	Upper Colorado Endangered Fish Recovery Alternatives Analysis (10.825)	Mar-07	\$0	\$200,000	\$200,000	Nonconsumptive	C150404	6/30/08	6/30/08
Colorado	Southeastern Colorado Water Conservancy District	Non-native Pteridophyte Trees & Mapping Project	Mar-07	\$0	\$0	\$0	Other	80000000005		6/30/09
Colorado	Ruedi Water and Power Authority	Roaring Fork Watershed Assessment	Mar-07	\$40,000	\$0	\$40,000	Nonconsumptive	80000000012	6/30/08	
Colorado	Colorado River Water Conservation District	Upper Colorado Endangered Fish Recovery Alternatives Analysis (10.825)	Mar-07	\$0	\$0	\$0	Other	C150404		
Colorado	Grand County	Vail Ditch Project	Mar-07	\$0	\$1,500,000	\$1,500,000	Agricultural	C150409	6/30/08	6/30/08
Colorado	Bull Creek Reservoir Canal and Power Co.	Bull Creek Reservoir No. 5 Spillway Adequacy Analysis	Sep-07	\$50,000	\$0	\$50,000	Agricultural	80000000039	6/30/10	2/25/09
Colorado	Summit County	Old Dillon Reservoir	Mar-08	\$100,000	\$0	\$100,000	Municipal & Industrial	90000000026	6/30/09	3/2/10
Colorado	Grand County	Fraser Sedimentation Basin	Mar-08	\$60,000	\$127,900	\$187,900	Nonconsumptive	C150449	6/30/12	12/28/11
Colorado	Grand County	Grand County Stream Flow Management Plan	May-08	\$100,000	\$0	\$100,000	Nonconsumptive	C150461	6/30/11	12/6/10
Colorado	Ruedi Water and Power Authority	Roaring Fork Watershed Assessment- Phase 2	May-08	\$40,000	\$0	\$40,000	Nonconsumptive	90000000049	10/1/09	10/1/09
Colorado	West Divide Water Conservancy District	Feasibility and design assessment of off-channel reservoir sites in the Crystal River water shed	Sep-08	\$40,000	\$0	\$40,000	Municipal & Industrial	90000000052	8/31/09	9/2/09
Colorado	Troul Unlimited	Battlement Reservoir #3 Dam reconstruction to enhance recreational & environmental opportunities	Sep-08	\$80,000	\$0	\$80,000	Nonconsumptive	110000000126	12/31/12	12/23/11
Colorado	Northwest Colorado Council of Governments	Colorado Basin Nonconsumptive Needs Quantification	Mar-09	\$315,171	\$0	\$315,171	Needs Assessment	C150451	6/30/12	6/14/12
Colorado	Colorado Foundation for Water Education	Solicitation of Stakeholders input and advice through a Colorado River Basin edition of Headwaters Magazine	Sep-10	\$25,000	\$0	\$25,000	Education	110000000039	6/30/11	6/28/11
Colorado	Grand River Ditch Company	Grand River Ditch Pipeline	Sep-10	\$25,000	\$0	\$25,000	Agricultural	110000000097	6/30/11	6/1/11
Colorado	Blue River Watershed Group	Upper Swan River Restoration Project	Mar-12	\$30,000	\$0	\$30,000	Nonconsumptive	121BC000021	3/30/13	3/29/13
<b>Colorado Basin Total Request</b>				<b>\$1,005,171</b>						
<b>Number of Projects</b>				<b>17</b>						
Colorado/Yampa/White	City of Grand Junction	Energy Development Water Needs Assessment (300,000 Joint Application see Colorado)	Mar-08	\$0	\$300,000	\$300,000	Needs Assessment	C150407	12/31/13	
<b>Colorado/Yampa/White Basin Total Request</b>				<b>\$0</b>						
<b>Number of Projects</b>				<b>1</b>						
Gunnison	Leroux Creek Water Users Association (LCWUA)	Safety and Serviceability Needs Inventory for Reservoirs in the Leroux Creek Drainage Basin	May-07	\$60,000	\$0	\$60,000	Agricultural	80000000008	6/30/11	6/30/11
Gunnison	Town of Orchard City	Orchard City Water Reservoir Project (Task 1-3)	May-07	\$60,000	\$0	\$60,000	Municipal & Industrial	80000000007	6/30/08	
Gunnison	Town of Orchard City	Orchard City Water Reservoir Project (Remaining Tasks)	Sep-07	\$0	\$480,000	\$480,000	Municipal & Industrial	C150410	12/31/08	
Gunnison	Project 7 Water Authority and Uncompahgre Valley Water Users Association	Off-System Raw Water Storage Project 7 Water Authority/Uncompahgre Valley Water Users Association	Sep-07	\$56,700	\$0	\$56,700	Municipal & Industrial	80000000059		
Gunnison	North Fork River Improvement Association	Paonia-Feldman Diversion Reconstruction, North Fork of the Gunnison River (Part 1 and 2)	Sep-07	\$48,000	\$62,700	\$110,700	Agricultural	C150411	12/31/08	
Gunnison	Overland Ditch and Reservoir Company	Overland Reservoir Dam Expansion/Restoration	Sep-07	\$0	\$68,000	\$68,000	Agricultural	80000000038	9/30/12	9/30/12
Gunnison	Upper Gunnison River Water Conservancy District (UGRWCD)	Phase II Engineering for Lake San Cristobal Outlet Modification	Jul-08	\$75,265	\$0	\$75,265	Municipal & Industrial	90000000041	6/30/11	4/8/11
Gunnison	Upper Gunnison River Water Conservancy District (UGRWCD)	Lake San Cristobal Outlet Structure Modification--Phase III	Nov-08	\$0	\$120,960	\$120,960	Municipal & Industrial	C150444A	6/30/11	

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Basin	Applicant	Name of Water Activity	CWCB Meeting	Basin Account Approved	Statewide Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date	Final Date Closed
Gunnison	Town of Ridgway	Ridgway Ditch and Lake Otonamanda Improvement Project	Mar-09	\$109,500	\$0	\$109,500	Municipal & Industrial	C150455	6/30/11	6/30/11
Gunnison	City of Grand Junction Water Enterprise Fund	Juniata Reservoir Spillway Modification	Mar-09	\$97,000	\$0	\$97,000	Municipal & Industrial	9000000088	6/30/10	12/15/09
Gunnison	Painted Sky Resource Conservation and Development Council, Inc.	Hartland Diversion Dam Fish Passage Feasibility Study	May-09	\$22,100	\$0	\$22,100	Nonconsumptive	9000000144	6/30/10	1/25/10
Gunnison	City of Ouray	Development of Augmentation Supplies	May-09	\$50,000	\$0	\$50,000	Municipal & Industrial	10000000041	6/30/11	6/30/11
Gunnison	Valley View Irrigation Association	Valley View Irrigation Improvement	Mar-11	\$0	\$0	\$0	Agricultural	11000000127	12/31/11	7/26/11
Gunnison	Gunnison Gorge Anglers - Trout Unlimited	Relief Ditch Diversion Dam Design	May-11	\$20,650	\$0	\$20,650	Agricultural	121BC0000004	6/30/12	6/30/12
Gunnison	Painted Sky Resource Conservation and Development Council, Inc.	Hartland Diversion Dam — Partial Dam Removal and Stabilization	Sep-11	\$0	\$0	\$0	Nonconsumptive	121BC0000008	3/31/12	3/31/12
Gunnison	Grand Mesa Reservoir Company	Lining Outlet for Grand Mesa Reservoir #6	Nov-11	\$19,840	\$0	\$19,840	Agricultural	121BC0000022	12/31/12	11/13/12
Gunnison	North Delta Irrigation Company	Tunnel Reconstruction Project	Mar-12	\$40,000	\$690,110	\$730,110	Agricultural	C150498	4/1/13	4/1/13
Gunnison	Upper Gunnison Water Conservancy District and Hinsdale County	Lake San Cristobal Controlled Outlet Structure	Jul-13	\$40,000	\$0	\$40,000	Municipal & Industrial	8000000021		
<b>Gunnison Basin Total Request</b>				<b>\$699,055</b>	<b>\$1,421,770</b>	<b>\$2,120,825</b>				
<b>Number of Projects</b>				<b>18</b>						
Metro	The Greenway Foundation	Chaffield Reallocation EIS/FR (South Platte BRT contributing \$27,000)	Mar-07	\$103,000	\$0	\$103,000	Municipal & Industrial			
Metro	East Cherry Creek Valley Water and Sanitation District	Zero Liquid Discharge Pilot Study	Sep-07	\$200,000	\$200,000	\$400,000	Municipal & Industrial	C150412	6/30/11	1/8/09
Metro	Parker Water and Sanitation District	Parker Water & San. & CO. State Univ Joint Project on the Rural/Urban Farm Model	Sep-07	\$150,000	\$0	\$150,000	Municipal & Industrial	C150413	12/31/09	10/2/09
Metro	South Metro Water Supply Authority	South Metro Water Supply Authority - Regional Aquifer Supply Assessment	Jul-08	\$100,540	\$0	\$100,540	Municipal & Industrial	C150430	12/31/09	12/31/10
Metro	The Greenway Foundation	South Platte River Recreation and Habitat Feasibility Study	Sep-08	\$150,000	\$0	\$150,000	Nonconsumptive	C150442	6/30/10	6/30/10
Metro	Douglas County Water Resource Authority	Feasibility Study for Bureau of Reclamation Funding from the National Rural Water Supply Act	Sep-09	\$100,000	\$500,000	\$600,000	Municipal & Industrial	C150470	6/30/13	6/30/13
Metro	Colorado Foundation for Water Education	Educating Denver Metro elected officials and decision makers on solutions-oriented water supply planning	Jan-11	\$14,820	\$0	\$14,820	Education	110000000083	6/30/12	4/30/12
<b>Metro Basin Total Request</b>				<b>\$618,360</b>	<b>\$700,000</b>	<b>\$1,318,360</b>				
<b>Number of Projects</b>				<b>7</b>						
North Platte	Silver Spur Land & Cattle	New Pioneer Ditch Diversion Reconstruction Project	Mar-08	\$116,000	\$0	\$116,000	Agricultural	C150421	12/31/09	
North Platte	Town of Walden	Town of Walden Water Supply Improvement Project	Jul-08	\$385,000	\$0	\$385,000	Municipal & Industrial	C150431A	9/30/11	9/30/11
North Platte	Colorado State University	Identification and assessment of important wetlands in N.P. River watershed	Sep-08	\$86,000	\$86,000	\$182,000	Nonconsumptive	C150433	6/30/10	6/30/10
North Platte	Walden Reservoir Company	Structure for Water Control	Jan-11	\$36,000	\$0	\$36,000	Agricultural	110000000087	11/30/11	11/7/11
North Platte	Colorado Foundation for Water Education	Solicitation of stakeholder input through production of a North Platte Basin education package	Jan-11	\$14,040	\$0	\$14,040	Education	110000000084	6/30/12	6/25/12
North Platte	Jackson County Water Conservancy District	Structures for Water Control: Headgates and Diversion	Sep-11	\$128,828	\$0	\$128,828	Agricultural	C150488	12/31/13	12/10/12
North Platte	Jackson County Water Conservancy District	Structures for Water Control: Headgates and Diversion - Additional Funds Request	May-12	\$55,055	\$0	\$55,055		C150488	12/31/13	12/10/12
<b>North Platte Basin Total Request</b>				<b>\$820,923</b>	<b>\$96,000</b>	<b>\$916,923</b>				
<b>Number of Projects</b>				<b>7</b>						
Rio Grande	El Paso County Water Authority	Alamosa River In-stream Flow Project	Mar-07	\$64,500	\$0	\$64,500	Nonconsumptive	7000000076		6/30/08
Rio Grande	San Luis Valley Irrigation District	Preliminary Design Multi-use Rio Grande Reservoir Rehabilitation and Enlargement	Mar-07	\$0	\$288,000	\$288,000	Agricultural	C150402	6/30/10	6/30/10
Rio Grande	Colorado Rio Grande Restoration Foundation	Rio Grande Basin Conservation Reserve Enhancement Program	May-07	\$36,750	\$0	\$36,750	Agricultural	80000000006		



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Basin	Applicant	Name of Water Activity	CWCB Meeting	Account Approved	Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date	Final Date Closed
Rio Grande	San Luis Valley Resource Conservation and Development Council	Alamosa River Watershed Restoration Project	Sep-07	\$0	\$104,000	\$104,000	Other	C150419		
Rio Grande	Romero Irrigation Company	Romero-Guadalupe Channel Rectification Project	Sep-07	\$83,700	\$0	\$83,700	Agricultural	8000000060		9/17/08
Rio Grande	Rio Grande Headwaters Land Trust	Rio Grande Initiative	Mar-08	\$200,000	\$1,300,000	\$1,500,000	Nonconsumptive	C150420		
Rio Grande	Santa Maria Reservoir Company	Santa Maria and Continental Reservoirs: Rehabilitation and Multiple Use Studies	Sep-08	\$72,000	\$141,700	\$213,700	Agricultural	C150443	6/30/12	6/30/12
Rio Grande	Colorado Rio Grande Restoration Foundation	2008 Rio Grande Riparian Stabilization Project	Sep-08	\$35,000	\$250,000	\$285,000	Nonconsumptive	C150452	12/31/12	12/31/12
Rio Grande	Conejos Water Conservancy District	Platoro Reservoir Restoration	Sep-08	\$50,000	\$200,000	\$250,000	Agricultural	C150448	6/30/11	2/3/11
Rio Grande	Manassa Land and Irrigation Company	Conejos River and North Branch Diversion and Stabilization	Sep-08	\$50,000	\$333,700	\$383,700	Agricultural	C150446	6/30/10	6/30/10
Rio Grande	San Luis Valley Irrigation District	Rio Grande Reservoir Multi-Use Rehabilitation: Refinement and Enhancement of Reservoir Reoperation and Optimization Model	Nov-08	\$100,000	\$0	\$100,000	Agricultural	C150437A	12/31/11	12/21/11
Rio Grande	El Codo Ditch Company	San Antonio River - El Codo Ditch Diversion and Rehabilitation	May-09	\$65,000	\$0	\$65,000	Agricultural	1000000001	12/31/09	12/8/09
Rio Grande	Trinchera Irrigation Company	Sangre de Cristo Trinchera Diversion Canal Restoration	Sep-09	\$50,000	\$200,000	\$250,000	Agricultural	C150458	7/31/11	10/22/10
Rio Grande	Colorado Rio Grande Restoration Foundation	Conservation Reserve CREP Phase II	Sep-09	\$31,500	\$0	\$31,500	Agricultural	10000000056	12/31/12	11/20/12
Rio Grande	Trinchera Irrigation Company	Shortfall Request - Sangre de Cristo Trinchera Diversion Canal Restoration	Jan-10	\$54,000	\$0	\$54,000	Agricultural	C150458	7/31/11	7/31/12
Rio Grande	Rio Grande Watershed Conservation and Education Initiative	Educating Today to Balance Tomorrow's Water Supplies & Needs	May-10	\$25,000	\$0	\$25,000	Education	11000000059	6/30/12	10/17/11
Rio Grande	San Luis Peoples Ditch Company	San Luis Peoples Ditch Upgrade and Rehabilitation Project - Phase I	May-10	\$40,000	\$0	\$40,000	Agricultural	11000000053	6/30/11	9/7/11
Rio Grande	Manassa Land and Irrigation Company	Conejos North Branch Water Conservation and Management	Jan-11	\$75,000	\$0	\$75,000	Agricultural	11000000109	6/30/12	6/25/12
Rio Grande	Colorado Rio Grande Restoration Foundation	The McDonald Ditch and Plaza Project, Phase I Planning	Jan-11	\$40,000	\$0	\$40,000	Agricultural	11000000102	12/31/11	12/22/11
Rio Grande	Rio Grande Headwaters Land Trust	Rio Grande Initiative: North Rio Grande Ranch Conservation Easement	Mar-11	\$15,000	\$55,000	\$70,000	Nonconsumptive	C150489	12/30/11	12/30/11
Rio Grande	Conejos Water Conservancy District	Platoro Reservoir Crest of Dam Repair	Sep-11	\$15,000	\$135,000	\$150,000	Agricultural	C150495	12/31/12	10/20/12
Rio Grande	Sanchez Ditch & Reservoir Company	Sanchez Reservoir Rehabilitation - Phase I Assessment & Upgrade	Sep-11	\$10,000	\$85,000	\$95,000	Agricultural	121BC000013	7/31/12	6/13/12
Rio Grande	Rio Grande Watershed Conservation and Education Initiative	Water 2012: The Rio Grande Basin Partnering for Colorado's Water Future	Nov-11	\$15,600	\$0	\$15,600	Education	121BC000017	12/31/12	12/19/12
Rio Grande	Rio Grande County	Rio Grande County Hydrogeologic Study	Jul-12	\$99,564	\$0	\$99,564	Other	131BC000008	12/31/13	12/31/12
Rio Grande	Colorado Foundation for Water Education	Solicitation of Stakeholders Input & Advice through publication of a Rio Grande Edition of Headwaters Magazine	Jan-13	\$33,237	\$0	\$33,237	Education	131BC000016	10/31/13	6/30/13
Rio Grande Basin Total Request				\$1,260,851	\$3,092,400	\$4,353,251				
Number of Projects				25						
South Platte	The Greenway Foundation	Chaffield Reallocation EIS/SFR (Metro BRT contributing \$103,000)	Mar-07	\$27,000	\$0	\$27,000	Municipal & Industrial			
South Platte	Clear Creek County	Clear Creek Water Banking/High Altitude Storage	May-07	\$52,000	\$0	\$52,000	Municipal & Industrial	C8000000037		
South Platte	District 64 Reservoir Company	Ovid Reservoir Comprehensive Feasibility Study	Sep-07	\$176,000	\$0	\$176,000	Agricultural	C150417	12/31/11	4/13/12
South Platte	Ducks Unlimited, Inc.	Lower South Platte Wetland Initiative Phase I South Platte River, CO	Sep-07	\$0	\$278,476	\$278,476	Nonconsumptive	C150415	7/31/09	7/31/09
South Platte	Northern Colorado Water Conservancy District	Stage Discharge Data Loggers and Telemetry	Jan-08	\$48,800	\$0	\$48,800	Agricultural	80000000120	6/30/11	6/28/11
South Platte	City of Greeley	Halligan Seaman Water Mgmt project share vision planning model	Sep-08	\$25,435	\$76,305	\$101,740	Municipal & Industrial	C150436	6/30/10	6/30/10
South Platte	Ducks Unlimited, Inc.	Central South Platte Wetland Partnership	Mar-09	\$150,000	\$0	\$150,000	Nonconsumptive	C150454	6/30/12	6/30/12

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Basin	Applicant	Name of Water Activity	CWCB Meeting	Account Approved	Amount Approved	Total Request	Type of Water Activity	Number	Project Expiration Date	Final Date Closed
South Platte	Fort Morgan Reservoir and Irrigation Company (FMIRCo)	FMIRCo Recharge & Wetlands Project	Sep-09	\$250,000	\$420,000	\$670,000	Agricultural	C150464	6/30/12	6/27/12
South Platte	Colorado Climate Center--CSU	Colorado Agricultural Meteorological Network (CoAgNet)	Jul-10	\$20,000	\$0	\$20,000	Agricultural	11000000079	6/30/12	6/30/12
South Platte	Colorado Division of Water Resources	Data Logger Installation Project, South Platte River Basin	Mar-13	\$88,958	\$0	\$88,958	Other	C150519	6/30/13	6/30/13
South Platte Basin Total Request				\$838,193	\$774,781	\$1,612,974				
Number of Projects				10						
South Platte/Metro	Clear Creek County	Upper Mountain Counties Water Needs Assessment	May-08	\$174,350	\$0	\$174,350	Needs Assessment	C150429A	6/30/11	12/31/10
South Platte/Metro	Colorado Foundation for Water Education	Solicitation of Stakeholder Input through a South Platte Edition of Headwaters	Jul-08	\$48,057	\$0	\$48,057	Education	9000000019		
South Platte/Metro	Lost Creek Groundwater Management District	Lost Creek Aquifer Recharge and Storage Study	Jan-09	\$160,000	\$0	\$160,000	Municipal & Industrial	C150447	6/30/11	9/27/11
South Platte/Metro	The Greenway Foundation	South Platte River Recreation and Habitat Improvement Preliminary Design	Sep-11	\$50,000	\$200,000	\$250,000	Nonconsumptive	C150493	6/28/13	12/31/12
South Platte/Metro Basin Total Request				\$432,407	\$200,000	\$632,407				
Number of Projects				4						
Southwest	San Juan Water Conservancy District	Dry Gulch Reservoir/San Juan Reservoir Land Acquisition	Mar-07	\$0	\$0	\$0	Municipal & Industrial	C150408		12/17/08
Southwest	Goodman Point Water Association	Goodman Point Water Association Pipeline Environmental Assessment	Mar-07	\$7,700	\$0	\$7,700	Municipal & Industrial	8000000075		7/31/09
Southwest	Mancos Water Conservancy District	Jackson Gulch Reservoir Expansion Project	Jul-07	\$80,000	\$0	\$80,000	Municipal & Industrial	8000000076	6/30/09	6/30/09
Southwest	Goodman Point Water Association	Goodman Point Phase 2	Sep-07	\$20,000	\$120,000	\$140,000	Municipal & Industrial	C150462	6/30/12	3/16/11
Southwest	Bauer Lake Water Company	Bauer Lakes Water Co. Dam Outlet Structure Upgrade	Mar-08	\$40,000	\$0	\$40,000	Agricultural	10000000084	12/31/11	12/28/11
Southwest	La Plata West Water Authority	La Plata West Rural Water Supply System	Mar-08	\$100,000	\$1,000,000	\$1,100,000	Municipal & Industrial	C150422	6/30/09	6/30/09
Southwest	Town of Sawpit	Town of Sawpit Engineering/Planning for Domestic Water System: Southwest Basin	Mar-08	\$25,000	\$0	\$25,000	Municipal & Industrial	90000000006	6/30/09	6/7/10
Southwest	Summit Reservoir and Irrigation Company	MVIC Summit Irrigation Company feasibility study	Sep-08	\$39,300	\$0	\$39,300	Agricultural	90000000085	8/31/10	8/31/10
Southwest	Happy Scenes Water System #1	Water System Well, Treatment System and Distribution Upgrades	Nov-08	\$50,000	\$0	\$50,000	Municipal & Industrial	9000000127	6/30/10	11/17/09
Southwest	La Plata Archuleta Water District	Water System Master Planning	Nov-08	\$100,000	\$0	\$100,000	Municipal & Industrial	9000000112	12/31/09	12/22/09
Southwest	Town of Silverton	Motas Lake Ditch Rehabilitation and Diversion Structures	Jan-09	\$95,000	\$0	\$95,000	Municipal & Industrial	9000000143	12/31/11	11/18/11
Southwest	Lower Blanco Property Owners Association	Lower Blanco River Restoration Project	Mar-09	\$100,000	\$0	\$100,000	Nonconsumptive	C150450	6/30/11	6/30/10
Southwest	Florida Mesa Canal Companies (Florida Canal, Florida Farmers Ditch, Florida Enlargement Ditch, and the Florida Co-operative Ditch Company)	Ditch Loss, Hydropower, and Monitoring Improvement Program	Mar-09	\$100,000	\$0	\$100,000	Agricultural	9000000115	6/30/11	6/30/11
Southwest	Red Mesa Dam & Reservoir Company	Red Mesa Dam Incremental Damage Analysis (IDA) and Emergency Action Plan (EAP)	May-09	\$29,000	\$0	\$29,000	Agricultural	10000000061	6/30/12	6/29/12
Southwest	Park Ditch Company	Park Ditch Improvements	Jul-09	\$85,000	\$0	\$85,000	Agricultural	10000000011	6/30/11	12/9/09
Southwest	La Plata Archuleta Water District	La Plata Archuleta Water District Permitting	Sep-09	\$0	\$400,000	\$400,000	Municipal & Industrial	C150459	6/30/13	10/18/12
Southwest	Lower Blanco Property Owners Association	Lower Blanco River Restoration Project	Sep-09	\$0	\$150,000	\$150,000	Needs Assessment	C150468	6/30/12	12/17/10
Southwest	San Juan Resource Conservation and Development - Animas Watershed Project	Animas River Needs Assessment	Sep-09	\$57,000	\$0	\$57,000	Needs Assessment	110000000028	9/30/12	4/28/11
Southwest	Mancos Conservation District	Mancos River Diversion Project, Phase I	Nov-09	\$24,753	\$0	\$24,753	Nonconsumptive	10000000111	12/30/10	6/7/11
Southwest	Mancos Valley Resources Inc.	Protecting Irrigated Agricultural Lands and Water Rights for Agricultural Production	Nov-09	\$31,500	\$0	\$31,500	Agricultural	100000000125	6/30/12	6/30/12

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Southwest	Florida Mesa Canal Companies (Florida Canal, Florida Farmers Ditch, Florida Enlargement Ditch, and the Florida Co-operative Ditch Company)	Canal Seepage Reduction Project	Nov-09	\$0	\$225,000	\$225,000	Agricultural	C150463	6/30/11	6/30/11
Southwest	Town of Norwood	Raw Water System Update and Future Needs Study	Jan-10	\$58,458	\$0	\$58,458	Municipal & Industrial	100000000085	6/30/11	6/30/11
Southwest	Florida Mesa Canal Companies (Florida Canal, Florida Farmers Ditch, Florida Enlargement Ditch, and the Florida Co-operative Ditch Company)	Canal Seepage Reduction Program	Sep-10	\$0	\$775,000	\$775,000	Agricultural	C150475	6/30/13	6/30/13
Southwest	Dolores Water Conservancy District	Totten Reservoir Hydrographic Survey	Nov-10	\$29,500	\$0	\$29,500	Agricultural	1100000000114	12/31/11	12/28/11
Southwest	San Juan Citizens Alliance	A Way Forward: The Dolores River Below McPhee Reservoir	Nov-10	\$25,000	\$0	\$25,000	Nonconsumptive	121BC0000011	12/31/12	3/16/12
Southwest	Animas La Plata Water Conservancy District	Recreational Plan for Lake Nighthorse	Nov-10	\$25,000	\$0	\$25,000	Nonconsumptive	121BC0000005	12/31/11	10/21/11
Southwest	La Plata River and Cherry Creek Ditch Company	La Plata Cherry Creek Ditch Headgate Improvement Project	Nov-10	\$25,000	\$0	\$25,000	Agricultural	121BC000014	8/31/12	6/11/12
Southwest	Aspen Springs Metro District	Aspen Springs Metro Water Filling Station	Nov-10	\$30,000	\$0	\$30,000	Municipal & Industrial	131BC0000002	7/31/13	6/30/13
Southwest	Montezuma Valley Irrigation Company	Groundhog Reservoir Bathymetric Survey	Mar-11	\$0	\$0	\$0	Agricultural	121BC0000003	6/30/12	6/30/12
Southwest	Town of Rico	Town of Rico Alluvium Pipeline Water Supply Project - Well Drilling and Water Quality Testing	Mar-11	\$20,000	\$80,000	\$100,000	Municipal & Industrial	110000000122	6/30/12	3/16/12
Southwest Basin Total Request				\$1,197,211	\$2,750,000	\$3,947,211				
Number of Projects				30						
Yampa/White	Upper Yampa Water Conservancy District	Morrison Creek Reservoir Feasibility Study	Jul-07	\$49,500	\$0	\$49,500	Municipal & Industrial	80000000058	3/31/08	
Yampa/White	Moffat County	Agricultural Water Needs Assessment	Jan-08	\$0	\$0	\$0	Needs Assessment	C150418	12/31/10	12/31/10
Yampa/White	City of Steamboat Springs	Common Data Repository	Jan-08	\$106,600	\$0	\$106,600	Other	C150423	6/30/10	12/29/10
Yampa/White	Vernillion Ranch	Sparks Reservoir	Jul-08	\$16,000	\$0	\$16,000	Agricultural	90000000039	12/31/08	
Yampa/White	Moffat County	Sandwash basin coalbed methane production depletive effects on water resources	Sep-08	\$20,000	\$98,835	\$118,835	Municipal & Industrial	C150435	6/30/11	6/8/11
Yampa/White	Colorado Foundation for Water Education	Headwaters Magazine - January 2010	Sep-09	\$20,000	\$0	\$20,000	Education	100000000050	6/30/10	6/30/10
Yampa/White	Community Agriculture Alliance, Inc.	Development and Implementation of Water Forums, Workshop, and/or Tours	Sep-09	\$10,000	\$0	\$10,000	Education	100000000046	6/30/11	12/31/10
Yampa/White	Colorado River Water Conservation District	Yellow Jacket Water Storage Feasibility Study	Jan-10	\$220,800	\$0	\$220,800	Agricultural	C150472	6/30/13	
Yampa/White	The Nature Conservancy of Colorado	Yampa White Basin Nonconsumptive Needs Assessment Watershed Flow Evaluation Tool	Jan-10	\$169,002	\$0	\$169,002	Nonconsumptive	C150466	6/30/12	6/30/12
Yampa/White Basin Total Request				\$611,902	\$98,835	\$710,737				