



COLORADO WATER CONSERVATION BOARD

DIRECTOR'S REPORT

September 2015

Interstate Compact Compliance • Watershed Protection • Flood Planning & Mitigation • Stream & Lake Protection
Water Project Loans & Grants • Water Modeling • Conservation & Drought Planning • Water Supply Planning



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

TO: Colorado Water Conservation Board Members

FROM: James Eklund
Erik Skeie

DATE: September 15-17

SUBJECT: Agenda Item 6d, September 2015 CWCB Board Meeting Director's Report

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~INTERSTATE AND FEDERAL~

U.S.-MEXICO, MINUTE 319 IMPLEMENTATION AND FUTURE NEGOTIATIONS— The United States, Mexico, and the Colorado River basin states continue to meet to further the implementation of Minute 319 activities, and to explore the possibility of agreeing to another Minute in the future. The Board will continue to be updated as these conversations develop. (*Ted Kowalski*)

GLEN CANYON DAM ADAPTIVE MANAGEMENT WORK GROUP (“AMWG”) AND TECHNICAL WORK GROUP (TWG) MEETINGS— The Glen Canyon Dam AMWG held its annual summer meeting on August 27-28, 2015 in Tempe, Arizona. At that meeting, the AMWG approved the hydrograph for 2016 and received briefings on the budget and other key resources. In addition, the Bureau of Reclamation (BOR) and the National Park Service (NPS) provided updates about the Draft EIS (DEIS) for the Long Term Experimental and Management Plan (LTEMP). They indicated that they are hopeful to release a public DEIS for the LTEMP by the end of this calendar year. In July, the Department of the Interior named Scott Vanderkoi as the new Chief of the Grand Canyon Research and Monitoring Center (GCRMC). Scott was the acting Chief of the GCRMC, and he has extensive background in fisheries biology. We look forward to working with Scott over the next several years. The next TWG meeting will be held on October 20-21, 2015 in Phoenix, Arizona, where the TWG will discuss fish management issues, the budget, and a possible High Flow Experiment (HFE). (*Ted Kowalski*)

SYSTEM CONSERVATION AGREEMENT (SCA)— In July, the UCRC approved ten SCA projects, five in Colorado and five in Wyoming. The UCRC instructed the UCRC staff to negotiate implementation agreements between the UCRC and the various conserving parties. In August, the UCRC entered into an implementation agreement with the first of the conserving parties. On August 14th, the UCRC issued a joint press release with the CWCBC regarding the SCA, a copy of the press release can be found as General Attachment 3. The UCRC is in the process of negotiating the remaining agreements with the other conserving parties. There will be another round for submitting proposals, and those proposals will be due on November 1, 2015. (*Ted Kowalski*)

~STATEWIDE~

GROUND WATER COMMISSION MEETING— The Ground Water Commission (GWC) held its quarterly meeting on August 21, 2015 in Alamosa, CO. The agenda items included routine reports and a biennial election. Division Engineer Cotton gave a presentation on the impact of Division 3 Well Use Rules. The agenda also included discussion of the formation of a Ground Water Management District in the Upper Crow Creek designated basin and a potential change to the Designated Basin Rules to adjust the nontributary boundaries of the Denver and Laramie-Fox Hills aquifers in certain locations. The Ground Water Commission will hold its next regular meeting on November 20, 2015 in Castle Rock, CO. For more information visit: <http://water.state.co.us/groundwater/CGWC/Pages/default.aspx>. (*Suzanne Sellers*)

~ARKANSAS RIVER BASIN~

ARKANSAS RIVER COMPACT ADMINISTRATION (ARCA) UPDATE— Scott “Lane” Malone was appointed by Governor Hickenlooper as Colorado’s ARCA representative for a term expiring August 16, 2019. Lane will be replacing Colin Thompson, who was originally appointed in 2005. (*Steve Miller*)

~COLORADO RIVER BASIN~

COLORADO RIVER WATER USE— As of August 24, 2015, the Lake Mead water level was at 1078.09 feet with 9.853 million acre-feet (MAF) of storage, or 38% of capacity, while the Lake Powell water level was at 3610.23 feet with 12.753 MAF of storage, or 52% of capacity. Total system active storage as of August 24 was 31.009 MAF, or 52% of capacity, which is 727,000 AF more than one year ago. As of August 18, 2015, the unregulated inflow into Lake Powell for Water Year 2015 is forecast to be 10.335 MAF, which is 95% of average.

2015 Water Use Forecast: As of August 28, the 2015 Reclamation forecast for the Lower Basin states’ consumptive use of Colorado River water is 7.106 MAF, which includes Arizona at 2.587 MAF, California at 4.281 MAF, and Nevada at 0.239 MAF. The forecast for 2015 for California’s agricultural consumptive use of Colorado River water is 3.240 MAF. The Metropolitan Water District of Southern California’s forecast for 2015 use is 0.903 MAF. (*Andy Moore*)

UPPER COLORADO RIVER WILD AND SCENIC STAKEHOLDER GROUP— The Bureau of Land Management (BLM) Colorado River Valley Field Office and the BLM Kremmling Field Office approved their Resource Management Plans and issued their Records of Decision (RODs) on July 8, 2015. The United States Forest Service (USFS) White River National Forest also issued its final ROD for adoption of the Suitability Report on July 8, 2015. These documents represent official adoption of the Upper Colorado River Wild and Scenic Stakeholder Group (Stakeholder Group) Management Plan.

The Stakeholder Group held its regular meeting on August 27, 2015 in Glenwood, CO and its next regular meeting is scheduled for October 30, 2015 in Summit County. The Stakeholder Group meeting included discussions on the provisional period task list, the need for members to sign the Memorandum of Understanding, 2015 Recreational study work, finances, and updates by the various workgroups and interest groups as well as from the BLM. During the meeting, the members approved the effective date of the Stakeholder Management Plan as June 19, 2015 (the day the RODs were signed), which means that the Provisional Period of the Stakeholder Group Plan will begin on December 19, 2015. Additional information on the UCRW&S Group can be found at <http://www.upcowildandscenic.com>. (*Suzanne Sellers*)

~PLATTE RIVER BASIN~

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM— The Platte River Recovery Implementation Program (PRRIP) Governance Committee (GC) did not hold a meeting since the last CWCB meeting. CWCB staff participated in Finance Committee (FC), Water Advisory Committee (WAC) and Land Advisory Committee (LAC) meetings. The next regular GC meeting will be held on September 8-9, 2015 in Kearney, NE. For more information, please visit: <http://www.platteriverprogram.org/Pages/default.aspx>. (*Suzanne Sellers*)

~SAN JUAN/SAN MIGUEL-DOLORES RIVER BASIN~

RIVER PROTECTION WORKGROUP— The River Protection Workgroup (RPW) Steering Committee held a regular meeting on August 3, 2015 in Durango, Colorado with its next meeting scheduled for September 21, 2015 in the same location. The Steering Committee is currently engaged in negotiations and development of consensus approaches for the protection of the five rivers, and specifically related outstanding remarkable values (ORVs) in the San Juan River basin, while protecting the ability of water users within Colorado to fully use its compact entitlements. The group has been working on resolving differences between a proposal by Trout Unlimited and an alternate proposal by the Wilderness Society and the San Juan Citizen's Alliance. The Steering Committee has come to a tentative agreement-in-principle that incorporates features from both of the proposals. The Steering Committee has now shifted to the "drafting phase" of a regional legislative package with the understanding that there are still some details to be worked through. The agreement-in-principal includes the removal of suitability, Wild and Scenic designation, and the maintenance of suitability within the five watersheds of the San Juan Basin. Additional information on the RPW can be found at: <http://ocs.fortlewis.edu/riverprotection>. (*Suzanne Sellers*)

~ WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE—

Two grant applications were received since the July 2015 Director's Report

- Town of Rocky Ford - Water Efficiency Plan
- City of Brighton - Water Efficiency Plan Update

Three grants have been approved since the July 2015 Board meeting

- Town of Windsor - Water Efficiency Plan Update
- City of Brighton - Water Efficiency Plan Update
- Town of Rocky Ford - Water Efficiency Plan Update

The following are deliverables sent to the CWCB since the last Board Meeting:

- Colorado WaterWise - AWWA M36 Water Audit Training Pilot Project - 50% Progress Report
 - Ruedi Water & Power Authority - Roaring Fork Valley Regional Water Efficiency Plan Update - Complete Plan
 - Ft Collins-Loveland Water District - Water Efficiency Plan Update - 75% Progress Report
 - Arapahoe County Water & Wastewater Authority - Water Efficiency Plan Update - 75% Progress 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

- Town of Erie- The Town of Erie submitted a Drought Management Plan for review from CWCB on August 14th, staff will review the plan over the next 90 days. (*Taryn Finnessey*)

- Pagosa Area Water and Sanitation District - The District submitted a draft Drought Management Plan that the CWCB has reviewed and provided feedback on, they are working to incorporate CWCB comments.
- City of Evans - The City's Drought Management Plan will be submitted to the CWCB for approval once it receives city council approval. (*Taryn Finnessey & Ben Wade*)

WATER EFFICIENCY PLANS—

Approved Plans

- City of Glenwood Springs
- Roaring Fork Regional Water Efficiency Plan
- Left Hand Water District
- Town of Basalt
- Las Animas
- South Swink

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.

- Town of Aspen
- City of Greeley
- Skyland Metro District
- Aurora Water

Water Efficiency Plans in review

- Upper Arkansas Water Conservancy District
 - Lower Arkansas Water Conservancy District
 - Southeastern Colorado Water Conservancy District Supplemental Regional Plan
 - Mount Crested Butte
 - Town of Firestone
 - Town of Castle Rock
 - Cherokee Metropolitan District
 - La Junta
- (*Kevin Reidy & Ben Wade*)

GOVERNOR'S WATER AVAILABILITY TASK FORCE— The next Water Availability Task Force meeting will be held on September 23, 2015 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*)

DROUGHT UPDATE— Colorado remains largely drought free despite decreased precipitation in late July and early August. This is in part due to moderate summer temperatures over the same time period. Drier conditions in recent weeks have led to declining soil moisture levels, but overall evapotranspiration rates are below average for the season, and pasture conditions are reportedly good. Water supplies continue to increase and statewide storage is the highest we have seen since 2000. Water providers are reporting system-wide storage levels greater than 90 percent of capacity. Demand is also lower than this time last year. El Niño has gained strength over the last few months and

continues to be forecasted as a strong event, if not a “Super El Niño.” The last “Super El Niño” was in 1997 when Colorado experienced above average precipitation. (*Taryn Finnessey*)

WATER AND GROWTH DIALOGUE— Through a Water Efficiency Grant, the Keystone Center is facilitating a dialogue to quantify water use through different land use patterns as well as bringing together land use and water managers to discuss where integration can occur. Staff is on the technical advisory group as well as the steering committee. The group is modeling runs using Denver Water’s water use data and running that through different land use pattern scenarios. At present time, Denver Water is still running numbers through their model. (*Kevin Reidy*)

AWWA M36 WATER LOSS STATEWIDE TRAINING PILOT PROGRAM— The CWCB is funding a pilot program for statewide water loss control trainings to be carried out by Colorado WaterWise (CWW). CWW has been approved for a water efficiency grant and will work with the Rocky Mountain Section of the AWWA, Water Research Foundation and Cavanaugh and Associates. The trainings will center on the AWWA M36 methodology which is the standard for top down and bottom water system audits. Cavanaugh has a great track record for conducting statewide training efforts using the AWWA M36 Methodology for the State of Georgia. The webinar on August 19 to prepare the participants for the upcoming training was a success with approximately 100 attendees. CWW has scheduled five trainings during the week of September 21-25, 2015 in Grand Junction, Frisco, Greeley, Pueblo and Denver. The plan moving forward is to expand trainings to other parts of the state. More information can be found on the CWW website: <http://coloradowaterwise.org/WaterLossAuditTraining> (*Kevin Reidy*)

CFWE CITIZEN’S GUIDE TO CONSERVATION WORKGROUP— Staff has been asked to participate in the working group to develop the next CFWE Citizen’s Guide to Conservation. The last edition was published in 2004 and much has changed since that time. Staff attended the first brainstorming session in early August and CFWE staff is creating the outline for the next edition from the feedback from that meeting. The workgroup will review a couple of drafts over the coming months and the guide should be published at the end of March 2016. (*Kevin Reidy*)

COLORADO CLIMATE PLAN— The plan is in the final stages of development and will likely be released early this fall. The goal of this document is to promote state policy recommendations and actions that help to decrease future impacts and increase Colorado’s level of preparedness, while meeting the requirements of Colorado House Bill 13-1293. The major sectors of the state government are addressed, specific actions are called for, and policy recommendations are made. Because addressing climate change is best addressed collaboratively, this plan has been developed collectively by the Department of Natural Resources, the Colorado Department of Public Health and Environment, the Colorado Energy Office, the Colorado Department of Transportation, the Colorado Department of Agriculture, Department of Local Affairs, and the Office of Economic Development and International Trade. (*Taryn Finnessey*)

~WATERSHED AND FLOOD UPDATES~

RWEACT RADAR PROJECT UPDATE—The CWCB has been helping the Rio Grande Watershed Emergency Action Team (RWEACT) rent a mobile radar from Oklahoma to observe the burn scars in the Rio Grande. Real time data can be found here: <http://arrc.ou.edu/px1000/status/index.html>.

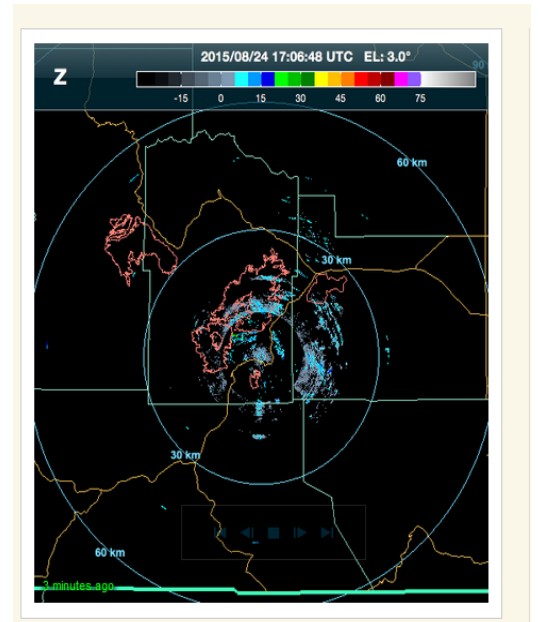
The radar only operates when rain clouds enter the area. Additional equipment has also been installed to augment this data. The CWCB has also installed a radiometer in the area upwind of storms that track into the region. This is located at Pagosa Springs Middle School and the data can be accessed here: <http://173.164.54.41/vail.htm>.

This project temporarily provides radar coverage in a 75 mile (60km) circle in an area without any quality radar coverage. (Joe Busto)

WEATHER MODIFICATION PROGRAM UPDATE— Staff is currently planning for \$425,000 worth of expenditures in the cloud seeding grants and technical assistance program. There was \$50,000 awarded from the WSRA program, which enabled the CWCB to have \$225,000 available to meet the matching State expenditures requirement of the WSRA. Plans include plume dispersion modeling of the Central Mountains, one new leased remote generator for Telluride, a Desert Research Institute owned remote operated by the local contractor at Mancos, continued lease to own of the radiometer, and partnering with Water Enhancement Authority (City of Grand Junction and local conservancy districts) on two Idaho Power Company built remote operated seeders.

The remaining funds will be used for a round of grants to operators and possibly a plume dispersion modeling study in the San Juan Mountains. The updated 2012 WM Rules require and suggest periodic evaluation proposals and funding is being made available to local sponsors to conduct studies that are essentially a “fleet report card” and determine where generators are effective and where high elevation remotes are needed. There is also a new inventory and needs assessment of all the local programs that was completed by Wilson Water Group. That report will help set priorities for local, state, and Lower Basin expenditures in future years. (Joe Busto)

SILVER JACKETS UPDATE— The Colorado Water Conservation Board, U.S. Army Corps of Engineers, Federal Emergency Management Agency and others participate in Colorado’s Silver Jackets partnership. Through this partnership, we work together to share knowledge to enhance flood response and recovery and reduce flood risks to Colorado communities. One of our projects was recently highlighted during the National Association of Flood and Stormwater Management Agencies Annual Meeting as a Silver Jackets success story. The Honorable Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), described the Floodproofing and Flood Recovery workshops held around Colorado after the September 2013 floods, which were organized jointly by CWCB and U.S. Army Corps of Engineers staff, as good examples of the Silver Jackets partnership in action. CWCB staff will continue to look for opportunities to partner with the Silver Jackets team on flood recovery, response, and mitigation projects. (Jamie Prochno)



~AGENCY UPDATES~

RECENTLY DECREED ISF WATER RIGHTS— On June 29, 2015, the Division 4 Water Court decreed an instream flow water right to the CWCB on East Creek in Case No. 4-14CW3093 for 1.6 cfs (3/15-6/30), and 0.25 cfs (7/1-3/14), with an appropriation date of January 28, 2014. The upstream terminus is the confluence with North East Creek and the lower terminus is the East Creek Ditch headgate. This ISF reach is approximately 4.94 miles long and flows in a northeasterly direction through parts of Mesa County.

On June 29, 2015, the Division 4 Water Court decreed an instream flow water right to the CWCB on Hot Springs Creek in Case No. 4-14CW3094 for 2.4 cfs (5/1-7/21), with an appropriation date of January 28, 2014. The upstream terminus is the outlet of Hot Springs Creek Reservoir and the lower terminus is the L.L. Bush Ditch headgate. This ISF reach is approximately 3.46 miles long and flows in a southwesterly direction through parts of Gunnison County. This right is in addition to an existing instream flow right on Hot Springs Creek decreed in Case No. 4-84CW374 in the amount of 1.5 cfs (1/1-12/31), with an appropriation date of 5/4/1984.

On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on Beaver Creek in Case No. 5-14CW3148 for 4.75 cfs (5/1-6/30), 2.85 cfs (7/1-7/31), 1.00 cfs (8/1-11/30), and 0.70 cfs (12/1-4/30), with an appropriation date of January 28, 2014. The upstream terminus is its headwaters and the lower terminus is the Dame Ditch headgate. This ISF reach is approximately 8.11 miles long and flows in a northerly direction through parts of Garfield County. On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on West Divide Creek in Case No. 5-14CW3152 for 14.1 cfs (4/16-7/15), 4.2 cfs (7/16-7/31), 1.14 cfs (8/1-3/14), and 4.2 cfs (3/15-4/15), with an appropriation date of January 28, 2014. The upstream terminus is the confluence with Little Beaver Creek and the lower terminus is the confluence with Mosquito Creek. This ISF reach is approximately 9.51 miles long and flows in a northwesterly direction through parts of Mesa County.

On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on Meadow Creek in Case No. 5-14CW3154 for 2.1 cfs (4/1-9/30), and 1.3 cfs (10/1-3/31), with an appropriation date of January 28, 2014. The upstream terminus is the outlet of Meadow Creek Reservoir and the lower terminus is the confluence with Main Elk Creek. This ISF reach is approximately 8.21 miles long and flows in a southerly direction through parts of Garfield County.

On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on Left Fork Carr Creek in Case No. 5-14CW3155 for 2.0 cfs (4/1-8/31), 1.0 cfs (9/1-10/31), and 0.75 cfs (11/1-3/31), with an appropriation date of January 28, 2014. The upstream terminus is its headwaters and the lower terminus is the Franklin Ditch No. 2 headgate. This ISF reach is approximately 6.43 miles long and flows in a southeasterly direction through parts of Garfield County.

On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on East Fork Parachute Creek in Case No. 5-14CW3156 for 0.50 cfs (4/15-6/30), and 0.65 cfs (7/1-4/14), with an appropriation date of January 28, 2014. The upstream terminus is the confluence with Bull Gulch and the lower terminus is the Bureau of Land Management property boundary. This ISF reach is approximately 1.28 miles long and flows in a northwesterly direction through parts of Garfield County.

On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on East Divide Creek in Case No. 5-14CW3157 for 1.4 cfs (4/1-4/15), 4.8 cfs (4/16-6/30), 1.5 cfs (7/1-7/15), 1.2 cfs (7/16-7/30), and 0.3 cfs (8/1-3/31), with an appropriation date of January 28, 2014. The upstream terminus is the confluence with Gennings Creek and the lower terminus is the confluence with Camp Creek. This ISF reach is approximately 3.52 miles long and flows in a northerly direction through parts of Garfield and Mesa Counties.

On July 12, 2015, the Division 5 Water Court decreed an instream flow water right to the CWCB on East Divide Creek in Case No. 5-14CW3158 for 3.0 cfs (4/1-4/15), 7.2 cfs (4/16-6/30), 3.0 cfs (7/1-7/31), and 1.1 cfs (8/1-3/31), with an appropriation date of January 28, 2014. The upstream terminus is the confluence with Camp Creek and the lower terminus is the confluence with June Creek. This ISF reach is approximately 9.51 miles long and flows in a northwesterly direction through parts of Garfield County. (*Rob Viehl*)

UTE WATER CONSERVANCY DISTRICT/CWCB LEASE FINALIZED— On August 27, 2015, the State Controller approved the Water Lease Agreement between the CWCB and the Ute Water Conservancy District by which the District will lease water it owns in Ruedi Reservoir to the CWCB for ISF use on the 15-Mile Reach of the Colorado River. The Board approved this water acquisition at its May 2015 meeting. Staff is coordinating with the USFWS, Reclamation, the District, the Division of Water Resources, and other interested parties on implementing the lease this month and anticipates using 6,000 acre-feet of leased water to supplement flows in the 15-Mile Reach to benefit the endangered fish in that reach. The CWCB will pay for the leased water with money from the Species Conservation Trust Fund. (*Linda Bassi, Ted Kowalski*)

~GENERAL ATTACHMENTS~

- 01 Steam and Lake Protection De Minimis Cases
- 02 Instream Flow and Natural Lake Level Program - Summary of Resolved Opposition Cases
- 03 UCRC & CWCB SCA Joint Press Release

~LOAN PROGRAM ATTACHMENTS~

- 01 Water Project Loan Program Interest Rates
- 02 Prequalified Project List and Loan Prospect Summary
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Director's Report Attachment – September 15-17, 2015 CWCB Meeting 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 these cases and has provided the required notification to the Division Engineers and applicants.

Case No.	Applicant	Stream/ Case Number	ISF Amount	Percent Injury	Cumulative % Injury	Previous Cases
2-94CW005	Thomas C. Fisher	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66389% 0.31351%	164
2-94CW005	John A. Vakarietis & Ingrid Black	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66411% 0.31373%	165
2-94CW005	Rolland J. & Susan M. McFee	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66433% 0.31395%	166
2-94CW005	Ellsworth R. Webb & Kimberly Schwan	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66455% 0.31417%	167
2-94CW005	Paul G. & Cheryl D. Rauschke	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66477% 0.31439%	168
2-94CW005	Terry M. Potts	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66499% 0.31461%	169
2-94CW005	Terry M. Potts	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66521% 0.31483%	170
2-94CW005	Gregory D. Bull & Patricia J. Larson	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66543% 0.31505%	171
2-94CW005	Dorothy Ann & Tom R. Bell	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66565% 0.31527%	172
2-94CW005	Tom R. & Nancy T. Bell	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66587% 0.31549%	173
2-94CW005	Steven B. & Tracy A. Wartman	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66609% 0.31571%	174
2-94CW005	Mitchell Williams	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66631% 0.31593%	175
2-96CW017	James P. Smith, Jr. and Karen S. Smith	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66653% 0.31615%	176
2-96CW017	James D. & Joanna L. Metz	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66675% 0.31637%	177
2-96CW017	The 15200 Country Road LP	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66697% 0.31659%	178
2-96CW017	Miller Rentals, LLC - Michael E. Miller	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66719% 0.31681%	179
2-96CW017	Kim L. Heidemann	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66741% 0.31703%	180
2-96CW017	Kevin L. and Laurie A. Coggins	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66763% 0.31725%	181
2-96CW017	Glen W. & Natalia Ayers	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66785% 0.31747%	182
2-96CW017	Glen W. & Natalia Ayers	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66807% 0.31769%	183
2-96CW017	Mark & Catherine Beardsley	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66829% 0.31791%	184
2-96CW017	Mark & Catherine Beardsley	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66851% 0.31813%	185
2-96CW017	Daniel L. & Candace Blakeley	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66873% 0.31835%	186
2-96CW017	Ray E. & Molly M. Cramer	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66895% 0.31857%	187
2-96CW017	Constance R. LaValle	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66917% 0.31879%	188
2-96CW017	Reed k. & Karen K. Dils	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66939% 0.31901%	189
2-96CW017	Kenneth W. & Cheryl D. Eigsti	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66961% 0.31923%	190

2-96CW017	Hans W. & Melissa k. Albrecht	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.66983% 0.31945%	191
2-96CW017	Jesse Mair	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67005% 0.31967%	192
2-96CW017	William M. Cordova Jr. & Holly M. Cordova	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67027% 0.31989%	193
2-96CW017	James L. & Mary F. Spencer	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67049% 0.32011%	194
2-96CW017	Sylvia S. Isenhower	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67071% 0.32033%	195
2-96CW017	Travis J. & Christine M. Drake	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67093% 0.32055%	196
2-96CW017	Jeffrey S. Zaring	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67115% 0.32077%	197
2-96CW017	Tony L. & Diane L. Johnson	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67137% 0.32099%	198
2-96CW017	Troy E. & Limberly B. Whitmore	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67159% 0.32121%	199
2-96CW017	Jerry & Kathryn J. Kaczmariski	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67181% 0.32143%	200
2-96CW017	Lawrence L. & Cheryl L. Smith	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67203% 0.32165%	201
2-96CW017	Robert T. & Kathleen J. Truitt	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67225% 0.32187%	202
2-96CW017	Paul & Linda D. Davis	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67247% 0.32209%	203
2-96CW017	Mari L. Butler	Cottonwood Creek/ 2-79CW115	20 cfs (summer) 20 cfs (winter)	0.00022 % 0.00022 %	0.67269% 0.32231%	204
5-15CW007	Brian Widhalm	Sweetwater Creek/ 5-80CW313	18 cfs (summer) 18 cfs (winter)	0.00374 % 0.00017 %	0.2177% 0.0334%	4
5-15CW3059	Trackside Tree Nursery, LLC	Colorado River/ 5-11CW160	650 cfs (summer) 525 cfs (winter)	0.00308% 0.00050%	0.00745% 0.00161%	4
5-15CW3059	Trackside Tree Nursery, LLC	Colorado River/ 5-11CW161	800 cfs (summer) 650 cfs (winter)	0.00250% 0.00041%	0.00605% 0.00130%	4
7-15CW3020	Robin & Barry Mason	Florida River/ 7-77W1763	7 cfs (summer) 14 cfs (winter)	0.03258% 0.01684%	0.73566% 0.34198%	25

September 15-17, 2015 Board Meeting
Instream Flow and Natural Lake Level Program
Summary of Resolved Opposition Cases

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

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; the Director has authorized the Attorney General's Office to enter into stipulations that protect the CWCB's water right(s).

(1) Case No. 1-02CW240-B - Application of Center of Colorado Water Conservancy District, et al.

The Board ratified this statement of opposition at its January 2003 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 and exchange, and change of water rights do not injure the Board's instream flow water rights on Michigan Creek and Tarryall Creek by expansion of use and by not replacing out-of-priority depletions in time, place or amount. This case was bifurcated from Case No. 1-02CW240 (Part A), which was decreed in February 2008. Applicant's request for dismissal without prejudice of Part B was granted by the Court on July 20, 2015.

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

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
1-76W8229	Tarryall Creek	7	1/14/1976	Tarryall Creek	Park
1-76W8230	Michigan Creek	7	1/14/1976	Tarryall Creek	Park
1-77W8729	Tarryall Creek	14	11/15/1977	Tarryall Creek	Park
1-77W8730	Tarryall Creek	20	11/15/1977	Tarryall Creek	Park

(2) Case No. 1-12CW088 - Application of Mesa Trail Ranch LCC

The Board ratified this statement of opposition at its July 2012 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 rights on Boulder Creek and South Boulder Creek by expansion of use. A 5-day trial was set to begin on Monday August 24, 2015. On the Friday prior to trial, Staff, in cooperation with the Attorney General's Office, finalized a negotiated 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:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
1-90CW193A-H	Boulder Creek	Varies from 0.5-15.0	Varies from 1859-1956	St. Vrain	Boulder
1-74W7636	Boulder Creek	15.0	10/1/1973	St. Vrain	Boulder
1-79CW308	Boulder Creek	1.0	6/1/1862	St. Vrain	Boulder
1-80CW379A	South Boulder Creek	2.0/15.0	12/2/1980	St. Vrain	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:

- Applicant agreed to not divert or consume the historically unconsumed irrigation season return flows.
- Applicant agreed that if it diverts and retains the historically unconsumed non-irrigation season return flows, it will account for such diversion and consumption as a new junior right, although such diversion may occur under the senior irrigation right.
- Applicant agreed to a value for ditch loss that represents the historical ditch loss, rather than a percentage of their decreed share, that was not historically used.
- Applicant agreed to not divert the junior pond right, including freshening flows, when CWCB is calling for water to the instream flow downstream of the diversion point.
- Applicant agreed to not divert at its upstream changed points of diversion when the instream flow between the Green Ditch headgate and the changed points of diversion is not met and CWCB is calling for water.

(3) Case No. 2-08CW038 - Application of Hill Ranch, LTD.

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 of augmentation and exchange and change of water rights do not injure the Board's instream flow water rights on the Purgatoire River and South Purgatoire River by expansion of use and by not replacing out-of-priority depletions in 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:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
2-09CW90	Purgatoire River	7 (12/1 - 4/14) 8.4 (4/15 - 5/14) 21 (5/15 - 8/15) 15 (8/16 - 9/15) 8.4 (9/16 - 11/30)	1/27/2009	Purgatoire	Las Animas

2-09CW88	South Fork Purgatoire River	3 (10/16 - 4/30) 9.6 (5/1 - 5/31) 18 (6/1 - 6/30) 13 (7/1 - 8/15) 5 (8/16 - 10/15)	1/27/2009	Purgatoire	Las Animas
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In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant has agreed to the following additional protective terms and conditions:

- The CWCB has two pending applications for minimum stream flow water rights in Case Nos. 09CW88 and 09CW90. Hill Ranch shall not operate an exchange up streams on which the CWCB holds a minimum flow right, as may be decreed in Case Nos. 09CW88 and 09CW90, at times when the minimum flow water right is not being fully satisfied and the CWCB has placed call recognized and administered by the Division Engineer.
- Any reuse and successive use to extinction at New Elk mine may only occur pursuant to the terms and conditions to be decreed in Case No. 13CW3000, or other administrative approvals or decree, which must include a reuse plan that demonstrates dominion and control over water to be reused.

(4) Case No. 2-10CW002 - Application of Pioneer Natural Resources USA, Inc., XTO Energy Inc., and ARP Production Company LLC

The Board ratified this statement of opposition at its May 2010 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 right on the North Fork Purgatoire, and the Board's pending instream flow water rights on the Purgatoire River and South Purgatoire River by not replacing out-of-priority depletions in 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:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
2-09CW90*	Purgatoire River	21/8.4	1/27/2009	Purgatoire	Las Animas
2-09CW88*	South Purgatoire River	18/3	1/27/2009	Purgatoire	Las Animas
2-77W4632	North Fork Purgatoire River	5.0	1/19/1977	Purgatoire	Las Animas

* Pending applications

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

- The CWCB acknowledges and agrees that the instream flow ("ISF") appropriations claimed in Case No. 09CW88 and 09CW90, Water Division 2, are subject to the uses of water which were being made by Applicants on the date of the CWCB's appropriations, pursuant to C.R.S. § 37-92-102(3)(b). Such uses consist of the production of ground

water (sometimes referred to as “produced water”) from coal bed methane (“CBM”) wells completed in the Raton and Vermejo Formations in the Central Raton Basin, which includes the drainages of the Purgatoire River and its tributaries generally above Trinidad Reservoir and portions of the Apishapa River Basin.

- Using the Central Raton Basin Ground Water Model (“CRB Model”) approved by the Colorado State Engineer in rulemaking proceedings for the Produced Nontributary Ground Water Rules, 2 CCR 402-17, Applicants have identified the depletive effects associated with the tributary CBM wells in existence at the time of the CWCB’s claimed appropriations in 2009 (the “2009 Tributary CBM Wells”). The CRB Model indicates that pumping of produced water from the 2009 Tributary CBM Wells caused, and will cause in the future, depletions affecting the ISF reaches claimed in Case Nos. 09CW88 and 09CW90.
- Applicants and the CWCB stipulate and agree that, pursuant to C.R.S. § 37-92-102(3)(b), the CWCB’s ISF appropriations are subject to the modeled maximum depletion for each respective ISF reach based upon the volume of water production from the 2009 Tributary CBM Wells at the time of the CWCB’s appropriations, inclusive of past pumping together with projected future pumping at gradually declining rates (combined, the “Existing 2009 CBM Water Use”). Based on modeling conducted using the CRB Model, the 2009 Existing CBM Water Use will result in the following maximum depletions to each ISF reach:
 - a. For the Purgatoire River mainstem ISF reach claimed in Case No. 09CW90: 2.5 acre-feet annually, or 0.003 c.f.s. (1.5 g.p.m.).
 - b. For the South Fork of the Purgatoire River ISF reach claimed in Case No. 09CW88: 0.3 acre-feet annually, or 0.0004 c.f.s. (0.19 g.p.m.).
- So long as the projected depletions to the CWCB’s ISF reaches claimed in Case Nos. 09CW90 and 09CW88 are no greater than the maximum depletion to each respective ISF reach described in paragraph 3, above, the CWCB agrees that Applicants will not be required to make augmentation deliveries to replace projected out-of-priority depletions to the CWCB’s ISF reaches.
- If the projected annual depletion to the CWCB’s respective ISF reaches is greater than the maximum depletion in each reach from the Existing 2009 CBM Water Use, as described in paragraph 3 above, Applicants agree that they will either: (1) replace such additional depletion in time, location and amount as required by the Colorado Division of Water Resources; or (2) at least five years prior to any such exceedance, apply to the CWCB to request approval of an injury with mitigation (“IWM”) plan, pursuant to Rule 8.i(3) of the CWCB Rules Concerning the Colorado Instream Flow and Natural Lake Level Program, 2 CCR 408-2, or the relevant “injury with mitigation” rule within such promulgated rules existing at such time, if any. The CWCB Staff agrees to confer and cooperate with Applicants on a mutually-acceptable IWM project, and agrees that Staff shall not unreasonably withhold a recommendation of approval to the CWCB Board of an IWM project proposed by Applicants.

(5) Case No. 4-14CW053 - Application of High Cimarron LLC

The Board ratified this statement of opposition at its March 2015 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 plan of augmentation do not injure the Board’s instream

flow water rights on the Cimarron River by expansion of use and a change in the amount, location and timing of historical irrigation return flows and by not replacing depletions in the amount, location or timing. 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:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
4-84CW395	Cimarron River	15/25	5/4/1984	Upper Gunnison	Montrose, Gunnison
4-84CW398	Cimarron River	16	5/4/1984	Upper Gunnison	Montrose

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

- In the event that sufficient water is not available in High Park Lake Reservoir Augmentation and Domestic Pool to provide enough augmentation water to replace all out-of-priority depletions covered under the Applicant's Plan for Augmentation and High Park Spring LLC's Plan for Augmentation, and a local call is placed on the Cimarron River such that the Applicant must make available its replacement water supply out of High Park Lake Reservoir to continue out-of-priority depletions, the Division Engineer shall curtail uses in the following order, if depletions from such uses are not otherwise replaced from other locally available augmentation supply: (i) out-of-priority depletions caused by structures described in High Park Spring, LLC's augmentation plans adjudicated in Case Nos. 05CW165 and 10CW36, unless such depletions are replaced by a different augmentation plan, (ii) out-of-priority diversions and depletions caused by the ponds covered by Applicant's Plan of Augmentation, and (iii) out-of-priority diversions caused by domestic uses from the Couloir Spring, Christmas Spring and Castle Spring, described in the decree.

(6) Case No. 5-14CW3080 - Application of White Horse Springs Water & Sanitation District

The Board ratified this statement of opposition at its September 2014 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 the Roaring Fork River by not replacing depletions in time, amount, and location. 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:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
5-85CW646	Roaring Fork River	30/55	11/8/1985	Roaring Fork	Pitkin Eagle
5-85CW639	Roaring Fork River	75/145	11/8/1985	Roaring Fork	Pitkin, Eagle Garfield

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

- Applicant will not operate the exchange through the instream flow water rights identified in the table above at any time the Roaring Fork River is being administered and the above-identified instream flow water rights are not satisfied. At such times, Applicant shall curtail its domestic irrigation diversions.



UPPER COLORADO
RIVER COMMISSION

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COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

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Colorado River States Embark on Innovative Water Savings Program

The states of Wyoming, Colorado, Utah, and New Mexico have embarked on a unique test program to shore up declining reservoir levels if the 15-year drought that has plagued the Colorado River continues into the future. On July 1, the four states approved 10 projects that allow farmers, municipalities and other water users to voluntarily and temporarily forego use of their water in exchange for compensation. On August 13, 2015, the first agreement was reached on one project within Colorado, in the Yampa River basin.

The states hope that this "forbearance" of water use will supply information that can be used in times of extreme drought as part of a contingency plan to ultimately reduce impacts on Lake Powell, a major Colorado River reservoir located on the Utah-Arizona state line. Lake Powell releases water to Lake Mead for use by the states of Arizona, Nevada, and California and the Republic of Mexico pursuant to an interstate agreement among the seven Colorado River states and a treaty between the United States and Mexico. Lake Powell is also a major producer of hydropower for the Western United States.

"We had a tremendous response from water users in the Upper Colorado River Basin to our request for pilot projects. We are hopeful that these projects will yield valuable information that can be used to develop a long-term program to provide incentives for people to conserve sufficient water to increase the water levels at Lake Powell during times of extreme drought. This will help the four Colorado River states above Lake Powell continue to meet their obligations to Arizona, California and Nevada. It will also protect hydropower generation at the reservoir and the associated revenues that support salinity control as well as endangered fish recovery efforts," said Don Ostler, Executive Director of the Upper Colorado River Commission, the interstate entity that is overseeing the implementation of the projects.

"Better understanding our water management tools affords us greater control over our own water future," said James Eklund, Director of the Colorado Water Conservation Board and Colorado's Commissioner on the Upper Colorado River Commission.

The 10 projects, five in Colorado and five in Wyoming, will be funded for one or more years, at a total cost of roughly \$1 million. This program is part of a larger \$11 million Pilot System Conservation Program involving all seven Colorado River states. Denver Water, Southern Nevada Water Authority, Metropolitan Water District of Southern California and Central Arizona Water Conservation District, together with the United States Bureau of Reclamation, are funding the Pilot System Conservation Program. Additional projects will be solicited beginning in fall 2015.

###



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**Colorado Water
Conservation Board**

Department of Natural Resources

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John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

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

DATE: September 15-17, 2015 Board Meeting

DIRECTORS REPORT: Water Project Loan Program
Interest Rates

Introduction

The CWCB establishes interest rates bi-monthly for the Water Project Loan Program (per Financial Policy #7).

The current rates for a 30-year term are as follows:

- 1.75% - Agricultural
- 2.45% - Low-income Municipal
- 2.80% - Middle-income Municipal
- 3.15% - High-income Municipal
- 6.00% - Commercial
- 2.00% - Hydroelectric

The rates can also be found on the CWCB web site under the “Loans and Grants” tab. These rates will be applicable for loans presented at this Board meeting.





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John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E., Marketing
Finance Section

DATE: September 15-17, 2015 Board Meeting

DIRECTORS REPORT: Water Project Loan Program
Prequalified Project List and Loan Prospect Summary

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
Previously Approved Applications						
Florida Consolidated Ditch Company	Hess Lateral Improvement Project	July 1, 2015	Southwest	The purpose of this project is to pipe the lateral to improve efficiencies within the ditch system. A WSRA grant application is expected. The company will also receive \$950K in CDOT funds as a part of the Hwy 550 expansion project.	\$2,500,000	\$762,500
Lookout Mountain Water District	Upper Beaver Brook Dam Spillway Improvement	July 1, 2015	South Platte	The purpose of this project is to increase the storage capacity of the reservoir by constructing a new, larger spillway in order to raise the normal pool elevation.	\$3,400,000	\$3,060,000
Orchard Ranch Ditch Company	Ditch Piping Project	May 1, 2015	Gunnison	The project is a salinity control project that includes piping 1.6 miles of canal. The company hopes to fund \$1M of the project through Bureau of Reclamation Salinity Control Program funds.	\$1,100,000	\$250,000
Totals					\$7,000,000	\$4,072,500

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					
	15-Aug	NISP Participants	NISP	\$700,000,000	\$100,000,000
	14-Dec	Harry Lateral Ditch Company	Ditch Lining Project		\$70,000
	14-May	Colorado Trout Group	Reservoir Rehabilitation		\$300,000
	14-Jun	Dixon Reservoir Water Company	Reservoir Rehabilitation		\$300,000
	15-Aug	Kembel Reservoir	Reservoir Rehabilitation		\$200,000
	14-Dec	Upper Platte & Beaver Ditch Company / Duel & Snyder Ditch Company	Diversion Structure		\$1,000,000
	15-July	Bijou Irrigation District	Reservoir Rehabilitation		\$500,000
	14-Dec	Bijou Irrigation Company	Pipeline Project		\$200,000
				TOTAL	\$102,270,000
Arkansas					
	12-Feb	Colorado City Metro District	Beckwith Dam Repair		\$500,000
	13-Apr	City of Walsenburg	Reservoir(s) Rehabilitation		\$6,000,000
	13-Dec	Stonewall Springs, LLC	Reservoir Construction	\$6,000,000	\$5,500,000
	14-Feb	Colorado Springs Flycasting Club	Reservoir Rehabilitation		\$450,000
	14-Oct	Oxford Ditch	Siphon Repair	\$2,000,000	\$1,800,000
	14-Dec	Holita Ditch and Reservoir Company	Reservoir Rehabilitation		\$500,000
	14-Nov	Town of Manitou Springs	Raw Water Pipeline	\$3,500,000	\$3,000,000
	15-Aug	Southeastern Colorado Water Conservancy District	Hydro Project		\$15,000,000
	15-Apr	Fountain Creek Watershed District	Water Rights Purchase	\$3,000,000	\$1,000,000
				TOTAL	\$33,750,000
San Miguel/ Juan					
	14-July	Moonlight Ditch	Ditch Lining (NRCS)		\$200,000
				TOTAL	\$200,000
Colorado					
				TOTAL	\$0

Gunnison					
				TOTAL	\$0
North Platte					
	15-Aug	Private borrower	Reservoir Rehabilitation	\$1,600,000	\$100,000
				TOTAL	\$100,000
Rio Grande					
	15-Jun	Manasa Land & Irrigation Co.	Ditch Rehabilitation		\$6,000,000
	14-May	Baca Grande Water and Sanitation District	Water Rights Purchase		\$1,000,000
				TOTAL	\$100,000
Yampa					
	15-Apr	Town of Oak Creek	Reservoir Rehabilitation		\$500,000
				TOTAL	\$500,000
				TOTAL	\$143,820,000

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

Recent inquiries:

Lake McIntosh Reservoir Company - Reservoir Rehabilitation

Kendall Reservoir Company - Reservoir Rehabilitation

Union Well Augmentation Group - Water Rights Purchase

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James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members**FROM:** Kirk Russell, P.E., Finance Section Chief**BOARD MEETING:** September 15-17, 2015**DIRECTORS REPORT:** Water Project Loan Program
Design & Construction Status Report

The CWCB Loan Program has Substantially Completed twelve (12) projects in Calendar Year 2015 as shown in Table 1. There are currently sixty-one (61) projects authorized to receive loan funding totaling \$277.4 million. There are fifty-three (53) projects currently under contract and in the Design and Construction phase totaling \$122.5 million. There are an additional twenty (20) Emergency Loans approved totaling \$22.6 million shown under a separate report.

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

	Borrower	Project	County	Loan	Complete
1	Mancos WCD	Inlet & Outlet Canal Rehab.	Montezuma	\$1,451,556	1/1/15
2	Lone Cabin Ditch & Res. Co.	Lone Cabin Dam Rehab. Proj.	Delta	\$123,448	2/1/15 (a)
3	Parker Water & San. District	WISE - ECCV Pipeline Purchase	Douglas	\$4,426,830	2/1/15
4	Denver SE Sub. W&S District	WISE - ECCV Pipeline Purchase	Douglas	\$1,845,270	2/1/15
5	Joseph W. Bowles Res. Co.	Bowles No. 1 Dam Rehab.	Jefferson	\$1,668,391	3/1/15 (b)
6	Town of Dillon	Old Dillon Res. Enlargement	Summit	\$1,515,000	4/1/15 (c)
7	Farmers' High Line Canal & Reservoir Company	System Rehabilitation Project	Adams/ Jefferson	\$2,129,918	5/1/15
8	Platte Valley Irrigation Co.	Lake Outlet Works Rehab.	Weld	\$738,466	5/1/15
9	Sterling Irrigation Company	Emergency Ditch Rehabilitation	Logan	\$101,000	5/1/15
10	Terrace Irrigation Company	Spillway Replacement Project	Conejos	\$2,712,602	6/6/15 (d)
11	East Mesa Water Company	Ditch Piping Project	Pitkin/Weld	\$732,927	7/1/15
12	Greeley Irrigation Company	Greeley Canal No. 3 Rehab.	Weld	\$1,134,839	7/1/15
		Total:		\$18,580,247	

Calendar Year 2015 has added or preserved 4,365AF of reservoir storage [(a) 163, (b) 2,062, (c) 140, (d) 2,000]





Jackson Gulch Inlet Canal Rehabilitation

Mancos Water Conservancy District
Substantially Complete January 1, 2015



AFTER



BEFORE

Project Description

The Project included the rehabilitation of the District's Jackson Reservoir Inlet Canal. Improvements included access road rehabilitation along with seepage repairs of the half mile long existing concrete box culvert. In addition, the canal required approximately a half mile of concrete lining and the installation of approximately 1600 feet of twin eight foot diameter concrete pipes. The trapezoidal concrete canal is approximately 30 feet wide at the top, 12 feet wide at the bottom and 6 feet deep. The canal was reshaped and covered with a PVC geomembrane liner sandwiched between two layers of geotextile fabric and covered with a protective concrete filled Geoweb surface on the side slopes with a rock-filled canal bottom.

P R O J E C T D A T A		
<i>Sponsor:</i> Mancos Water Conservancy District	<i>County:</i> Montezuma	<i>Water Source:</i> Mancos River
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> November 2002
<i>Amended Term of Loan:</i> \$1,451,556.12 at 2.80% Interest for 20 years		
<i>Design Engineer:</i> Buckhorn Geotech, Montrose CO		
<i>Contractor:</i> Mays Construction Specialists - Grand Junction CO; C&J Gravel, Durango CO		
<i>Project Elements:</i> 1600LF twin 8ft diameter RCP, 1000LF access road improvements, 2000LF trapezoidal contract lining, 2000LF of box culvert seepage repair.		



Lone Cabin Reservoir Rehabilitation Project

Lone Cabin Ditch and Reservoir Company
Substantially Complete February 1, 2015



The Lone Cabin Ditch and Reservoir Company provides irrigation water storage for 18 farms located on Lamborn Mesa approximately 5 miles southeast of Paonia, CO. The reservoir has a storage capacity of 163 acre-feet. This project became necessary due to a slump on the downstream face of the dam that resulted in a State Engineer's Office storage restriction to 20 feet below the dam crest. The construction project included excavation and reconstruction of the slumped area, installation of 200 LF of 6-inch toe drain collector pipe, a precast outlet pipe structure for the toe drain system, and final grading and re-seeding.



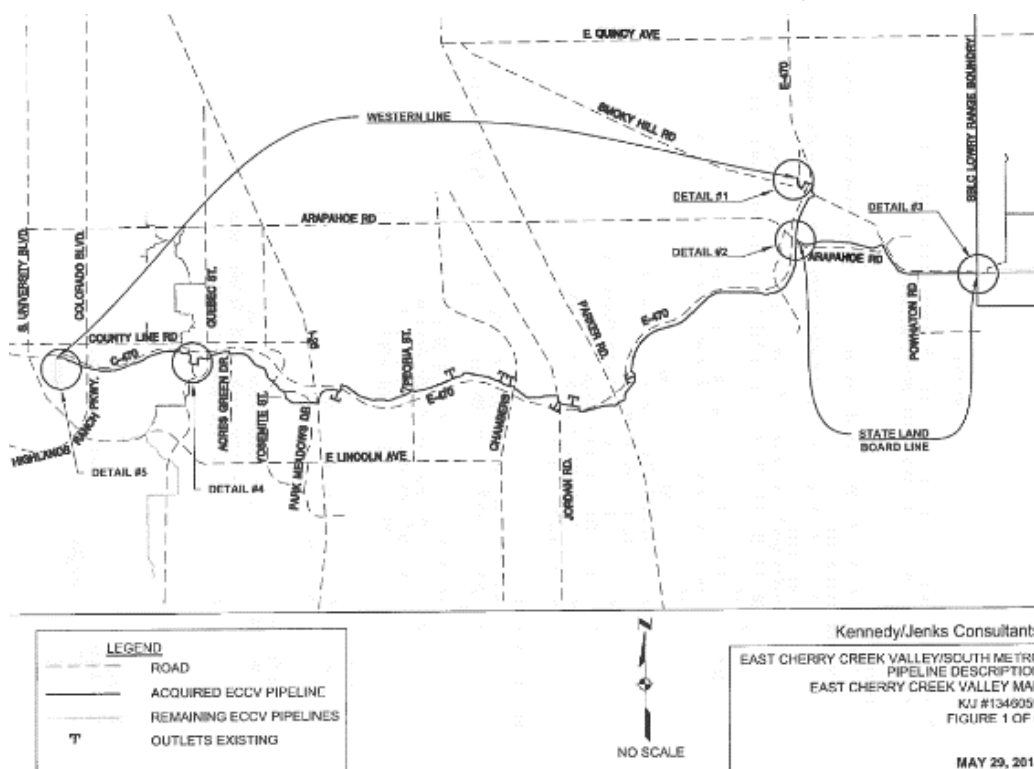
P R O J E C T D A T A		
<i>Sponsor:</i> Lone Cabin Ditch and Reservoir Company	<i>County:</i> Delta	<i>Water Source:</i> Minnesota Crk.
<i>Type of Loan:</i> Dam Rehabilitation	<i>Board Approval Date:</i> September 2013	
<i>Amended Terms of Loan:</i> \$252,803 at 1.75% for 30 years		
<i>Design Engineer:</i> Buckhorn Geotech, Montrose, CO - Norman Aufderheide, P.E.		
<i>Contractor:</i> Lacy Construction, Crested Butte, CO		
<i>Project Elements:</i> Reconstruct slumped area in dam embankment, install new toe drain collector pipe, install piezometers. install new drain outlet structure		



COLORADO
Colorado Water
Conservation Board
Department of Natural Resources

Water Infrastructure and Supply Efficiency Project (WISE) ECCV Pipeline Purchase

Parker Water & Sanitation District
Contract No. CT2015-107
Substantially Complete February 1, 2015



Project Description

The WISE Project is a collaborative effort by multiple south metropolitan water entities (the WISE Authority), Denver Water, and Aurora water to supplement existing water supplies by bringing reusable water supplies southward through Aurora's Prairie Waters pipeline to the East Cherry Creek Valley (ECCV) Pipeline. The WISE Authority purchased an 85% ownership share in the existing ECCV Pipeline, while the remaining 15% was purchased by Denver Water. The WISE Authority will operate and maintain the ECCV pipeline.

Each WISE Authority member's cost obligations for the project are dictated by an Organizational Agreement between the WISE Authority and WISE Authority member entities, and are dependent upon each member's subscription share for water deliveries.

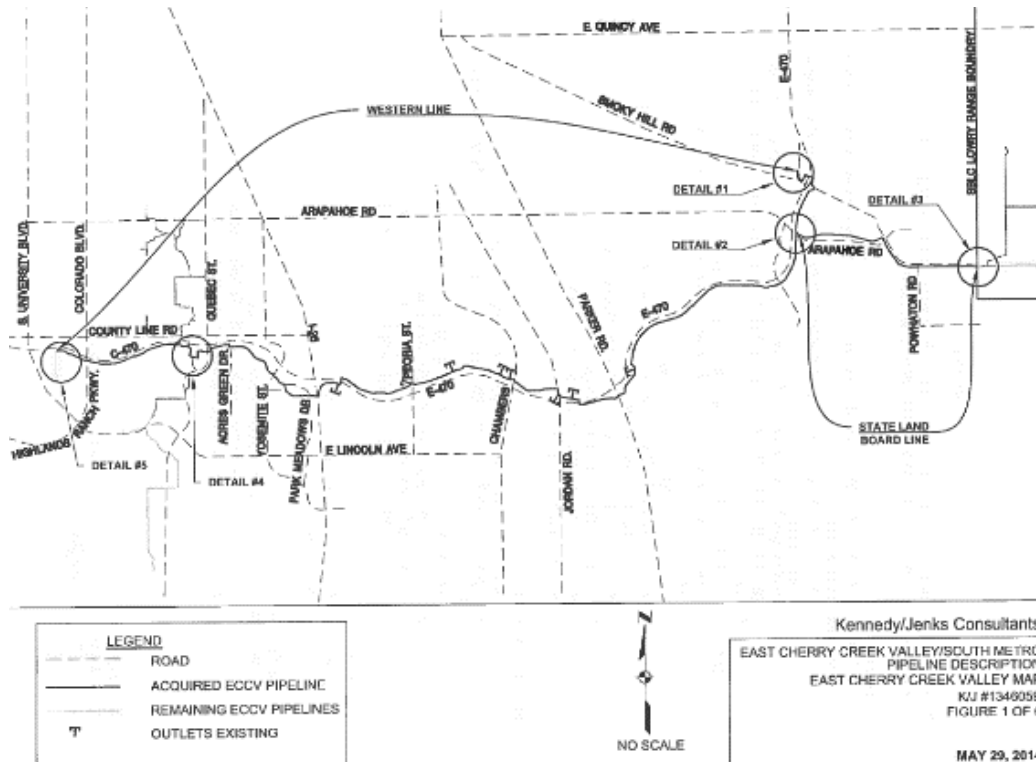
This Water Project Loan financed Parker's cost share obligations for the purchase of the ECCV Pipeline by the WISE Authority, resulting in a license agreement for approximately 17% capacity of pipeline deliveries.

P r o j e c t d a t a		
<i>Sponsor:</i> Parker Water & Sanitation District	<i>County:</i> Douglas & Arapahoe	<i>Water source:</i> South Platte
<i>Type of loan:</i> Water Delivery System	<i>Board approval date:</i> May 22, 2014	
<i>Terms of loan:</i> 20 years @ 2.75%		
<i>Design engineer:</i> No design was financed for this WISE Project element.		
<i>Contractor:</i> No construction was financed for this WISE Project element.		
<i>Project elements:</i> License Agreement for approximately 17% capacity in the ECCV pipeline.		



Water Infrastructure and Supply Efficiency Project (WISE) ECCV Pipeline Purchase

Denver Southeast Suburban Water Sanitation District (Pinery)
Contract No. CT2015-083
Substantially Complete February 1, 2015



Project Description

The WISE Project is a collaborative effort by multiple south metropolitan water entities (the WISE Authority), Denver Water, and Aurora water to supplement existing water supplies by bringing reusable water supplies southward through Aurora's Prairie Waters pipeline to the East Cherry Creek Valley (ECCV) Pipeline. The WISE Authority purchased an 85% ownership share in the existing ECCV Pipeline, while the remaining 15% was purchased by Denver Water. The WISE Authority will operate and maintain the ECCV pipeline.

Each WISE Authority member's cost obligations for the project are dictated by an Organizational Agreement between the WISE Authority and WISE Authority member entities, and are dependent upon each member's subscription share for water deliveries.

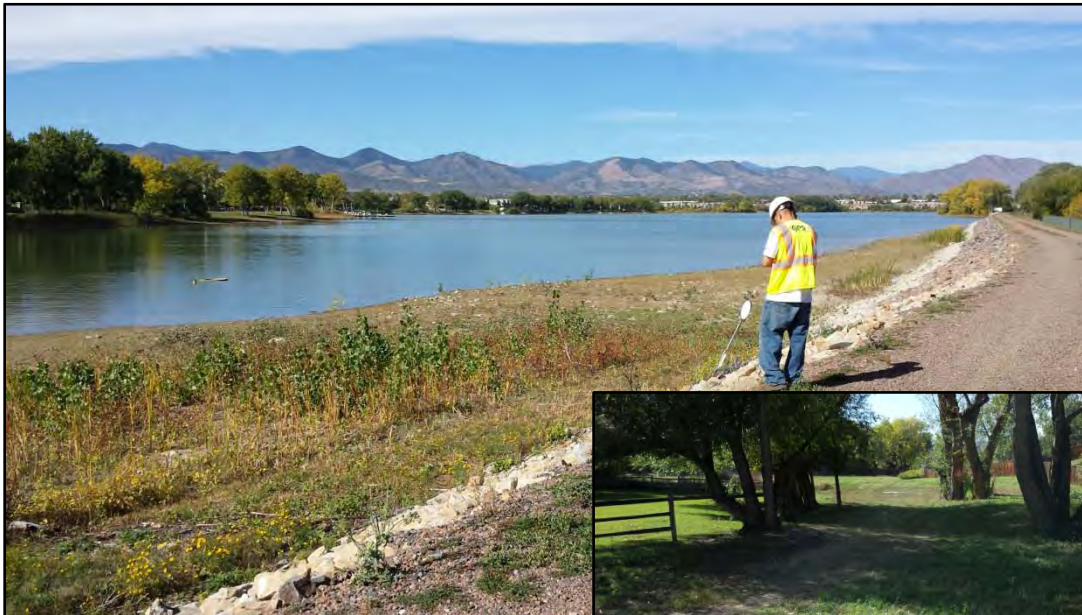
This Water Project Loan financed the Denver Southeast Suburban Water Sanitation District's (Pinery's) cost share obligations for the purchase of the ECCV Pipeline by the WISE Authority, resulting in a license agreement for approximately 6% capacity of pipeline deliveries.

P r o j e c t d a t a		
<i>Sponsor:</i> Denver Southeast Suburban Water & Sanitation District (Pinery)	<i>County:</i> Douglas & Arapahoe	<i>Water source:</i> South Platte
<i>Type of loan:</i> Water Delivery System		<i>Board approval date:</i> May 22, 2014
<i>Terms of loan:</i> 30 years @ 3.00%		
<i>Design engineer:</i> No design was financed for this WISE Project element.		
<i>Contractor:</i> No construction was financed for this WISE Project element.		
<i>Project elements:</i> License Agreement for approximately 6% capacity in the ECCV pipeline.		



Bowles No. 1 Dam Rehabilitation Project

Joseph Bowles Reservoir Company
Substantially Complete March 2015



Project Description

The Joseph W. Bowles Reservoir Company owns and operates Bowles No. 1 Reservoir, located in the southwest metropolitan area of Denver. The Company was formed in 1906 and has 50 shareholders who use the water for municipal uses including parks, open space, and golf courses, as well as some individual ranches for irrigation water. The Project consisted of several repairs to correct dam safety deficiencies and improve the long-term performance of Bowles No. 1 Dam. Dam repairs included the widening the dam crest, reconstructing the upstream slope, installing a seepage collection and toe drain system on the downstream slope, and lining the existing dam outlet pipe. Additionally, the Project rehabilitated a section of the reservoir's inlet ditch. This work included piping a section of the open ditch, reconstructing the ditch alignment, placing slope protection in high erosion areas, and installing a flow control pipe that will provide for the safe discharge of excessive ditch flows into an existing spillway and drainage structure. This was a long term Project with many phases which saw some level of construction occurring from fall of 2010 to fall of 2014.

P R O J E C T D A T A		
<i>Sponsor:</i> Joseph W. Bowles Reservoir Company	<i>County:</i> Jefferson	<i>Water Source:</i> Bear Creek
<i>Type of Loan:</i> Dam Rehabilitation		<i>Board Approval Date:</i> May 19, 2009
<i>Terms of Loan:</i> \$1,703,870 for 30 years @ 4.65%		
<i>Design Engineer:</i> W.W. Wheeler and Associates		
<i>Contractor:</i> Winslow Construction Company, Tezak Heavy Equipment		
<i>Project Elements:</i> Widen dam crest, reconstruct upstream slope, install toe drains, line outlet pipe, ditch erosion control, pipe open ditch.		



PROJECT DESCRIPTION

The Town of Dillon participated 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 to 286 AF. The Town's participation cost was approximately 27% of the construction costs and 20% of the engineering costs. The Reservoir was originally a 46 AF raw water storage reservoir filled via the Dillon Ditch, which diverts water from Salt Lick Gulch to the site. The reservoir was drained in 2008 due to dam safety concerns. This project included two new dams and a pipeline system from the new Salt Lick Gulch diversion structure. The Reservoir is located southwest of the Dillon Reservoir Dam.

P R O J E C T D A T A		
<i>Sponsor:</i> Town of Dillon	<i>County:</i> Summit	<i>Water Source:</i> Salt Lick Gulch
<i>Type of Loan:</i> Reservoir Rehabilitation	<i>Board Approval Date:</i> May 19, 2009	
<i>Terms of Loan:</i> \$1,515,000 at 4.0% for 30 years		
<i>Project Manager:</i> Colorado River WCD, Glenwood Springs, CO		
<i>Design Engineer:</i> Tetra Tech Inc, Longmont, CO		
<i>Contractor:</i> Fiore & Sons Inc, Denver, CO		
<i>Project Elements:</i> 120,000CY excavation, 80,000CY of fill, 10,000CY riprap, and 7,000 feet of 24" HDPE pipe, an inverted siphon under I-70 and a new headgate		



System Rehabilitation Project

Farmers Highline Canal and Reservoir Company
Substantially Complete May 2015



New Ralston Creek Siphon



New Van Bibber Creek Siphon



Farmer's Highline Diversion - Before



Farmer's Highline Diversion - After

Project Description

The Project included the rehabilitation of the Company's 130-year old canal system including its diversion and headgate structure, as well as the Van Bibber Creek and Ralston Creek siphons and the Club Crest storm drain crossing.

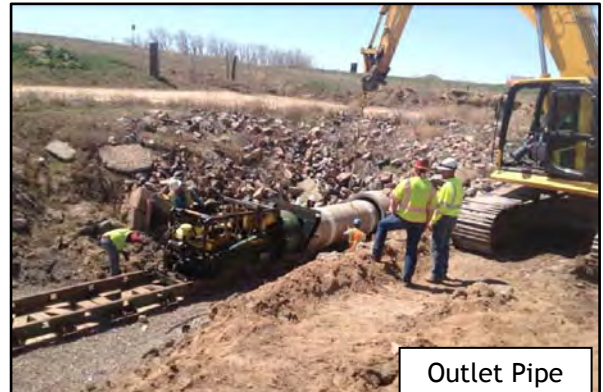
The diversion dam is a 93' concrete dam located in Golden. The existing dam was deteriorating and causing a large void to develop at the downstream toe of the dam. The dam was resurfaced with a toe wall and riprap apron added. The headgate structure consist of resurfacing the concrete structure and installing new (2) 10'-6" slide gates to the ditch, (1) 9' sandout slide gate, and (2) 6'-6" river bypass slide gates. Incorporated in the headgate rehabilitation was the installation of a SCADA system to add automation to the Company's headgates.

The Van Bibber Creek and Ralston Creek siphons were aging concrete structures with surface erosion and concrete wear exposing the aggregate and rebar. Work done included the patching and resurfacing of the concrete structure, and stabilizing the ditch embankments. The existing culvert at the Club Crest storm drain crossing was exposed and deteriorating. This corroded drain pipe was replaced.

P R O J E C T D A T A		
<i>Sponsor:</i> Farmer's High Line Canal and Reservoir Company	<i>County:</i> Adams/Jefferson	<i>Water Source:</i> Clear Creek
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> November 2010
<i>Terms of Loan:</i> \$2,209,597.00 @ 4.65% for 30-years (actual amount drawn: \$2,129,918.30)		
<i>Design Engineer:</i> Deere & Ault Consultants, Inc., Longmont, CO		
<i>Contractor:</i> Lillard & Clark Construction Company		
<i>Project Elements:</i> Diversion dam and headgate rehabilitation including SCADA installation, rehabilitation of two siphon structures, and replacement of a storm drain pipe.		



Developing
Sinkhole



Outlet Pipe
Slip-Lining



New Outlet Works

Project Description

In January 2014, the Company was in the process of replacing Sand Hill Reservoir's 48" outlet gate. During construction a sink hole developed in the dam around the outlet structure, prompting an emergency response from the Company and the SEO's Dam Safety Branch. The Project team, in close coordination with the SEO, developed a project approach for the completion of the rehabilitation of the outlet structure. The repair efforts included cutting out the effected sink hole location in the dam, demolishing the existing outlet structure and rebuilding the dam and new outlet structure back up to SEO specifications. The slide gate was relocated from the interior of the dam to the front of the outlet intake in the reservoir. Additionally, the Company slip-lined the existing RCP outlet pipe.

P R O J E C T D A T A		
<i>Sponsor:</i> Platte Valley Irrigation Company	<i>County:</i> Weld	<i>Water Source:</i> South Platte River, C-BT
<i>Type of Loan:</i> Reservoir Rehabilitation		<i>Board Approval Date:</i> November 2014
<i>Terms of Loan:</i> \$745,380.00 @ 2.00% for 30-years (actual amount drawn: \$738,466.25)		
<i>Design Engineer:</i> Franchetti Engineering		
<i>Contractor:</i> Aslan Construction, Inc		
<i>Project Elements:</i> Emergency repair of dam outlet works. Included outlet redesign of placing slide gate into reservoir, and slip lining of RCP pipe.		



Emergency Sterling Ditch Rehabilitation Project

Sterling Irrigation Company
Substantially Complete May 2015



Project Description

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged, including the Company's ditch. Floodwaters overtopped the headgate structure and entered the ditch resulting in significant sedimentation and the weakening of ditch banks. During the 2014 snowmelt high-water runoff, uncontrolled waters again entered the ditch causing additional sedimentation and ditch bank breaches. Construction crews repaired the breaches and removed sand from the ditch channel and upstream river channel. The first phase was the immediate clean out following the September 2013 flood event and the second phase was the clean out and breach repair following the spring 2014 snowmelt runoff.

P R O J E C T D A T A		
<i>Sponsor:</i> Sterling Irrigation Company	<i>County:</i> Logan	<i>Water Source:</i> South Platte River
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> September 2014
<i>Terms of Loan:</i> \$101,000 @ 1.50% for 10 years		
<i>Design Engineer:</i> NA		
<i>Contractor:</i> Ransom Boone Excavating		
<i>Project Elements:</i> Remove sedimentation and repair ditch breaches caused by flooding.		



Spillway Replacement Project
Terrace Irrigation Company
Substantially Complete June 1, 2015



Project Description

The Terrace Irrigation Company supplies irrigation water to its shareholders for irrigation of 9,300 acres of agricultural lands. The Company's Terrace Reservoir was under a restriction order from the SEO, reducing its available capacity by 2,000 AF. The Project involved the demolition of the existing spillway, raising the existing saddle dike where the spillway is located, construction of a new spillway which included a new spillway chute and stilling basin. The Company is 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. Funding for this project included grant money from the CWCB's WSRA (\$1.5M) and the Summitville Natural Resource Damage account (\$2.0M). 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.

P R O J E C T D A T A		
<i>Sponsor:</i> The Terrace Irrigation Company	<i>County:</i> Conejos	<i>Water Source:</i> Alamosa River
<i>Type of Loan:</i> Dam Rehabilitation		<i>Board Approval Date:</i> March 20, 2012
<i>Terms of Loan:</i> \$2,751,968 @ 1.75% for 30 years		
<i>Design Engineer:</i> URS Corporation		
<i>Contractor:</i> ASI Constructors, Inc.		
<i>Project Elements:</i> 200,000 CY of Rock Excavation, 225 CY Rip Rap, 2.2M CY of Structural Concrete		



Project Description

The 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 project site is located six miles south of Carbondale. The earthen ditch was replaced with 42-inch HDPE pipe. The new pipe enters a 650 foot long rock tunnel that was collapsing. The Company worked with the NRCS and URS Corporation to pipe the ditch and utilize a combination of rock anchoring and grouting to protect the HDPE pipe inside the tunnel section. The Company serves 12 shareholders and is primarily used to grow hay and forage crops for cattle ranching. The Company was approved for grant funding from NRCS and construction was completed in June 2015.

P R O J E C T D A T A		
<i>Sponsor:</i> East Mesa Water Company	<i>County:</i> Pitkin & Garfield	<i>Water Source:</i> Crystal River
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> July 2013
<i>Final loan Contract Terms:</i> \$367,418.42 at 1.75% for 30 years		
<i>Design Engineer:</i> Natural Resource Conservation Service (NRCS) & URS Corporation		
<i>Contractor:</i> Mueller Construction & Rock Solid Construction		
<i>Project Elements:</i> Pipe removal, 42" HDPE, concrete inlet and outlet structures, tunnel stabilization, and grouting of tunnel		



Greeley Canal No. 3 Rehabilitation

Greeley Irrigation Company
Substantially Complete July 1, 2015



Project Description

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. 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.

P R O J E C T D A T A		
<i>Sponsor:</i> Greeley Irrigation Company	<i>County:</i> Weld	<i>Water Source:</i> Cache La Poudre River
<i>Type of Loan:</i> Canal Rehabilitation		<i>Board Approval Date:</i> January 2007
<i>Terms of Loan:</i> \$2,233,867 at 2.85% for 30 years		
<i>Design Engineer:</i> Smith Geotechnical Engineering Consultants, Aqua Engineering		
<i>Contractor:</i> ECI Buildings and Components, LLC		
<i>Project Elements:</i> 683' of 6' CMP, Radial Gate Installation, 60 tons of subgrade stabilization material, 1350' of 3 rail fence, concrete wall, building electrical system, gate motors, control and monitor conduit, 1300' box culvert, 89 loans of rip rap, 3 headwalls and gates replacement		

Design and Construction - Summary

Loan Program
Attachment 3

Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
Projects in Design or Construction							
1 Bellyache Ridge Metro District > Well Replacement Project C150356 (CT2015-015)	Eagle	\$169,175	100%	Feb 2015 - May 2016	80%	ACM	Project was bid in June 2014. The District received no bids. The engineer and District reevaluated the project and opted to drill a smaller test well. Drilling began on February 17, 2015. The test well did not produce the amount of water required by the District to meet its needs. The District's engineer is recommending a new well site.
2 Bennett, Town of > Wells #3 and #6 Replacement Project CT2015-161	Adams Arapahoe	\$145,400	100%	May 2015 - Nov 2015	75%	ACM	The Project was bid in 2014 and drilling began in May 2015. All drilling was complete as of the end of July. Temporary pumps are currently in place and will be replaced with the permant pumps by the end of 2015.
3 Bergen Ditch & Reservoir Company > Bergen Reservoir No. 2 Rehabilitation C150344 (CT2015-017)	Jefferson	\$2,020,000	100%	June 2015 - Nov 2015	25%	JMH	Project has been bid and Bergen worked with Low-bidder and SEO to identify cost savings in order to bring construction cost in line with the available budget. Construction started June 2015
4 Boxelder Basin Regional Stormwater Authority > Larimer & Weld Canal Crossing Structure Project C150352 (CT2015-071)	Larimer/ Weld	\$1,010,000	100%	Fall 2015 - Spring 2016	0%	JMH	Land aquisition of all required parcels has been completed and loan funds were advanced to cover land purchase costs. Final design is complete. Bids were received and contract execution is underway.
5 Boxelder Basin Regional Stormwater Authority > East Side Detention Facility Project C150353 (CT2015-070)	Larimer/ Weld	\$7,171,000	100%	Aug 2015 - Spring 2016	5%	JMH	Land aquisition of all required parcels has been completed and loan funds were advanced to cover land purchase costs. Construction began August 2015.
6 Boxelder Basin Regional Stormwater Authority > County Rd 52 Culvert Project C150393 (CT2015-069)	Larimer/ Weld	\$818,100	100%	Aug 2015 - Spring 2016	5%	JMH	Land aquisition of all required parcels has been completed and loan funds were advanced to cover land purchase costs. Construction began August 2015.
7 Central CO WCD - WAS > Augmentation Water Supply Project C150337 (CT2015-060)	Weld/ Adams/ Morgan	\$3,030,000	50%	Apr 13 - Apr 16	30%	JMH	Purchased a portion of the water rights on 4/25/13. Additional water rights/projects being identified.
8 Colorado Parks & Wildlife > Beaver Park Reservoir Rehabilitation C150343	Rio Grande	\$10,000,000	Ph1 100% P2 100%	Summer '13 & Summer '15	100% 98%	KGR	Phase 1 Alsand Construction \$2M. Spillway & Grout work is complete. Phase 2 Construction by ASI Contractors will be complete in September 2015. Minor work closeout will continue through the early fall 2015. Water is currently being stored in the reservoir under SEO observation.
9 City of Cortez > Water Meter Replacement Project > CT2015-152	Montezuma	\$858,500	100%	June 2015 - Jan 2016	10%	ACM	Notice to proceed was issued in June 2015. Meter replacement is underway.

Design and Construction - Summary

Loan Program
Attachment 3

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
10	Crystal Lakes Water and Sewer Association > Lower Lone Pine Lake Enlargement Project C150325 (CT2015-045)	Larimer	\$2,363,400	100%	Apr 12 - Nov 15	99%	ACM	Construction was completed in November 2014. The SEO accepted the as-built drawings in June 2015. Loan will be substantially completed in late 2015.
11	Eckhardt Farms Inc > Water Rights Purchase C150338 (CT2015-051)	Weld	\$1,336,230	N/A	N/A	N/A	JMH	Water rights purchase. Loan funds disbursed May 2015. Substantial completion set for Sept 2015.
12	Ephraim Ditch Company > Ephraim Diversion and Headgate Rehabilitation C150402 (CT2015-090)	Rio Grande	\$101,000	100%	Aug 15 - Dec 15	20%	JMH	NRCS has finalized design. Construction began August 2015.
13	Farmers Pawnee Canal Company > Diversion Structure Replacement Project C150394 (CT2015-132)	Logan	\$2,067,470	100%	Fall 14 - Fall 15	96%	DRJ	Final electrical work continues. Excel coordination taking longer than expected, but project expected to wrap up by September.
14	Fowler, Town of > Augmentation Pipeline Project C150359 (CT2015-054)	Otero	\$277,245	90%	Fall 2015	0%	DRJ	Design modifications required for alignment change. Bid process imminent.
15	Fulton Irrigating Ditch Company > Diversion Structure Rehabilitation Project C150399 (CT2015-092)	Adams	\$2,027,070	100%	Fall 14 - Summer 15	96%	DRJ	Working through gantry crane/rake issues and punchlist items.
16	Georgetown, Town of > Outlet Works Modification Project C150321 (CT2015-055)	Clear Creek	\$2,976,975	100%	Aug 14 - Fall 15	90%	ACM	Construction began in August 2014. Gate testing occurred on 4/28/15. The gate is operational at 50% of its capacity. Rodney-Hunt (gate manufacturer) is fabricating a replacement part to be installed in fall of 2015.
17	Grand Mesa Water Conservancy District > Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	\$227,250	100%	Mar 13 - Nov 16	85%	ACM	Construction on Peak Reservoir began in the 2013 season and was completed in Oct 2014. Blanche Park construction was delayed due to Federal permitting issues. The District was hopeful it could begin construction in the 2015 season but the project is on hold until the permits are issued.
18	Greeley and Loveland Irrigation Company > Irrigation System Improvements C150362 (CT2015-022)	Larimer	\$3,154,230	100%	Summer 14 - Fall 15	80%	JMH	Phase 1 and 2A of Horseshoe complete. Phase 2B to occur after 2015 irrigation season. Boyd Lake Project started construction January 2015 and was completed May 2015.
19	Gypsum, Town of > LEDE Ditch and Reservoir Rehabilitation C150296 (CT2015-058)	Eagle	\$2,690,000	100%	Jul 13 - Sep 16	60%	DRJ	Outlet conduit and blanket drain in place and covered. Lower cast-in-place spillway cutoff wall and spillway/outlet discharge basin are completed. Contractor continues to place shell, chimney, and core material.

Design and Construction - Summary

Loan Program
Attachment 3

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
20	Huerfano County Water Conservancy District > Regional Augmentation Project C150364 (CT2015-047)	Huerfano	\$2,222,000	100%	Mar 14 - Oct 15	60%	ACM	Land and water rights purchase to occurred in January 2014. Camp Ranch augmentation site construction is underway. The Red Wing augmentation project is on hold pending a re-evaluation of sites for the reservoir.
21	Lake Canal Reservoir Company > North Gray Reservoir Rehab Project C150322 (CT2015-042)	Larimer/ Weld	\$116,625	50%	Fall 2015 - 2016	0%	JMH	Project was delayed until neighboring Boxelder East Side Detention Facility was finalized. Project is currently out to bid with a September bid open date. Anticipating submitting design to SEO in September 2015.
22	Lake Durango Water Authority > Source Water Supply Project C150317 (CT2015-013)	LaPlatta	\$2,525,000	95%	Fall 15 - Fall 16	0%	KGR	Final design near complete. ROW and easements are being negotiated. Work to be bid in the fall of 2015.
23	Las Animas Consolidated Canal Company >Repair and Replacement of the Las Animas Consolidated Canal Spillway Structure CT2016-1007	Bent	\$363,782				DRJ	Anticipated schedule for 2015: Survey March, Engr revw by Aug, Final plans by mid-Sept, contracting by Oct/Nov, Nov 15 ditch out, anticipated Thanksgiving construction NTP, finish by Mar 1, 2015
24	Left Hand Ditch Company > Allen Lake and Lake Isabelle Repair Project C150336 (CT2015-088)	Boulder	\$1,475,307	100%	Nov 12 - Oct 15	90%	ACM	Allen Lake construction was completed in August 2013. Lake Isabelle outletworks construction began in 2013. No construction occurred in 2014 due to high water levels and the elevation of the project. Construction resumed in August 2015 and completion is expected by November 2015.
25	Louden Irrigating Canal & Reservoir Company > Emergency Diversion Structure and Ditch Repair C150398 (CT2015-151)	Larimer	\$ 161,600	100%	Summer 14 - Fall 15	90%	JMH	Initial repair phase of project is complete. Improvements to the diversion and heatgate system is scheduled for Fall of 2015
26	Lower Arkansas Valley WCD >Water Rights Purchase CT2015-175	Bent, Crowley, Otero, Prowers, Pueblo	\$2,560,350	NA	Summer 2015	NA	DRJ	Substantial completion imminent.
27	Lower Poudre Augmentation Company >Cornish Water Rights Purchase CT2015-171	Larimer & Weld	\$1,163,500	N/A	N/A	N/A	JMH	Water rights purchase.Loan funds disbursed July 2015. Substantial completion set for November 2015.
28	McDonald Ditch Company > Ditch Diversion and Headgate Replacement C150334 (CT2015-044)	Rio Grande	\$101,000	100%	Dec 14 - Fall 15	50%	JMH	Phase 1 Construction (diversion dam) started December 2014, completed in March 2015. Phase 2 (pipeline) to be completed after 2015 irrigation season.
29	Monte Vista, City of > Augmentation Water Rights Acquisition C150309 (CT2015-011)	Rio Grande	\$1,693,770	N/A	Oct 10 - Jul 17	50%	ACM	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.

Design and Construction - Summary

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
30	North Poudre Irrigation Co > Reservoir No. 4 Rehabilitation C150378 (CT2015-003)	Larimer	\$1,636,200	90%	Fall 14 - Fall 15	10%	JMH	Design being updated per SEO suggestion to upsize spillway to meet higher classification. Wildlife Mitigation completed in January 2015. Reservoir construction bids due September 22, 2015.
31	Northern Colorado WCD- Hydropower Enterprise > Granby Hydropower Project C150396 (CT2015-140)	Grand	\$5,135,183	100%	May 15 - May 16	25%	JMH	Power Purchase and Lease of Power Privledge agreements signed March 2015. Construction started in May 2015
32	Overland Ditch and Reservoir Company > Overland Reservoir Rehabilitation C150206 (CT2015-034)	Delta	\$1,141,300	50%	Permitting	0%	KGR	Permitting issues are being addressed to enlarge reservoir. Company is concerned about the impact of increased costs to the project
33	Owl Creek Reservoir Company > Owl Creek Reservoir Rehabilitation C150089 (CT2015-048)	Weld	\$1,125,000	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.
34	Penrose Water District > Water Rights Purchase and Pipeline Installation C150237 (CT2015-040)	Fremont	\$9,763,670	100%	Summer 14 - Spring 16	95%	DRJ	Final SCADA commissioning under way. Contractor working to determine source of leaks in main pipeline. Substantial completion imminent.
35	Pisgah Reservoir and Ditch Company > Mount Pisgah Dam/Wrights Res Rehabilitation C150341 (CT2015-027)	Teller	\$1,160,655	100%	Spring 15 - Dec 16	20%	JMH	Approved for additional loan funds at November 2014 and July 2015 Board Meeting. Phase 1 complete. Phase 2 to begin September 2015.
36	Prairie Ditch Company > Plaza Phase 3: Prarie Ditch Imp. Project C150400 (CT2015-134)	Rio Grande	\$131,300	90%	Fall 15 - Spring 16	0%	JMH	NRCS near complete with final headgate design. Scheduled for a Fall 2015 construction start. Bids for the diversion dam were received August 27, 2015.
37	Ridgway, Town of > Lake Otonowanda Rehabilitation Project C150340 (CT2015-056)	Ouray	\$606,000	100%	June 14 - July 15	95%	KGR	Earthwork and outlet construction is nearly complete. Outlet work nearly complete. Completion expected in mid summer. Celebration on August 31, 2015.
38	Riverside Ditch and Allen Extension Company > Ditch System Rehabilitation C150301 (CT2015-050)	Chaffee	\$186,345	85%	Jul 10 - Dec 15	80%	KGR	Ditch lining phase of the project was completed in December 2010. Additional phases will be constructed in 2015. Utilizing NRCS La Junta Fid office for design of replacment of diversion structure. Work is expected in the Winter of 2015/16.
39	Riverside Reservoir and Land Company > Riverside Reservoir Spillway Enlargement C150291 (CT2015-026)	Weld	\$2,838,100	80%	Summer 2016	0%	DRJ	Engineer expects submittal to SEO by late fall/winter of 2015. Construction anticipated summer 2016.

Design and Construction - Summary

Loan Program
Attachment 3

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
40	San Luis Valley Water Conservancy District > Anaconda Ditch Water Right Acquisition C150348 (CT2015-166)	Alamosa	\$839,000	N/A	2015	N/A	ACM	Water rights purchase is pending water court change case completion. There is currently one opposer in the case and trial is schedule for December 2015. This District is hopeful the purchase will occur in early 2016.
41	Sanchez Ditch and Reservoir Company > Sanchez Reservoir Outlet Rehabilitation Project C150342 (CT2015-012)	Costilla	\$1,381,276	100%	Summer 14 - Winter 15	85%	ACM	Construction began in Oct 2014. Outlet works work was completed in Jan 2015. Seepage and monitoring work is scheduled for fall of 2015.
42	Sanford Canal Company > Sanford Diversion and Headgate Rehabilitation C150401(CT2015-091)	Rio Grande	\$101,000	100%	Aug 15 - Dec 15	20%	JMH	NRCS has finalized design. Construction began August 2015.
43	Santa Maria Reservoir Company > Siphon and Canal System Rehabilitation Project C150350 (CT2015-005)	Hinsdale/ Mineral	\$1,405,163	100%	2014 - 2015	99%	ACM	Construction was completed in Oct 2014. As-built drawings are in progress. Discussions regarding concrete durability issues are underway with the contractor.
44	Santa Maria Reservoir Company > Continental Dam Spillway Rehabilitation Project C150365 (CT2015-006)	Hinsdale/ Mineral	\$3,071,633	100%	2014 - 2015	70%	ACM	Bid was awarded in April 2014. Construction began in May 2014 and is scheduled for two construction seasons. Loan increase was approved in Jan 2015. Construction resumed in June of 2015. Completion is expected by fall of 2015.
45	Thunderbird W&S Dist > Lambert Ranch Water Rights Purchase C150320 (CT2015-049)	Douglas	\$318,150	100%	N/A	0%	JMH	Closing has been delayed until 2015 due to easement access to purchased wells. Easement aquisition process is still underway and District expects to purchase water rights in September 2015.
46	Upper Arkansas Water Conservancy District > Reservoir Rehabilitation C150192 (CT2015-052)	Chaffe/ Custer	\$3,009,800	100%	Permitting	90%	KGR	The first phase of construction was awarded to ASI, Buena Vista, CO, and completed in May 2007. The NEPA permitting effort for the enlargment is underway and expected to be complete by Dec 2017.
47	Upper Platte & Beaver Canal Company > Hospital Rd Recharge Facility & Bridge Project CT2015-101	Morgan	\$190,890	30%	Fall 14 - Spring 15	30%	DRJ	Augmentation land purchase complete. Connection to ditch supply ongoing. Draw made on loan to replace broken headgate at river diversion structure. Bridge component on hold pending possible larger diversion dam rehab project with Deuel & Snyder Ditch Co.
48	West Reservoir and Ditch Company >Repair of West Reservoir No. 1 Outlet Works Loan CT201-196 (Grant CT2015-3228)	Delta	\$248,378	95%%	Summer 15 - Fall16	2%	DRJ	Construction plans under review by SEO. Dam breaching under way.
49	Windsor, Town of > Kyger Reservoir Project C150366 (CT2015-057)	Larimer/ Weld	\$4,545,000	20%	Summer 16 - Fall16	0%	JMH	Town to purchase reservoir and water rights in summer 2014. Town is expected to complete design and permitting in February 2016 with constrution to occur that summer.
50 - WISE Project - ECCV Pipeline Purchase								\$2,227,050

Design and Construction - Summary

Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
Cottonwood W&S Dist - C150408A (CT2015-102)	Douglas/ Arapahoe	\$381,780	N/A	Fall 14 - Spring 15	80%	DRJ	
Inverness W&S Dist - C150409A (CT2015-117)	Douglas/ Arapahoe	\$1,845,270	N/A	Fall 14 - Spring 15	0%	DRJ	
51 - WISE Project - Phase 1 Infructure							\$16,802,501
Cottonwood W&S Dist - C150408B (CT2015-106)	Douglas/ Arapahoe	\$2,636,100	1%	Spring 15 - Jan 17	0%	DRJ	Notice to proceed given to contractor in May 2015. Construction under way at Smoky Hill Tank site.Design and permitting under way for additional project elements.
Inverness W&S Dist - C150409B (CT2015-118)	Douglas/ Arapahoe	\$1,181,700	1%	Spring 15 - Jan 17	0%	DRJ	
Parker W&S Dist - C150410B (CT2015-108)	Douglas/ Arapahoe	\$6,785,321	1%	Spring 15 - Jan 17	0%	DRJ	
Denver SE Sub W&S Dist - C150411B (CT2015-085)	Douglas/ Arapahoe	\$6,199,380	1%	Spring 15 - Jan 17	0%	DRJ	
52 - WISE Project - Phase 2 Infructure							\$7,400,078
Cottonwood W&S Dist - C150408C (CT2015-105)	Douglas/ Arapahoe	\$1,127,160	0%	Spring 15 - Fall 21	0%	DRJ	
Inverness W&S Dist - C150409C (CT2015-119)	Douglas/ Arapahoe	\$1,427,130	0%	Spring 15 - Fall 21	0%	DRJ	
Parker W&S Dist - C150410C (CT2015-109)	Douglas/ Arapahoe	\$3,418,658	0%	Spring 15 - Fall 21	0%	DRJ	
Denver SE Sub W&S Dist - C150411C (CT2015-086)	Douglas/ Arapahoe	\$1,427,130	0%	Spring 15 - Fall 21	0%	DRJ	
53 - WISE Project - DIA Connection							\$2,372,490
Cottonwood W&S Dist - C150408D (CT2015-104)	Douglas/ Arapahoe	\$363,600	N/A	Spring 15 - Spring 21	11%	DRJ	
Inverness W&S Dist - C150409D (CT2015-120)	Douglas/ Arapahoe	\$454,500	N/A	Spring 15 - Spring 21	0%	DRJ	No Inverness Request for Reimb received.
Parker W&S Dist - C150410D (CT2015-110)	Douglas/ Arapahoe	\$1,099,890	N/A	Spring 15 - Spring 21	11%	DRJ	
Denver SE Sub. W&S Dist - C150411D (CT2015-087)	Douglas/ Arapahoe	\$454,500	N/A	Spring 15 - Spring 21	11%	DRJ	

Design and Construction - Summary

Loan Program
Attachment 3

Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
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Projects Under Contract SubTotal = \$122,462,141

Approved Projects - Not Under Contract

a	Chatfield Reallocation Project - Storage Purchase > Castle Pines North MD - C150404A > Centennial W&S Dist - C150405A > Center of CO WCD - C150406A > Central CO WCD - C150407A	Arapahoe Douglas Park Weld	\$9,549,247	In Contracting	JMH	
b	Chatfield Reallocation Project - Phase 1 Mitigation > Castle Pines North MD - C150404B > Centennial W&S Dist - C150405B > Center of CO WCD - C150406B > Central CO WCD - C150407B	Arapahoe Douglas Park Weld	\$54,687,763	In Contracting	JMH	
c	Chatfield Reallocation Project - Phase 2 Mitigation > Castle Pines North MD - C150404C > Centennial W&S Dist - C150405C > Central CO WCD - C150407C	Arapahoe Douglas Weld	\$19,646,520	In Contracting	JMH	
d	Southeastern CO Water Conserv. District > Arkansas Valley Conduit C150238	Crowley	\$60,600,000	In Contracting	KGR	Pending Federal Appropriation. Hydro project may be considered from these loan funds
e	Bow Mar Water & Sanitation District >Rehabilitation and Replacement of Water Meters	Arapahoe & Jefferson	\$332,795	In Contracting	DRJ	Construction anticipated after 2015 November election, likely 2016 January
f	Plum Valley Heights Subdistrict >Raw Water Supply Project	Douglas	\$2,248,260	In Contracting	JMH	
g	Uncompahgre Valley Water Users Association >Drop 5 Hydroelectric Project CT2015-174	Montrose & Delta	\$6,999,300	In Contracting	KGR	
h	Oligarchy Irrigation Company > Dam Outlet Works Rehabilitation	Boulder	\$860,000	In Contracting	JMH	

Not Under Contract SubTotal = \$154,923,885

Design and Construction - Summary

Loan Program
Attachment 3

Contract Borrower

County

Loan Amount

Design
Status

Const.
Start/End

Const.
Status

PM

Status Description/Update

Grand Total = \$277,386,026

Projects Substantially Completed in Calendar Year 2015

1	Mancos Water Conservancy District > Inlet and Outlet Canal Rehabilitation C150120 (CT2015-036)	Montezuma	\$1,451,556	100%	Jan 04 - Oct 13	100%	KGR	1/1/2015
2	Lone Cabin Ditch & Reservoir Company > Lone Cabin Dam Rehab. Project C150361 (CT2015-059)	Delta	\$123,448	100%	Summer 14 - Fall 14	100%	DRJ	2/1/2015
3	Parker Water and Sanitation District > ECCV Pipeline Purchase C150410A (CT2015-107)	Douglas/ Arapahoe	\$4,426,830	NA	Fall 14 - Spring 15	100%	DRJ	2/1/2015
4	Denver Southeast Suburban Water and San. District > ECCV Pipeline Purchase C150411A (CT2015-083)	Douglas/ Arapahoe	\$1,845,270	NA	Fall 14 - Spring 15	100%	DRJ	2/1/2015
5	Joseph W. Bowles Reservoir Company > Bowles No. 1 Dam Rehabilitation C150290 (CT2015-030)	Jefferson	\$1,668,391	100%	Aug 10 - Dec 14	100%	JMH	3/1/2015
6	Dillon, Town of > Old Dillon Reservoir Enlargement C150295 (CT2015-038)	Summit	\$1,515,000	100%	Sep 10 - Oct 14	100%	KGR	4/1/2015
7	Farmers' High Line Canal and Reservoir Company > System Rehabilitation Project C150314 (CT2015-019)	Adams/ Jefferson	\$2,129,918	100%	Feb 11 - May 15	100%	JMH	5/1/2015
8	Platte Valley Irrigation Company > Sand Hill Lake Outlet Works Rehabilitation CT2015-139	Weld	\$738,466	100%	Summer 14 - Summer 15	100%	JMH	5/1/2015

Design and Construction - Summary

Loan Program
Attachment 3

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
9	Sterling Irrigation Company > Emergency Sterling Ditch Rehabilitation Project CT2015-097	Logan	\$101,000	100%	May-14	100%	JMH	5/1/2015
10	Terrace Irrigation Co > Spillway Replacment Project C150332 (CT15-033)	Conejos	\$2,712,602	100%	Jul 12 - Jul 13	100%	KGR	6/1/2015
11	East Mesa Water Company > Ditch Piping Project C150360 (CT2015-141)	Pitkin/ Garfield	\$732,927	100%	Feb 15 - May 15	100%%	KGR	7/1/2015
12	Greeley Irrigation Company > Greeley Canal No. 3 Rehabilitation C150239 (CT2015-021)	Weld	\$1,134,839	100%%	Feb 08 - Dec 15	100%%	KGR	7/1/2015

SubTotal = \$18,580,247

**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

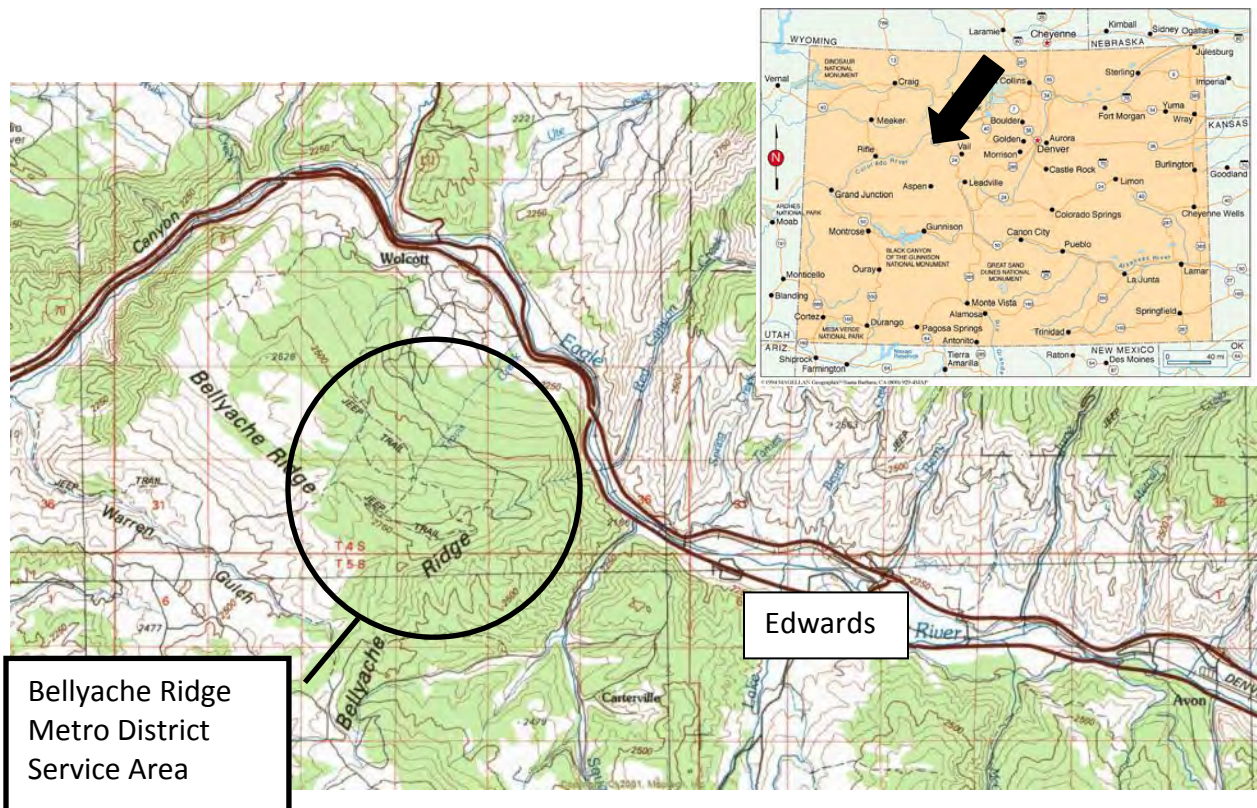
Type of Borrower: Municipal (High)

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.



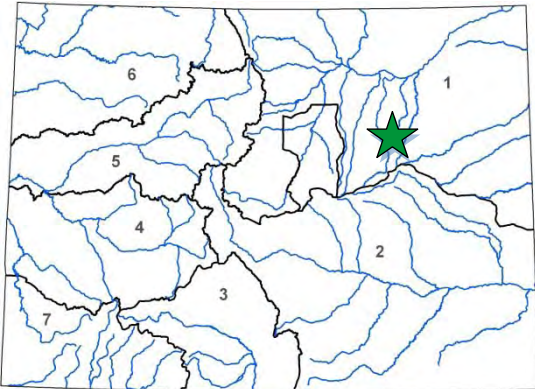


Wells #3 and #6 Replacement Project

Town of Bennett

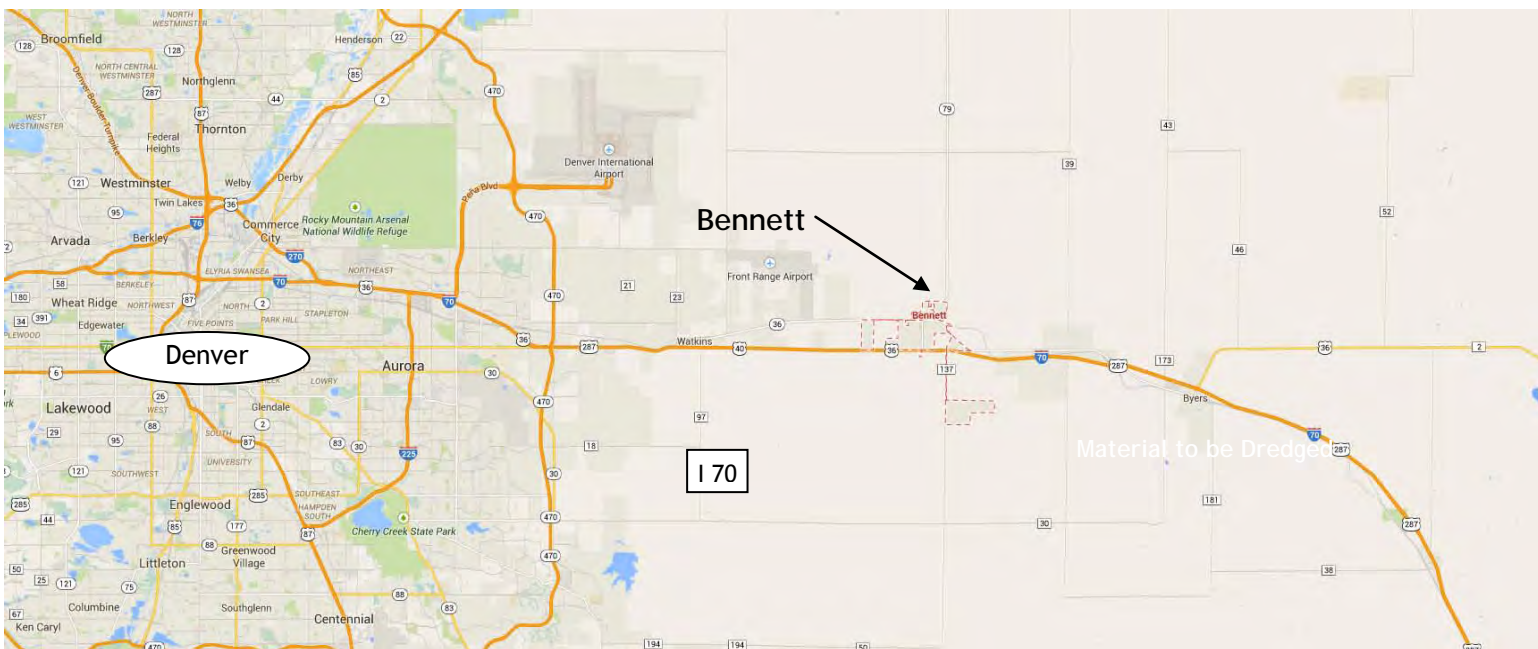
November 2014 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$1,600,000
CWCB Loan (with Service Fee):	\$1,454,400
Loan Term and Interest Rate:	30 Years @ 3.25%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
0%	0% Low - 100% Mid - 0% High
Commercial	0%
P R O J E C T D E T A I L S	
Project Type:	Well Drilling
Average Annual Delivery:	261 AF



The Town of Bennett provides water to its 2,500 residents from the Denver, Upper Arapahoe and Lower Arapahoe, and Laramie-Fox Hills aquifers. A recent study revealed the need to address operational reliability, efficiency, and safety of the Town of Bennett's well #3 and well #6. The Town currently has 11 wells. The replacement of wells #3 and #6 will provide the Town with additional supply to meet demands and needed redundancy in its water supply system. Both wells need to be replaced due to the age of the existing wells. Construction is expected to occur during the spring of 2015.

L O C A T I O N	
County:	Adams & Arapahoe
Water Source:	Non-Tributary Groundwater
Drainage Basin:	South Platte
Division:	1
District:	1

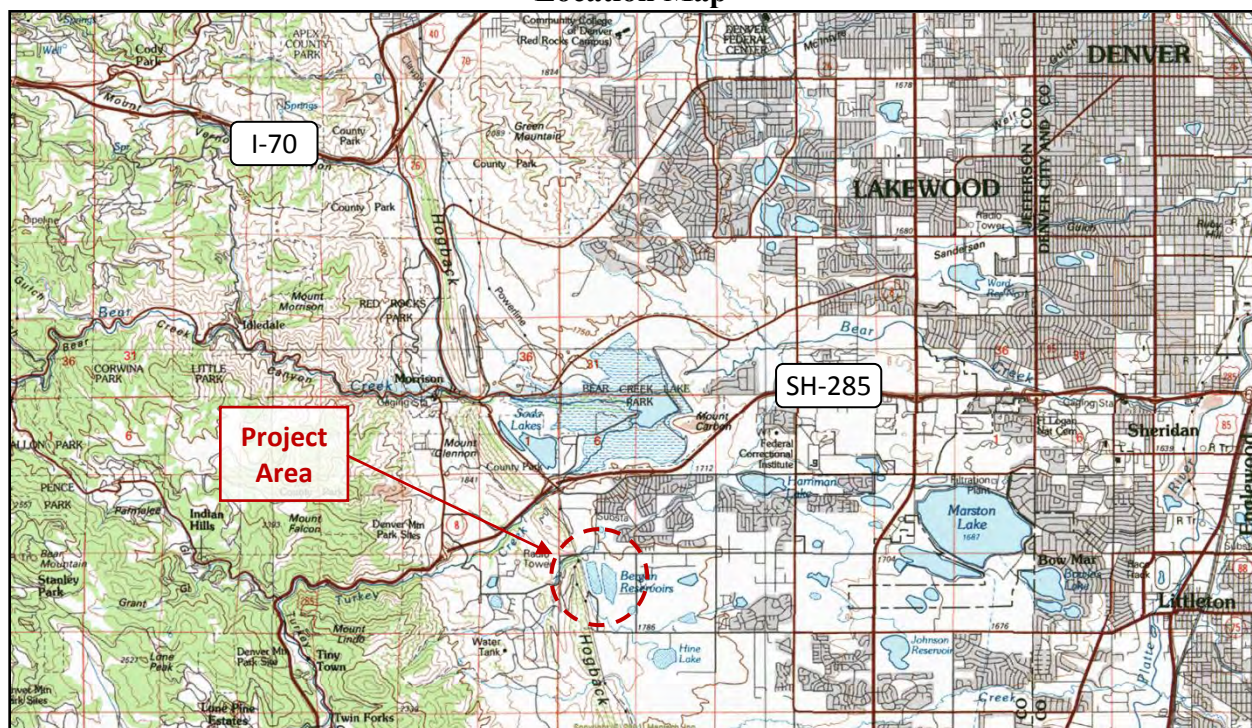


Water Project Loan Program – Project Data Sheet

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



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

Borrower: Boxelder Basin Regional Stormwater Authority

County: Larimer

Project Name: Larimer-Weld Canal & Boxelder Creek Crossing Structure

Project Type: Flood Control

Drainage Basin / District: South Platte / 3

Water Source: Boxelder Creek

Total Project Cost: \$1,139,000

Funding Source: Construction Fund

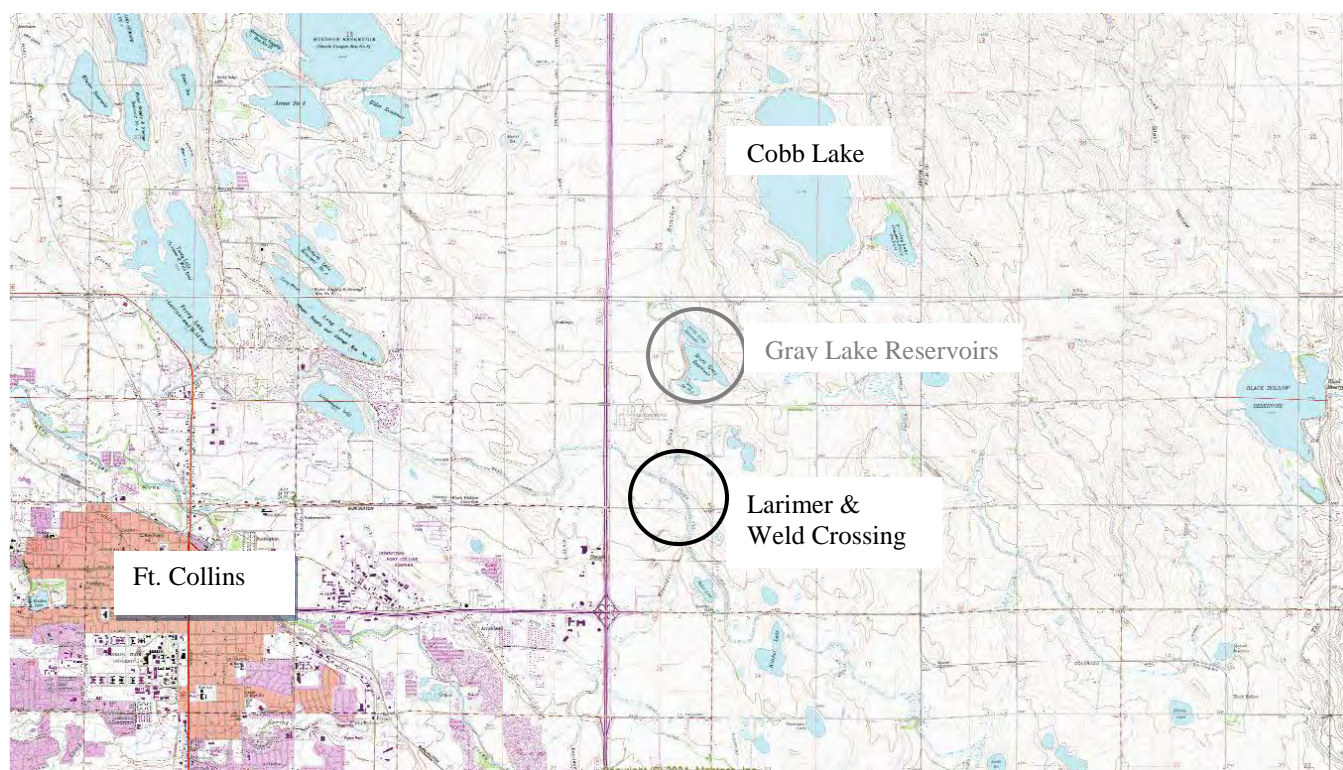
Type of Borrower: Middle Income Municipal

Average Annual Diversion: N/A

CWCB Loan: \$1,010,000
(with 1% service fee)

Interest Rate: 2.75% **Term:** 15-years
(rate 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 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**

Borrower: Boxelder Basin Regional Stormwater
Authority

County: Larimer

Project Name: East Side Detention Facility

Project Type: Flood Control

Drainage Basin/ District: South Platte / 3

Water Source: Boxelder Creek

Total Project Cost: \$8,761,000

Funding Source: Construction Fund

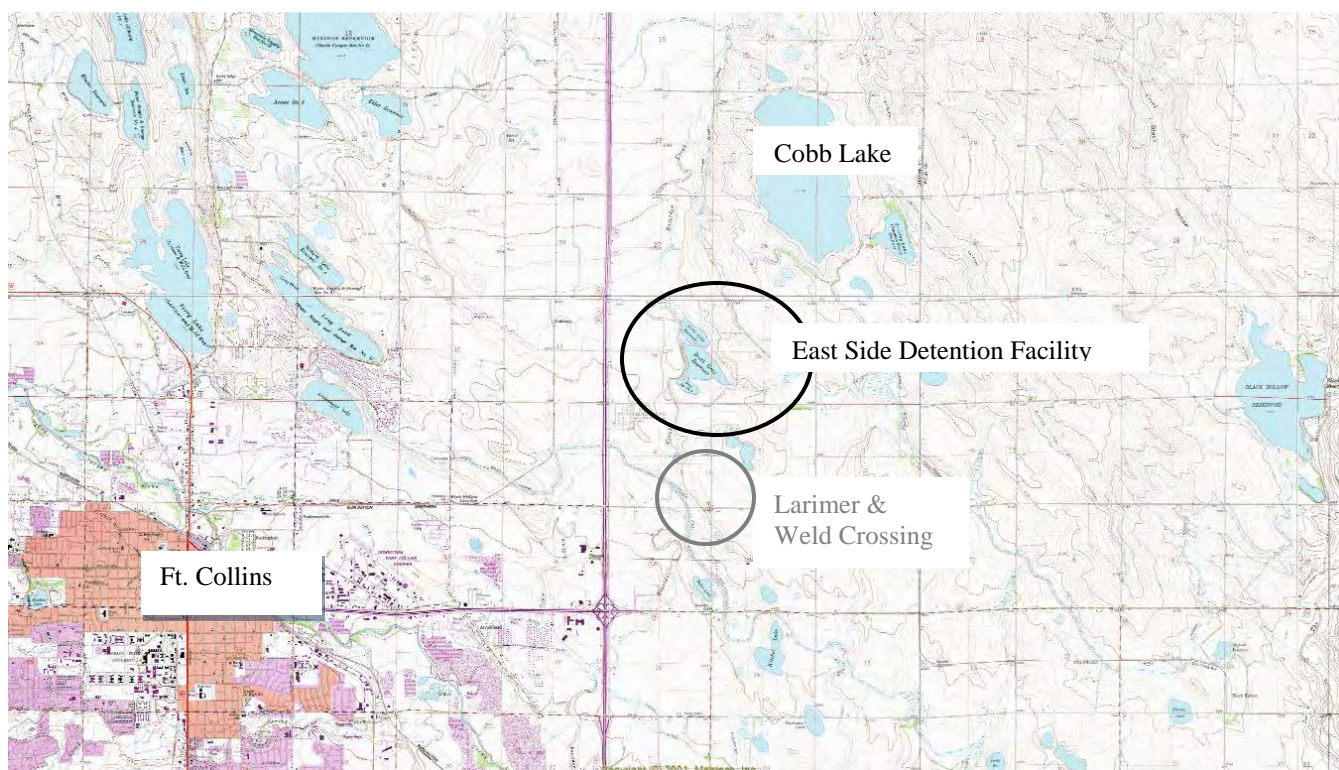
Type of Borrower: Middle Income Municipal

Average Annual Diversion: N/A

CWCB Loan: \$7,171,000
(with 1% service fee)

Interest Rate: 2.75% **Term:** 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**

C150393

Borrower: Boxelder Basin Regional
Stormwater Authority

County: Larimer

Project Name: County Road 52 Improvements

Project Type: Flood Control

Drainage Basin/ District: South Platte / 3

Water Source: Boxelder Creek

Total Project Cost: \$1,850,000

Funding Source: Construction Fund

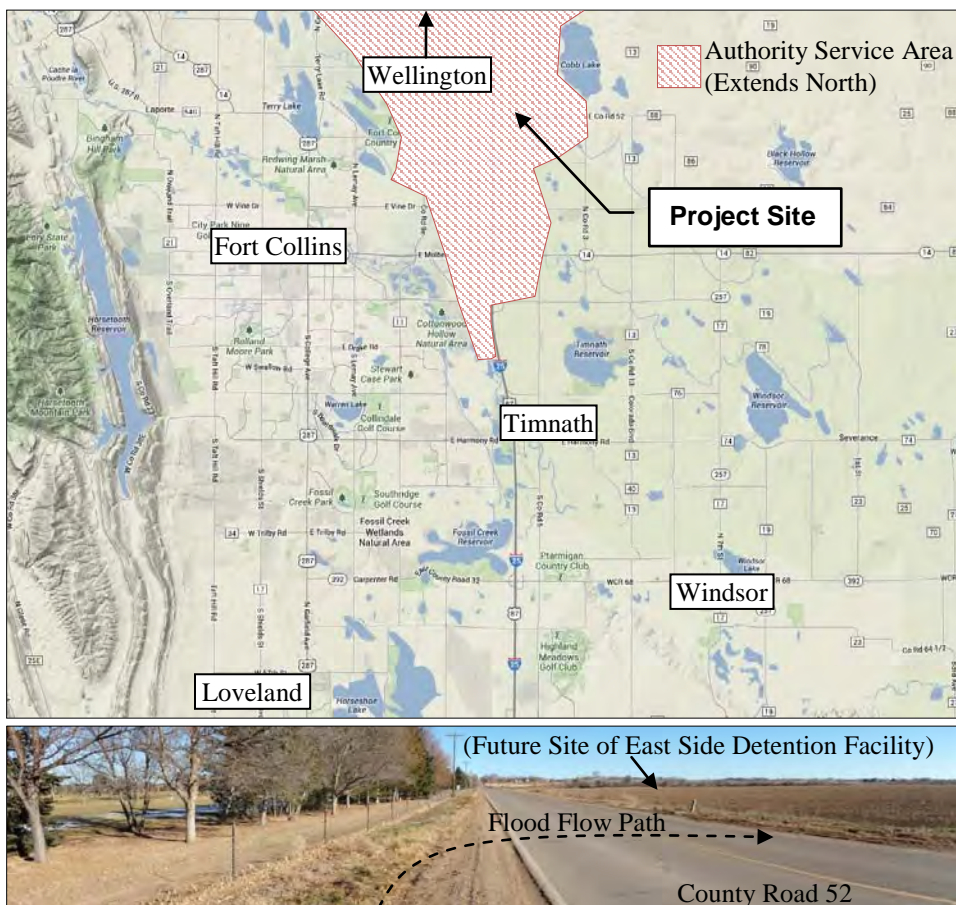
Type of Borrower: Middle Income Municipal

Average Annual Diversion: N/A

CWCB Loan: \$818,100
(with 1% service fee)

Interest Rate: 2.50% **Term:** 15 years
(Reduced from 2.75% for middle income municipal)

The Boxelder Basin Regional Stormwater Authority was formed in 2008, through an IGA between Fort Collins, Larimer County, and 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 County Road 52 Improvement Project will be completed in conjunction with the Authority's East Side Detention Facility (CWCB Loan Contract C150352) and Larimer and Weld Canal Crossing Structure (CWCB Loan Contract C150353). This Project will install box culverts under County Road 52 to reduce roadway overtopping in a 100-year storm event. Altogether, these projects are expected to reduce downstream flows in Boxelder Creek from over 7,000 cfs to less than 2,400 cfs during a 100-year storm event.

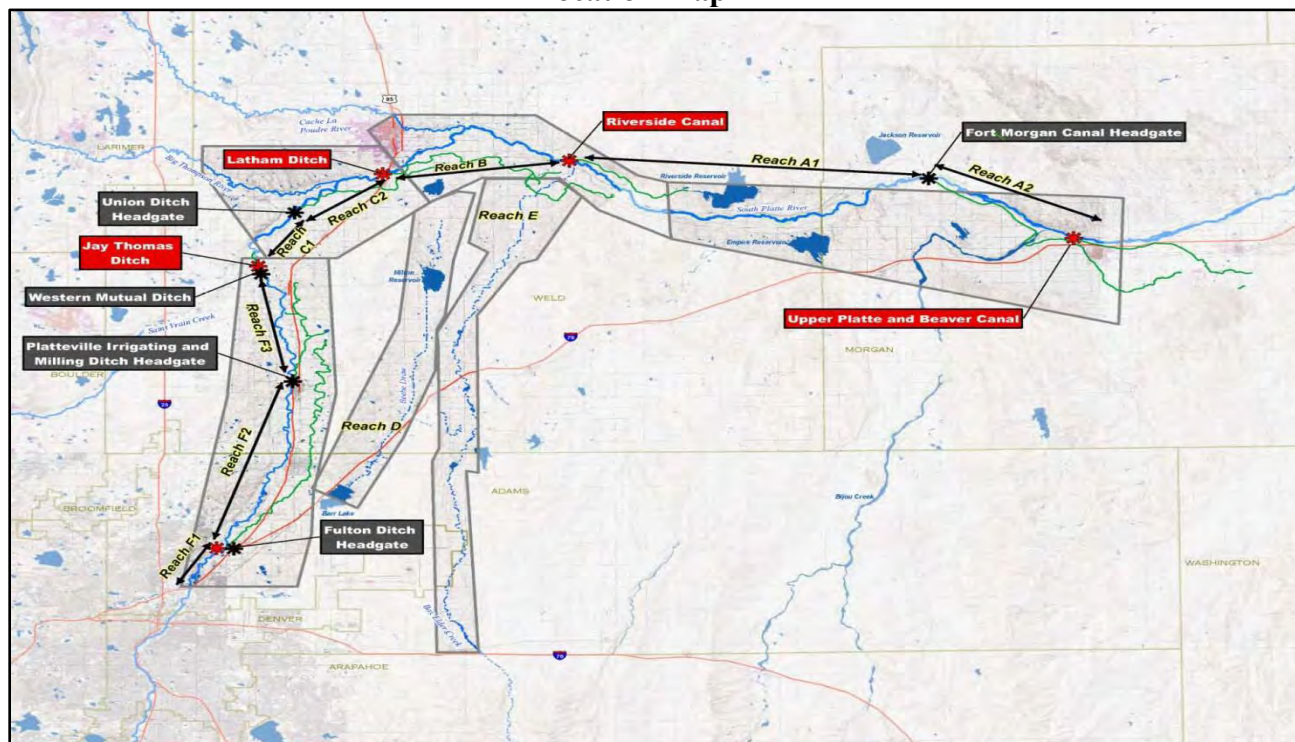


Water Project Loan Program – Project Data Sheet

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



**CWCB 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

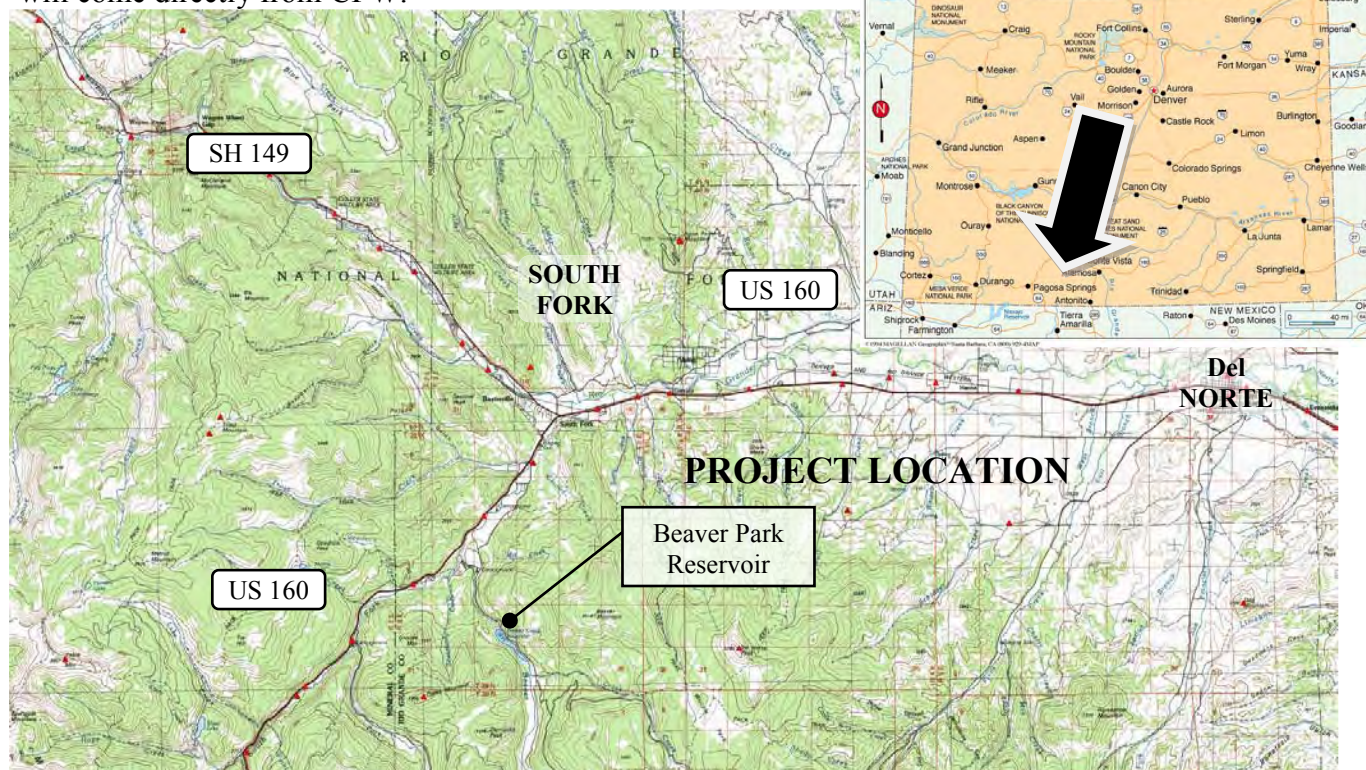
Average Annual Diversion: 4,434 AF

Restricted Capacity Reclaimed: 2,201 AF

CWCB Loan: \$10,000,000

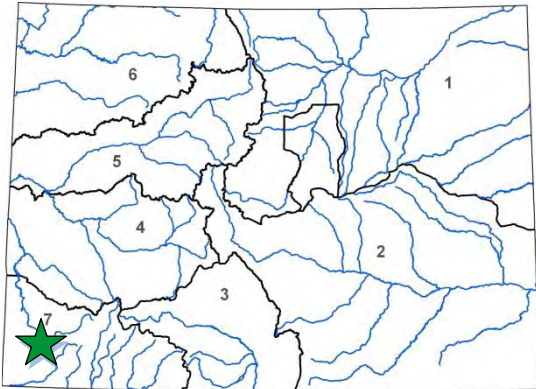
Interest Rate: 0% **Term:** 30-year

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.





L O A N D E T A I L S	
Project Cost:	\$1,200,000
CWCB Loan (with Service Fee):	\$858,500
Loan Term and Interest Rate:	10 Years @ 2.1%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
0%	100% Low - 0% Mid - 0% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Meter replacement
Average Annual Delivery:	2,600 AF



L O C A T I O N	
County:	Montezuma
Water Source:	Dolores River
Drainage Basin:	San Juan / Dolores
Division:	7
District:	71

The City supplies potable water to the residents of Cortez, the Ute Mountain Ute Tribe, and Montezuma County Water District No. 1. Its supply comes from McPhee Reservoir. The existing system has 3,400 meters that range in age from 25 to 70 years old. The meters are inaccurate and are failing to capture customer usage information. The City intends to replace the meters with smart meters that will provide data storage and the ability to better manage water within the distribution system. The City is also applying for a \$50,000 Water Efficiency Grant from the CWCB and a \$200,000 grant from DOLA. All work is expected to occur in 2015.



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 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

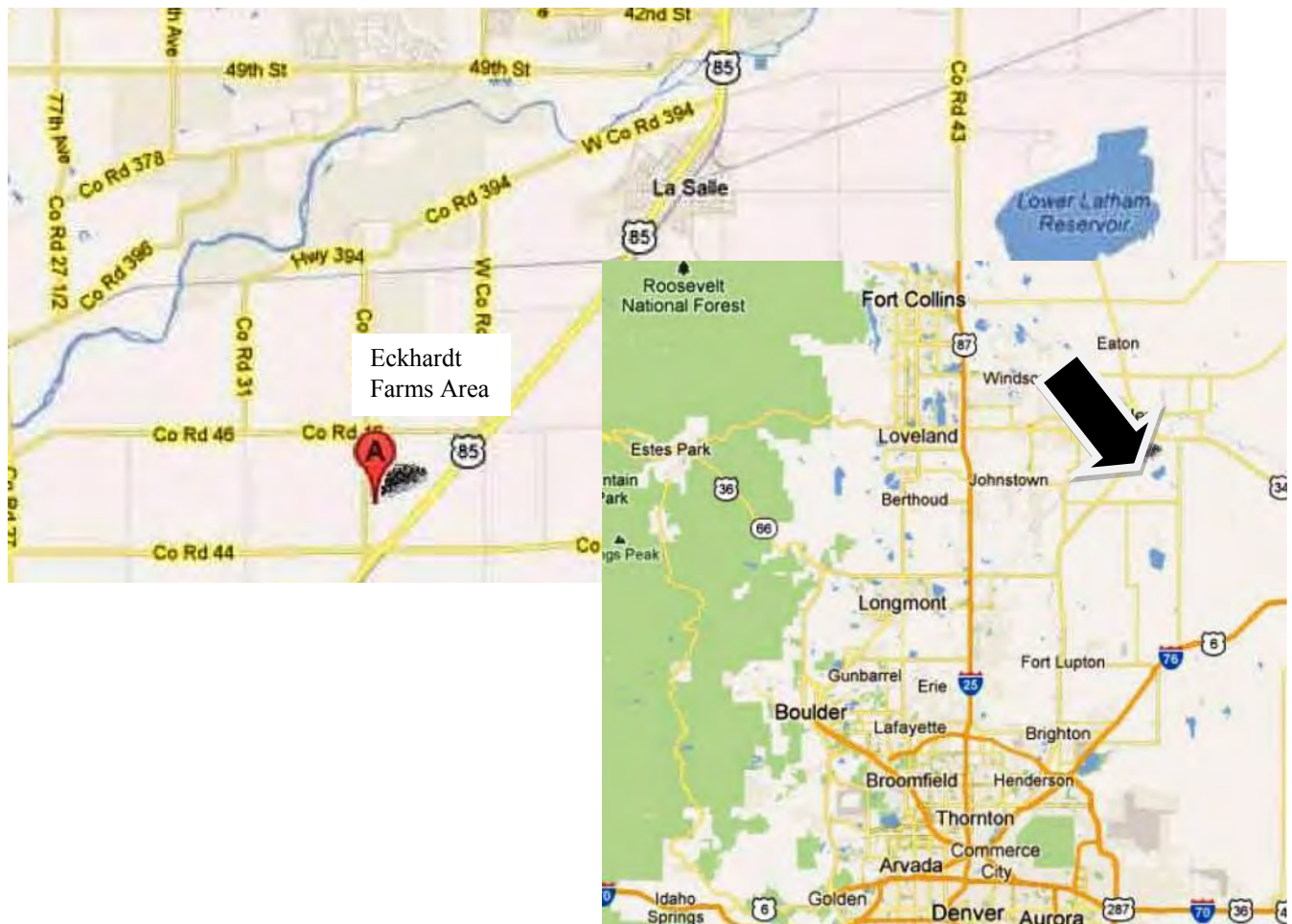
Funding Source: Construction Fund

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

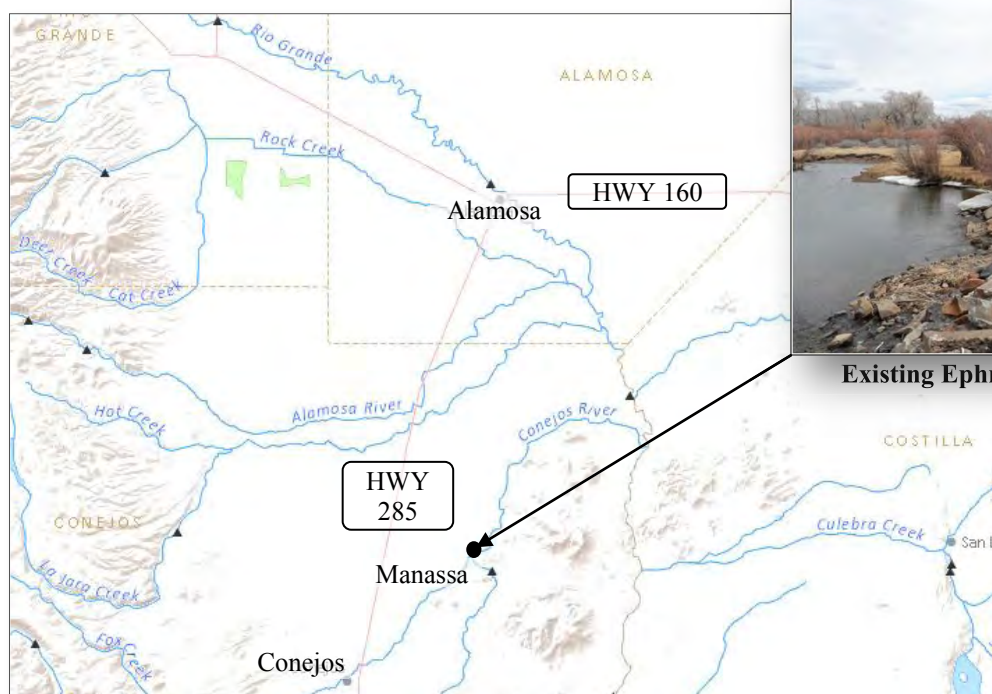
Eckhardt Farms Inc. is located in Weld County near LaSalle, Colorado. The farming Corporation has been incorporated since 1993. It farms 3,000 acres and generates revenues from crops of hay, wheat, corn, sugar beets, onions, and pinto beans. In the past, the Corporation was able to irrigate with well 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****C150402****Borrower:** The Ephraim Ditch Company**County:** Rio Grande**Project Name:** Ephraim Diversion and
Headgate Rehabilitation**Project Type:** Ditch Rehabilitation**Drainage Basin/ District:** Rio Grande / 22**Water Source:** Conejos River**Total Project Cost:** \$201,500**Funding Source:** Construction Fund,
WSRA Grants**Type of Borrower:** Agricultural**Average Annual Diversion:** 4,100 AF**CWCB Loan:** \$101,000
(with 1% service fee)**Interest Rate:** 1.75% **Term:** 30-years

The Ephraim Ditch Company formed in 1883 and incorporated in 1927 as a Mutual Ditch Company. Its diversion is located on the Conejos River just below the confluence with the San Antonio River and a service area covering approximately 5,000 irrigated acres. The purpose of this Project is to address the need for a well-designed diversion structure that will reduce maintenance, improve water management efficiencies, and allow for the accurate control of compact-entitled waters. The core of the Ephraim Ditch diversion structure has been washed away over time, contributing to decades of limited diversion to irrigators and potential over payment to the Compact. Currently irrigators divert their water right by piling debris such as tree trunks or cinderblocks to act as the diversion dam. This Project will remove and replace the diversion and headgate structure and install automated headgates and five gauging stations. Construction is expected to start around July 2015.

This Project is one of three projects collectively known as the Conejos River System Confluence Management Project, managed by the Conejos Water Conservancy District. The District has taken a proactive “whole river” system approach to water management and, over the past few years, has improved the efficiency and stability of many diversions, developed real-time water management data, and studied the effects on return flows from irrigated areas from groundwater withdrawals. The Confluence Management Project will extend this whole river strategy to the Confluence, specifically to the Sanford Canal, Ephraim Ditch, and East Bend Ditch.

**Existing Ephraim Ditch Diversion**

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

C150394

Borrower: Farmers Pawnee Canal Company

County: Logan

Project Name: Diversion Structure Replacement Project

Project Type: Diversion Structure

Drainage Basin/ District: South Platte / 64

Water Source: South Platte River

Total Project Cost: \$2,047,000

Funding Source: Construction Fund

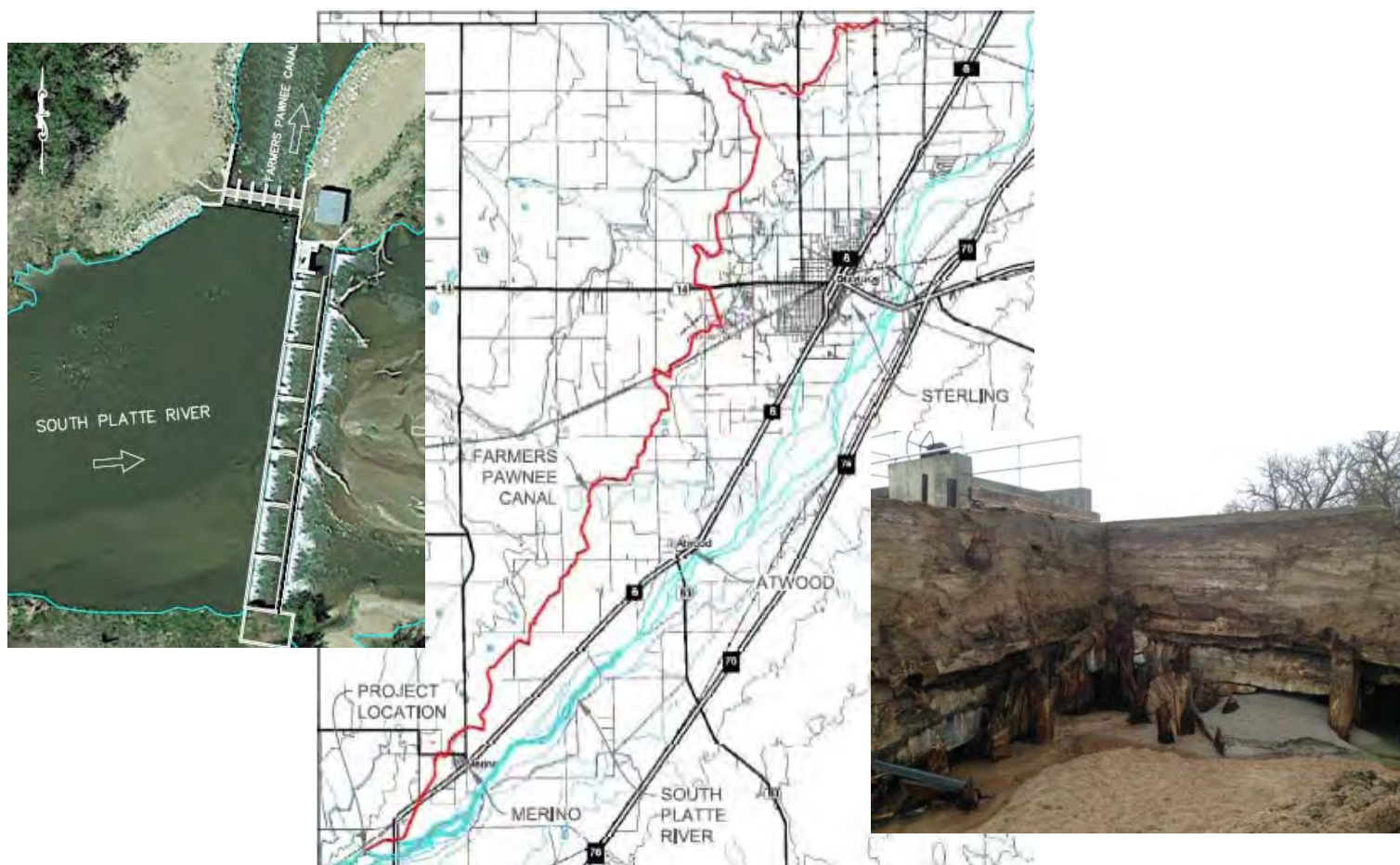
Type of Borrower: Agricultural

Average Annual Diversion: 27,956 AF

CWCB Loan: \$2,067,470
(with 1% service fee)

Interest Rate: 1.75% **Term:** 30 years

The Company provides irrigation water to a 10,000 acre service area, extending from one mile south of Merino to four miles north of Sterling along the west side of the South Platte River. The Company's diversion structure is 218-foot long rollover diversion dam that spans the width of the river. Adjacent to the dam is the Company's 40-foot canal headgate structure. Both structures were originally built in 1926. After the September 2013 flood, the river began to undermine the structures. Attempts to repair the structures with additional steel sheet piling and concrete were not successful and the undermining worsened. The Company intends to rebuild the diversion dam and canal headgate. Replacement of the diversion dam provides the Company with an opportunity to utilize an improved design and alleviate an ongoing maintenance issue of sand accumulation within the canal. Construction is expected to occur in the fall/winter of 2014/2015.



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

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

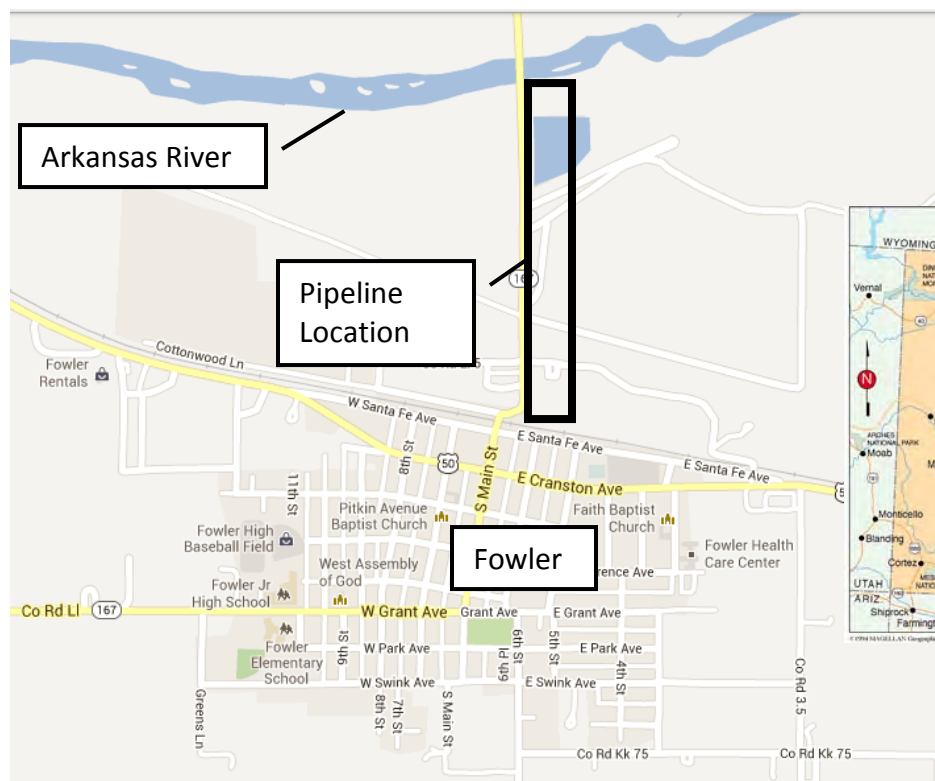
Type of Borrower: Municipal (Low)

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**

C150399

Borrower: Fulton Irrigation Ditch Company

County: Adams

Project Name: Diversion Structure Rehabilitation Project

Project Type: Diversion Rehabilitation

Drainage Basin/ District: South Platte / 2

Water Source: South Platte River

Total Project Cost: \$2,230,000

Funding Source: Construction Fund

Type of Borrower: Blended

Average Annual Diversion: 29,684 AF

CWCB Loan: \$2,027,070
(with 1% service fee)

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

The purpose of the Project is to replace the Company's South Platte River diversion gates and rehabilitate the existing trash rack. The Project will also include the reconstruction of the Branch Ditch Diversion Structure on the Fulton Ditch. The Company diverts South Platte River water near 100th Ave. in Commerce City to a 38,000 acre service area. Sago pond weed in the South Platte River has escalated and is beginning to obstruct the flow of water through the existing trash rack. Construction is expected to occur in the fall/winter of 2014/2015.



**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

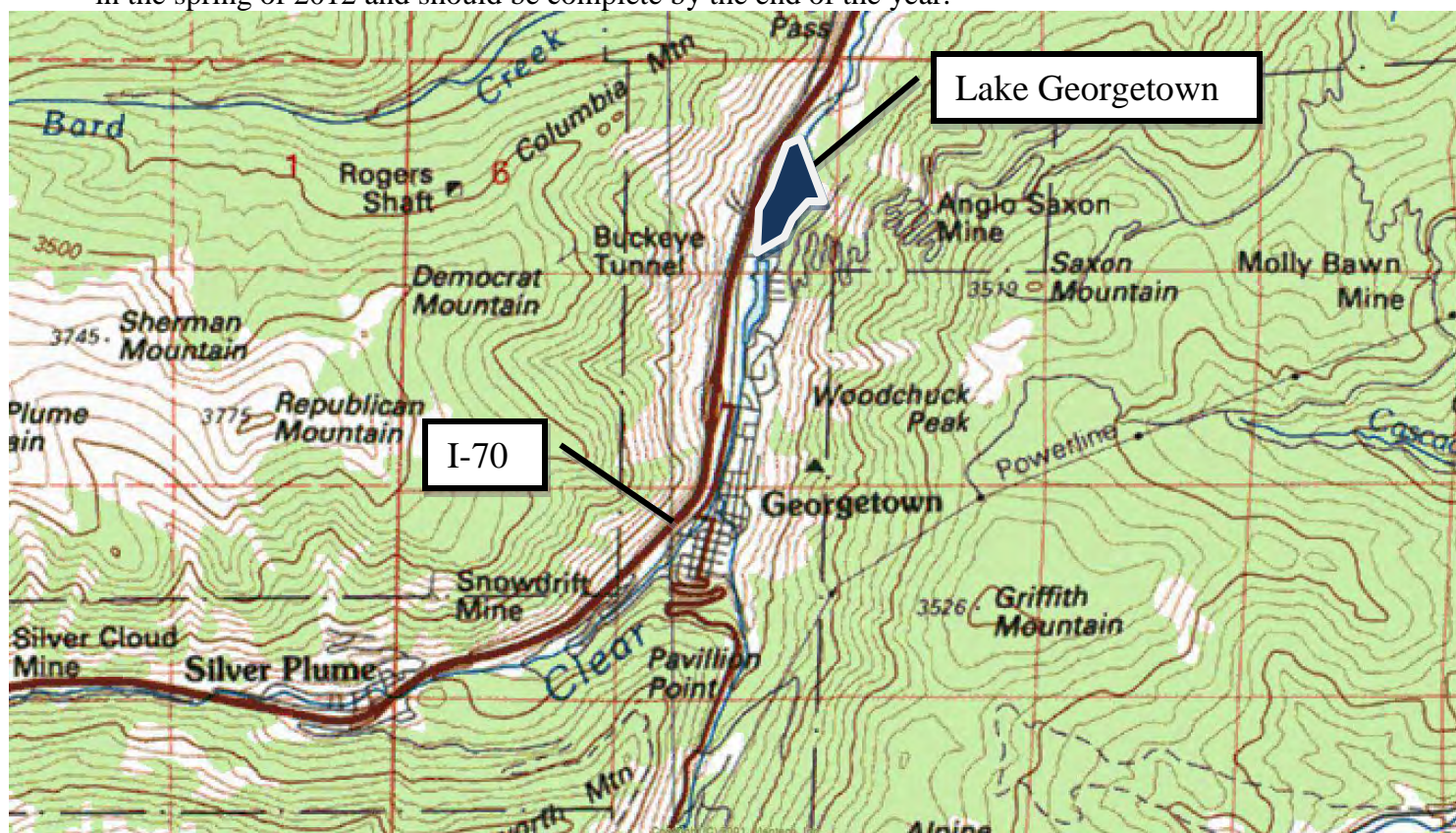
Type of Borrower: Middle-Income Municipal

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.



CWCW 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

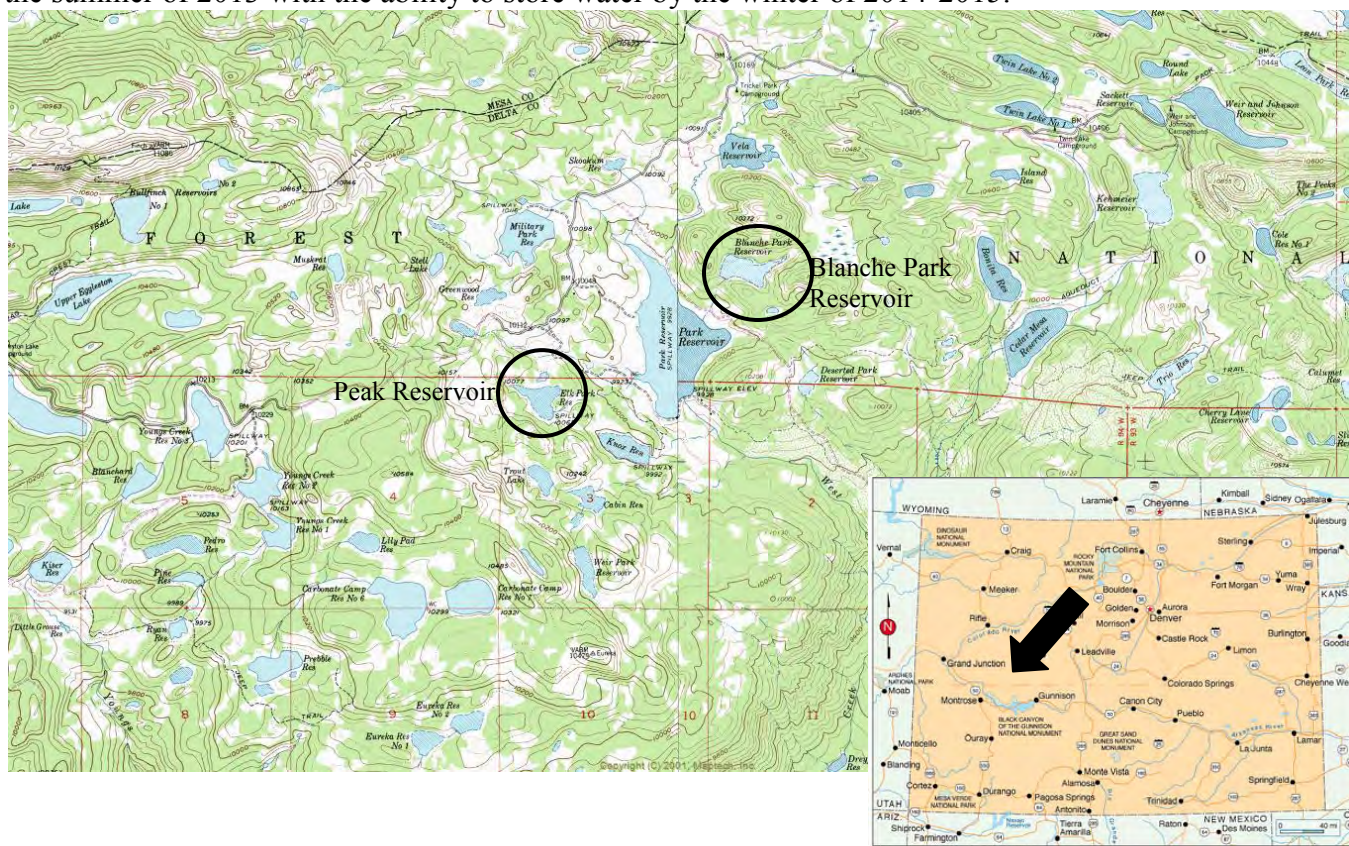
Type of Borrower: Municipal/Agricultural

Average Annual Diversion: 400 AF
Storage Added: 155 AF

CWCW 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

C150362

Borrower: Greeley and Loveland Irrigation Company

County: Larimer

Project Name: Irrigation System Improvements

Project Type: Reservoir Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: Big Thompson River

Total Project Cost: \$3,470,000

Funding Source: Construction Fund

Type of Borrower: Agricultural

Average Annual Diversion: 45,000 AF

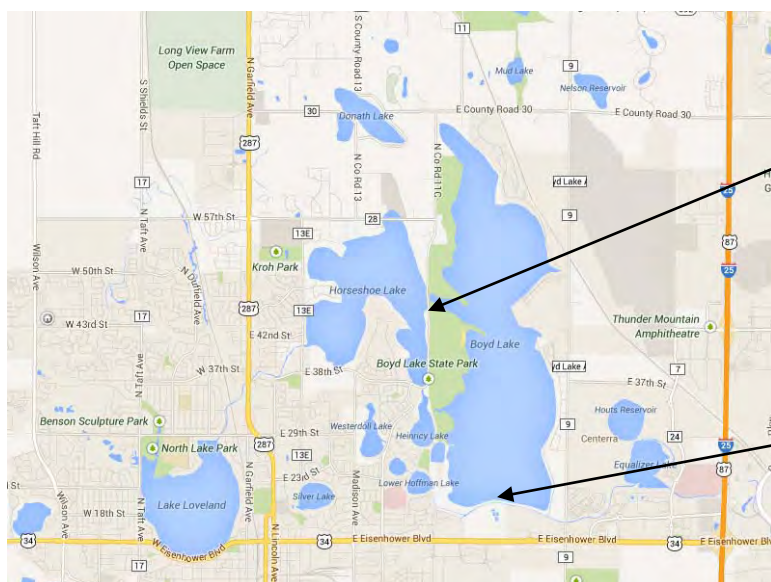
CWCB Loan: \$3,154,230
(with 1% service fee)

Interest Rate: 2.15% **Term:** 30-years
(34% Ag, 53% Low, 12% Mid, <1% High, <1% Com)

The Greeley and Loveland Irrigation Company (Company) is a mutual ditch company established in 1900. Together with the Seven Lakes Reservoir Company (Seven Lakes), they own and operate nine reservoirs, and control the Greeley and Loveland Canal.

Boyd Lake, owned by the Company, is the largest reservoir in the irrigation system and has a surface area of 1,750 acres with a storage capacity of 4,874 acre-feet. The Boyd Lake project will replace the high-level reservoir inlet and outlet from the Greeley and Loveland Irrigation Canal so that the Company can discharge water into Boyd Lake for storage during low reservoir levels, or discharge water back into the canal for deliveries during high reservoir levels.

Horseshoe Lake, owned by Seven Lakes, has a surface area of 650 acres and a storage capacity of 8,051 acre-feet. The Horseshoe Lake project will be used to increase the conveyance capability from Horseshoe Lake into Boyd Lake to 1,100 cfs, at higher reservoir levels, so the Company and Seven Lakes can more efficiently provide irrigation water to shareholders.



Existing Horseshoe Lake High-Level Outlet



Existing Boyd Lake High-Level Outlet

CWCBC 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

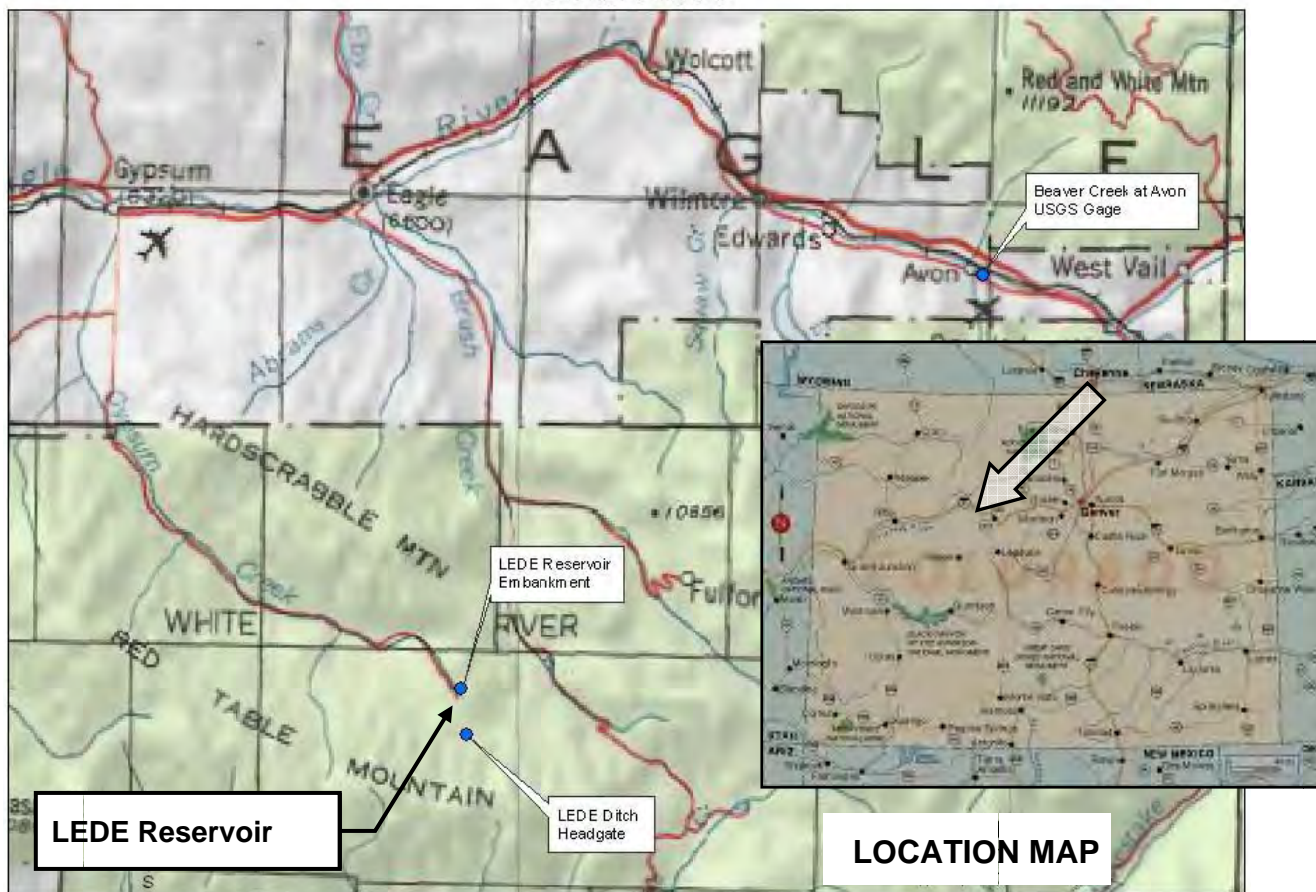
New Storage: 254 AF

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.

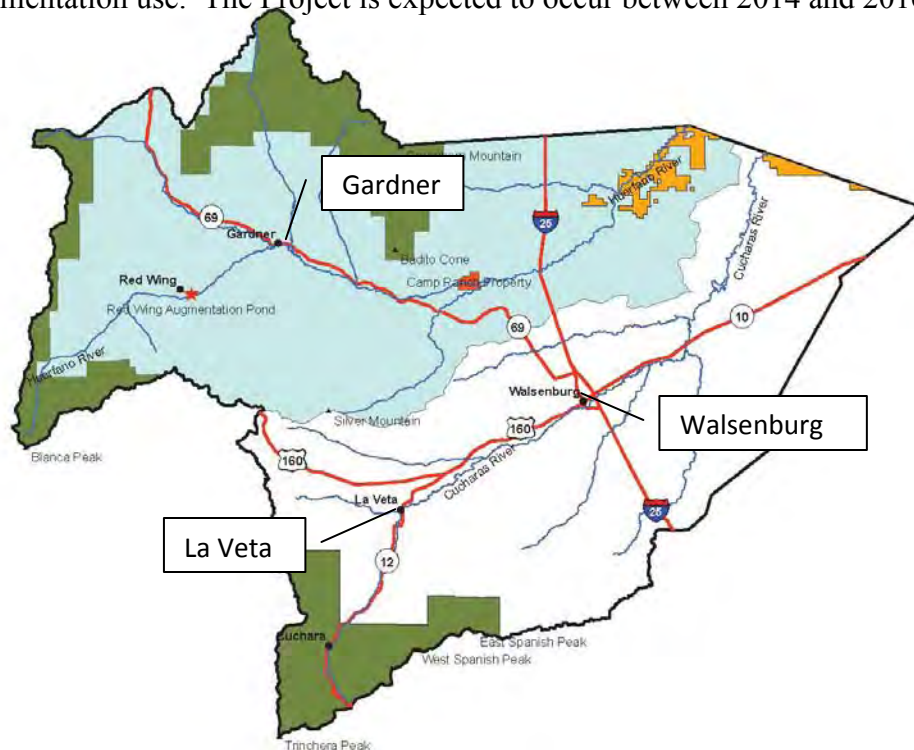
General Locations



Water Project Loan Program Project Data Sheet

Borrower:	Huerfano County Water Conservancy District	County:	Huerfano		
Project Name:	Regional Augmentation Project	Project Type:	Water Rights Acquisition and Augmentation		
Drainage Basin:	Arkansas / District 67	Water Source:	Huerfano River		
Total Project Cost:	\$3,050,000	Funding Source:	Construction Fund		
Type of Borrower:	Low-Income Municipal	Avg. Annual Diversions:	19.5 AF		
CWCB Loan:	\$2,222,000 (w/ 1% service fee)	Interest Rate:	2.25%	Term:	30 years

The Huerfano County Water Conservancy District is applying for a CWCB loan to develop a regional augmentation program to replace depletions of wells in unincorporated communities in Huerfano County through a regional augmentation program. Within Huerfano County there are many water users that are at risk of being curtailed due either to being out of priority or due to failing (or failed) augmentation plans. The users include schools and domestic, commercial, and agricultural users. The District has utilized a Substitute Water Supply Plan and Regional Rule 14 Replacement Plan from 2009 to 2013 to provide augmentation water to five entities that were in danger of having water use curtailed due to out of priority usage. The District believes that other water users will find it necessary to join the regional augmentation plan and the Division Engineer has indicated an urgent need for such a plan. Project components include: the purchase of land and water rights, the construction of a recharge reservoir, and the construction of a reservoir for augmentation use. The Project is expected to occur between 2014 and 2016.



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

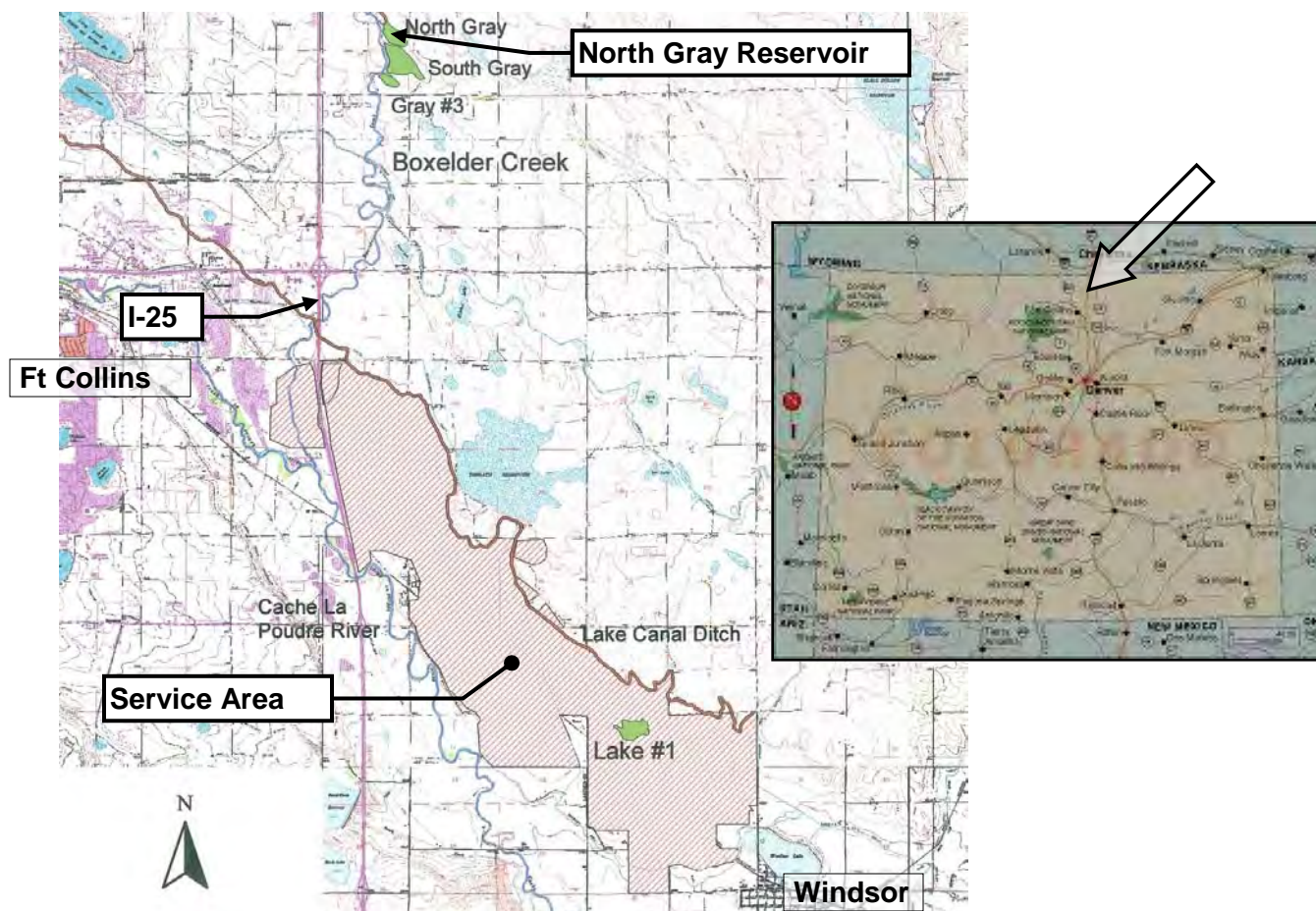
Details: 333 AF Stored
75 AF Recovered

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%.



**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)

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

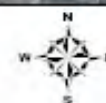
WSRA Statewide Grant: ~~\$500,000~~ **\$450,000**

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 NAIP aerial imagery provided by
the US Farm Service Agency

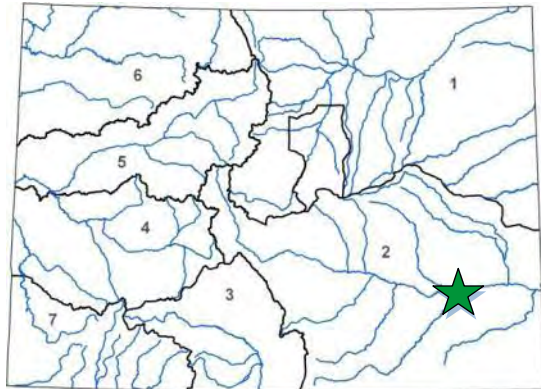




Repair & Replacement of the Las Animas Consolidated Canal Spillway Structure

Las Animas Consolidated Canal Company
November 2014 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$ 400,200
CWCB Loan (with Service Fee):	\$ 363,782
Loan Term and Interest Rate:	30 Years @ 5.05%
Funding Source:	
B O R R O W E R T Y P E	
Agriculture	Municipal
23%	0%
	Commercial
	77%
P R O J E C T D E T A I L S	
Project Type:	Spillway Structure Replacement
Average Annual Diversion:	26,000 AF



L O C A T I O N	
County:	Bent
Water Source:	Arkansas River
Drainage Basin:	Arkansas
Division:	2
District:	17

The Las Animas Consolidated Canal Company and the Consolidated Extension Canal Company were formed in the mid-1870s and together have continuously operated to irrigate 8,300 acres of land in the vicinity of Las Animas, Colorado. A significant, localized thunderstorm occurred during the night in April 2014, which created heavy runoff which flowed into the canal downstream of the main canal headgate through several uncontrolled and ungaged tributaries. These flows exceeded the capacity of the existing spillway structure at the river return, caused the structure to be overtopped and undermined, and resulted in catastrophic failure of the existing structure. While temporary measures have been put in place to keep the ditch in operation, a long-term solution is being sought. The Company is seeking to replace the spillway structure with an improved and modernized structure similar to the original design, but with additional control and safety measures to allow automated canal operations, including response to similar flooding conditions in the future. Modernization of this structure will improve routine canal operations and safety, in addition to mitigating future canal failure risk.



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)

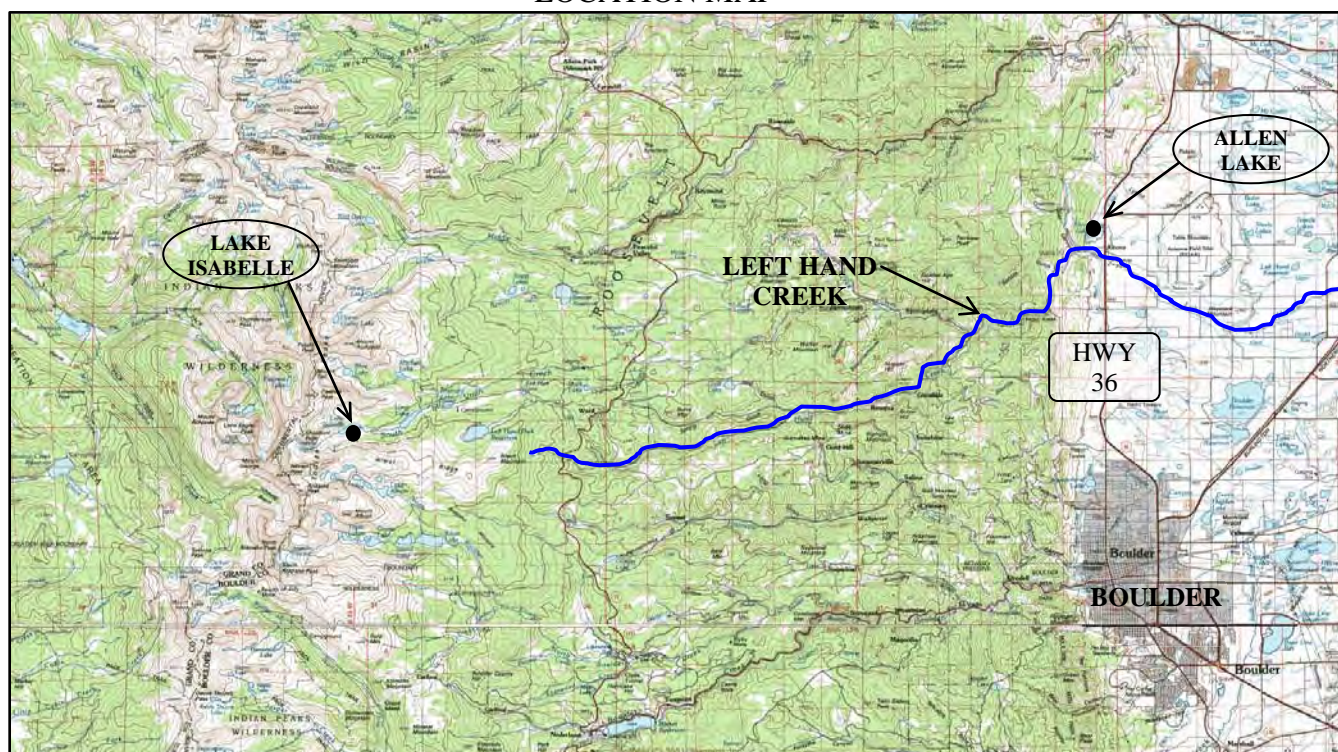
Avg. Annual Delivery: 22,700 AF

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



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

C150398

Borrower: Louden Irrigating Canal
and Reservoir Company

County: Larimer

Project Name: Emergency Diversion Structure
and Ditch Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: Big Thompson River

Total Project Cost: \$215,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 8,000 AF

CWCB Loan: \$161,600
(with 1% service fee)

Interest Rate: 2.70% **Term:** 30-years
(25% Ag, <1% Low, 61% Mid, 8% High, 6% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged, including the Company's river diversion. The ditch was diverting water as the September storm started. As the flood progressed, the headgates could not be safely reached for operations. Water overtopped the headgate structure by at least 4 feet resulting in damage to the headgate and ditch system. The first 3,000 feet of the ditch were totally filled with silt and debris. The ditch breached back to the river in two places and undercutting caused slides that threatened the ditch. Phase 1 will clean and rebuild the ditch and service road, and salvage the existing headgates to ensure general operation for the 2014 irrigation season. Phase 2 will replace the existing headgates with gates that are safer, more accurate, and capable of remote operation.



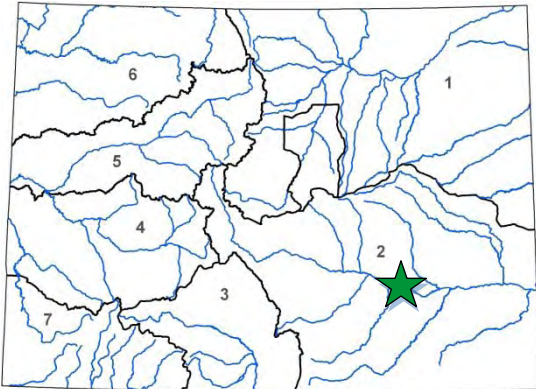


Water Rights Purchase Project

Lower Arkansas Valley Water Conservancy District

May 2015 Board Meeting

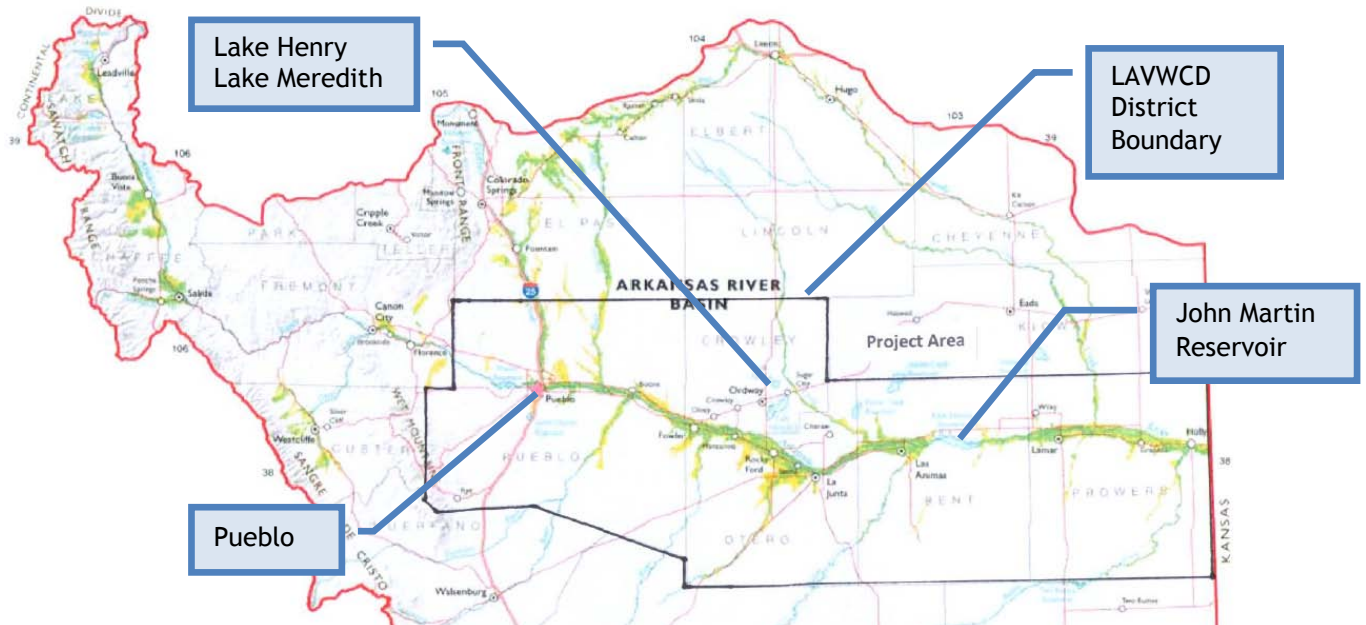
L O A N D E T A I L S	
Project Cost:	\$4,077,000
CWCB Loan (with Service Fee):	\$2,560,350
Loan Term and Interest Rate:	20 years @ 1.45%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
100%	0% Low 0% Mid 0% High 0%
P R O J E C T D E T A I L S	
Project Type:	Water Rights Purchase
Average Annual Delivery:	442 AF



L O C A T I O N	
County:	Bent, Crowley, Otero, Prowers, Pueblo
Water Source:	Arkansas River
Drainage Basin:	Arkansas
Division:	2 Districts: 14, 17, & 67

The Lower Arkansas Valley Water Conservancy District supports agriculture in the Lower Arkansas River valley, participating in water-related projects and providing water for Rule 10 and Rule 14 plans in compliance with the Arkansas River Compact, the Catlin Following-Leasing pilot project, and leases to farmers as needed and available.

The District plans to purchase 400.6 Colorado Canal Company shares to complement an additional purchase of 149.4 Colorado Canal Company shares with the support of a separate WSRA Grant and District funds.



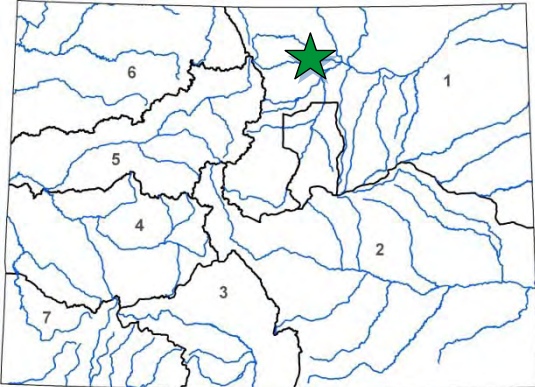


Cornish Water Rights Purchase

Lower Poudre Augmentation Company

May 2015 Board Meeting

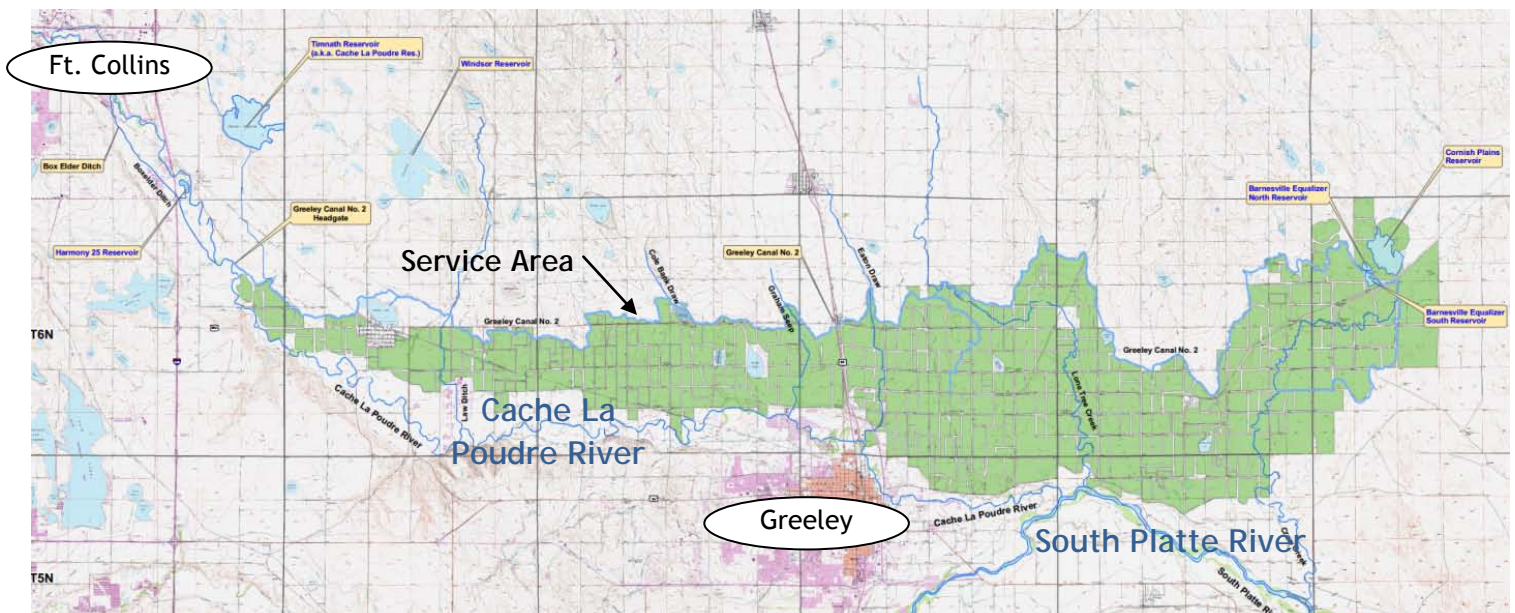
L O A N D E T A I L S	
Project Cost:	\$1,279,500
CWCB Loan (with Service Fee):	\$1,163,015
Loan Term and Interest Rate:	30 Years @ 1.75%
Funding Source:	Severence Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
94%	1% Low - 4% Mid - <1% High 1%
P R O J E C T D E T A I L S	
Project Type:	Water Rights Purchase
Average Annual Delivery:	4,000 AF



L O C A T I O N	
County:	Larimer & Weld
Water Source:	Cache la Poudre River
Drainage Basin:	South Platte
Division:	1 District: 3

The Lower Poudre Augmentation Company provides augmentation water for 62 irrigation wells in Larimer and Weld Counties owned by 28 individual owners. The wells provide irrigation water to 4,000 acres. The Company currently has in place 1 AF of augmentation water per irrigated acre quota.

The Company's augmentation plan was awarded a decree under consolidated Case No. 04CW025/06CW295 in January 2014. Water rights that were changed to augmentation use in that decree include the Cornish Plains Farms water rights, which are made up of 34.5 shares of the New Cache La Poudre Irrigating Company and 4.0 shares of the Cache La Poudre Reservoir Company. These shares have been leased to the Company for use in its augmentation plan since 2004. This Project will purchase these shares for permanent inclusion in the Company's augmentation plan.



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

C150334

Borrower: The McDonald Ditch Company

County: Rio Grande

Project Name: McDonald Ditch Diversion
and Headgate Replacement Project

Project Type: Ditch Rehabilitation

Drainage Basin/ District: Rio Grande / 20

Water Source: Rio Grande River

Total Project Cost: \$1,085,200

Funding Source: Construction Fund

Type of Borrower: Agricultural

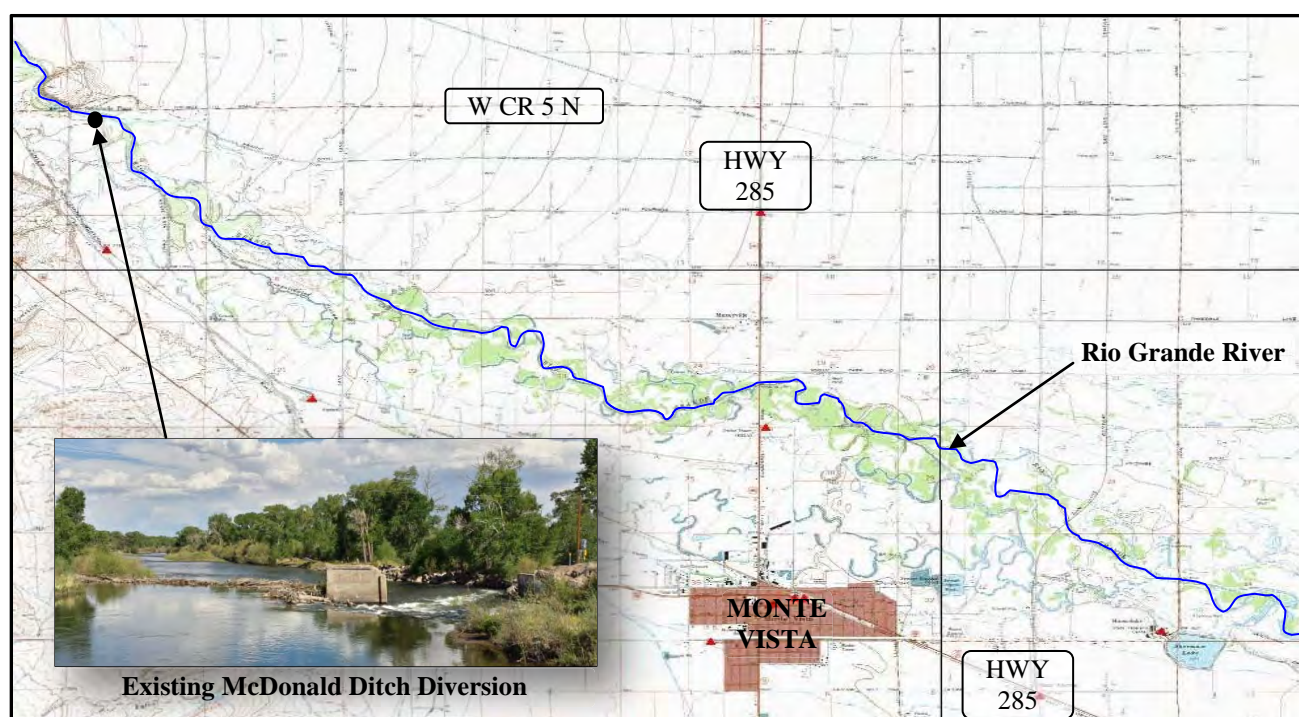
Average Annual Diversion: 45,000 AF

CWCB Loan: \$101,000
(with 1% service fee)

Interest Rate: 2.50% **Term:** 30-years

The McDonald Ditch Company is a Mutual Ditch Company formed in 1921. Their diversion structure and headgate were poorly designed and are rapidly deteriorating, presenting a growing maintenance burden for the Company. Both the diversion and headgate were highlighted as rehabilitation priorities in a 2001 study titled "Rio Grande Headwaters Restoration Project (RGHRP)." 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 and triggered a more localized effort known as the Plaza Project. Phase 2 of the Plaza Project includes the final engineering design and construction of a new diversion and headgate for the McDonald Ditch Company.

A loan to the McDonald Ditch Company was approved for this Project in May 2012 in the amount of \$70,700. During the final engineering design of the McDonald Ditch diversion structure, analysis showed that the chosen design of the diversion structure at the existing location would cause flooding in the local community including the upstream bridge of W CR 5 N (Sevenmile Plaza Bridge). The solution is to relocate the diversion structure and headgate just upstream of the bridge and has increased Project cost. This loan increase request of \$30,300 is sought to cover the Company's portion of the Project cost increase.



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

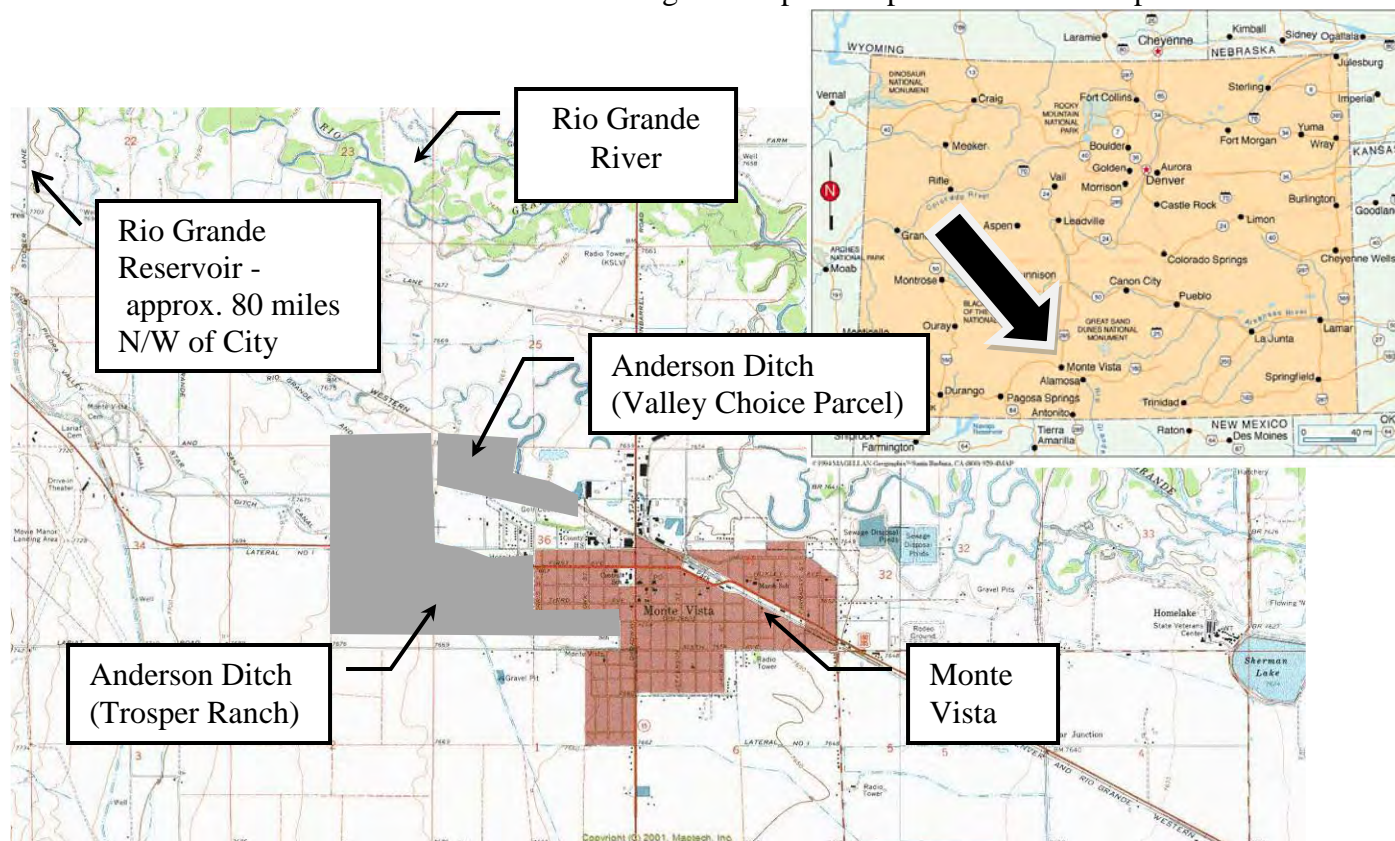
Water Source: Rio Grande River

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

CWCB Water Project Loan Program Project Data Sheet

C150378

Borrower: North Poudre Irrigation Company

County: Larimer

Project Name: Reservoir No. 4 Rehabilitation

Project Type: Reservoir Rehabilitation

Drainage Basin/ District: South Platte / 3

Water Source: Cache la Poudre

Total Project Cost: \$1,800,000

Funding Source: Construction Fund

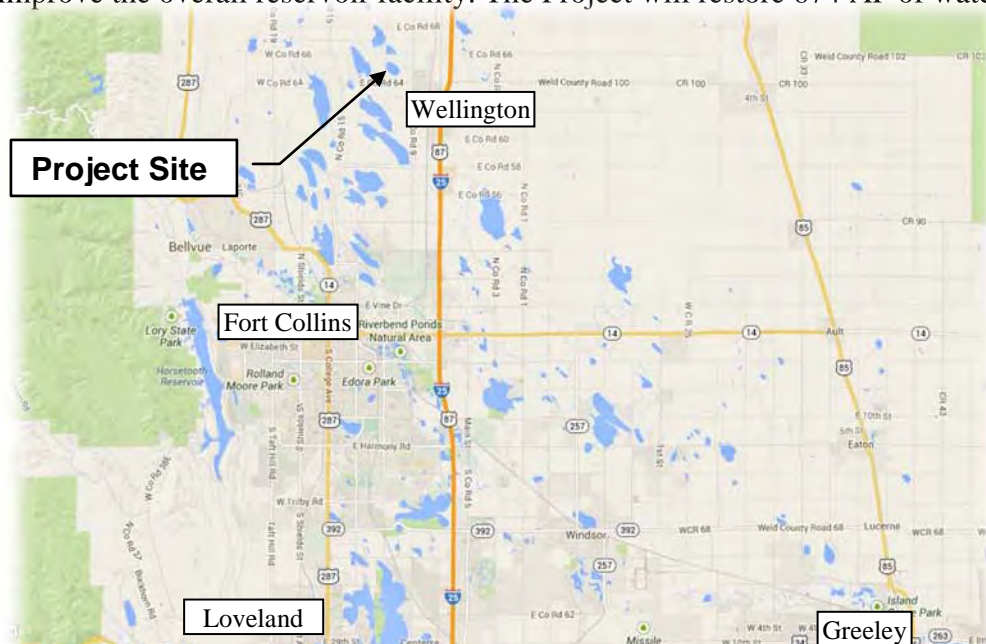
Type of Borrower: Blended

Average Annual Diversion: 44,400 AF

CWCB Loan: \$1,636,200
(with 1% service fee)

Interest Rate: 2.35% **Term:** 30-years
(37% Ag, 1% Low, 57% Mid, 4% High, <1% Com)

The North Poudre Irrigation Company is a mutual ditch company established in 1901. The Company's office is located in Wellington with a service area of approximately 28,000 irrigated acres of farm land. Reservoir No. 4 is an off stream reservoir constructed in the late 1880s, enlarged in the 1920s, and had the outlet works replaced in the late 1950s. The Reservoir No. 4 Rehabilitation Project will modify the dam including its slope, outlet works, drains, spillway, and measurement structure and will also provide a new parking area and floodplain improvements. The purpose of the project is to lift the State Engineer's storage restriction on the reservoir and dam and improve the overall reservoir facility. The Project will restore 674 AF of water storage.

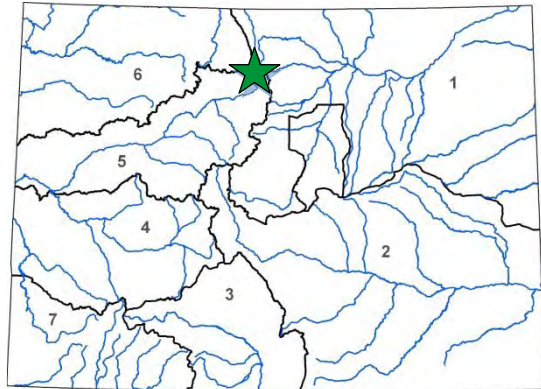




Granby Hydropower Project

Northern Colorado Water Conservancy District
November 2014 Board Meeting

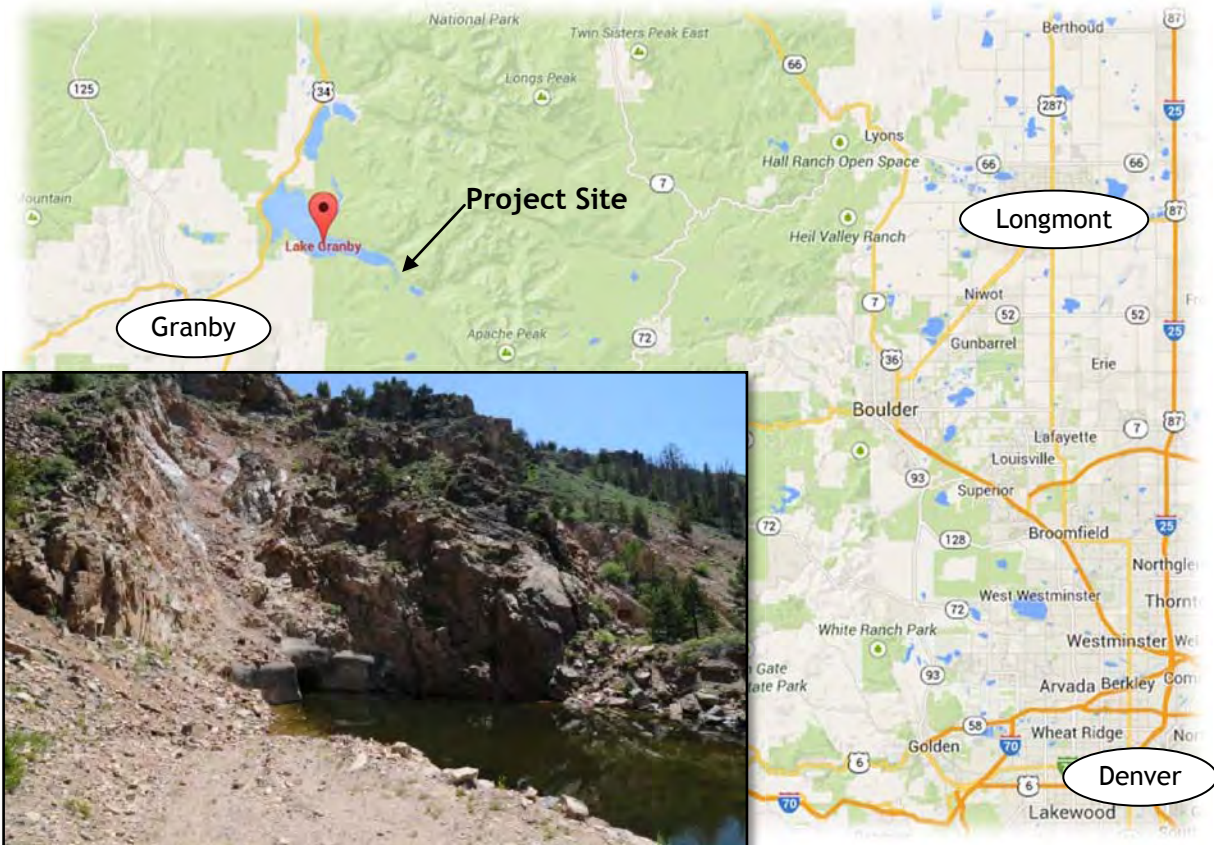
L O A N D E T A I L S	
Project Cost:	\$5,669,340
CWCB Loan (with Service Fee):	\$5,135,183
Loan Term and Interest Rate:	30 Years @ 2.0 %
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Hydropower	
P R O J E C T D E T A I L S	
Project Type:	Hydroelectric
Average Annual Power Production:	4.9M KWh



L O C A T I O N	
County:	Grand
Water Source:	Colorado River
Drainage Basin:	Colorado
Division:	5 District: 51

Northern Water Hydropower Water Activity Enterprise a government -business owned by the Northern Colorado Water Conservancy District is applying for a loan for the construction of the Granby Hydropower Project. The Project is located at the existing Colorado - Big Thompson Project Granby Dam and will utilize the existing releases to the Colorado River without changing the flow regime.

The hydro station will use the minimum streamflow obligations and a portion of additional releases to generate power through a 1.2-megawatt facility. The Project is being performed under the U.S. Bureau of Reclamation's Lease of Power Privilege (LOPP) process. Power generated will be purchased by Mountain Parks Electric, Inc. per a 30-year Power Purchase Agreement (PPA). The anticipated Project schedule is to finalize the LOPP and PPA by end of 2014. Construction will occur in the summer/fall of 2015 and is expected to be operational by the summer of 2016.

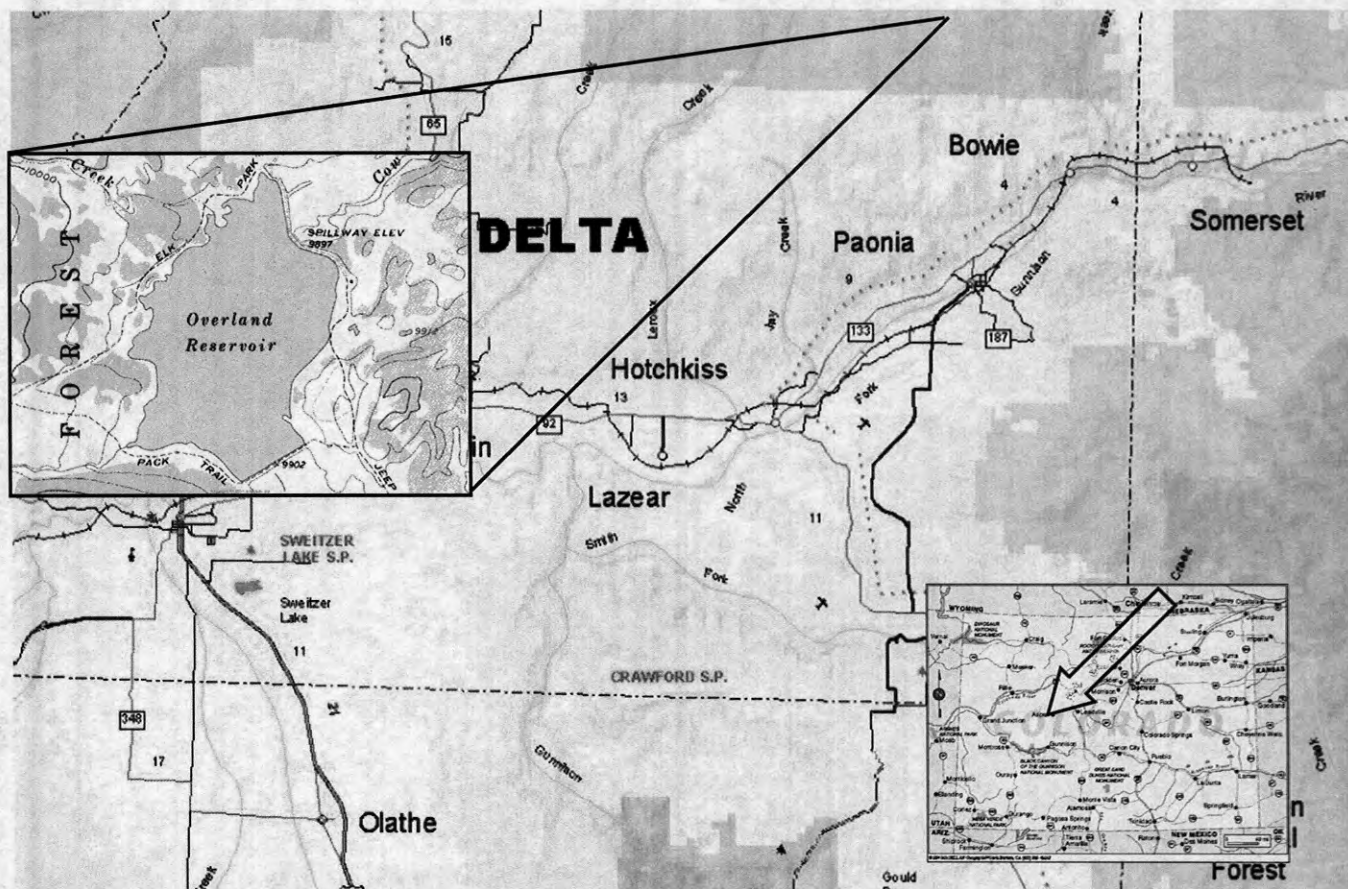


Lake Granby Tunnel Outlet

CWCB Construction Loan Program Project Data Sheet

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

7

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

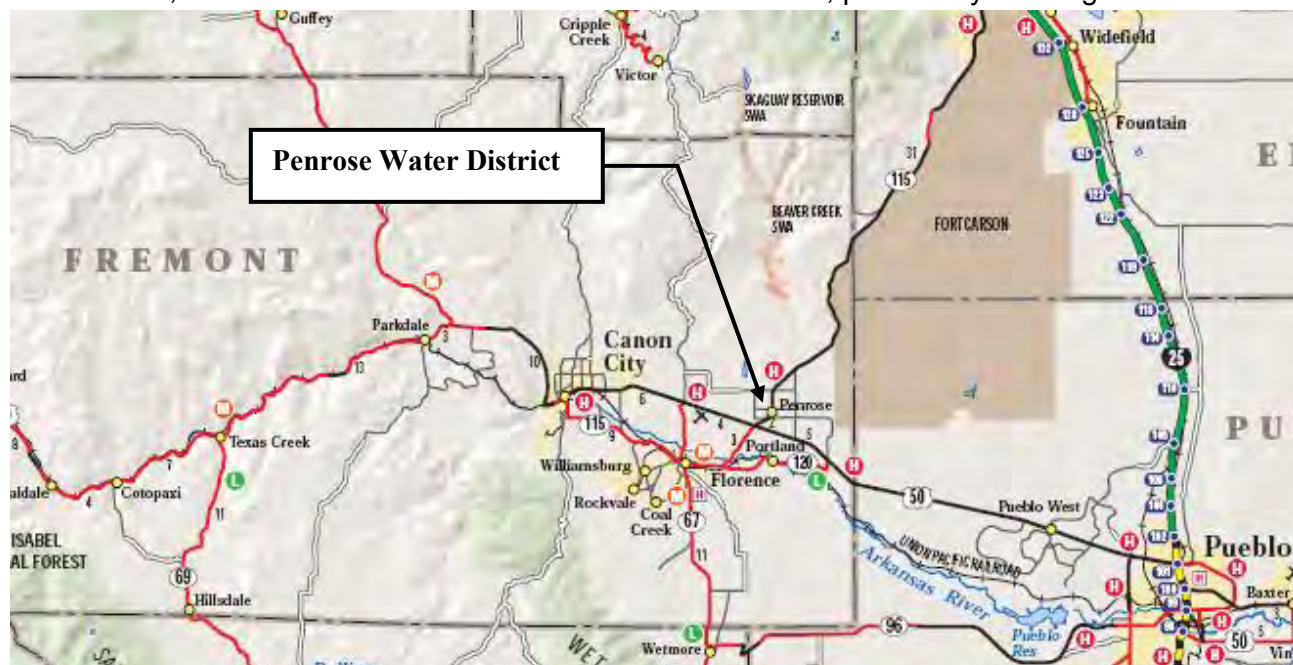
Type of Borrower: Municipal/Low

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 10/12th 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.

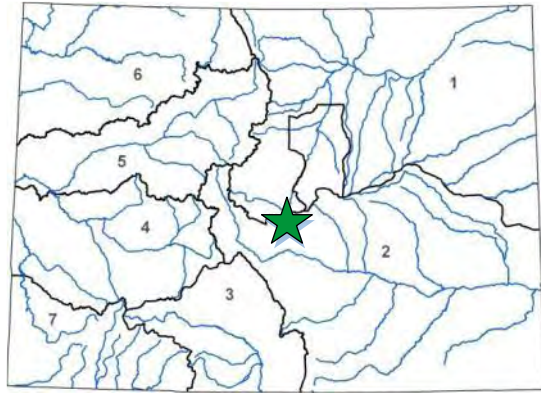


Location Map



(Loan Increase)

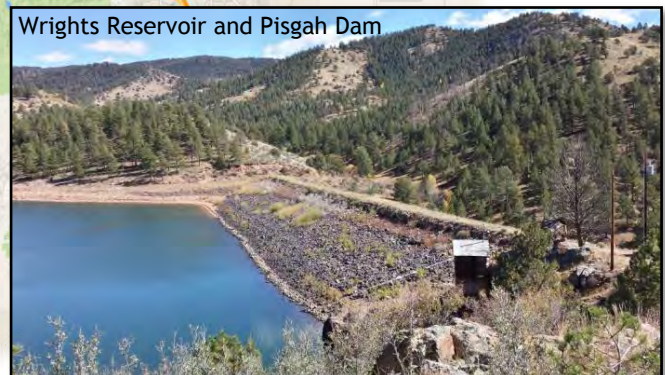
L O A N D E T A I L S	
Project Cost:	\$745,000
CWCB Loan (with Service Fee):	\$549,091
Loan Term and Interest Rate:	30 Years @ 1.75%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
93%	7% Low - 0% Mid - 0% High 0%
P R O J E C T D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Diversion:	86,000 AF
Water Supply Storage Preserved:	2,192 AF



L O C A T I O N	
County:	Teller
Water Source:	Fourmile Creek
Drainage Basin:	Arkansas
Division: 2	District: 12

The Pisgah Reservoir and Ditch Company provides 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.

The Company was approved for a \$161,345 loan and a \$161,345 WSRA grant at the September 2012 CWCB Board Meeting to modify the operational inlet and outlet works and replace existing control valves on Pisgah Dam, in compliance with an SEO conditional order. During final engineering, construction costs were found to have increased and additional remedial abandonment work on the outlet originally abandoned in 1929 was added to the Project's Scope of Work. With these changes, the cost estimate has risen from \$362,875 to \$745,000. The Company is seeking to cover this cost increase with an increase to its approved loan. Construction is scheduled for 2015.



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

C150400

Borrower: The Prairie Ditch Company

County: Rio Grande

Project Name: Plaza Project Phase 3:
Prairie Ditch Implementation Project

Project Type: Ditch Rehabilitation

Drainage Basin/ District: Rio Grande / 20

Water Source: Rio Grande River

Total Project Cost: \$975,000

Funding Source: Construction Fund,
WSRA Grants

Type of Borrower: Agricultural

Average Annual Diversion: 16,000 AF

CWCB Loan: \$131,300
(with 1% service fee)

Interest Rate: 1.25% **Term:** 10-years

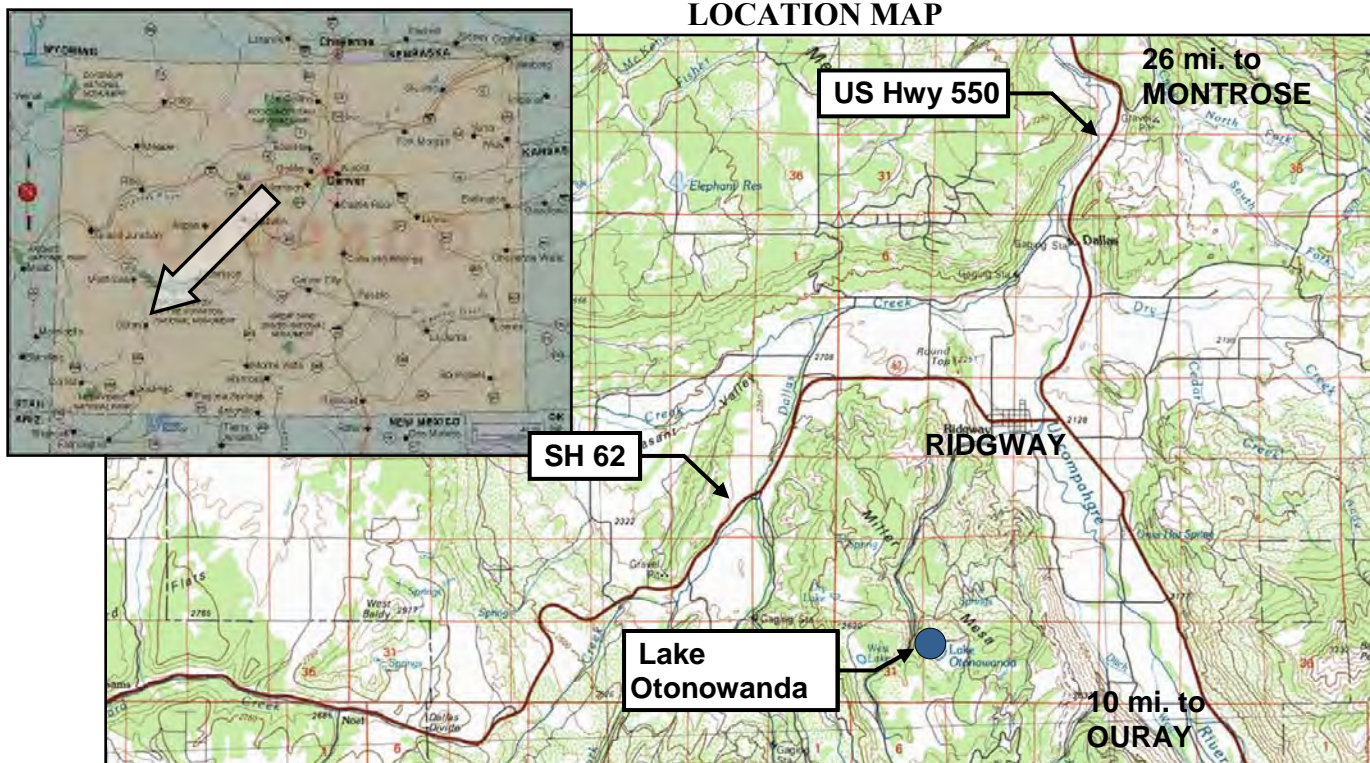
The Prairie Ditch Company is a Mutual Ditch Company formed in 1887. The Prairie Ditch diversion structure and headgate is located seven miles northwest of Monte Vista, Colorado on the Rio Grande River and has a service area of approximately 23,000 acres. The diversion and headgates were constructed in the early 1900s and was most recently reworked in 1962. They are now deteriorating, presenting a growing concern the diversion structure may soon completely wash out. Both the diversion and headgate were highlighted as river rehabilitation priorities in a 2001 study titled "Rio Grande Headwaters Restoration Project." 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 and triggered a more localized effort known as the Plaza Project.

The Plaza Project is a multi-phased project intended to improve the health and function of the Rio Grande River in the Sevenmile Plaza area through stream bank restoration, wetland restoration, and the replacement of aging and inefficient diversion and headgate structures. Phase 1 was a planning phase and identified several diversion and headgate structures in need of replacement. Phase 2 (McDonald Ditch Implementation Project) was the Plaza Project's first implementation project and was funded in part with a CWCB Loan and WSRA grant. Phase 3 is the second implementation project and the subject of this loan request. Project Tasks include the final engineering design and construction of the new Prairie Ditch diversion and headgate, as well as stream bank stabilization, monitoring, outreach, and education. Construction is expected to occur fall 2014.



**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

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

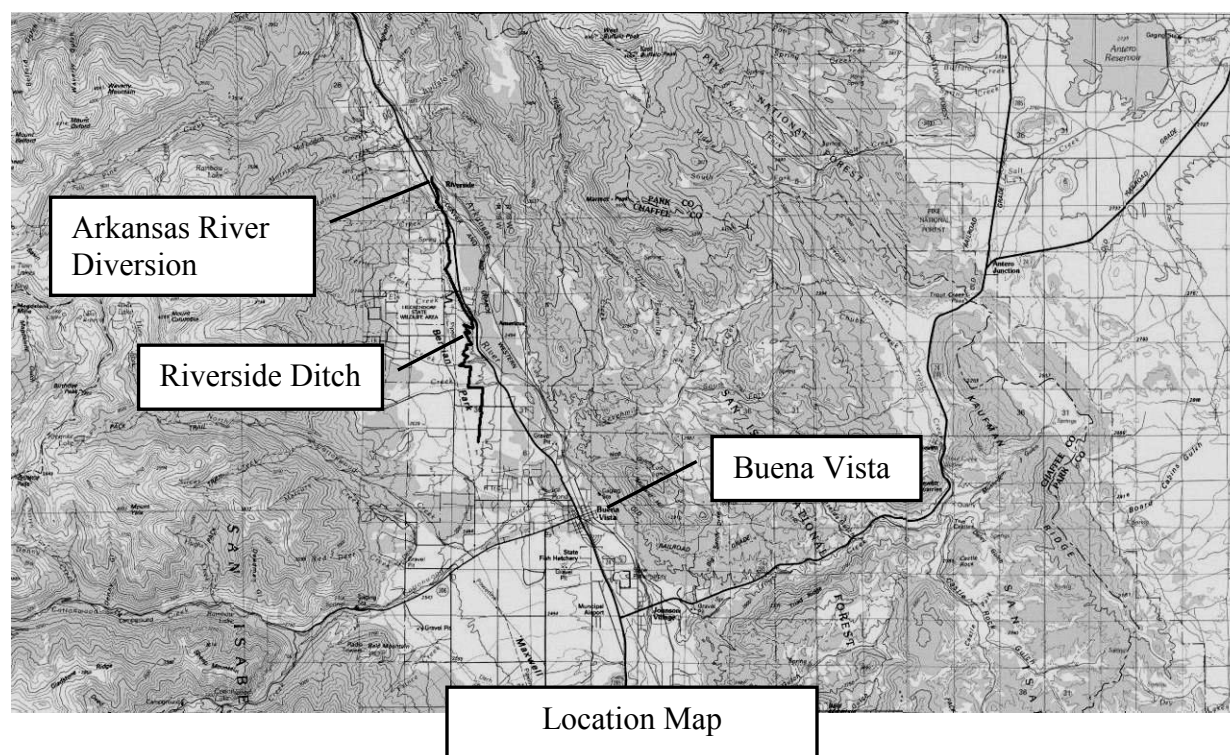
Type of Borrower: Agricultural

Average Diversion: 3,250 acre-feet

CWCB Loan: \$186,345 (Including 1% fee)

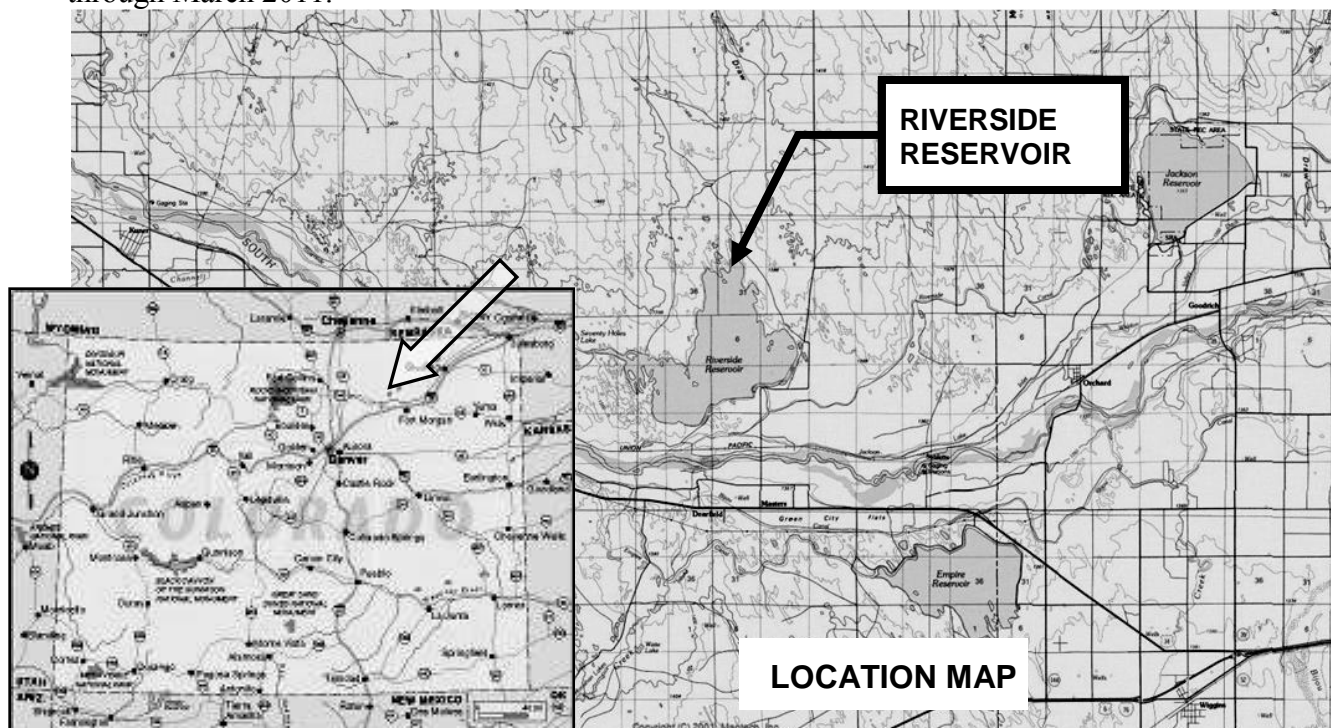
Interest Rate: 2.75% **Term:** 30 years

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.



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

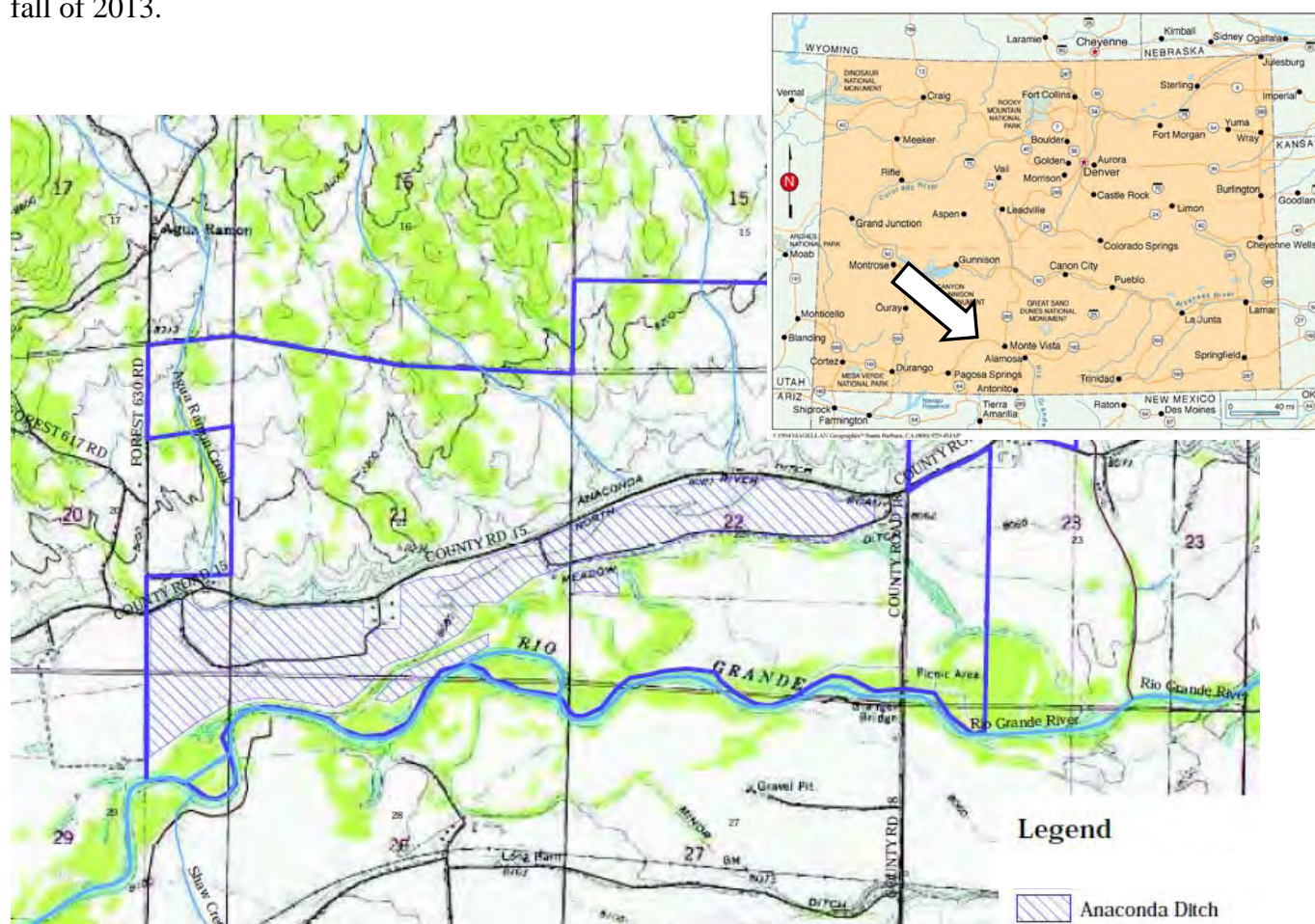
Type of Borrower: Municipal Low Income

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 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

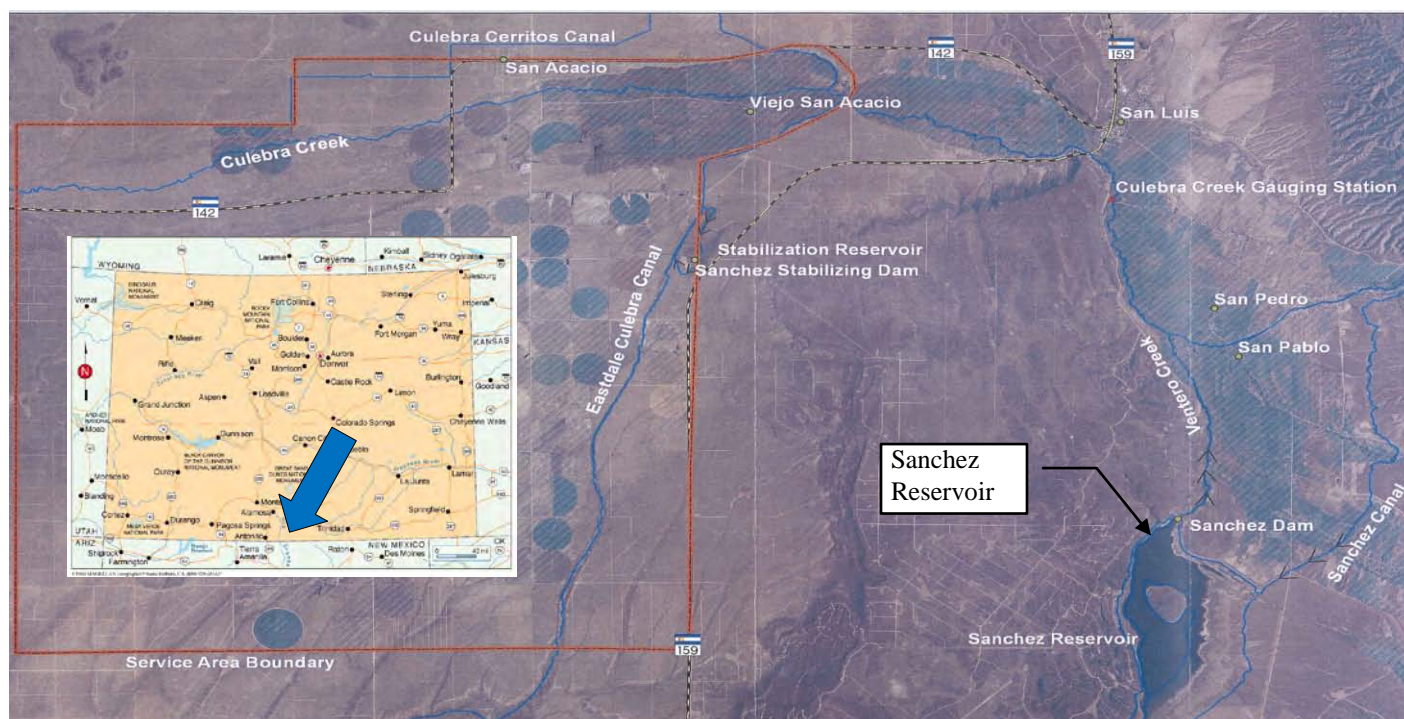
Funding Sources: Construction Fund &
WSRA (Basin & Statewide funds)

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.



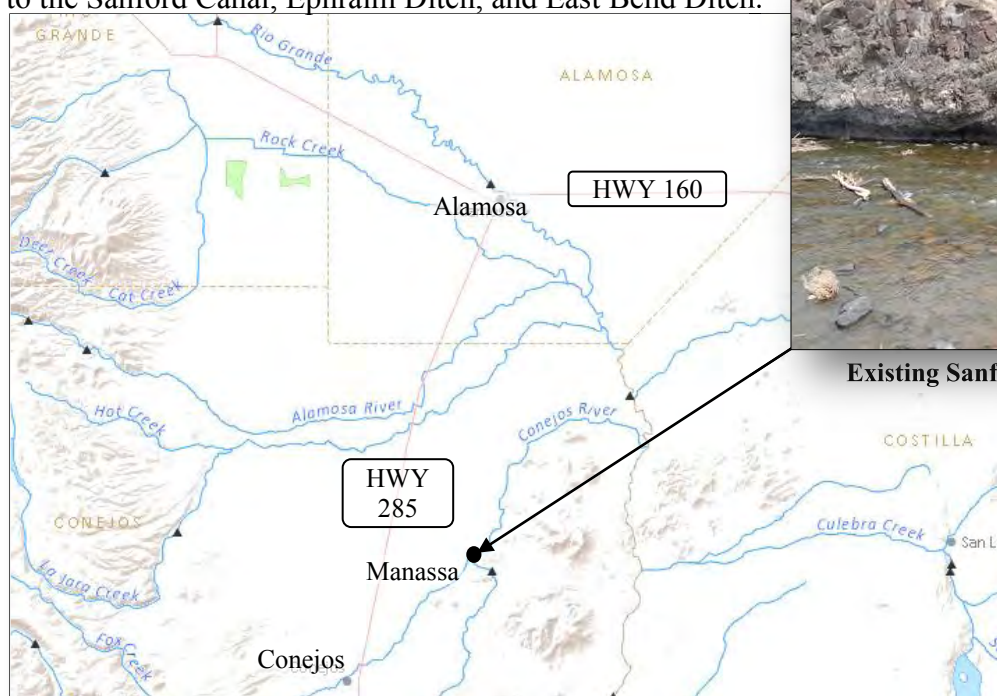
CWCW Water Project Loan Program
Project Data Sheet

C150401

Borrower: The Sanford Canal Company**County:** Rio Grande**Project Name:** Sanford Diversion and
Headgate Rehabilitation**Project Type:** Ditch Rehabilitation**Drainage Basin/ District:** Rio Grande / 22**Water Source:** Conejos River**Total Project Cost:** \$213,000**Funding Source:** Construction Fund,
WSRA Grants**Type of Borrower:** Agricultural**Average Annual Diversion:** 4,000 AF**CWCW Loan:** \$101,000
(with 1% service fee)**Interest Rate:** 1.75% **Term:** 30-years

The Sanford Canal Company was incorporated in 1892 as a “Colorado Water Company” and later became a Mutual Ditch Company in 1912. Its diversion is located on the Conejos River just below the confluence with the San Antonio River and has a service area covering approximately 3,000 irrigated acres. The purpose of this Project is to address the need for a well-designed diversion structure that will reduce maintenance, improve water management efficiencies, and allow for the accurate control of compact-entitled waters. The core of the Sanford Canal diversion structure has been washed away over time, contributing to decades of limited diversion to irrigators and potential over payment to the Compact. Currently irrigators divert their water right by piling debris such as tree trunks or cinderblocks to act as the diversion dam. This Project will remove and replace the diversion and headgate structures and install automated headgates and four gauging stations. Construction is expected to start by September 2014.

This Project is one of three projects collectively known as the Conejos River System Confluence Management Project, managed by the Conejos Water Conservancy District. The District has taken a proactive “whole river” system approach to water management and over the past few years have improved the efficiency and stability of many diversions, developed real-time water management data, and studied the effects on return flows from irrigated areas from groundwater withdrawals. The Confluence Management Project will extend this whole river strategy to the Confluence, specifically to the Sanford Canal, Ephraim Ditch, and East Bend Ditch.



Existing Sanford Ditch Diversion

Water Project Loan Program Project Data Sheet

Borrower:	Santa Maria Reservoir Company	County:	Hinsdale & Mineral		
Project Name:	Santa Maria Siphon and Canal System Rehabilitation Project	Project Type:	Dam Rehabilitation & Ditch Rehabilitation		
Drainage Basin:	Rio Grande / District 20	Water Source:	North Clear Creek		
Total Project Cost:	\$1,855,000	Funding Source:	Construction Fund and Water Supply Reserve Account Grants		
Type of Borrower:	Agricultural	Avg. Annual Diversion:	6,300 AF		
CWCB Loan:	\$1,405,163 (w/ 1% service fee)	Interest Rate:	1.75%	Term:	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:	Santa Maria Reservoir Company	County:	Hinsdale & Mineral
Project Name:	Continental Dam Spillway Restoration Project	Project Type:	Dam Rehabilitation
Drainage Basin:	Rio Grande / District 20	Water Source:	North Clear Creek
Total Project Cost:	\$4,055,000	Funding Source:	Construction Fund and Water Supply Reserve Account Grants
Type of Borrower:	Agricultural	Avg. Annual Diversion:	6,300 AF
		Recovered Storage:	12,000 AF
CWCB Loan:	\$3,071,633 (w/ 1% service fee)	Interest Rate:	1.75%
		Term:	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 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 purpose of this Project is to address seepage issues and repair the spillway Continental Reservoir in order to lift the storage restriction. Construction is expected to occur in the 2014 construction season.



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

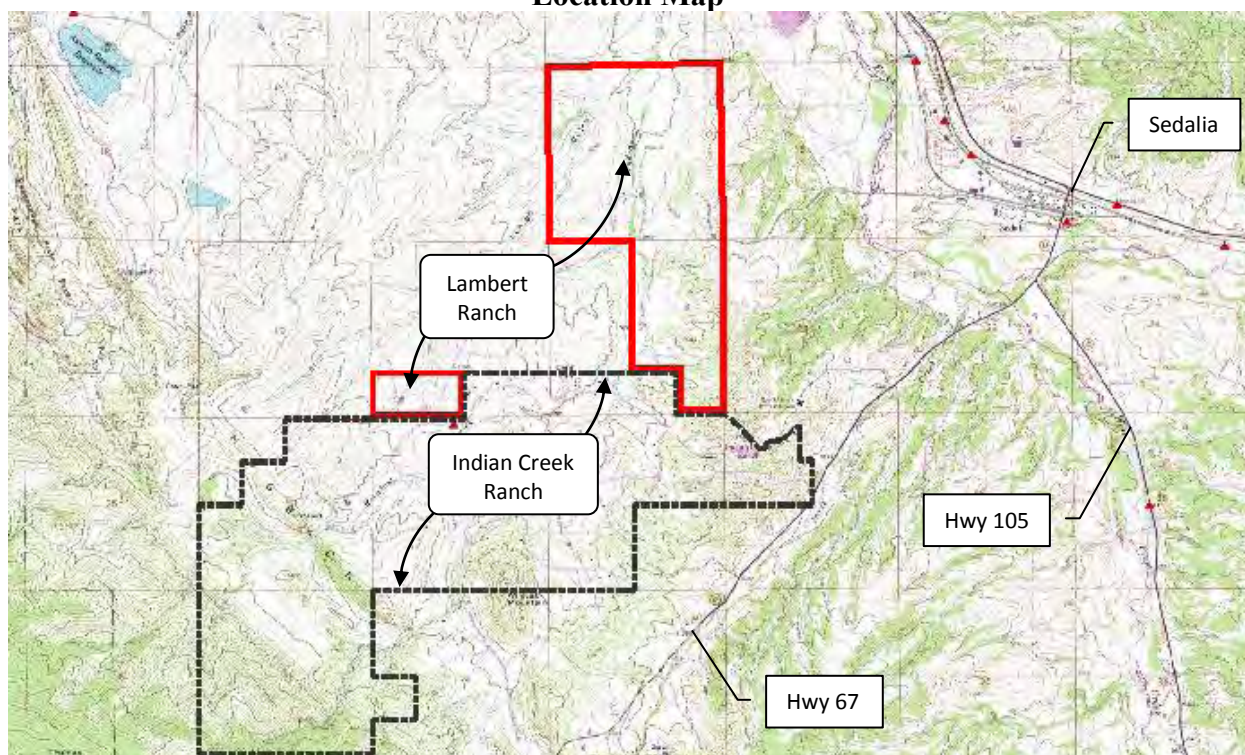
Avg. Annual Delivery: 55 AF

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

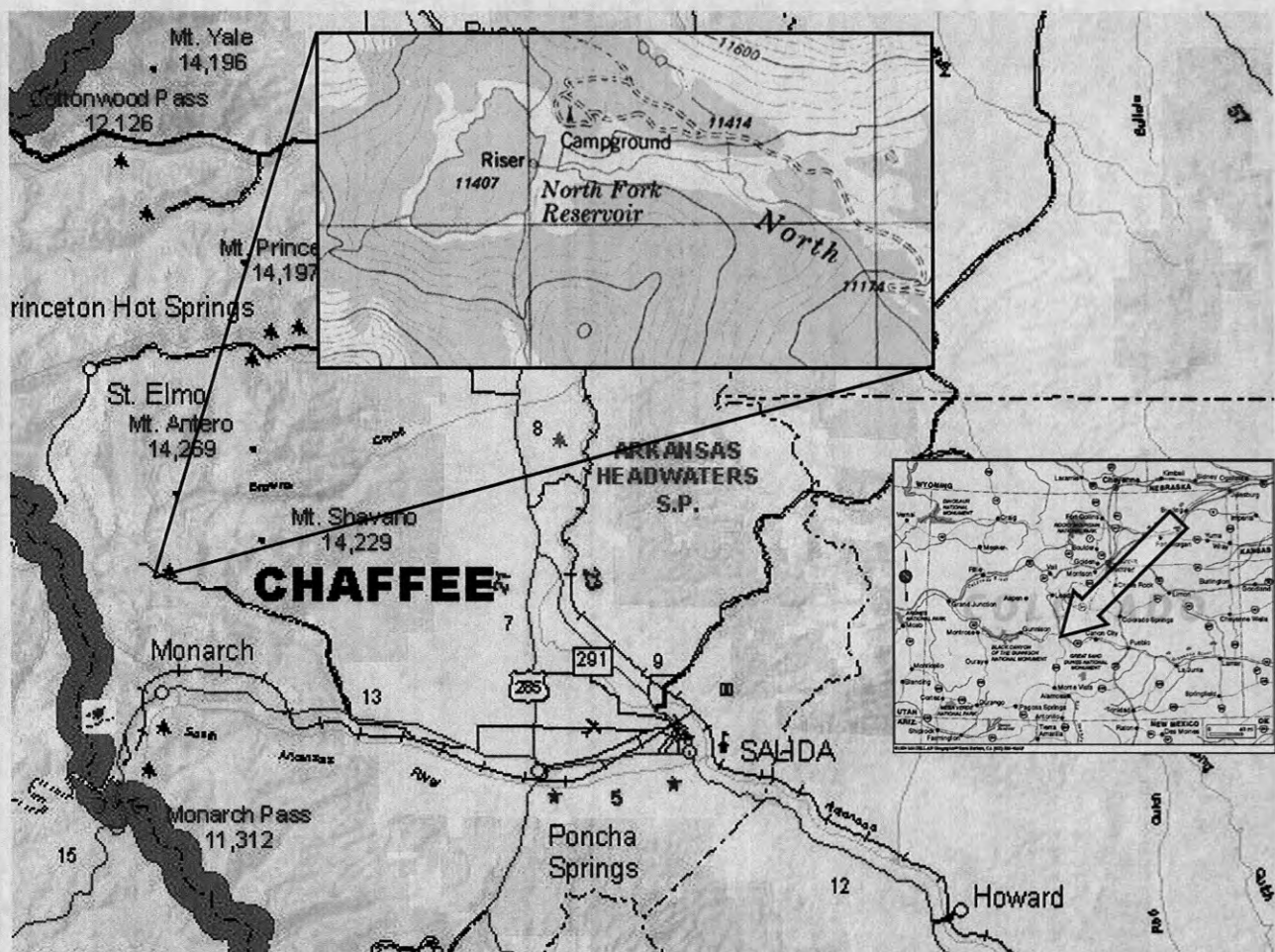


**CWCB Construction Loan Program
PROJECT DATA SHEET**

Loan Program
Attachment 3

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

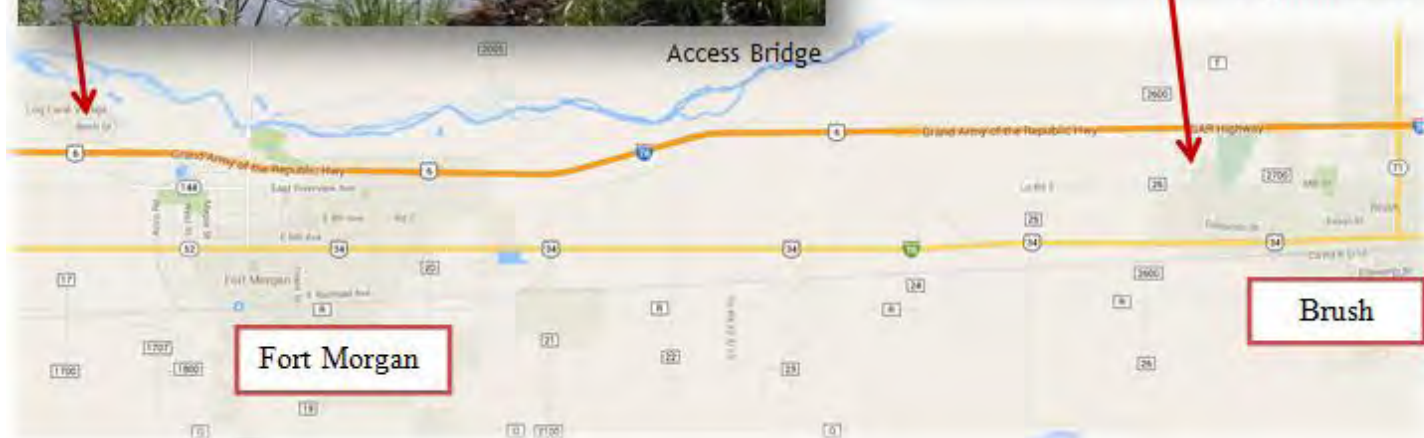
CWCB Water Project Loan Program Project Data Sheet

Borrower:	Upper Platte & Beaver Canal Company	County:	Morgan
Project Name:	Hospital Road Recharge Facility and Bridge Widening Project	Project Type:	Augmentation
Drainage Basin/ District:	South Platte Basin Division 1, District 1	Water Source:	South Platte River
Total Project Cost:	\$210,000	Funding Source:	Construction Fund
Type of Borrower:	Blended	Average Annual Diversion:	35,000 Acre-feet
CWCB Loan:	\$190,890 (with 1% service fee)	Interest Rate:	1.75%
		Term:	10 years

The Upper Platte & Beaver Canal Company desires funding to construct an augmentation pond, and, at a separate location, to widen an existing access bridge at their primary diversion along the South Platte River. The augmentation pond will enable better retiming of return flows to the river by virtue of its further location from the river than existing augmentation ponds operated by the Company. The widening of the access bridge will allow improved function and safety crossing the canal for ongoing maintenance needs.

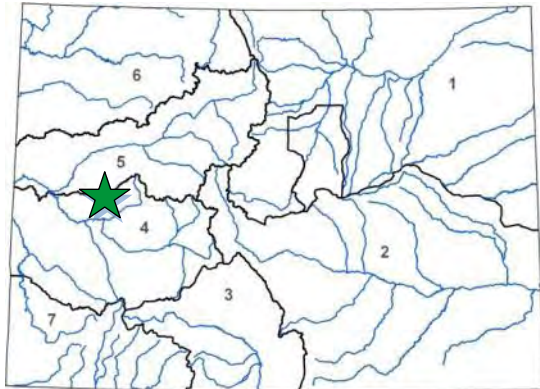


Augmentation Pond





L O A N D E T A I L S		
Project Cost:		\$ 471,577
CWCB Loan (with Service Fee):		\$248,378
Loan Term and Interest Rate:		30 Years @ 2%
Funding Source:		
B O R R O W E R T Y P E		
Agriculture	Municipal	Commercial
100%	0%	0%
P R O J E C T D E T A I L S		
Project Type:		Outlet Rehabilitation
Average Annual Diversion:		604 AF



L O C A T I O N	
County:	Delta
Water Source:	Jay Creek
Drainage Basin:	Gunnison
Division: 4	District: 40

The West Reservoir and Ditch Company operates West Reservoir No. 1, providing water seven miles eastward via Wakefield Ditch to Wakefield Mesa. The water is available for livestock as it traverses east Oak Mesa, and irrigates approximately 600 acres of hay and pasture. The current landowners use the Oak Mesa Reservoir and Ditch water for spring irrigation, and, when those flows are exhausted, use the West Reservoir flows for mid-summer to fall irrigation. The West Reservoir was improved in the early 1950s, but is now under a storage restriction order from the Office of the State Engineer due to deterioration of the outlet pipe. This project will include a low-level outlet sized to meet SEO release requirements, an outlet stilling basin structure downstream of the dam for energy dissipation, and an intake structure for a manually-operated slide gate and trash racks. Construction is scheduled for Spring of 2015.

West Reservoir
No. 1

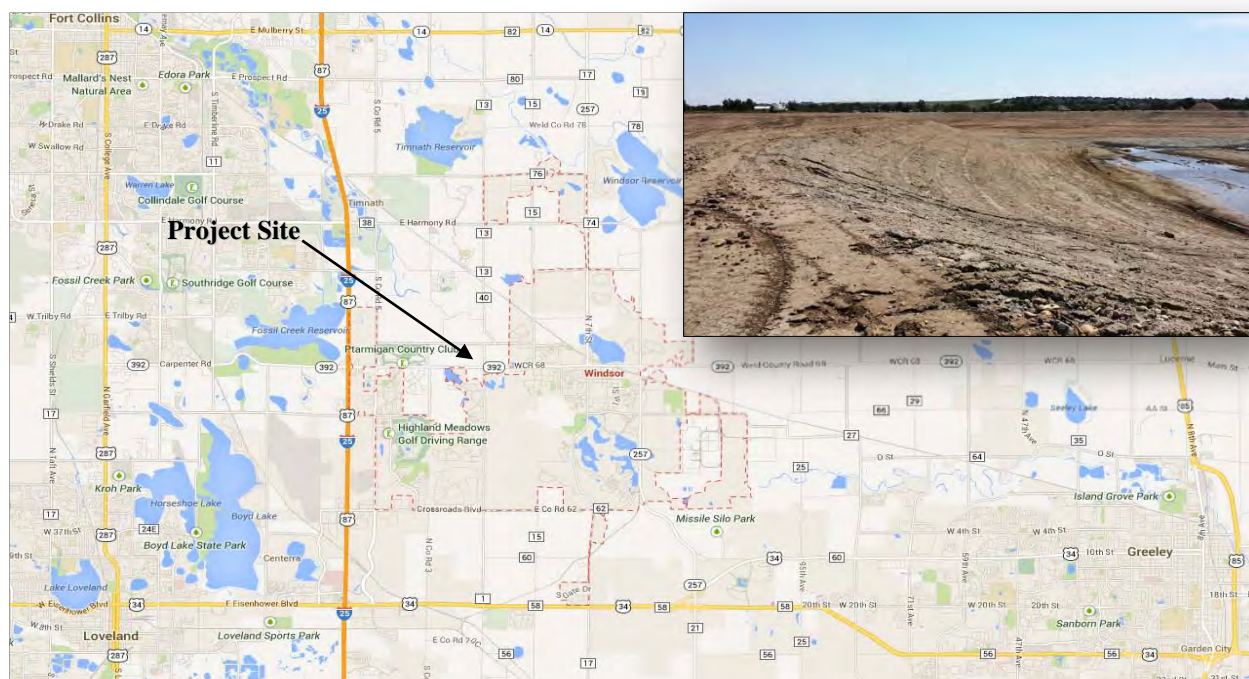


CWCB Water Project Loan Program Project Data Sheet

C150366

Borrower: Town of Windsor Water Enterprise	County: Larimer/Weld
Project Name: Kyger Reservoir Project	Project Type: Reservoir Construction
Drainage Basin/ District: South Platte / 3	Water Source: Cache la Poudre River
Total Project Cost: \$6,300,000	Funding Source: Construction Fund
Type of Borrower: Municipal (High)	Average Annual Delivery: 2035 AF
CWCB Loan: \$4,545,000 (with 1% service fee)	Interest Rate: 2.75% Term: 20-years

The Town of Windsor was incorporated in 1890 and adopted its Home Rule Charter in 2003. The Town has seen tremendous growth over the last decade and has a current population of approximately 18,700 people. The Town's Water Activity Enterprise was created by a Town Ordinance in 1994 and serves 5,604 taps. The Enterprise revenues come from water usage fees. The average water bill is \$45 per month. The purpose of this project is to provide the Town new water storage to help meet their current and future non-potable and augmentation water needs. This CWCB loan will go towards the purchase of the Kyger reservoir, the design and construction of the reservoir infrastructure, and the purchase of water rights.



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

C150408

Borrower: Cottonwood Water & Sanitation District

County: Douglas & Arapahoe

Project Name: Water Infrastructure and Supply (WISE) Efficiency Project

Project Type: New Water Supply

Drainage Basin/ District: South Platte / 8

Water Source: South Platte

Total Project Cost: \$4,960,000

Funding Source: Construction Fund

Type of Borrower: High-Income Municipal

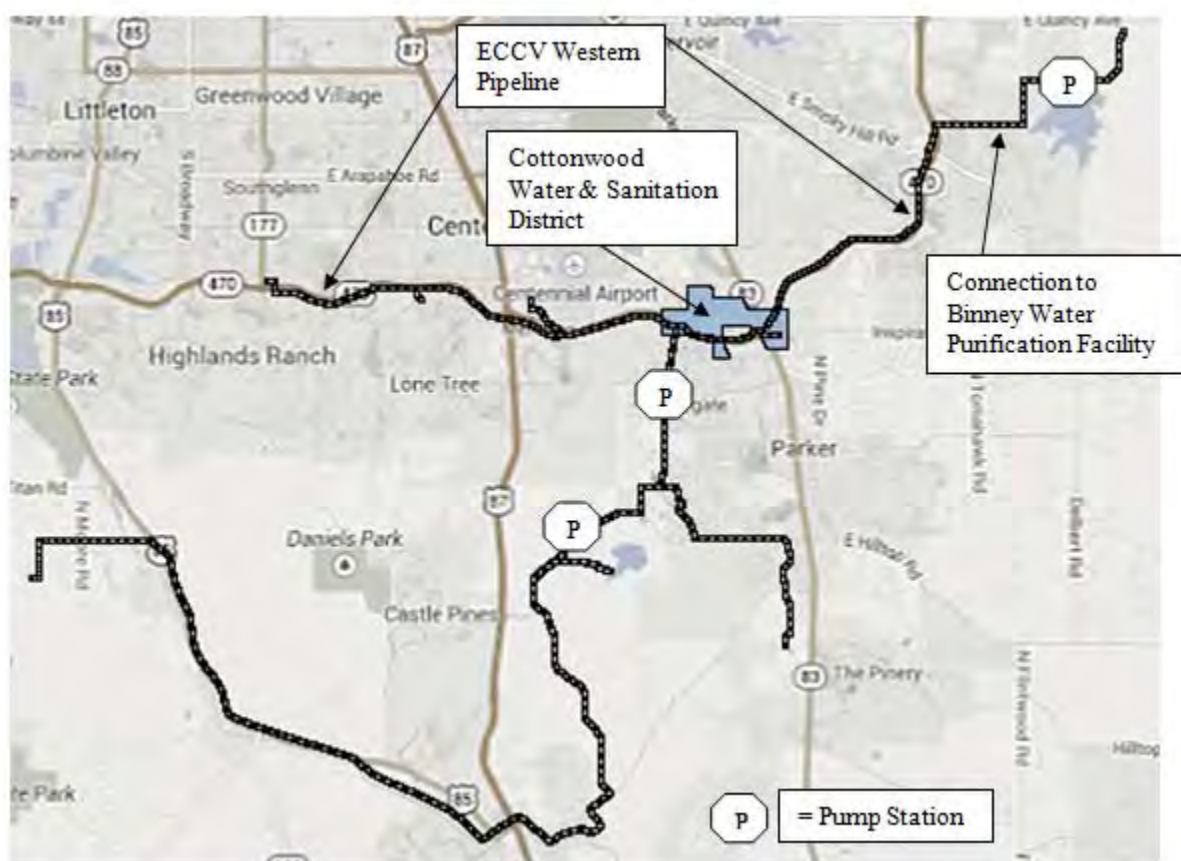
Average Annual Delivery: 789 AF

CWCB Loan: \$4,508,640 (with 1% service fee) **Interest Rate:** 3.00% **Term:** 30 years

In 1981, the Cottonwood Water & Sanitation District was formed, pursuant to Title 32 C.R.S., to provide water supply and treatment systems for customers within its service area.

Cottonwood's local project infrastructure components will extend from an existing tee located on the ECCV Western Pipeline, where a below-grade vault with flow control and metering equipment will be installed. From this location 500 feet of 36-inch pipe will be installed to connect to an existing Cottonwood pipeline. In addition, Cottonwood will also participate in a Rueter-Hess Reservoir fill pipeline and pump station being constructed by Parker.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



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

C150409

Borrower: Inverness Water & Sanitation
District

County: Douglas & Arapahoe

Project Name: Water Infrastructure and Supply
(WISE) Efficiency Project

Project Type: New Water Supply

Drainage Basin/ District: South Platte / 8

Water Source: South Platte

Total Project Cost: \$5,400,000

Funding Source: Construction Fund

Type of Borrower: High-Income Municipal

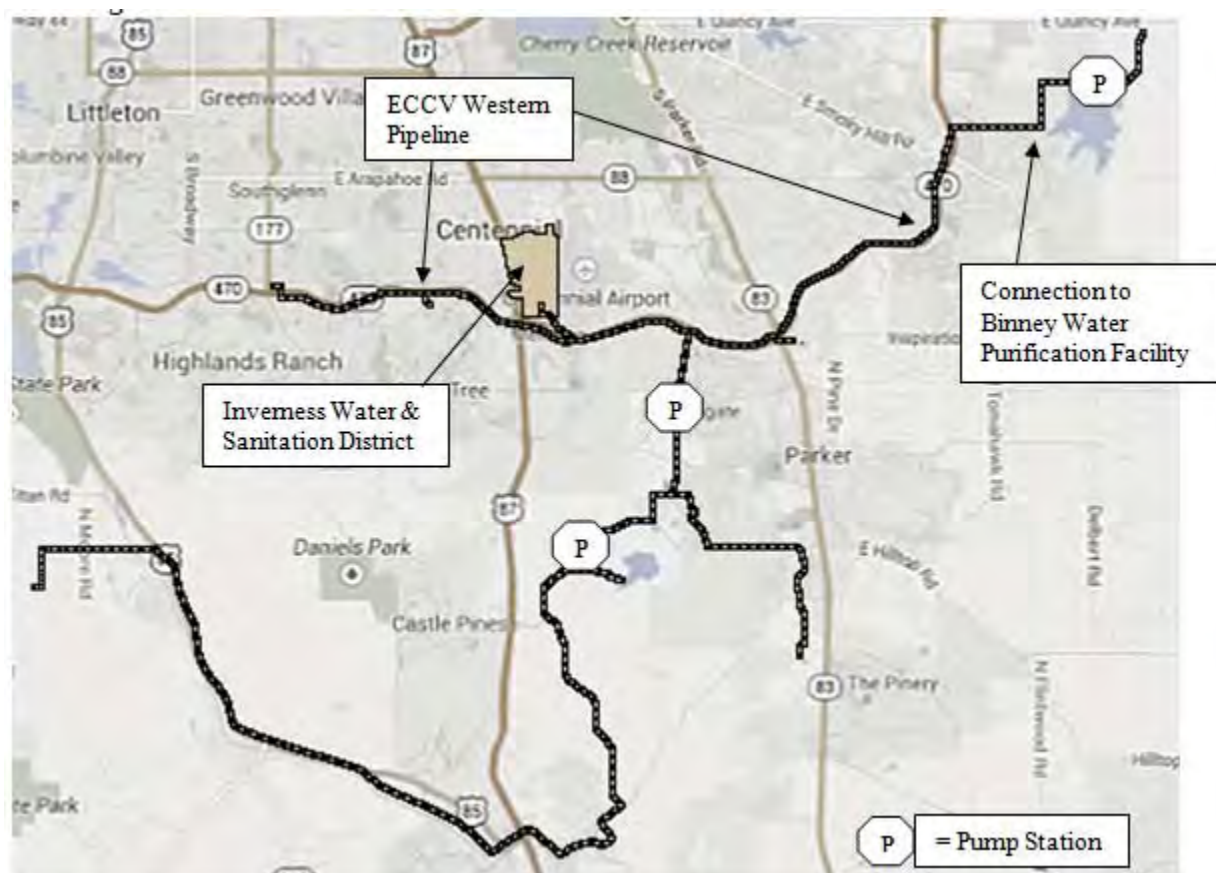
Average Annual Delivery: 1,100 AF

CWCB Loan: \$4,908,600 (with 1% service fee) **Interest Rate:** 2.75% **Term:** 20 years

In 1973, Inverness was formed pursuant to Article 1 of Title 32 C.R.S. to provide water supply and treatment systems for the customers within their service area.

Inverness will have a connection to the East Cherry Creek Valley (ECCV) Western Pipeline near the intersection of South Jamaica Street and E-470. Immediately downstream of the connection will be a below-grade vault with flow control and metering equipment. Downstream of the vault will be approximately 1,800 feet of 10-inch pipe to connect to the existing Inverness distribution system.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



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

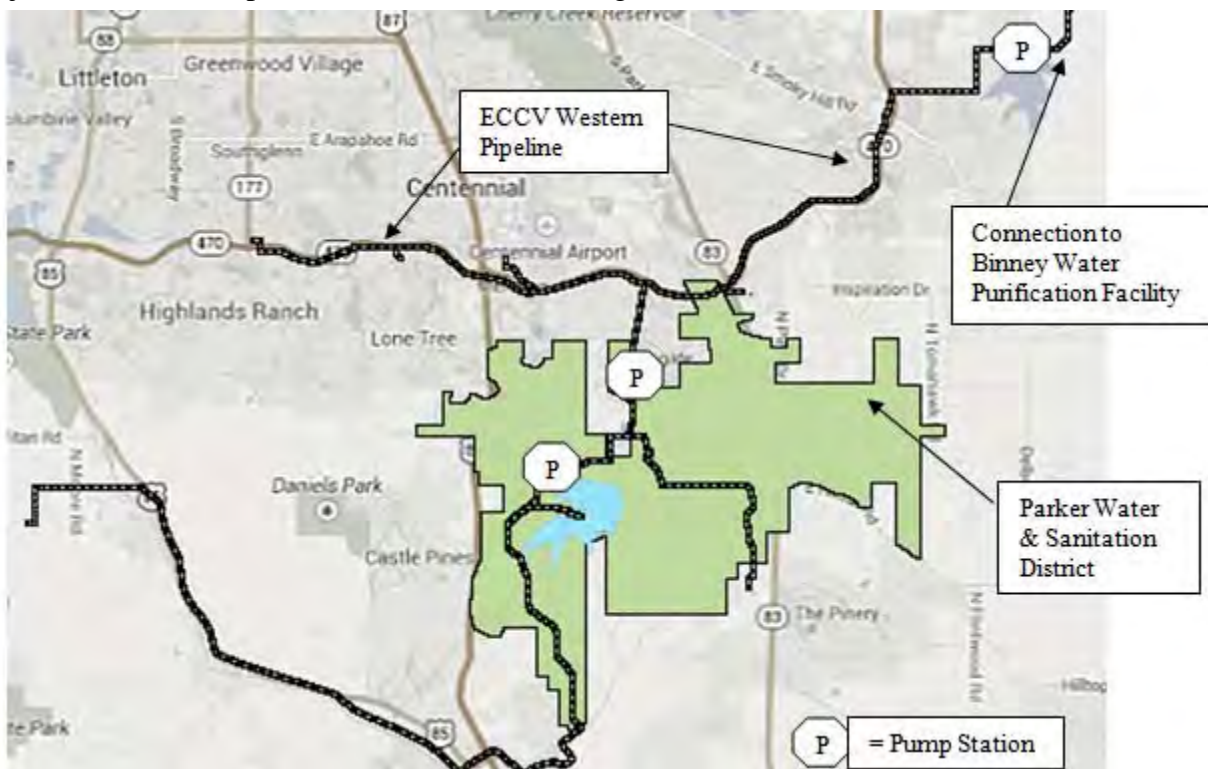
C150410

Borrower: Parker Water & Sanitation District	County: Douglas & Arapahoe
Project Name: Water Infrastructure and Supply (WISE) Efficiency Project	Project Type: New Water Supply
Drainage Basin/ District: South Platte / 8	Water Source: South Platte
Total Project Cost: \$17,305,500	Funding Source: Construction Fund
Type of Borrower: High-income Municipal	Average Annual Delivery: 5,000 AF
CWCB Loan: \$15,734,790 (with 1% service fee) Interest Rate: 2.75% Term: 20 years	

Parker Water and Sanitation District is a quasi-municipal corporation and political subdivision of the State of Colorado created in 1962 in Douglas County, for the purpose of providing water and sanitary sewer services its users.

Parker will take the lead on construction of 20,300 feet of new 42-inch pipeline from near the intersection of Chambers Road and E-470 to the Parker Water Treatment Plant located just south of Rueter-Hess Reservoir. Southward from the treatment plant a 16.5 million gallons per day pumping station will be constructed, followed by 9,000 feet of new 24-inch pipe that will allow WISE water to be conveyed to Rueter-Hess Reservoir for storage. Parker's facilities will oversized for use by other WISE Authority members.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



CWCB Water Project Loan Program Project Data Sheet

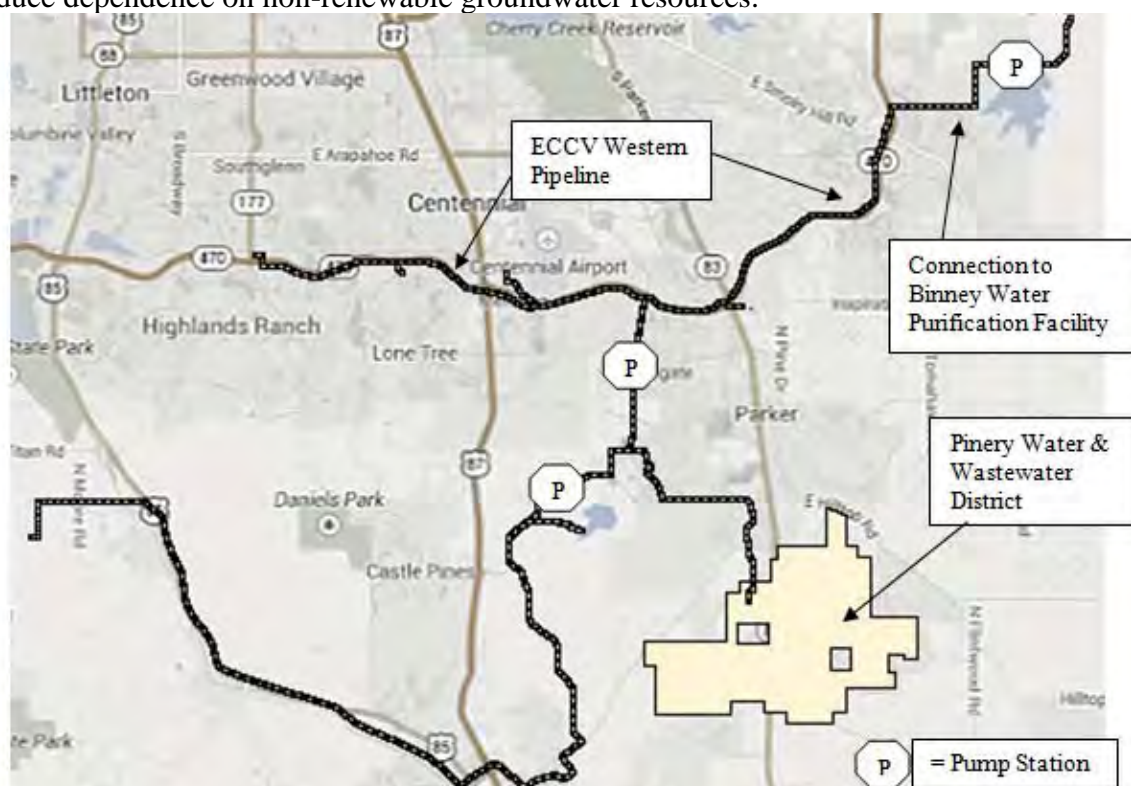
C150411

Borrower: Denver Southeast Suburban Water and Sanitation District (dba Pinery Water and Wastewater District)	County: Douglas
Project Name: Water Infrastructure and Supply (WISE) Efficiency Project	Project Type: New Water Supply
Drainage Basin/ District: South Platte / 8	Water Source: South Platte
Total Project Cost: \$10,920,000	Funding Source: Construction Fund
Type of Borrower: High-income Municipal	Average Annual Delivery: 2,837 AF
CWCB Loan: \$9,926,280 (with 1% service fee)	Interest Rate: 3.00% Term: 30 years

In 1965, the District was formed as the Denver Southeast Suburban Water and Sanitation District. The District has been providing water and wastewater services since 1971 to its predominately residential customers.

The District will participate in Parker's WISE infrastructure components including 20,300 feet of new 42-inch pipeline from near the intersection of Chambers Road and E-470 to the Parker Water Treatment Plant located just south of Reuter-Hess Reservoir. At the Parker Water Treatment Plant site a new 16.5 million gallons per day pumping station will be constructed. Downstream of the pumping station 9,000 feet of new 24-inch pipe will be constructed that will allow WISE water to be conveyed to Reuter-Hess Reservoir for storage. In addition, Pinery will construct about 6,200 feet of 12-inch pipeline to deliver water to an existing finished water distribution system pumping station.

The WISE Project is the result of regional cooperative planning efforts between Denver Water, Aurora Water, and 10 regional water providers in the south metropolitan area. The South Metro WISE Authority (WISE Authority) is comprised of ten governmental water providers in Douglas and Arapahoe Counties bound together by a 2013 Intergovernmental Agreement. The WISE Project will reduce dependence on non-renewable groundwater resources.



Projects Not Under Contract

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

C150403

Borrower: Castle Pines Metropolitan District

County: Douglas

Project Name: Chatfield Reallocation Project

Project Type: Reservoir Storage

Drainage Basin: South Platte

Water Source: South Platte River
Plum Creek

Total Project Cost: \$5,550,000

Funding Source: Severance Tax Perpetual
Base Fund

Type of Borrower: High-income Municipal

Average Annual Delivery: 1,056 AF

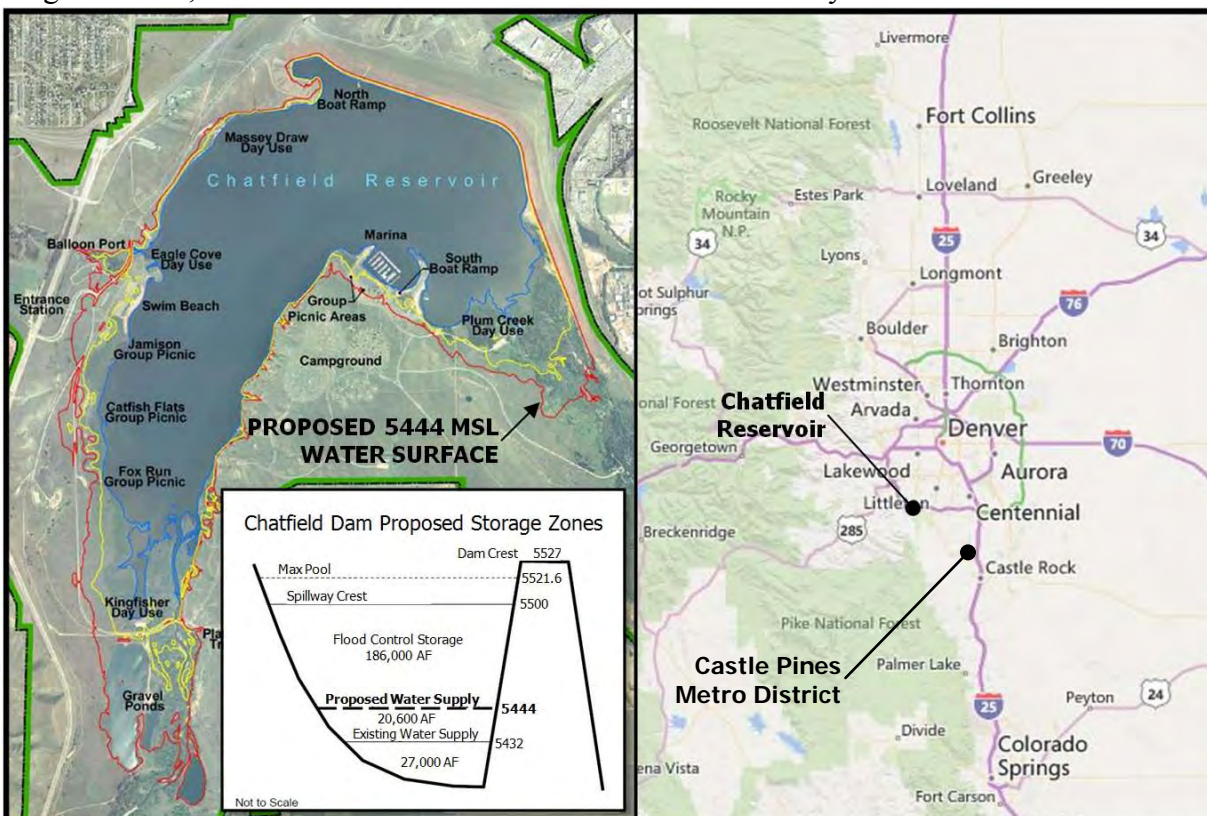
Added Water Supply Storage: 786.7 AF

CWCB Loan: \$5,050,000 (with 1% service fee)

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

The Castle Pines Metropolitan District provides water and wastewater services to the residents and businesses of Castle Pines Village in Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project would result in the District securing renewable water rights that on average would supply 32% of its average annual water demand. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 786.7 acre-feet of storage, or 3.82% of the total reallocation. The District will use Chatfield storage through an exchange on east Plum Creek as authorized in water court Case No 04CW308.

The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Project participants completed the Project's Fish, Wildlife and Recreation Mitigation Plan, in accordance with C.R.S. 37-60-122.2 in January 2014.



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

C150404

Borrower: Castle Pines North
Metropolitan District
Project Name: Chatfield Reallocation Project

County: Douglas

Project Type: Reservoir Storage

Drainage Basin: South Platte

Water Source: South Platte River
Plum Creek

Total Project Cost: \$7,100,000

Funding Source: Severance Tax Perpetual
Base Fund

Type of Borrower: High-income Municipal

Average Annual Delivery: 1,300 AF

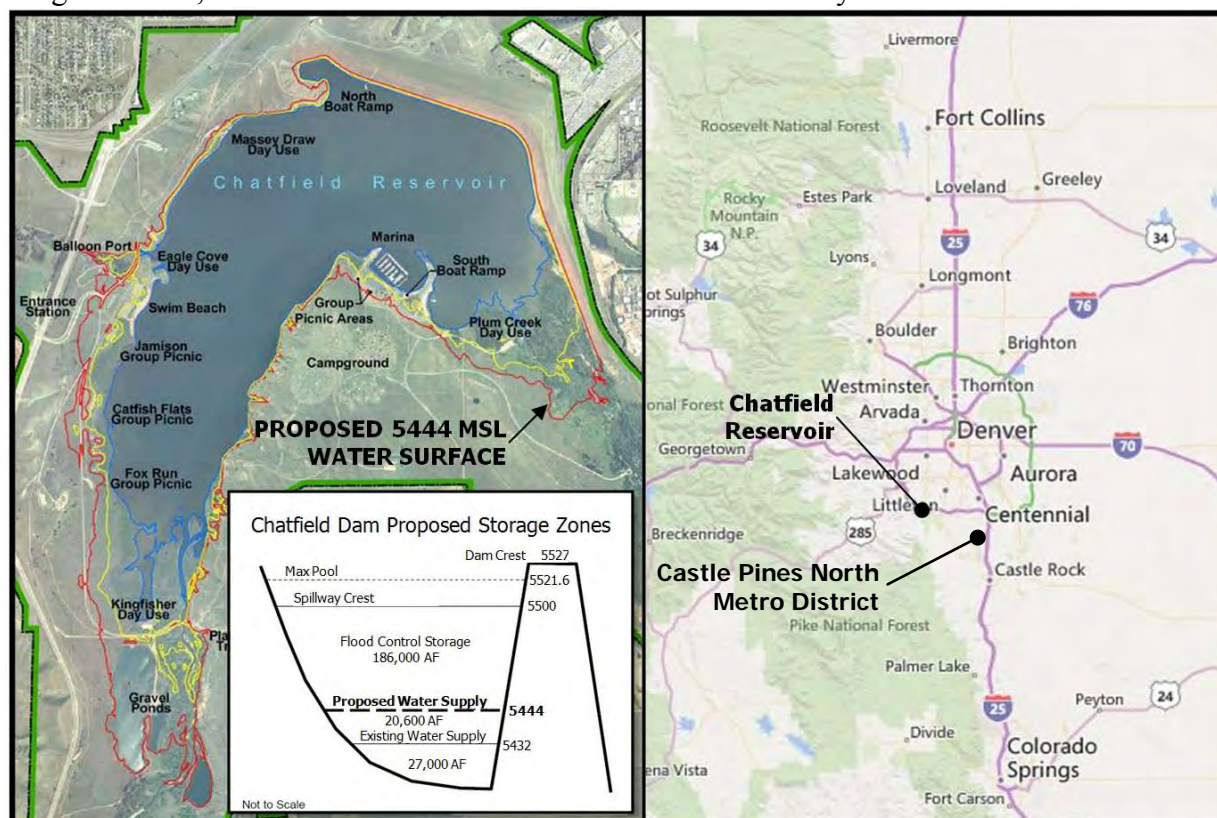
Added Water Supply Storage: 1005.8 AF

CWCB Loan: \$6,453,900 (with 1% service fee)

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

The Castle Pines North Metropolitan District provides water and wastewater services to the residents and businesses in the City of Castle Pines, Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project would result in the District securing renewable water rights that on average would supply 32% of its average annual water demand. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 1005.8 acre-feet of storage, or 4.88% of the total reallocation. The District will use Chatfield storage through exchanges as authorized in water court Case Nos. 04CW308 and 09CW279.

The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Project participants completed the Project's Fish, Wildlife and Recreation Mitigation Plan, in accordance with C.R.S. 37-60-122.2 in January 2014.



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

C150405

Borrower: Centennial Water & Sanitation District **County:** Douglas

Project Name: Chatfield Reallocation Project

Project Type: Reservoir Storage

Drainage Basin: South Platte

Water Source: South Platte River
Plum Creek

Total Project Cost: \$48,888,000

Funding Source: Severance Tax Perpetual
Base Fund

Type of Borrower: High-income Municipal

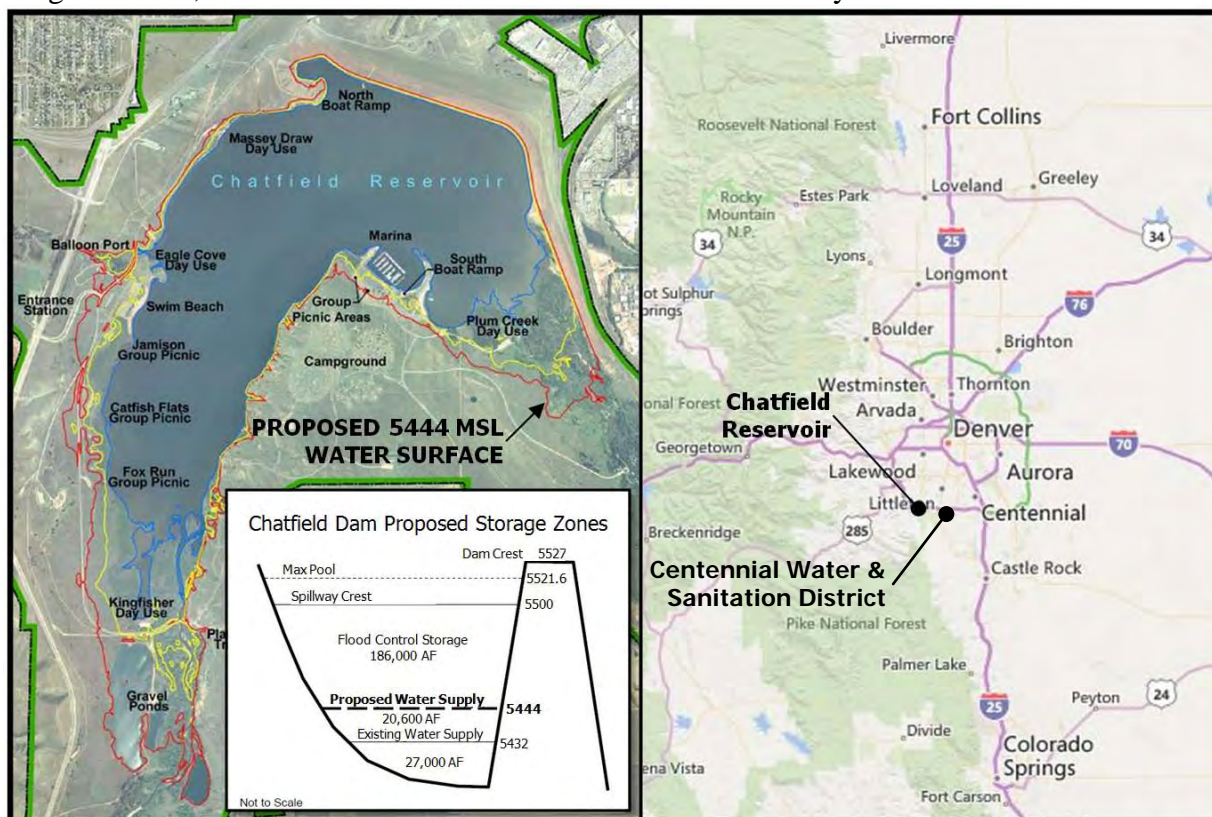
Average Annual Delivery: 17,500 AF

Added Water Supply Storage: 6,922.1 AF

CWCB Loan: \$44,440,000 (with 1% service fee) **Interest Rate:** 3.0% **Term:** 30-years

The Centennial Water & Sanitation District provides water and wastewater services to the residents and businesses of Highlands Ranch in Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project would result in the District securing renewable water rights that on average would supply 16% of its average annual water demand. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 6,922.1 acre-feet of storage, or 33.6% of the total reallocation. The District will store Chatfield water in accordance with water court Case Nos. 83CW184, 84CW411, and 85CW314.

The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Project participants completed the Project's Fish, Wildlife and Recreation Mitigation Plan, in accordance with C.R.S. 37-60-122.2 in January 2014.



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

C150406

Borrower: Center of Colorado Water
Conservancy District
Project Name: Chatfield Reallocation Project

County: Park
Project Type: Reservoir Storage

Drainage Basin: South Platte

Water Source: South Platte River
Plum Creek

Total Project Cost: \$931,000

Funding Source: Severance Tax Perpetual
Base Fund

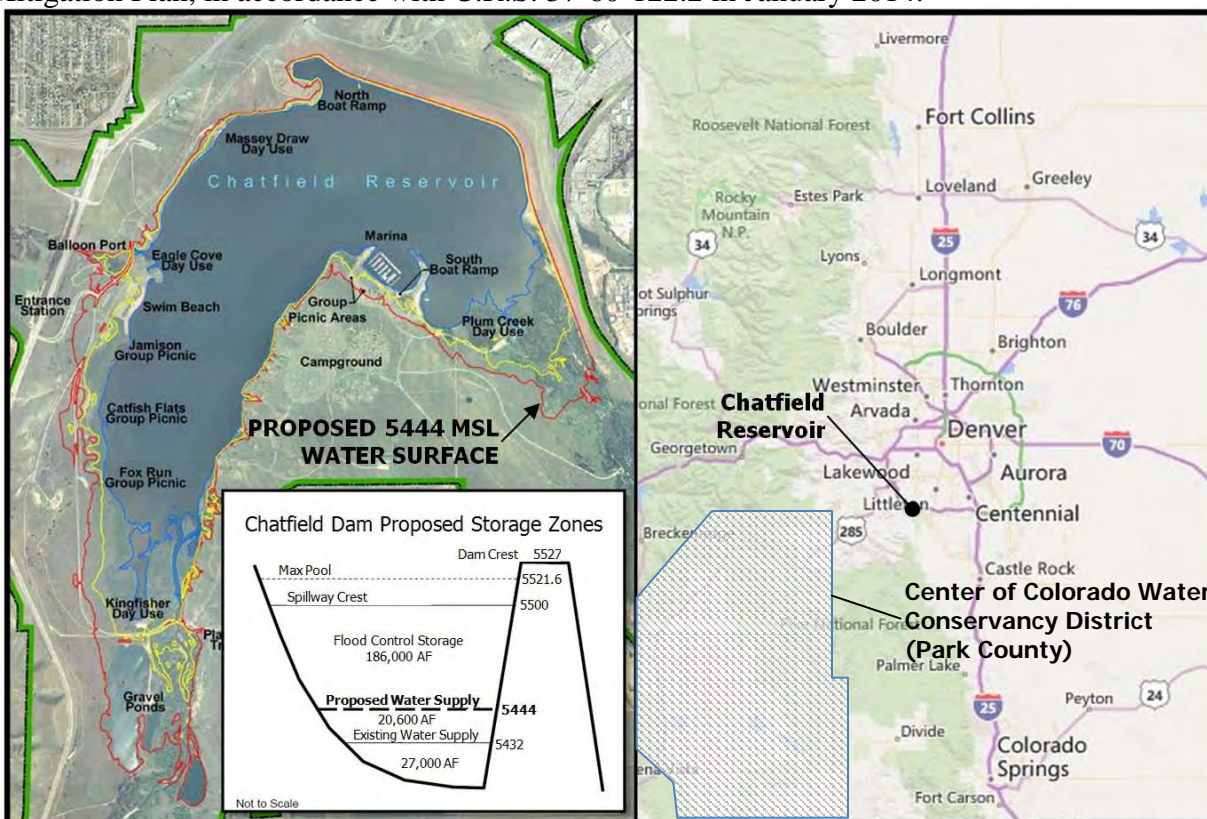
Type of Borrower: Middle-income Municipal

Average Annual Diversion: 700 AF
Added Water Supply Storage: 131.3 AF

CWCB Loan: \$606,000 (with 1% service fee) **Interest Rate:** 2.5% **Term:** 15-years

The Center of Colorado Water Conservancy District co-owns and manages a blanket augmentation plan with the Upper South Platte Water Conservancy District through the Headwater Authority of the South Platte. The District is participating in the Chatfield Reallocation Project in order to improve its augmentation operations by needed storage space at the lower reaches of its augmentation plan. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 131.3 acre-feet of storage, or 0.64% of the total reallocation. The District will use Chatfield storage to store senior and junior rights as authorized in water court Case Nos. 12CW50 and 13CW3148.

The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Project participants completed the Project's Fish, Wildlife and Recreation Mitigation Plan, in accordance with C.R.S. 37-60-122.2 in January 2014.



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

C150407

Borrower: Central Colorado Water
Conservancy District

County: Adams, Weld

Project Name: Chatfield Reallocation Project

Project Type: Reservoir Storage

Drainage Basin: South Platte

Water Source: South Platte River
Plum Creek

Total Project Cost: \$28,170,000

Funding Source: Severance Tax Perpetual
Base Fund

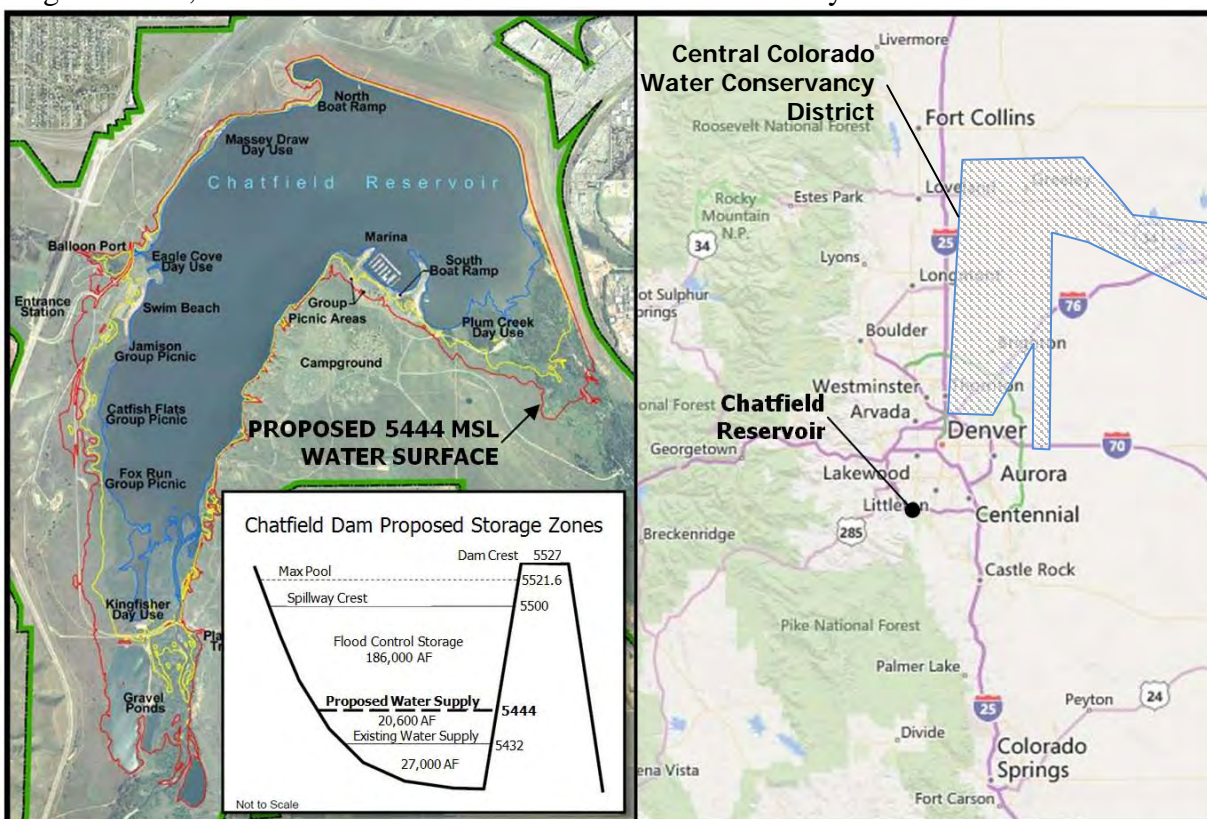
Type of Borrower: Agricultural

Average Annual Delivery: 24,600 AF
Added Water Supply Storage: 4,274 AF

CWCB Loan: \$28,451,700 (with 1% service fee) **Interest Rate:** 1.75% **Term:** 30-years

The Central Colorado Water Conservancy District is located in the South Platte River basin between Denver and Fort Morgan including Beebe Draw, and the lower portions of the Box Elder Creek and Lost Creek drainages. Approximately 210,000 acres of irrigated agricultural lands are served by the District. The District is participating in the Chatfield Reallocation Project to increase the availability of augmentation water for users within its District. Of the 20,600 acre-feet proposed to be reallocated, the District would receive 4,274 acre-feet of storage, or 20.75% of the total reallocation. The location of Chatfield provides the ability to replace well depletions to all locations within the District.

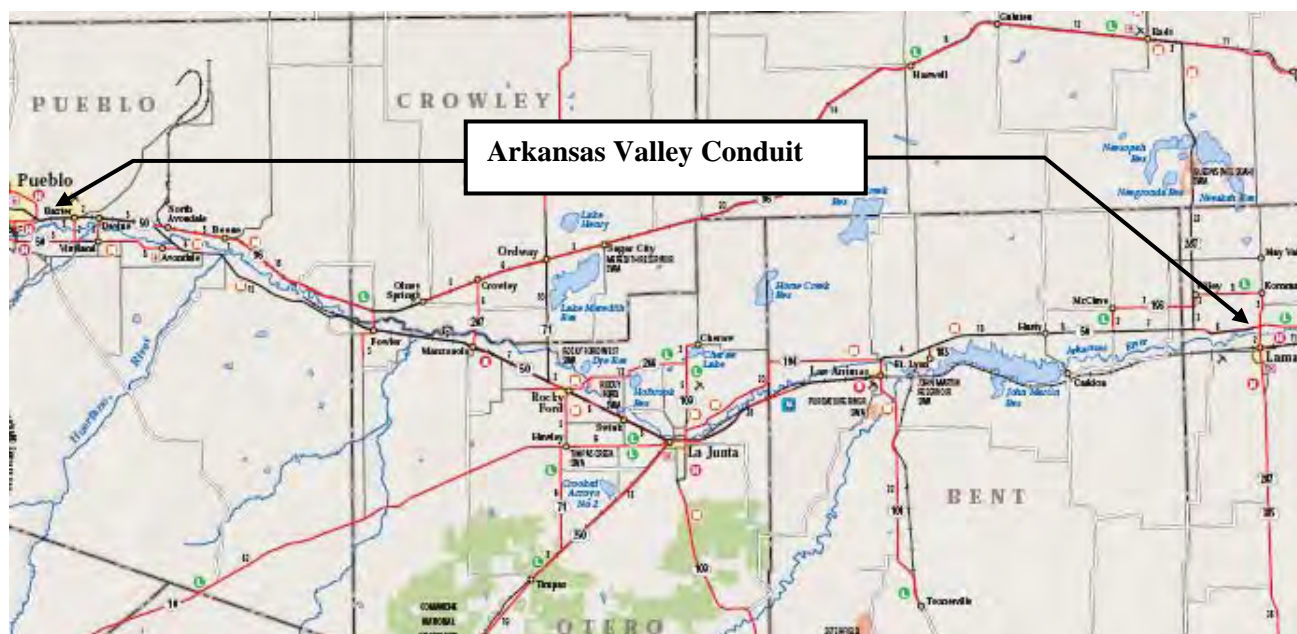
The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 5432 and 5444 msl for M&I water supply and other purposes including agriculture, environmental restoration, and recreation and fishery habitat protection and enhancement. Project participants completed the Project's Fish, Wildlife and Recreation Mitigation Plan, in accordance with C.R.S. 37-60-122.2 in January 2014.



Water Project Construction Loan Program - Project Data

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



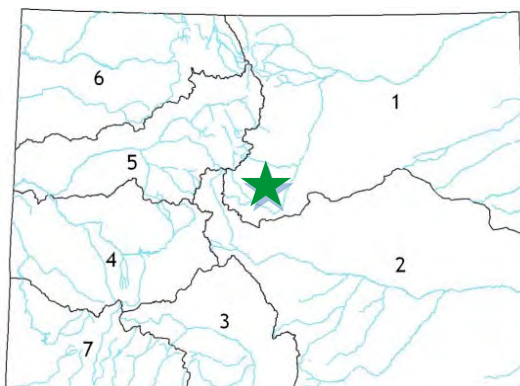
Water Project Loan Program
Project Data Sheet

Rehabilitation and Replacement of Water Meters

Bow Mar Water & Sanitation District

March 2015 Board Meeting

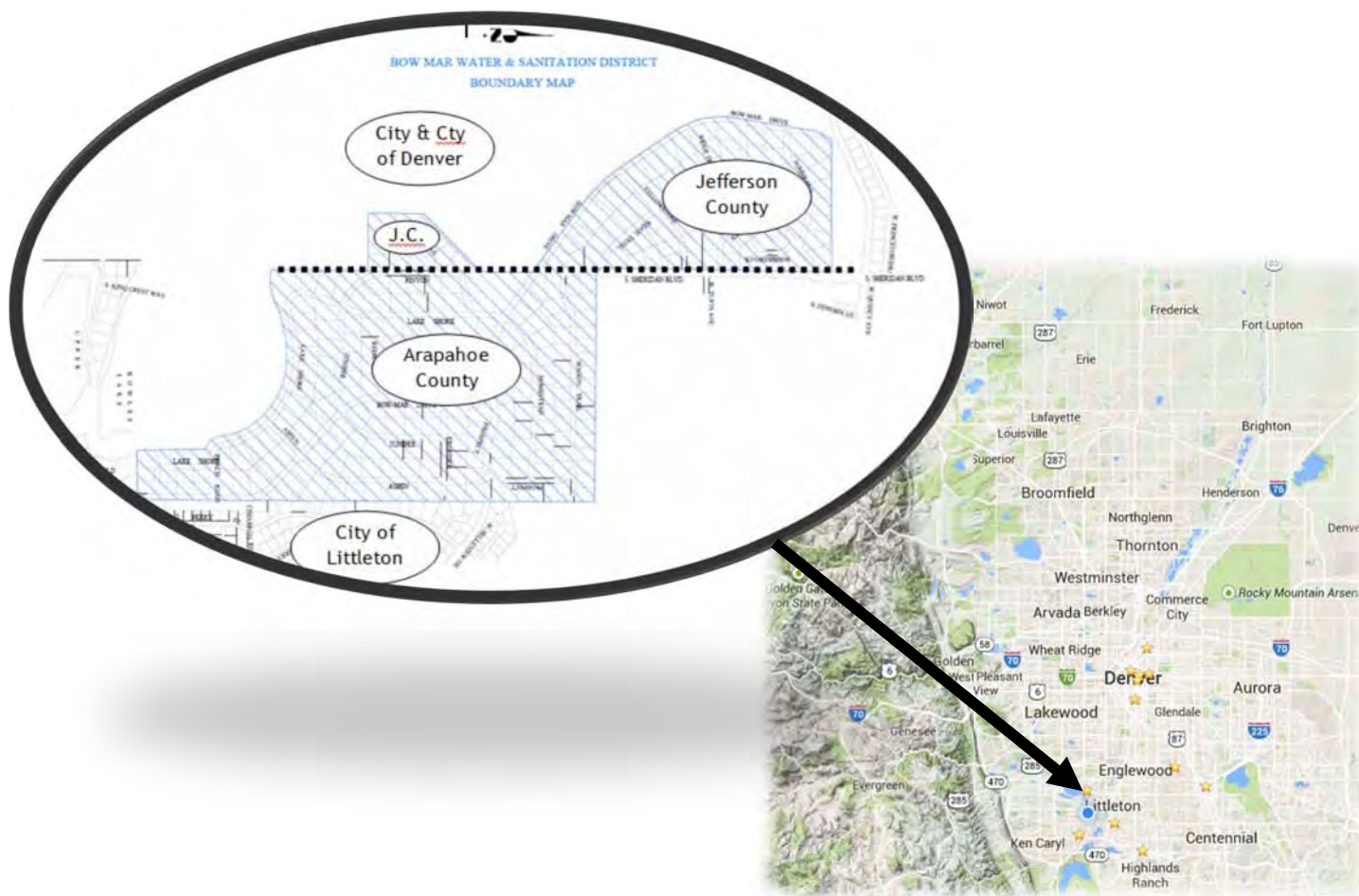
L O A N D E T A I L S				
Project Cost:			\$366,102	
CWCB Loan (with Service Fee):			\$332,795	
Loan Term and Interest Rate:			10 Years @ 2.65%	
Funding Source:			Construction Fund	
Agriculture		Municipal		Commercial
0%	0% Low	0% Mid	100% High	0%
P R O J E C T S U M M A R Y				
Project Type:			Municipal Water	
Residential Customers			293	
Annual Water Use			338 Acre-Feet	



The Bow Mar Water & Sanitation District is a master meter distributor for Denver Water located just south of Denver. The District seeks loan funding for the planned rehabilitation and replacement of water meters throughout the subdivision service area.

L O C A T I O N	
County:	Arapahoe & Jefferson
Water Source:	Denver Water (Master Meter)
Drainage Basin:	Metro
Division:	1 District: 9

The purpose of the project is to replace or rehabilitate the existing meters, which currently under-report actual usage due to age and wear. The meter replacement/rehabilitation program will replace 233 meters, rehabilitate 60 existing meters by replacing the meter register to accommodate automatic meter reading, and update the District's billing system to accommodate automatic meter reading.



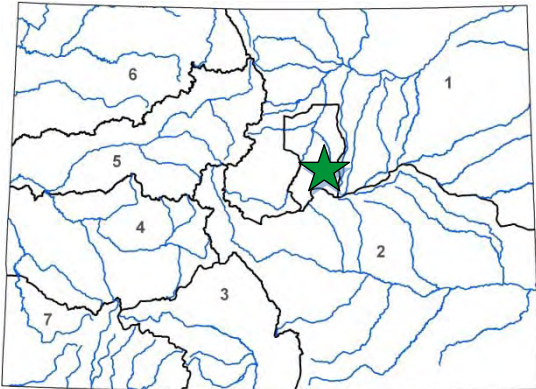


Raw Water Supply Project

Plum Valley Heights Subdistrict of the Roxborough Water and Sanitation District

May 2015 Board Meeting

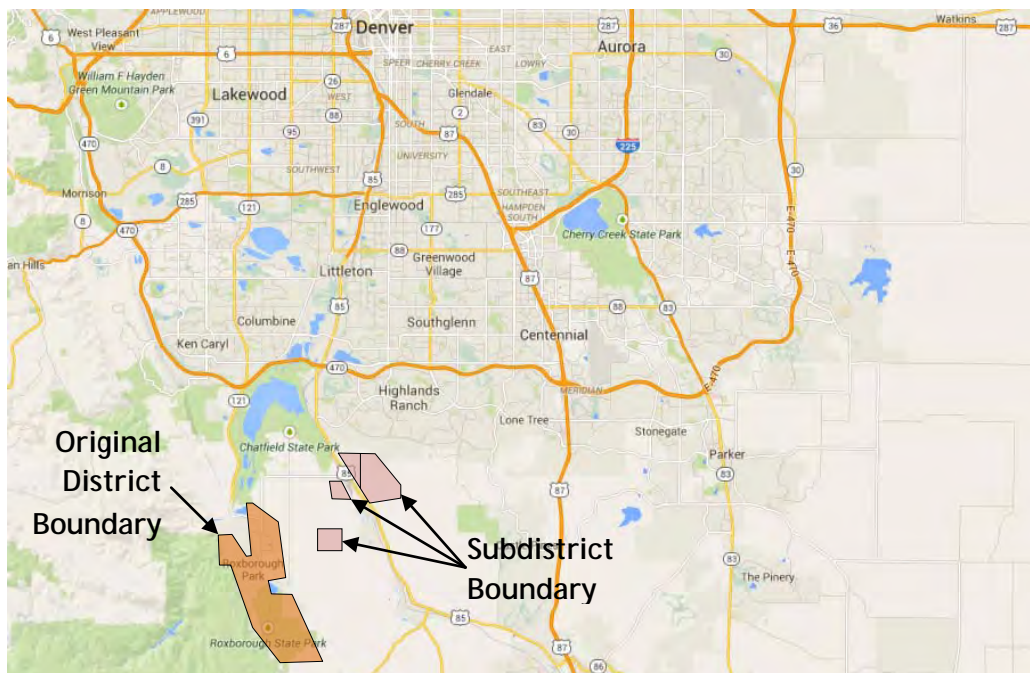
L O A N D E T A I L S	
Project Cost:	\$2,473,605
CWCB Loan (with Service Fee):	\$2,248,260
Loan Term and Interest Rate:	30 Years @ 3.05%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
0%	0% Low - 0% Mid - 100% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Water Rights Purchase
Average Annual Delivery:	150 AF



L O C A T I O N	
County:	Douglas
Water Source:	South Platte River
Drainage Basin:	South Platte
Division:	1
District:	8

Plum Valley Heights Subdistrict of the Roxborough Water and Sanitation District was recently formed to provide rural communities in Douglas County with a renewable water supply. The communities will be connected to the Roxborough Water and Sanitation District system through an infrastructure project funded by a WSR grant, CWRPDA loan, and Douglas County. The total project cost (including infrastructure) is approximately \$14.9M. The CWCB loan will finance the acquisition of a renewable water supply from the City of Aurora.

The existing residential developments of Chatfield Acres, Chatfield East, and Plum Valley Heights, and the industrial development of Titan Road Industrial Park, were built in the 1970s and 1980s. These developments are currently served by individual wells completed in the non-tributary Denver Basin aquifers. Water levels in the Denver Basin aquifers are declining, particularly in the margins of the aquifers where these developments are located. As a result, existing wells in these developments have either already failed, or are in danger of failing. The Metro Roundtable has determined this project is an important component of replacing the use of non-tributary groundwater in the South Metropolitan Area of Denver and in solving the water supply gap identified in SWSI.



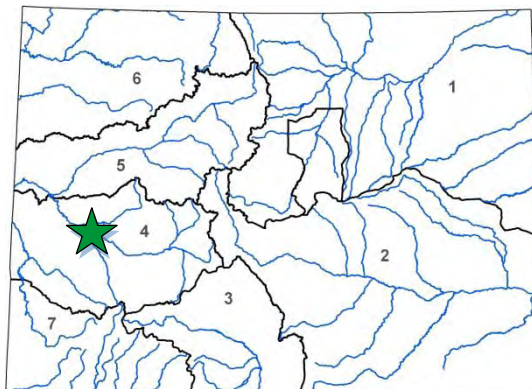


Drop 5 Hydroelectric Project

Uncompahgre Valley Water Users Association

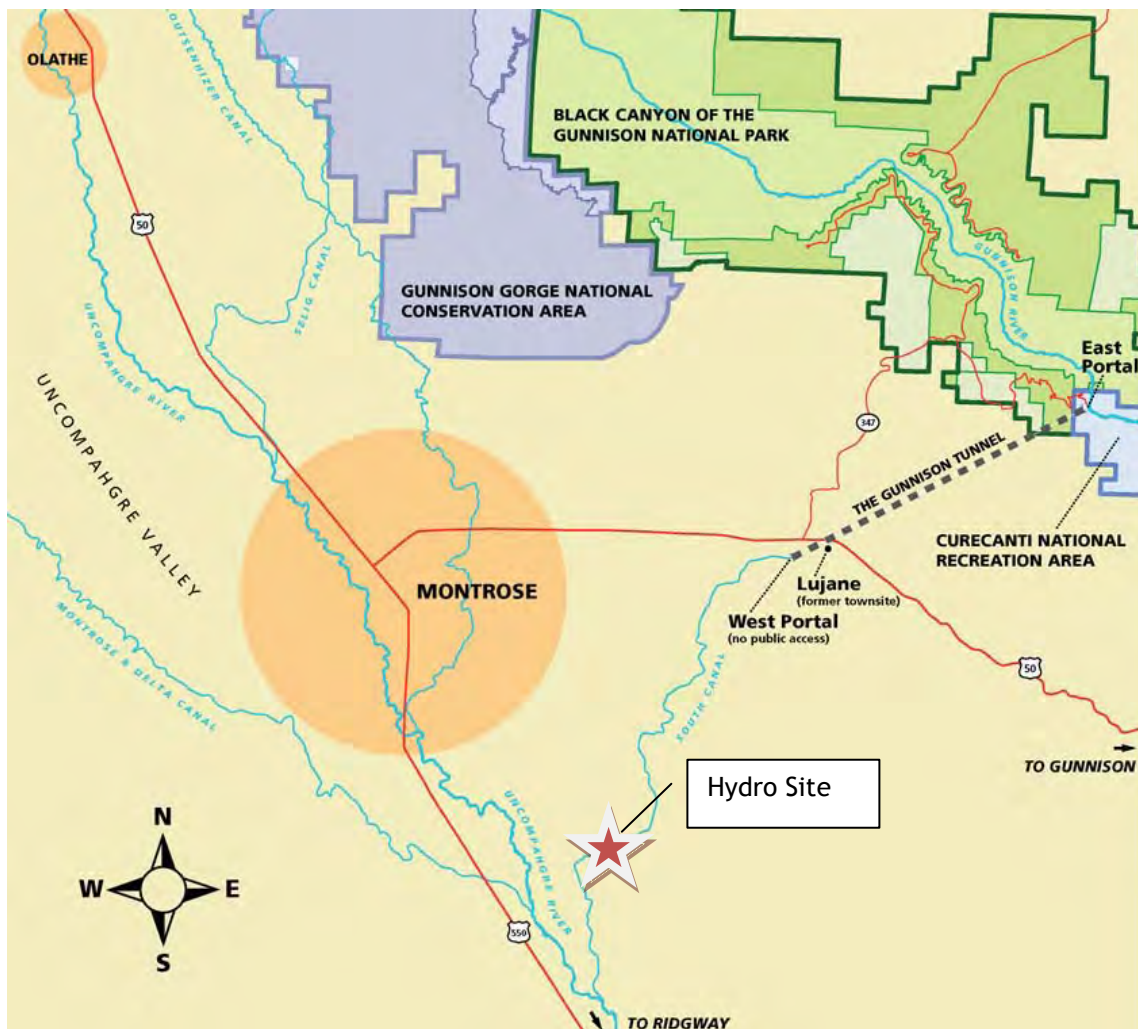
May 2015 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$7,700,000
CWCB Loan (with Service Fee):	\$6,999,300
Loan Term and Interest Rate:	20-years @ 2.0%
Funding Source:	Severence Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agricultural	
P R O J E C T D E T A I L S	
Project Type:	Hydroelectric
Average Annual Power Production	2.2 MW



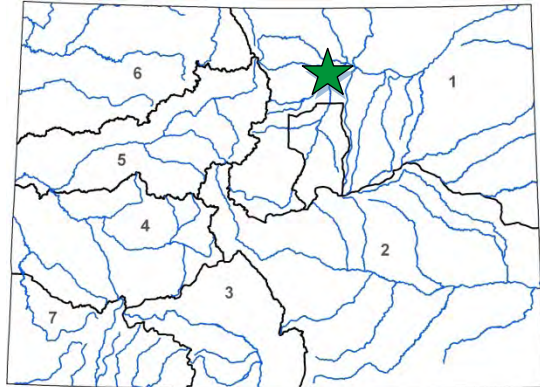
L O C A T I O N	
County:	Montrose & Delta
Water Source:	Gunnison River
Drainage Basin:	Gunnison
Division:	4
District:	41

The Uncompahgre Valley Water Users Association provides irrigation water to over 85,000 acres in Montrose and Delta Counties. It intends to develop a 2.2 MW hydroelectric project known at the Drop 5 Hydroelectric Project alongside an existing canal. The existing canal will be used as a by-pass during non-power generation times. The power will be sold to Delta Montrose Electric Association and will be used locally. Power production is anticipated by summer of 2016.



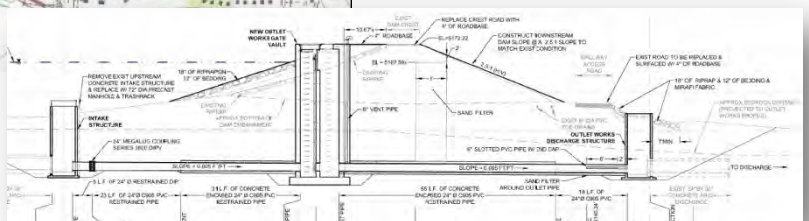
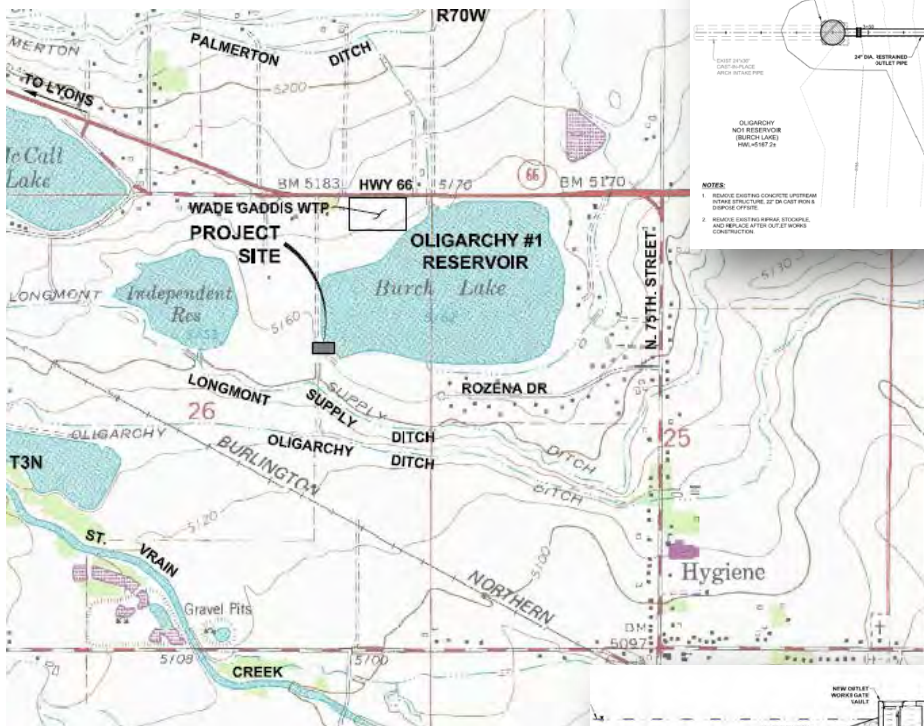
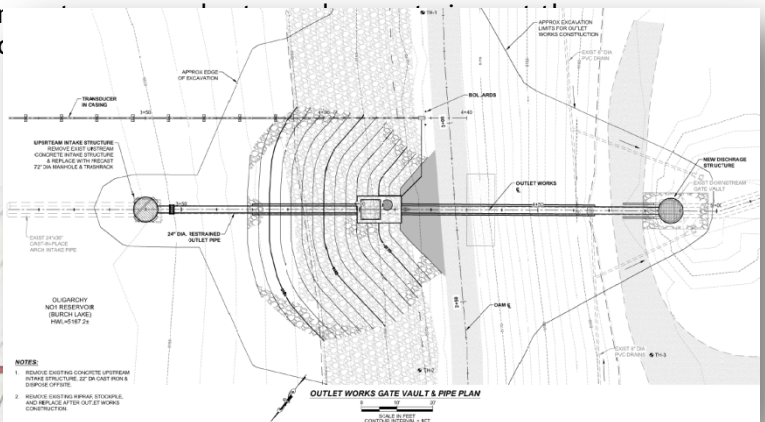


LOAN DETAILS	
Project Cost:	\$860,000
CWCB Loan (with Service Fee):	\$781,740
Loan Term and Interest Rate:	30 Years @ 2.40%
Funding Source:	Construction Fund
BORROWER TYPE	
Agriculture	Municipal (TBD)
25.4%	0% Low - 74.6% Mid - 0% High
Commercial	0%
PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average Annual Delivery:	7,966 AF
Water Supply Storage Preserved:	1,737 AF



LOCATION	
County:	Boulder
Water Source:	St Vrain Creek
Drainage Basin:	South Platte
Division:	1
District:	5

The Oligarchy Irrigation Company owns and operates the Oligarchy #1 Dam and Reservoir, also known as Burch Lake. The reservoir stores 1,737 acre-feet of water and is classified as a significant hazard dam by the Office of the State Engineer (SEO). The purpose of the project is to rehabilitate the Oligarchy Reservoir No.1 dam outlet works to include a new unpressurized outlet pipe, an outlet works system. Construction is expected to occur





COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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Denver, CO 80203

P (303) 866-3441

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John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

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

DATE: September 15-17, 2015

DIRECTORS REPORT: Water Project Loan Program
Emergency Loan Status Report

As a result of the unprecedented floods of September 2013, the CWCB awarded zero-interest and no-payment 3-year bridge loans to water suppliers. Typically the loans are utilized by borrowers to replace diversion structures and reconstruct the ditch delivery system.

To date, the CWCB has twenty (20) projects authorized totaling \$22.6 million. There are currently eighteen (18) projects under contract ready to receive loan funds for eligible project expenses. The CWCB Emergency Loan Program has Completed Construction on four (4) projects as shown in Table 1.

The attached spreadsheet summarizes the status of the projects. A detailed description can be found on the subsequent Data Sheets.

TABLE 1

	Borrower	Project	County	Loan	Completed
1	Boulder & Larimer Co Irr.	Diversion Structure Repair	Boulder/Larimer	\$202,000	April '14
2	Culver Ditch Company	Culver Mahoney Ditch Repair	Boulder/Larimer	\$151,500	May '14
3	Ish Reservoir Company	Inlet Ditch & Div. Repair	Boulder	\$207,050	April '14
4	Sylvan Dale Ranch, LLLP	Emergency Pond Excavation	Larimer	\$105,171	May '14
			Total:	\$665,721	



Boulder and Larimer County Irrigating and Manufacturing Ditch Company
Emergency Boulder & Larimer Diversion Structure Repair

C150374



Project Description

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. The purpose of this Project is to repair the Little Thompson River diversion structure and the Ish Reservoir inlet ditch structure to allow the Company to deliver water to shareholders.

Project Data

Sponsor: Boulder & Larimer
County Irrigating & Manufacturing
Ditch Co.

County: Boulder & Larimer

Water Source: Little Thompson River

Terms of Loan: \$202,000 for 30 years @ 1.90%

Construction Completed: April 2014

Expended Amount: \$202,000

Anticipates FEMA Funding: NO

Design Engineer: Tessara Water, LLC - Hudson, Colorado and SM&RC Structural Engineers, Inc. - Lakewood, Colorado

Contractors: Concrete Structures, Inc. - Longmont, CO. & Zac Dirt, Inc. - Longmont, CO.

Project Elements: The Project included the repair of the Little Thompson River diversion structure and the Ish Reservoir Inlet Ditch: The scope of work for the diversion structure repairs involved removing debris from the dam and diversion structure, forming and pouring a new wing wall on the north side of the diversion dam, and then rechanneling the Little Thompson River to flow back over the diversion dam. The scope of work for the inlet ditch washout repairs involved creating a new path for the Company's ditch through the area. This involved creating a foundation secured to bedrock and building a new water conveyance system on top of the foundation.

Culver Lateral Ditch Company Emergency Culver Mahoney Ditch Repair

150390



Project Description

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Culver Lateral Ditch Company ditch and diversion structure. The flood damaged the diversion dam, headgate structure, sand gates, measurement flume, and recording structure. Additionally, the first 1,500 feet of ditch was destroyed as it effectively became a part of the Little Thompson River. The next 1,800 feet of ditch was filled with sediment. The purpose of the Project is to repair the diversion structure and ditch to allow the Company to divert its decreed water rights.

Project Data

Sponsor: Culver Lateral Ditch Company County: Water Source: Little Thompson River
Boulder/Larimer
Terms of Loan: \$151,000 for 30 years @ 2.30% Construction Completed: May 2014
Expended Amount: \$151,000
Anticipates FEMA Funding: YES
Design Engineer: TZA Water Engineers, Inc. - Lakewood, Colorado
Contractor: Chaparral Construction, LLC - LaVeta, Colorado

Project Elements: The project included removal of debris and silt from the ditch and diversion dam, reshaping the ditch sideslopes and flowline, and rehabilitation of the headgate structure, sand gates, measurement flume, and recording structure.

Ish Reservoir Company Emergency Inlet Ditch and Diversion Structure Repair

C150376



Project Description

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. The purpose of this Project is to repair the Little Thompson River diversion structure and the Ish Reservoir inlet ditch structure to allow the Company to deliver water to shareholders.

Project Data

Sponsor: Ish Reservoir Company

County: Boulder &
Larimer

Water Source: Little Thompson River

Terms of Loan: \$207,050 for 30 years @ 1.75%

Construction Completed: April 2014

Expended Amount: \$207,050

Anticipates FEMA Funding: NO

Design Engineer: Tessara Water, LLC - Hudson, Colorado and SM&RC Structural Engineers, Inc. - Lakewood, Colorado

Contractors: Concrete Structures, Inc. - Longmont, CO. & Zac Dirt, Inc. - Longmont, CO.

Project Elements: The Project included the repair of the Little Thompson River diversion structure and the Ish Reservoir Inlet Ditch. The scope of work for the diversion structure repairs involved removing debris from the dam and diversion structure, forming and pouring a new wing wall on the north side of the diversion dam, and then rechanneling the Little Thompson River to flow back over the diversion dam. The scope of work for the inlet ditch washout repairs involved creating a new path for the Company's ditch through the area. This involved creating a foundation secured to bedrock and building a new water conveyance system on top of the foundation.

Sylvan Dale Ranch, LLLP
Emergency Irrigation Pond Excavation

C150392



Project Description

The Ranch has been owned and operated by the Jessup family since 1946 as both a guest ranch and a working ranch encompassing 3,200 acres in the foothills at the mouth of the Big Thompson Canyon, seven miles west of Loveland. There are 160 the year, the pastures are grazed by the Ranch's grass-fed cattle herd. The Ranch owns two adjoining ponds next to Big Thompson River. The ponds, which were silted in during the September 2013 flood, are fed by springs and drain into the river just above the George Rist Ditch diversion. The Ranch pumps water out of the ponds to irrigate pastures located immediately south of the ponds. Between 142 and 190 acre-feet are used per season, using two center pivots. Without these ponds, there is no means to irrigate the pastures. The purpose of this project is to excavate the silt from the ponds.

Project Data

Sponsor: Sylvan Dale Ranch, LLP County: Larimer
Terms of Loan: \$105,171 for 30 years @ 1.75%
Expended Amount:\$105,171
Anticipates FEMA Funding: NO
Design Engineer: None

Water Source: Big Thompson River
Construction Completed: May 2014

Contractor: Custom Design Fabricators - Livermore, Colorado

Project Elements: The ponds were excavated and the silt was distributed to various locations on the Ranch.

Emergency Loan - Summary

Loan Program
Attacment 4

Current Projects in Design or under Construction

	Borrower/Project	County	Loan Amount	Annual Delivery Yield (AF)	Design Status	Construction Start/End	Construction Status	PM	Status Description/Update
1	Beeman Irrigation > Emergency Beeman Diversion Dam Repair C150385	Weld	\$ 2,020,000	10,586	100%	1/2014-5/2014	100%	JMH	Construction complete, loan funds remaining. No additional dibursements are anticipated.
2	Big Elk Meadows Association > Emergency Raw Water Storage Repair C150391	Boulder/ Larimer	\$ 1,515,000	25,391	75%	7/2014-4/2015	20%	JMH	Project includes the reconstruction of 5 dams in series. Mirror Dam complete as of April 2015. Rainbow Dam to be constructed Fall 2015 with other 3 dams to follow. Association still working with FEMA to get Meadows Dam covered.
3	Big Thompson and Platte River > Big Thompson & Platte River Div. Structure Repair C150373	Larimer	\$ 808,000	9,736	100%	5/2014-6/2014	95%	JMH	Design change complete. Project is now a siphon crossing the Little Thompson River, rather than an elevated pipe. Construction nearly completed.
4	Boulder and Larimer County Irrigation > Boulder & Larimer Diversion Structure Repair C150374	Boulder & Larimer	\$ 202,000	4,500	100%	1/2014-4/2014	100% Ltr	JMH	Construction complete, used all loan funds. No grant reimbursements are expected.
5	Butte Irrigation & Milling Company > Emergency Berm Repair C150382	Boulder	\$ 277,750	1,177	100%	4/2014-5/2014	100%	JMH	Construction complete, loan funds remaining. No additional dibursements are anticipated.
6	Church Ditch Water Authority > Leyden Creek Crossing Repair C150377	Jefferson	\$ 606,000	8,355	100%	1/2014-5/2014	95%	JMH	Repair construction complete, small amount of loan funds remaining. Additional dibursements are anticipated for mitigation portion of project. Company has applied \$360k of FEMA money to loan balance.
7	Consolidated Home Supply Ditch & Reservoir Co > Big Dam Diversion Structure Repair C150375	Larimer	\$ 1,840,000	22,000	100%	1/2014-4/2015	98%	JMH	Loan increase approved at Sept 2014 for flood mitigation work. Flood repairs to the dam have been completed. New headgates, sandgates, control gate, and the new spillway gate are all near complete. Company to request FEMA closeout meeting soon.
8	Consolidated Home Supply Ditch & Reservoir Co > George Rist Ditch Repair C150380	Larimer	\$ 519,140	22,000	100%	2/2014-5/2014	98%	JMH	Loan Increase request approved during July 2014 Board Meeting.
9	Culver Ditch Company > Culver Mahoney Ditch Repair C150390	Boulder & Larimer	\$ 151,500	1,200	100%	2/2014-4/2014	100% Ltr	JMH	Construction complete, used all loan funds. FEMA grant reimbursement is still pending.
10	Green Ditch Company > Emergency Green Ditch Channel Repair C150383	Boulder	\$ 530,250	1,847	100%	5/2014-6/2014	100%	JMH	The project schedule and description has been revised to include only the river breach construction, which has been completed. The diversion structure will be completed using other funds. No additional loan disbursements are expected.

Emergency Loan - Summary

Loan Program
Attachment 4

11	Highland Ditch Company > Highland Ditch System Repairs C150369	Boulder	\$ 1,999,800	38,000	100%	10/2013-4/2014	100%	JMH	Construction complete, loan funds remaining. No additional disbursements are anticipated.
12	Ish Reservoir Company > Inlet Ditch & Diversion Structure Repair C150376	Boulder	\$ 207,050	4,500	100%	1/2014-4/2014	100% Ltr	JMH	Construction complete, used all loan funds.
13	Left Hand Ditch Company > Left Hand Ditch System Repairs C150370	Boulder	\$ 3,276,056	22,700	100%	10/2013-2/2015	99%	JMH	Several projects are included in this loan. All are complete or very near completion. Significant savings in Project cost because anticipated Left Hand Valley work did not have to be done. Company has applied \$592k of FEMA money to loan balance.
14	North Poudre Irrigation Company > Fossil Creek Res. Diversion Structure Repair C150368	Larimer	\$ 481,770	31,700	100%	Fall 2015 - Spring 2016	0%	JMH	Construction was delayed due to continuously high river conditions during winter of 2014/2015. Bids were received August 2015 and Company is seeking a loan increase to cover increased construction costs.
15	Oligarchy Irrigation Company > Oligarchy Irr. Ditch River Diversion Struct. Repair C150372	Boulder	\$ 1,262,500	7,966	100%	1/2014-5/2014	100%	JMH	Construction complete, loan funds remaining. No additional disbursements are anticipated. Company has applied \$584k of FEMA money to loan balance.
16	Rough & Ready Irrigation Ditch Company > Rough & Ready River Diversion Struct.Repair C150371	Boulder	\$ 1,843,250	7,528	100%	1/2014-5/2014	100%	JMH	Construction complete, loan funds remaining. No additional disbursements are anticipated. Company has applied \$963k of FEMA money to loan balance.
17	Supply Irrigating Ditch Company >Emergency Supply Irrigating Ditch Repair Project CT15-142	Boulder	\$324,210		100%	3/2015-5/2015	100%	JMH	Construction complete, loan funds remaining. No additional disbursements are anticipated. FEMA reimbursements pending.
18	Sylvan Dale Ranch,LLP > Emergency Irrigation Pond Excavation C150392	Larimer	\$ 105,171		100%	6/2014-4/2014	100% Ltr	JMH	Construction complete, used all loan funds. Company has applied \$84k of grant funds to loan balance.

Projects Under Contract SubTotal = \$ 17,969,447 219,186

Projects Not Under Contract

Emergency Loan - Summary

Loan Program
Attachment 4

a	St. Vrain and Left Hand Water Conservancy District > Emergency Rock'n WP Ranch Lake No. 4 Repair	Boulder	\$ 4,545,000	2,200	In Contracting			JMH	Approved July 2014 Board Meeting. District delaying contracting until agreements with Boulder County are in place.
b	Haldi Ditch Company > Emergency Haldi Ditch Reapir C150389	Boulder	\$ 50,500	3,000	100%	1/2014-3/2014	100%	JMH	Construction completed but Ditch Company's contribution was covered with non-CWCB grants. Loan was amended to \$0.

Not Under Contract SubTotal = \$ 4,595,500 5,200

Grand Total = \$ 22,564,947 224,386

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

C150385

Borrower: Beeman Irrigating Ditch and
Milling Company
Project Name: Emergency Beeman
Diversion Dam Repair
Drainage Basin/ District: South Platte / 2

County: Weld

Project Type: Diversion Rehabilitation

Water Source: South Platte River

Total Project Cost: \$2,000,000

Funding Source: Severance Tax PBF

Type of Borrower: Agricultural

Average Annual Diversion: 10,586 AF

CWCB Loan: \$2,020,000
(with 1% service fee)

Interest Rate: 1.75% **Term:** 30-years

The Company and Meadow Island No. 2, jointly operate a diversion dam, measurement flume, and bifurcation structure. (Beeman is allocated 75% of costs, Meadow Island is allocated 25% of costs). The diversion headworks was constructed in the early 1900s to irrigate approximately 5,000 acres under both canal systems. The September 2013 flood deposited silt covered the diversion dam and cut a new channel through the historic island, cutting off flow to the joint headworks area. The project includes four phases: 1) Demolition of existing structures and reconstruction of the headworks (headwall, headgates, flow measurement, and bifurcation structure), 2) Install an adjustable check dam in place of the current stop log dam, 3) Demolition of a portion of the existing “big dam” structure at the river, 4) Channel bank stabilization will be coordinated with adjoining landowners.



CWCB Water Project Loan Program Project Data Sheet

C150391

Borrower: Big Elk Meadows Association

County: Boulder/Larimer

Project Name: Emergency Raw Water Storage
Repair Project

Project Type: Reservoir Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: West Fork of the Little
Thompson River

Total Project Cost: \$1,900,000

Funding Source: Severance Tax PBF

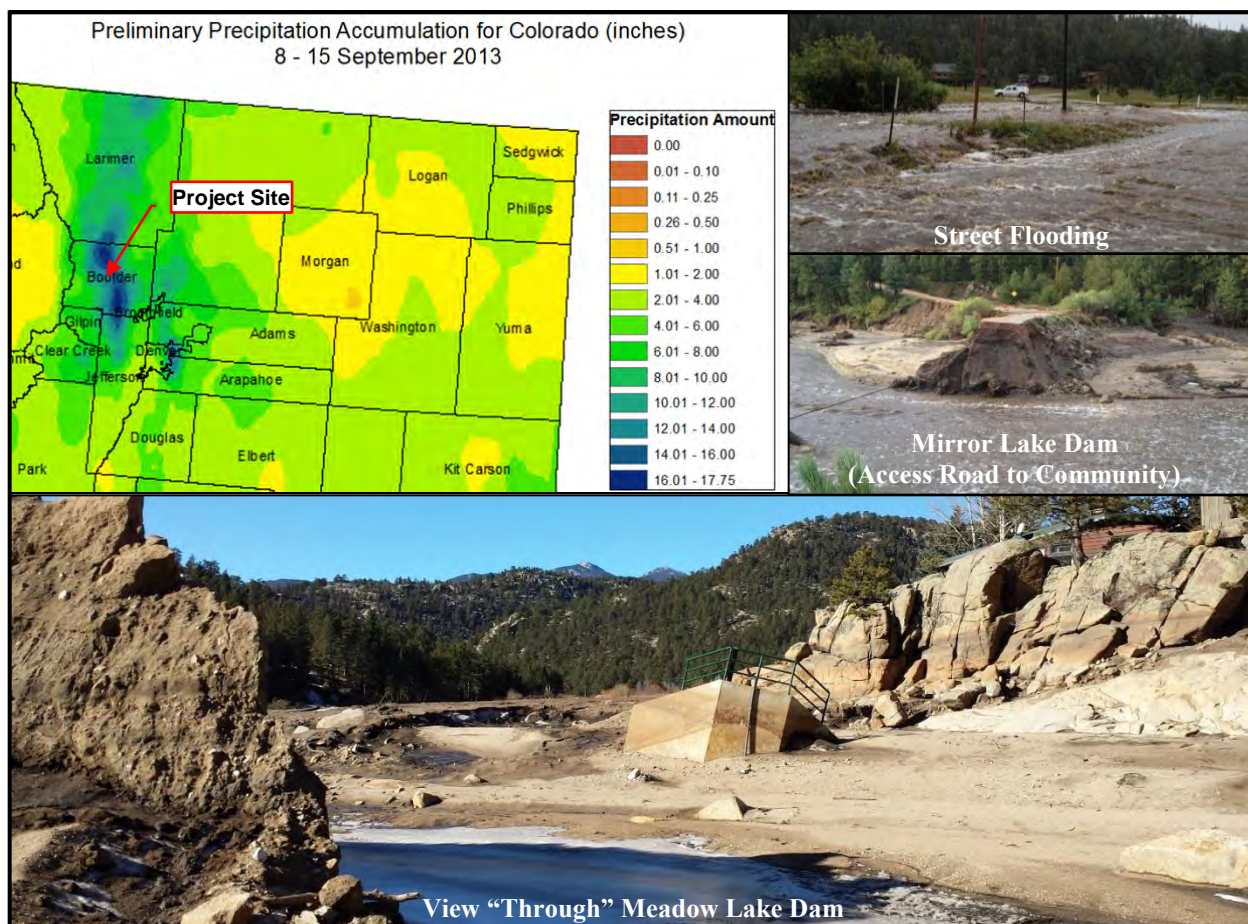
Type of Borrower: Middle-Income Municipal

Water Storage: 108 AF

CWCB Loan: \$1,515,000
(with 1% service fee)

Interest Rate: 2.75% **Term:** 30-years

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. Measured rainfall in and around Big Elk Meadows exceeded the 1,000-year Average Recurrence Interval for rainfall. Flow along the West Fork reached historic levels and resulted in the destruction of all five dams; both flow monitoring stations; the community's access road (CR-47); the majority of interior roads; and the water, power, and telephone services. The purpose of this project is to restore the community's water supply by reconstructing the five dams and two monitoring stations.



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

C150373

Borrower: Big Thompson & Platte River
Ditch Company

County: Larimer

Project Name: Big Thompson & Platte
River Diversion Structure Repair

Project Type: Diversion Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: Big Thompson River

Total Project Cost: \$800,000

Funding Source: Severance Tax PBF

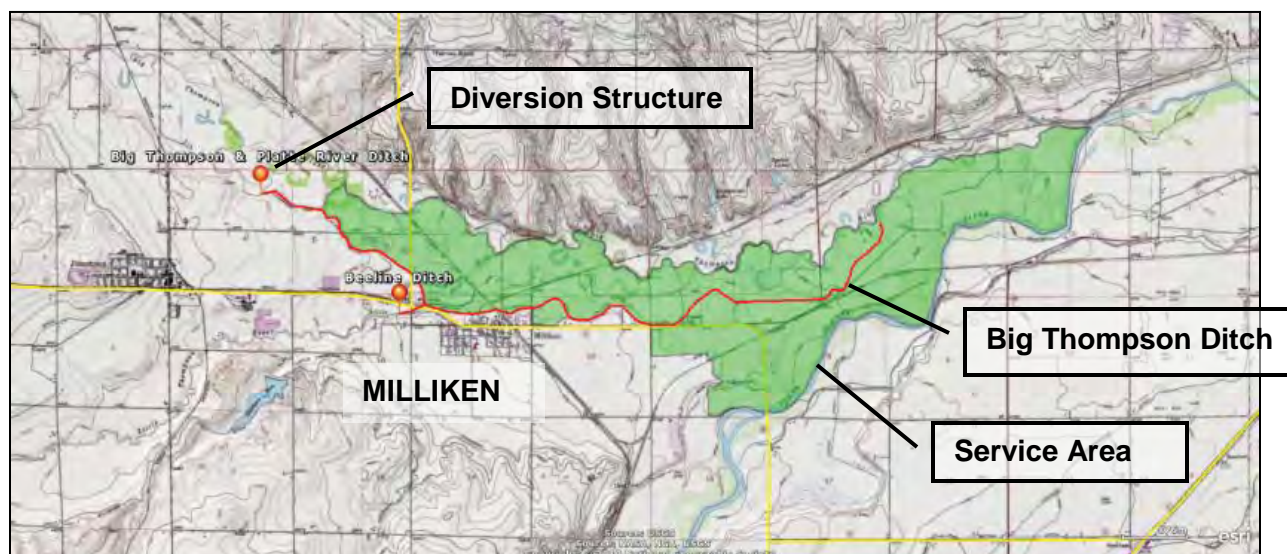
Type of Borrower: Blended

Average Annual Diversion: 9,736 AF

CWCB Loan: \$808,000
(with 1% service fee)

Interest Rate: 1.85% **Term:** 30-years
(97% Ag, 3% Comm)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. The purpose of this Project is to repair the diversion structure and crossing structures to allow the Company to deliver water to shareholders. The Company's diversion structure and by-pass structure will be repaired and its crossing over the Little Thompson River will be replaced. The crossing structure was a bottleneck at times of free river, so the structure will be improved to allow for additional flows.



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

C150382

Borrower: Butte Irrigating & Milling Company **County:** Boulder

Project Name: Emergency Berm Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 6

Water Source: Boulder Creek

Total Project Cost: \$275,000

Funding Source: Severance Tax PBF

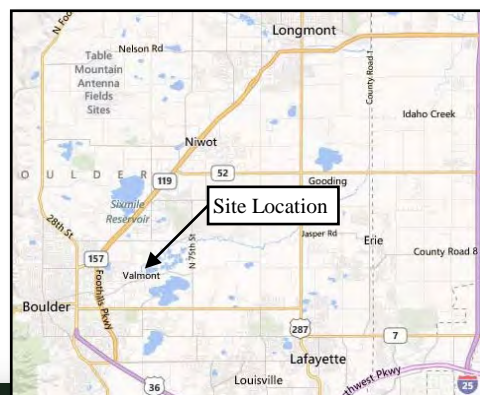
Type of Borrower: Blended

Average Annual Diversion: 1,177 AF

CWCB Loan: \$277,750
(with 1% service fee)

Interest Rate: 2.30% **Term:** 30-years
(48% Ag, 51% Mid-Muni, 1% Commercial)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's Butte Mill Ditch. Portions of the ditch were silted in and the flood eventually breached a berm upstream of the Company's diversion point, causing the post-flood river to bypass the diversion structure. The purpose of the Project is to repair this berm and clean out the ditch channel to allow the Company to divert its decreed water rights.



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

C150377

Borrower: Church Ditch Water Authority

County: Jefferson

Project Name: Leyden Creek Crossing Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 7

Water Source: Clear Creek

Total Project Cost: \$600,000

Funding Source: Severance Tax PBF

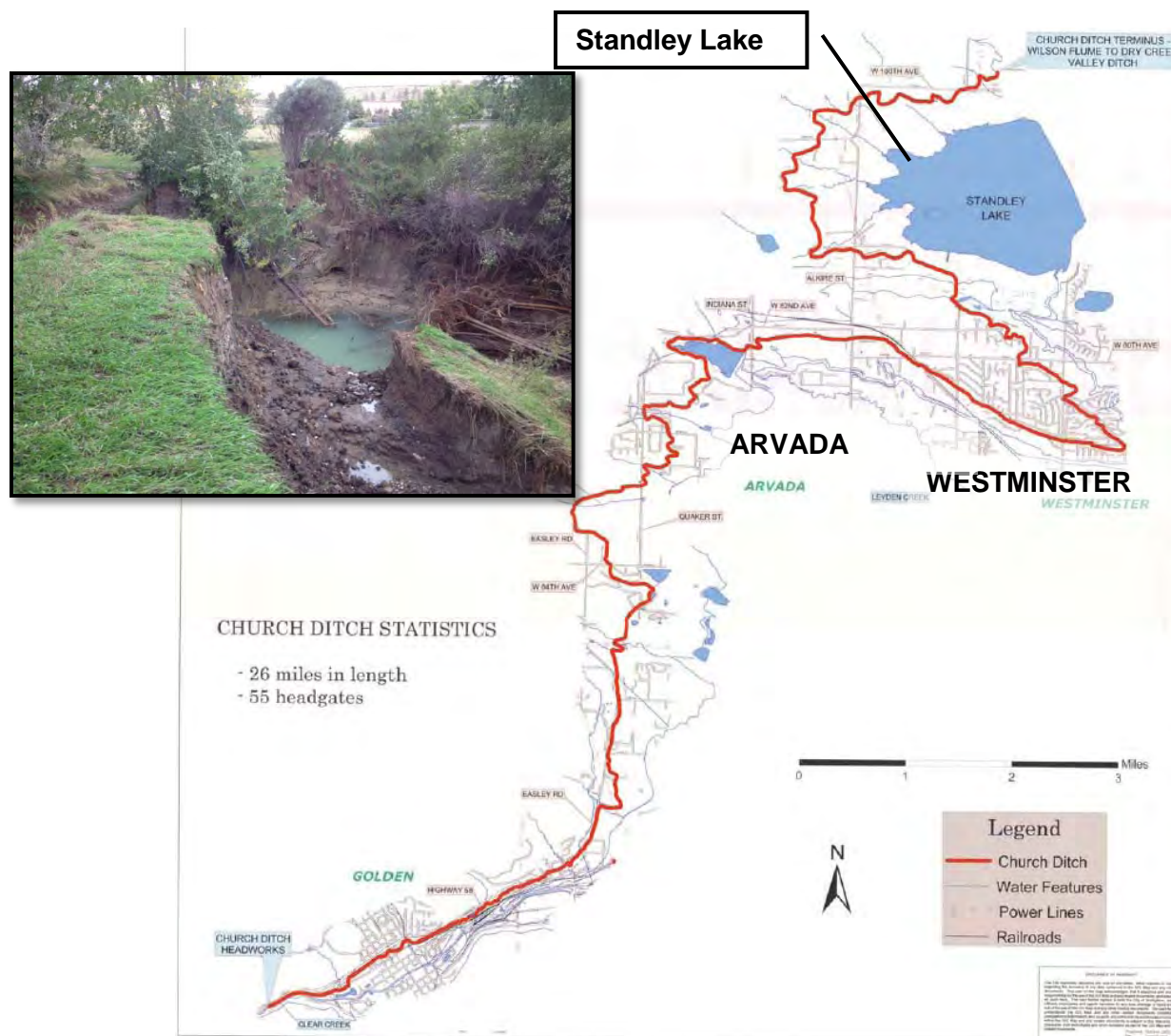
Type of Borrower: Blended

Average Annual Diversion: 8,355 AF

CWCB Loan: \$606,000
(with 1% service fee)

Interest Rate: 2.85% **Term:** 30-years
(6% Ag, 26% Mid, 67% High, <1% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Authority's Church Ditch. Church Ditch flood repairs include restoring the Church Ditch to pre-flood conditions. The Leyden Creek Crossing Structure will be rebuilt with this section of the ditch piped to prevent the uncontrolled diversion of flood waters in potential future events. For all areas of the ditch, sediment that was deposited by the flood will be removed and the ditch banks will be reshaped where sloughing occurred. Riprap will be added to portions of the reconstructed ditch banks to prevent erosion and increase protection to the ditch.





Emergency Big Dam Diversion Structure Repair

Consolidated Home Supply Ditch & Reservoir Company

September 2014 Board Meeting

(Loan Increase)

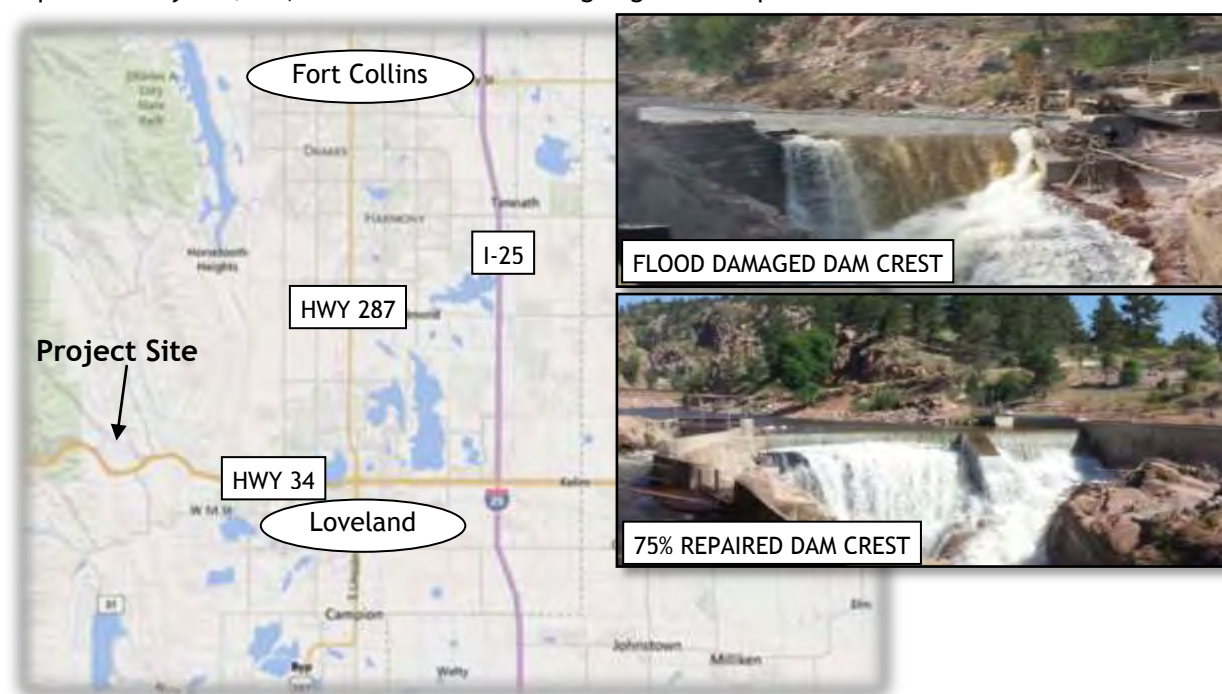
L O A N D E T A I L S	
Project Cost:	\$2,775,000
CWCB Loan (with Service Fee):	\$1,840,000 (15% increase)
Loan Term and Interest Rate:	30 Years @ 1.95%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
76%	0% Low - 23% Mid - <1% High <1%
P R O J E C T D E T A I L S	
Project Type:	Diversion Rehabilitation
Average Annual Diversion:	22,000 AF



L O C A T I O N	
County:	Larimer
Water Source:	Big Thompson River
Drainage Basin:	South Platte
Division:	1 District: 4

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's "Big Dam" diversion structure. During the flood, the top five feet of the masonry dam structure was washed out and the mortar between masonry blocks on the north abutment was partially lost. Field observations show that the river was overtopping the structure by approximately 10 feet. The purpose of this project is to restore the "Big Dam" diversion structure to its pre-flood crest elevation while improving the structural integrity of the structure.

As part of the design and evaluation process, the Company worked with FEMA, the Engineer, and the Construction Manager to identify any appropriate flood mitigation measures. As a result, improvements will be made to the Big Dam's spillway capacity by reconstructing the abandoned spillway and modifying the Company's headgates. Incorporating these improvements will increase the total Project cost from \$1.6 million to \$2.8 million. The Company has agreements with FEMA and the City of Loveland to provide funding assistance. The cost-share agreement with the City allows this increase request to only be \$240,000. Construction is on-going and is expected to finish in winter of 2014/15.

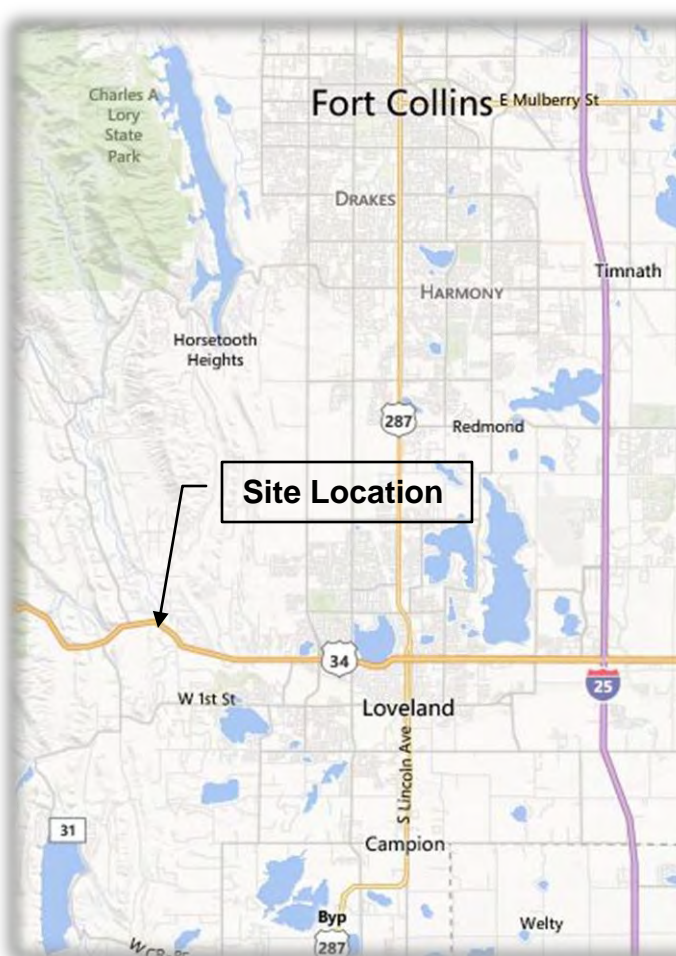


**CWCB Water Project Loan Program
Project Data Sheet
(Increase)**

C150380

Borrower: Consolidated Home Supply Ditch & Reservoir Company	County: Larimer
Project Name: Emergency George Rist Ditch Repair	Project Type: Ditch Rehabilitation
Drainage Basin/ District: South Platte / 4	Water Source: Big Thompson River
Total Project Cost: \$514,000	Funding Source: Severance Tax PBF
Type of Borrower: Blended	Average Annual Diversion: 22,000 AF
CWCB Loan: \$519,140 (with 1% service fee)	Interest Rate: 1.95% Term: 30-years (76% Ag, 23% Mid, <1% High, <1% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged, including the Company's George Rist ditch and diversion structure. During the flood, the diversion dam, headgate, measuring flume, stilling well and house, and access road were heavily damaged. Additionally, two sections of the ditch's embankment and bottom were completely washed out. The purpose of this Project is to restore the George Rist Ditch to its pre-flood condition. During repairs, approximately \$70,000 worth of additional needs were identified prompting a request for additional funds.



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

C150383

Borrower: Green Ditch Company

County: Boulder

Project Name: Emergency Green
Ditch Channel Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 6

Water Source: Boulder Creek

Total Project Cost: \$525,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 1,847 AF

CWCB Loan: \$530,250
(with 1% service fee)

Interest Rate: 2.50% **Term:** 30-years
(21% Ag, 58% Mid, 5% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Green Ditch. Additionally the flood relocated Boulder Creek at this location and water no longer flows to the Green Ditch headgate. Various stakeholders have indicated the creek's new alignment is more environmentally friendly alignment. In an effort of collaboration the Company plans to relocate their point of diversion upstream of the breach and build a fish friendly diversion structure. A new pipeline will connect the new diversion structure with the existing ditch.



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

C150369

Borrower: Highland Ditch Company

County: Boulder

Project Name: Highland Ditch System
Repairs

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 5

Water Source: St. Vrain Creek

Total Project Cost: \$1,980,000

Funding Source: Severance Tax PBF

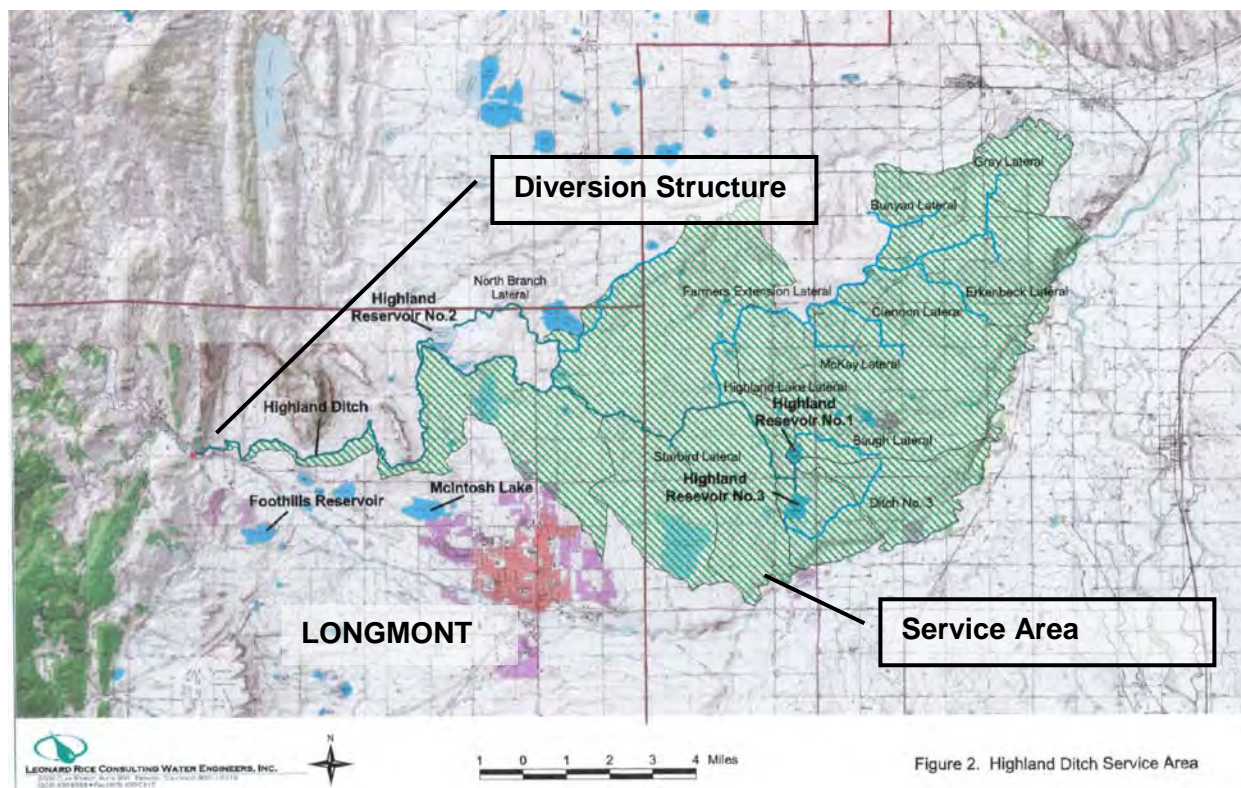
Type of Borrower: Blended

Average Annual Diversion: 38,000 AF

CWCB Loan: \$1,999,800
(with 1% service fee)

Interest Rate: 1.95% **Term:** 30-years
(86% Ag, 6% Mid, 6% High, 2% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. The purpose of this Project is to repair the Company's system to allow the delivery of water to shareholders. The scope of work includes: repairing of the main diversion structure, headgate, SCADA system, and inlet and outlet of Foothills Reservoir.



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

C150370

Borrower: Left Hand Ditch Company

County: Boulder

Project Name: Left Hand Ditch System
Repairs

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 5

Water Source: Left Hand &
St. Vrain Creeks

Total Project Cost: \$3,243,620

Funding Source: Severance Tax PBF

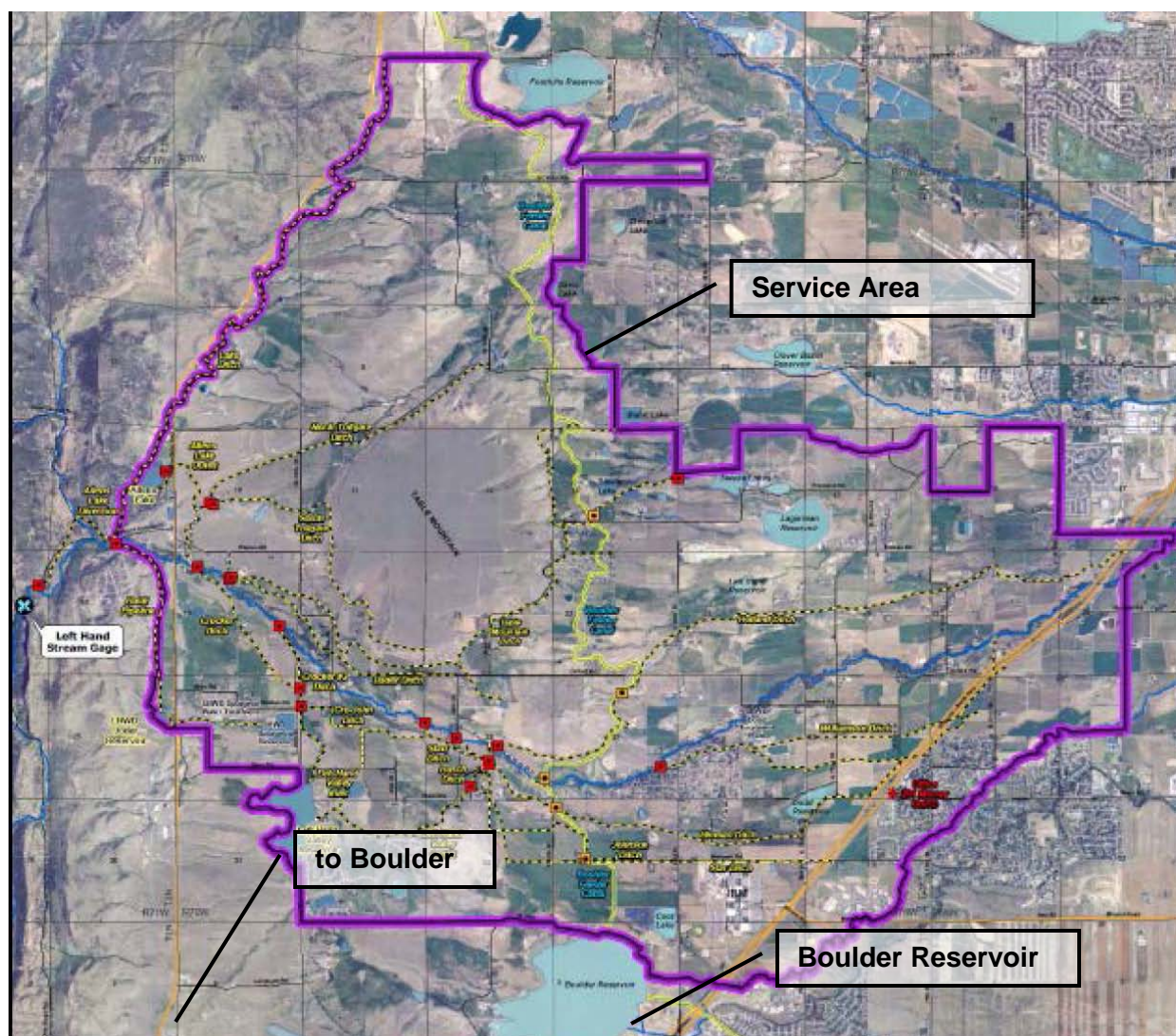
Type of Borrower: Blended

Average Annual Diversion: 22,700 AF

CWCB Loan: \$3,276,056
(with 1% service fee)

Interest Rate: 2.30% **Term:** 30-years
(46% Ag, 38% Mid, 16% High)

The Company plans to restore its system to pre-flood condition which includes: Replacement of Left Hand Creek Parshall Flume and Recorder Station, repair of Left hand Valley Diversion repair of several ditches: Crocker, Table mountain, Bader, Hunman, Star, Holland, Williamson, and Gold Lake Filler Ditch, replace the diversion dam and headgate structure at Allen's Lake Filler Canal Head Gate



CWCB Water Project Loan Program Project Data Sheet

C150368

Borrower: North Poudre Irrigation Company

County: Larimer

Project Name: Fossil Creek Reservoir Diversion
Structure Repair

Project Type: Diversion Rehabilitation

Drainage Basin/ District: South Platte / 3

Water Source: Cache la Poudre

Total Project Cost: \$477,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 31,700 AF

CWCB Loan: \$481,770
(with 1% service fee)

Interest Rate: 2.35% Term: 30-years
(37% Ag, 1% Low, 57% Mid, 4% High, <1% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's Fossil Creek Reservoir inlet diversion off the Cache la Poudre River. The purpose of the Project is to repair the existing diversion structure by rebuilding the check dam and abutment. The Project will restore the structure to pre-flood elevations while modifying the foundation to improve protection against future scouring.



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

C150372

Borrower: Oligarchy Irrigation Company

County: Boulder

Project Name: Oligarchy Irrigation Ditch
River Diversion Structure Repair

Project Type: Diversion Rehabilitation

Drainage Basin/ District: South Platte / 5

Water Source: St. Vrain Creek

Total Project Cost: \$1,250,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 7,966 AF

CWCB Loan: \$1,262,500
(with 1% service fee)

Interest Rate: 2.50% **Term:** 30-years
(26% Ag, 72% Mid, 2% High)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's diversion off the St. Vrain Creek. Of the original structure, only a small portion of the diversion dam and right abutment remain. The purpose of this Project is to rebuild the diversion dam, sand gates, Rubicon flumegate, and bypass gate. The structure will be the same size and location as the original but will modify the sand gates and flumegate. The original structure had one sand gate into which the Rubicon flumegate was installed. For better operation and river administration, the rebuilt diversion will separate the sand gate and the flumegate into their own passages through the diversion dam.



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

C150371

Borrower: Rough & Ready Irrigating
Ditch Company
Project Name: Rough & Ready Ditch River
Diversion Structure Repair
Drainage Basin/ District: South Platte / 5

County: Boulder

Project Type: Diversion Rehabilitation

Water Source: St. Vrain Creek

Total Project Cost: \$1,825,000

Funding Source: Severance Tax PBF

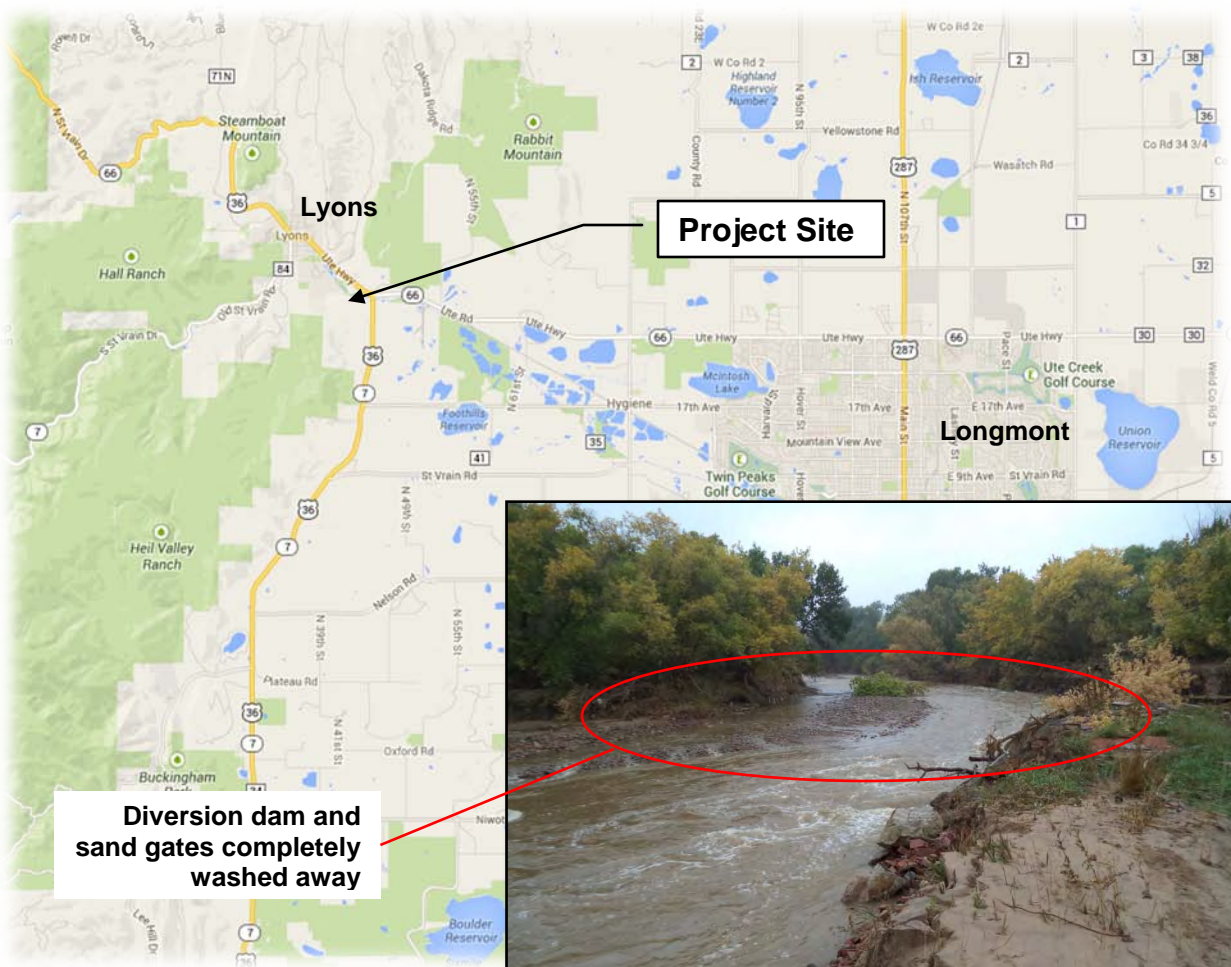
Type of Borrower: Blended

Average Annual Diversion: 7,528 AF

CWCB Loan: \$1,843,250
(with 1% service fee)

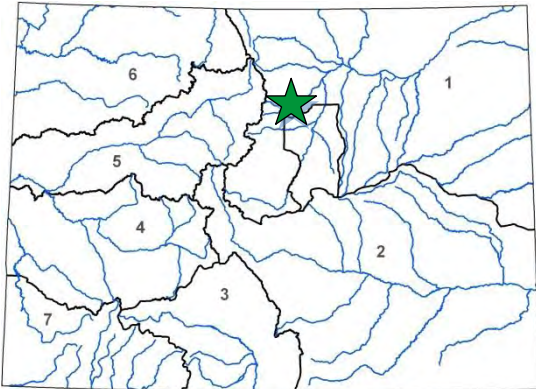
Interest Rate: 2.7% **Term:** 30-years
(15% Ag, 69% Mid, 13% High, 3% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's river diversion off the St. Vrain Creek. This structure also serves as the diversion dam for the Palmerton Ditch. The diversion dam and sand gates no longer exist and the headgates sustained major damage. The purpose of this Project is to rebuild the diversion dam, sand gates, Rubicon flumegate, headgates, ditches, and measuring flumes. The structure will be the same size and location but will include a combined conveyance ditch off the diversion and will include the addition of a bypass to the river to better regulate diversions.





L O A N D E T A I L S	
Project Cost:	\$321,000
CWCB Loan (with Service Fee):	\$324,210
Loan Term and Interest Rate:	27 Years @ 2.25%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
86%	0% Low - 5% Mid - 7% High 2%
P R O J E C T D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	4,650 AF



L O C A T I O N			
County:		Boulder	
Water Source:		Saint Vrain Creek	
Drainage Basin:		South Platte	
Division: 1		District: 5	

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's ditch system. Floodwaters destroyed the diversion dam, caused heavy sedimentation in the ditch, and damaged 750 LF of ditch.

Temporary repairs were completed in order to allow the Company to divert a portion of its water rights during the 2014 irrigation season. The Company has received approval of its Project Worksheet from FEMA to fund a portion of the permanent repairs. This loan will cover the remaining cost associated with the repairs and provide upfront funding for the FEMA reimbursement funds. Construction is scheduled to be complete prior to the 2015 irrigation season.



Projects Not Under Contract

CWCB Water Project Loan Program Project Data Sheet

Borrower: St. Vrain and Left Hand Water
Conservancy District
Project Name: Emergency Rock'n WP Ranch
Lake No. 4 Repair Project
Drainage Basin: South Platte

County: Boulder

Project Type: Reservoir Rehabilitation

Water Source: St. Vrain Creek

Total Project Cost: \$9,000,000

Funding Source: Severance Tax Perpetual
Base Fund

Type of Borrower: Blended

Average Annual Augmentation: 200 AF

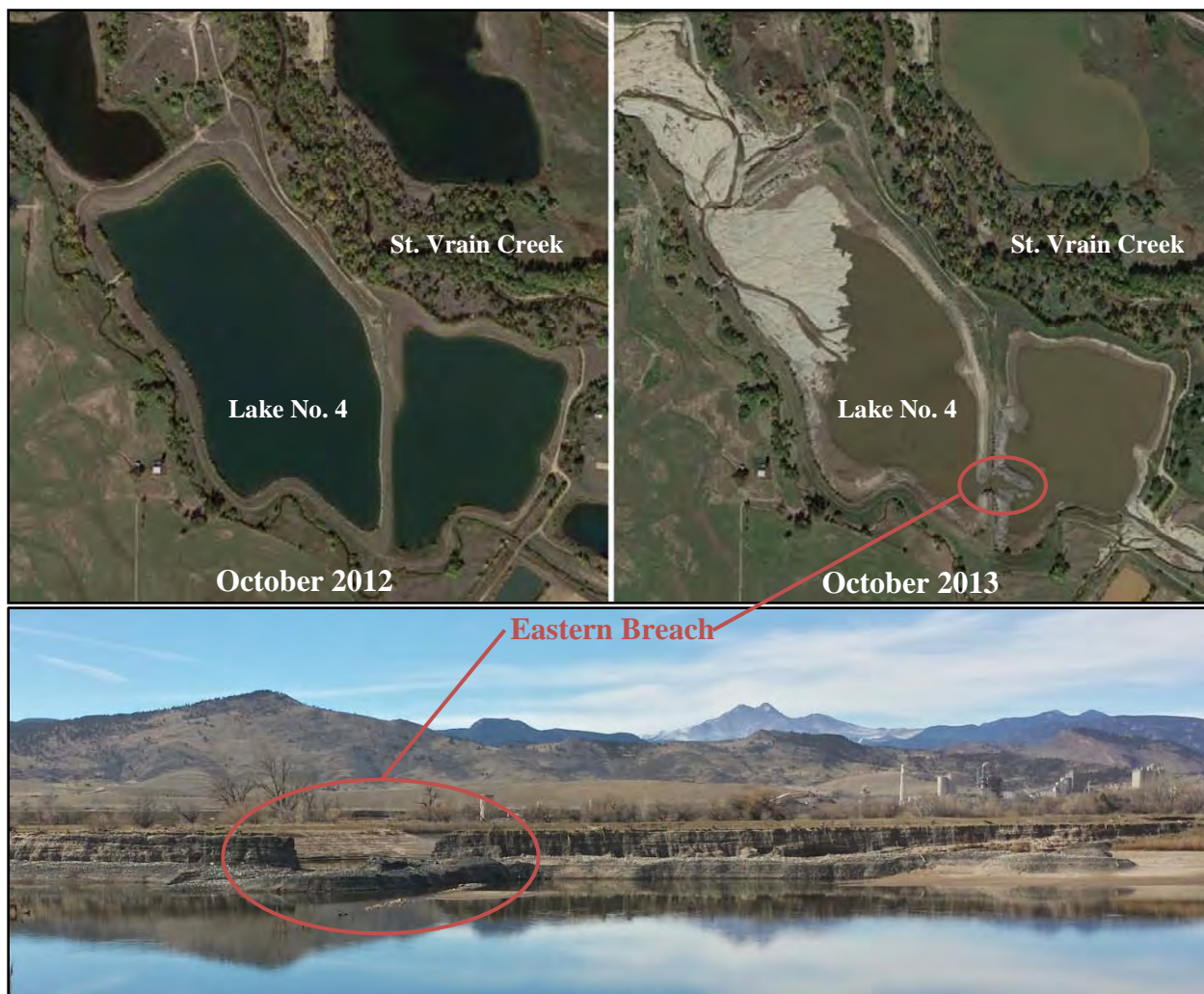
Preserved Water Supply Storage: 600 AF

CWCB Loan: \$4,545,000 (with 1% service fee)

Interest Rate: 3.2% **Term:** 30-years

(Ownership: 93% High Municipal, 7% Commercial)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the District's Rock'n WP Ranch Lake No. 4. During the flood, St. Vrain Creek breached in over four locations above the Lake. The unlined gravel pits above the Lake were flooded, causing their earthen embankments to fail, sending flood water into the Lake. The Lake filled and eventually overtopped, breaching its eastern embankment. The purpose of the Project is to repair the Lake to resume its use as a water augmentation reservoir by the District. Boulder County is a co-owner of the Lake. As the County and the District are public agencies, it is expected that FEMA will reimburse 75% of the Project Cost and the State's Public Assistance Program will cover 12.5% under their respective emergency programs. The remaining cost of repairs will be evenly split with Boulder County.



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

C150389

Borrower: Haldi Ditch Company

County: Boulder

Project Name: Emergency Haldi Ditch Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 5

Water Source: Left Hand Creek

Total Project Cost: \$343,000

Funding Source: Severance Tax PBF

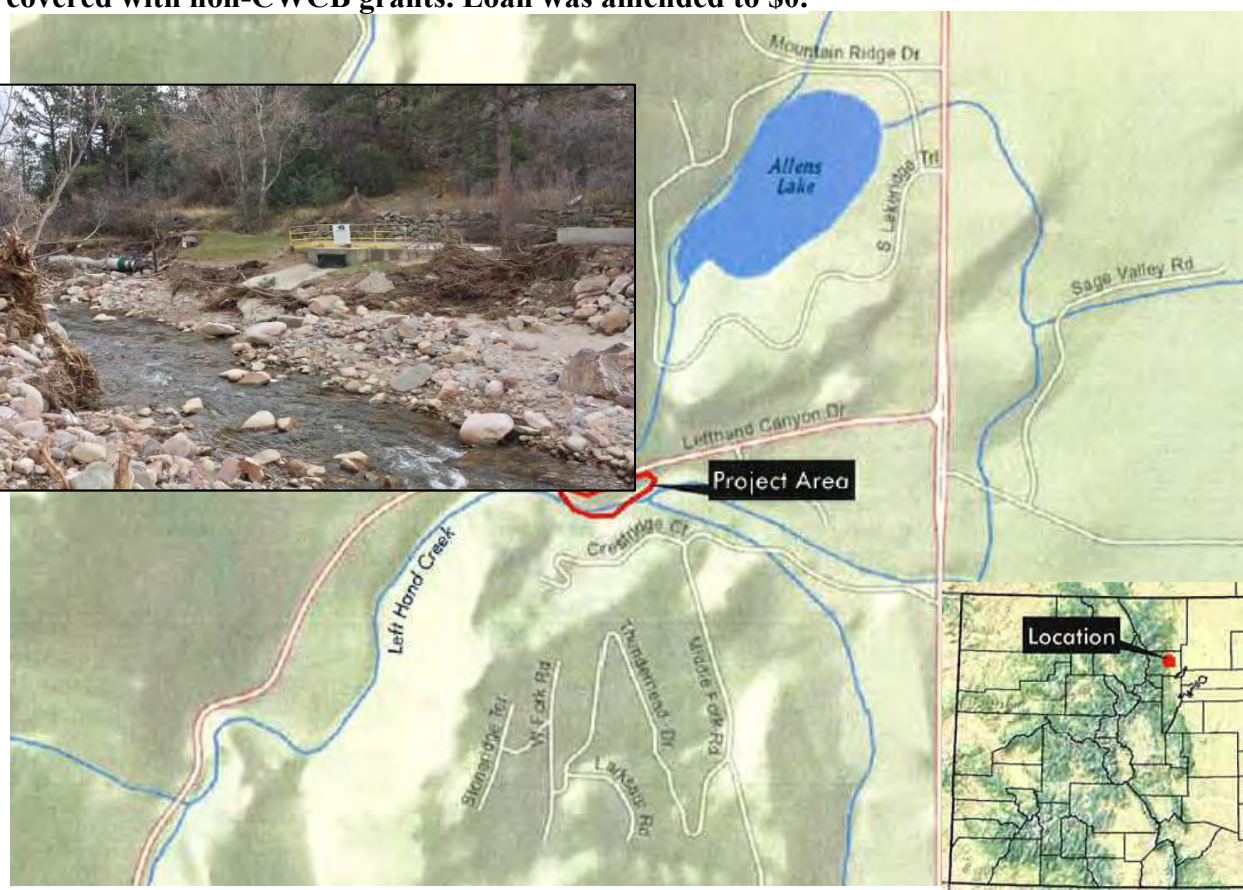
Type of Borrower: Agricultural/Municipal

Average Annual Diversion: 3,000 AF

CWCB Loan: \$50,500 Amended to \$0
(with 1% service fee)

Interest Rate: 2.35% **Term:** 30-years

The Haldi Ditch is located within the Left Hand Ditch Company's system and within the Left Hand Water District. The Haldi Ditch conveys Left Hand Ditch Company shares via a pipeline for irrigation users and as a raw water source for the Left Hand Water District's Spurgeon Water Treatment Plant and two Left Hand Water District reservoirs. During the 2013 flood event, the Left Hand Creek left its bank immediately upstream of the Haldi Diversion scouring a new channel and disconnecting the creek from the diversion. The proposed project involves the construction of a grouted boulder drop structure to divert water back into the historic channel leading to the intake structure. The historic channel and structures will be cleared of debris and repaired. The pipeline that was scoured and damaged will be removed and replaced with new ductile iron pipe. The access road will be restored to existing conditions and the diversion and stream bank will be armored. **Construction completed but Ditch Company's contribution was covered with non-CWCB grants. Loan was amended to \$0.**



**WATER PROJECT CONSTRUCTION LOAN PROGRAM
LOAN REPAYMENT DELINQUENCY REPORT
LOAN FINANCIAL ACTIVITY REPORT
SEPTEMBER 2015**

LOAN REPAYMENT DELINQUENCY

Loan Repayments received relative to the Water Project Construction Loan Program have been reviewed for the period covering July 2015 through August 2015. The effective due date of the payment is inclusive of the Board's current 30 day late policy. Hence, the date the payment was received was compared to the last day allowable prior to the payment being considered late.

Repayments due for the first two months of Fiscal Year 2016 totaled 56. There were no loan payments that were late for this period. Thus, the on-time performance for the total repayments due was 100% in compliance or 0% not in compliance. Additionally, the payment from the City of Lamar for interest during construction due in October 2014 and the loan payment for the South Platte Ditch Company due in June 2015 have been received and no payments are outstanding for Fiscal Year 2015.

LOAN FINANCIAL ACTIVITY

Loan Financial Activity relative to the Water Project Construction Loan Program for Fiscal Year 2016 is summarized as follows: Funds received relative to loans in repayment totaled \$7.1 M for this year. Funds disbursed relative to new project loans totaled \$3.4 M for this year. Net activity resulted in \$3.7 M received by the CWCB Construction Fund and the Severance Tax Perpetual Base Fund (STPBF) over the total disbursed.

Further breakdown is summarized as follows: The Construction Fund portion consists of \$1.3 M in receivables and \$0.6 M in disbursements for a total net activity of \$0.7 M received over disbursed. The STPBF consists of \$5.8 M in receivables and \$2.8 M in disbursements for a total net activity of \$3.0 M received over disbursed.

COLORADO WATER CONSERVATION BOARD

FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2016

CONSTRUCTION FUND

Period	Principal	Interest	Total Received	Disbursements	Net Activity
July 2015	\$ 807,994	\$ 179,878	\$ 987,872	\$ -	\$ 987,872
August 2015	\$ 167,181	\$ 159,096	\$ 326,277	\$ 561,158	\$ (234,881)
September 2015	\$ -	\$ -	\$ -	\$ -	\$ -
October 2015	\$ -	\$ -	\$ -	\$ -	\$ -
November 2015	\$ -	\$ -	\$ -	\$ -	\$ -
December 2015	\$ -	\$ -	\$ -	\$ -	\$ -
January 2016	\$ -	\$ -	\$ -	\$ -	\$ -
February 2016	\$ -	\$ -	\$ -	\$ -	\$ -
March 2016	\$ -	\$ -	\$ -	\$ -	\$ -
April 2016	\$ -	\$ -	\$ -	\$ -	\$ -
May 2016	\$ -	\$ -	\$ -	\$ -	\$ -
June 2016	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2016 Totals	\$ 975,175	\$ 338,974	\$ 1,314,149	\$ 561,158	\$ 752,991

SEVERANCE TAX PERPETUAL BASE FUND

Period	Principal	Interest	Total Received	Disbursements	Net Activity
July 2015	\$ 54,661	\$ 106,155	\$ 160,816	\$ -	\$ 160,816
August 2015	\$ 4,567,874	\$ 1,116,206	\$ 5,684,080	\$ 2,870,469	\$ 2,813,611
September 2015	\$ -	\$ -	\$ -	\$ -	\$ -
October 2015	\$ -	\$ -	\$ -	\$ -	\$ -
November 2015	\$ -	\$ -	\$ -	\$ -	\$ -
December 2015	\$ -	\$ -	\$ -	\$ -	\$ -
January 2016	\$ -	\$ -	\$ -	\$ -	\$ -
February 2016	\$ -	\$ -	\$ -	\$ -	\$ -
March 2016	\$ -	\$ -	\$ -	\$ -	\$ -
April 2016	\$ -	\$ -	\$ -	\$ -	\$ -
May 2016	\$ -	\$ -	\$ -	\$ -	\$ -
June 2016	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2016 Totals	\$ 4,622,534	\$ 1,222,361	\$ 5,844,895	\$ 2,870,469	\$ 2,974,426
GRAND TOTALS	\$ 5,597,709	\$ 1,561,335	\$ 7,159,044	\$ 3,431,627	\$ 3,727,417

Colorado Water Conservation Board

Construction Fund, Special Funds and Severance Tax Funds
Non-Reimbursable Investments Status Report
Fiscal Year 2014-2015

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 Perpetual Base Fund. The following table summarizes the non-reimbursable investment projects in progress from July 2014 thru June 2015. 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 Operational Fund Grant Program status for the same period.

<u>No.</u>	<u>Manager</u>	<u>Project</u>	<u>July 1 Balance</u>	<u>Amount Disbursed</u>	<u>June 30 Balance</u>
1	Bassi	Acquisitions of Water for Instream Flow	\$838,220	\$262,566	\$575,653
2	Bassi	CWCB Stream Gaging	\$59,509	\$17,673	\$41,836
3	Bassi	Instream Flow Engineering Support Services	\$67,319	\$256	\$67,063
4	Bassi	Satellite Monitoring - State Eng Office	\$339,068	\$331,107	\$7,962
5	Bassi	Stream Gauge Fund	\$280,540	\$56,526	\$224,014
6	Browning	Chatfield Reservoir Reallocation Project	\$1,803,000	\$76,080	\$1,726,920
7	Browning	Chatfield Res Reallocation Implementation	\$33,000,000	\$0	\$33,000,000
8	Browning	Chatfield Reservoir Reallocation Study	\$17,015	\$0	\$17,015
9	Browning	Water Conservation Public Awareness Study	\$29,061	\$0	\$29,061
10	Browning	Water Education Foundation	\$150,000	\$150,000	\$0
11	Feehan	Rio Grande Cooperative Project	\$1,631,027	\$439,761	\$1,191,266
12	Feehan	Rocky Mountain Fen Demonstration Project	\$100,000	\$0	\$100,000
13	Feehan	Water Resource Info Center & Data Harvest	\$450,000	\$4,954	\$445,046
14	Feehan	Windy Gap Reservoir Bypass Channel	\$2,000,000	\$0	\$2,000,000
15	Houck	Chatfield Channel Improvement	\$160,834	\$0	\$160,834
16	Houck	Colorado Floodplain Map Modernization	\$1,479,168	\$513,599	\$965,569
17	Houck	Fish and Wildlife Resources Fund	\$1,620,795	\$324,638	\$1,296,157
18	Houck	Flood and Drought Response Fund	\$668,678	\$289,012	\$379,666
19	Houck	Rio Grande Forecasting Development	\$150,000	\$28,169	\$121,831
20	Houck	Stream Restoration Grant Account	\$2,500,000	\$176,515	\$2,323,485
21	Houck	Tamarisk Control Cost-Sharing Program	\$802,489	\$242,357	\$560,132
22	Houck	Watershed Restoration	\$1,243,622	\$313,527	\$930,095
23	Houck	Weather Modification Program	\$422,912	\$349,105	\$73,807
24	Kowalski	Arkansas River Decision Support System	\$1,213,527	\$0	\$1,213,527
25	Kowalski	Co Decision Support Systems O & M	\$300,000	\$0	\$300,000
26	Kowalski	Co Flood Decision Support System	\$69,239	\$0	\$69,239
27	Kowalski	Co River Augmentation Project Develop	\$75,000	\$0	\$75,000
28	Kowalski	Co River Basin Study Implementation	\$25,000	\$25,000	\$0
29	Kowalski	Co River Delta in Mexico Consultation	\$120,611	\$29,439	\$91,173

<u>No.</u>	<u>Manager</u>	<u>Project</u>	<u>July 1 Balance</u>	<u>Amount Disbursed</u>	<u>June 30 Balance</u>
30	Kowalski	Co Water Needs and Alternatives Analysis	\$1,765,174	\$605,385	\$1,159,789
31	Kowalski	Gunnison Basin Irrigation System Planning	\$250,000	\$0	\$250,000
32	Kowalski	Instream Flow Decision Support System	\$24,936	\$15,361	\$9,575
33	Kowalski	Litigation Fund	\$2,350,729	\$225,008	\$2,125,721
34	Kowalski	Lower So Platte Water Mgmt & Storage Site	\$500,000	\$0	\$500,000
35	Kowalski	Project Imaging System	\$57,122	\$49,500	\$7,622
36	Kowalski	Purgatoire River Channel Capacity - Improve	\$25,000	\$25,000	\$0
37	Kowalski	South Platte Groundwater Data Collection	\$1,095,313	\$302,568	\$792,745
38	Kowalski	South Platte River Alluvial Aquifer Study	\$125,491	\$35,046	\$90,445
39	Kowalski	South Platte Decision Support System	\$866,974	\$236,122	\$630,852
40	Kowalski	Wild and Scenic Rivers Fund	\$472,095	\$98,761	\$373,334
41	Kowalski	Wild and Scenic Rivers Study	\$11,473	\$11,473	\$0
42	Mitchell	Alt Ag Water Transfer Sustainability Program	\$2,121,242	\$443,184	\$1,678,058
43	Mitchell	Climate Change Effects on Co Wtr Resources	\$27,048	\$0	\$27,048
44	Mitchell	Drought Mitigation Strategies Implement	\$100,000	\$0	\$100,000
45	Mitchell	Statewide Water Supply Initiative Cont	\$225,000	\$141,456	\$83,544
46	Mitchell	Water Adaptation Partnership Program	\$416,262	\$221,307	\$194,955
47	Mitchell	Water Conservation Data Tracking Project	\$87,291	\$1,199	\$86,093
48	Mitchell	Water Planning Studies	\$100,000	\$0	\$100,000
49	Russell	Long Hollow Reservoir Project	<u>\$1,575,000</u>	<u>\$1,575,000</u>	<u>\$0</u>
Total Balances for Non-Reimbursable Investments			<u>\$63,812,784</u>	<u>\$7,616,654</u>	<u>\$56,196,132</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: CWCB

Project Type: Water Acquisitions

Project Manager: Linda Bassi

Beneficiary: Statewide Water Users

In Fiscal Year 2013-2014, CWCB and the Colorado Water Trust 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 is for a term of up to 5 years and for an amount not to exceed \$500,000.

In Fiscal Year 2014-2015, an amount of \$262,566 was disbursed to the Colorado Water Trust pursuant to the Master Task Order contract. The funding was utilized for five separate projects including the McKinley Ditch Acquisition; Coats Brothers Ditch temporary lease; Stream Assessment project on Tomichi creek, Cochetopa Creek and Crystal River; Yampa River feasibility project; and Twin Lakes System feasibility.

2. CWCB Stream Gaging

Authorization: SB 01-157 to HB 06-1313

Water Source: Statewide Streams

Location: Statewide

Project Type: Stream Gaging

Project Manager: Jeff Baessler

Sponsor: CWCB

Beneficiary: CWCB 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 2014-2015, CWCB funded the following projects:

- In cooperation with Skyland Metropolitan District, Colorado Water & Civil Contractors, Inc. was contracted to design and install an instream flow bypass and diversion structure for administration of the Broom Ditch water right acquisition.
- CWCB has purchased and installed multiple weirs on stream segments throughout the state including Box Elder, Sand, and Lone Tree Creeks. These weirs provide data for water availability analyses on new instream flow recommendations. A weir was also installed for monitoring and compliance of the recent Stapleton Brothers acquisition.
- DWR Gage ID PINMOUCO: Pine Creek near mount in Water Division 2. This station provides information for monitoring and administration of CWCB's ISF water right on Pine Creek.
- CWCB has refurbished and maintained stream gaging equipment and has purchased other instrumentation which is utilized for stream gaging purposes. This equipment includes a Laser Survey Level, GPS units, pressure transducers, and waders.

3. Instream Flow Engineering 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. These funds are currently being utilized for technical support to address various ISF issues. It is anticipated that these funds will be used for additional technical support and engineering services in 2016 to address concerns with controversial new ISF appropriations cases.

4. Satellite Monitoring System - State Engineer's Office

Authorization: HB 93-1273 to HB 14-1333

Water Source: Statewide Streams

Location: Statewide

Sponsor: State Engineer's Office

Project Type: Stream Gaging

Managers: J. Baessler / S. Cuthbertson

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.

5. Stream Gage Fund

Authorization: SB 07-122

Water Source: Statewide Streams

Location: Statewide

Project Type: Stream Gaging

Project Manager: Jeff Baessler

Sponsor: CWCB

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). Staff has identified and is working on scoping equipment needs and collaborative efforts with USGS and 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 the U.S. Army Corps of Engineers, DNR, and local water providers. The seed money has assisted, to some extent, with completion of the Feasibility Report and Environmental Impact Statement, as well as the Record of Decision. More importantly, it will assist with the implementation phase of the Project. This consists of contracting with the U.S. Army Corps of Engineers for water supply storage space in the reservoir (now completed), program management (consultant has been selected), design, and construction. Construction will largely consist of recreation modifications and environmental mitigation. The remaining 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

Funding within this authorization is dedicated to orphan shares within the Chatfield Reservoir Reallocation Project. The CWCB will hold orphan shares of storage space within the reservoir until such time that the shares can be sold back into the water community. CWCB will sign a Water Provider Agreement with CDNR, who has executed a master contract with the U.S. Army Corps of Engineers for 20,600 AF of new water supply space in the reservoir.

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

The efforts contemplated under this authorization are now complete, and staff recommends that any remaining funds be transferred back to the CWCB Construction Fund.

9. 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

The efforts contemplated under this authorization are now complete, and staff recommends that any remaining funds be transferred back to the CWCB Construction Fund.

10. 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 and www.cwcb.state.co.us.

11. 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. To-date the District has completed the material processing, seepage control, final design of the outlet works and is currently working on the federal land exchange. The construction of the outlet works is anticipated to occur in the summer of 2016.

12. 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.

13. 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 has 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.

14. Windy Gap Reservoir Bypass Channel Project

Authorization: SB 13-181

Water Source: Colorado River

Location: Windy Gap Reservoir

Sponsor: Northern Colorado WCD

Project Type: Diversion Structure

Project Manager: Tim Feehan

Beneficiary: Water Users

SB13-181 authorized up to \$2 million for the planning, design and construction of the Windy Gap Reservoir Bypass Project. Northern Colorado WCD has also authorized up to \$2 million of funding for the project. At this time, the estimated cost of the project exceeds \$10 million and the project is on hold as additional funding options are explored. Interest in the project is increasing, and a feasibility study may be considered in 2016.

15. 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

Project Manager: 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 two miles and two phases of river in South Platte Park was rechanneled and restored. In the CWCB reach, we are planning for a park, trail, and repair and enhancement of two failed boat chutes near Oxford Avenue. The remaining funding in this account will be used in the new fiscal year for design and construction documents of the project now known as River Run and some annual maintenance and vegetation removal as prescribed in the annual Corps Flood Works Project inspection reports.

16. Colorado Floodplain Map Modernization

Authorization: SB 03-110 to HB 14-1333

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, Rio Blanco, 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 \$564,360 that has been encumbered for projects currently in progress which was transferred to Fiscal Year 2015-16 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.

17. 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 2015 were to the Platte River Recovery Implementation Program. In addition, expenditures were made to develop a stream mitigation banking protocol, sponsored by Colorado State University. This project is complete.

18. Flood and Drought Response Fund

Authorization: SB 01-157 to HB 14-1333

Water Source: All Colorado Streams

Location: Statewide

Sponsor: CWCB

Project Type: Response to Flood

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. 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, post-flood aerial photography, 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 continued to be used for post-wildfire flood mitigation purposes for a number of the large wildfires that occurred in both 2012 and 2013 as well as the damaging floods from September 2013.

Specific tasks accomplished using funds from this account during FY 2015 included the daily Flood Threat Bulletin during the flood season from May through September, a partnership with Colorado State University to prepare an oral flood history of the 2013 floods, a partnership

with the City of Manitou Springs to improve Williams Canyon drainage (which has been experiencing numerous devastating floods since the Waldo Canyon Fire), and seasonal climate forecasts from the University of Colorado for the purpose of flood and drought forecasting. In addition, Lidar acquisition was performed for portions of Pueblo County for the purpose of flood risk assessment and floodplain mapping. Also, a project was funded in the Town of Jamestown in order to reassess the floodplain following the 2013 floods and to aid in recovery activities.

19. Rio Grande Forecasting Development Project Implementation

Authorization: SB 13-181

Water Source: Rio Grande & Conejos Rivers

Location: Rio Grande

Sponsor: CWCB, USBR, Rio Grande BRT

Project Type: Demonstration Project

Project Manager: Joe Busto

Beneficiary: Rio Grande Water Users,
West Gulf River Forecast Center, DWR

The CWCB, NOAA-National Severe Storms Lab, National Center for Atmospheric Research (NCAR), and National Aeronautics and Space Administration (NASA) have conducted a full water year data collection and hydrologic modeling project. The goal is to look at how new remote sensing data through planes and mobile radars and new snow data will perform well in a new robust hydrologic model called WRF-HYDRO. NCAR has a contract to run this model for the nation for the NWS-Office of Hydrologic development. This is an important field demonstration project for the western U.S. water supplies, floods, droughts, and climate change. It's a transition from a few discrete SNOTEL data points and reliance on historical data sets to forecast "today" to detailed snowpack assessments each year. This project was "end to end" to a make volumetric water supply forecast in the Rio Grande and Conejos Basins to compare with existing methods. The initial results are that the radar made quality precipitation estimates where they belonged to force the model to perform well. We await a snow free flight from NASA to use their Aerial Snow Observatory estimates in this model. NASA ASO is used by the CA DWR for the last three years. A final report is due by the end of the calendar year. Plans are being made to continue this project for one more year in the Rio Grande.

20. Stream Restoration Grant Account - Flood and Drought Response Fund

Authorization: SB 14-179

Water Source: South Platte

Location: South Platte Basin

Sponsor: CWCB

Project Type: Watershed Cleanup Efforts

Project Manager: Chris Sturm

Beneficiary: Local Water Users

Twenty projects were awarded funds totaling \$2,443,655 through a competitive grant program designed to restore streams and remove debris from channels affected by flooding in September 2013. Three projects are complete (\$49,030). Seventeen projects remain active.

21. 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: Chris Sturm / Steve Miller

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 2009 and all work completed by December 2013. The remaining funds from the 2008 authorization have been rolled into the 2012 program described below. Staff will be posting the final reports from each project on the Board's website.

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 2014, five applications to the Invasive Phreatophyte Control Program (IPCP) were awarded funding totaling \$238,090. Grants were awarded to the Ute Mountain Ute Tribe (Mancos River), Denver Parks and Rec (Bear Creek), Yuma County Pest Control District (Republican River), Weld County Weed Division (St. Vrain River), and Larimer County Weed District (Swift Ponds). CWCB also entered into two one-year agreements, each for \$50,000, with the Colorado Youth Corps Association wherein the CYCA awarded mini-grants to regional Youth Corps units working with local governments and landowners to do control projects.

In Fiscal Year 2014-2015, four projects were completed. The total grant amount for those projects was \$133,530. Eight projects that were awarded funding in the 2014 remain active. Total funding for these projects is \$482,802. In addition, \$80,000 was awarded to the Colorado Youth Corps Association to fund 6 Youth Corps projects across the state. \$50,000 was awarded in February, 2015, with the additional \$30,000 awarded in July, 2015. To date, four of the projects have been completed, and the remaining two are expected to be complete before December.

22. Watershed Restoration

Authorization: HB 06-1313 to HB 14-1333

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 2010 - 2014 competitive grant cycles. Completed projects from the 2010 grant cycle include the South Platte restoration project below Chatfield Reservoir. Active projects from the 2011 grant cycle include ditch diversion reconstruction (Relief Ditch) on the Gunnison River (upstream of Delta). Completed projects from the January 2011 grant cycle include river restoration planning for Lightner Creek (Durango). Active projects from the January 2012 grant cycle include forest road restoration/erosion control in the Coal Creek Basin (Redstone). Completed project from the January 2012 grant cycle include channel/floodplain restoration on Tarryall Creek and Phase II gully stabilization in the Campbell Valley (N. of Fort Collins). Completed projects from the 2013 grant cycle include the Cucharas River Basin Watershed Wildfire Assessment, post-fire watershed restoration for the Waldo Canyon fire, and floodplain/channel restoration design on the Slate River in Crested Butte. Active projects from the September 2013 grant cycle include post fire watershed restoration for the High Park fire. Complete projects from the September 2014 grant cycle include riparian re-vegetation on the St. Vrain near Lyons. Active projects from the September 2014 grant cycle include restoration of gullies in Campbell Valley NE of Fort Collins, river restoration design on the Lake Fork of the Gunnison near Lake City, and restoration prioritization in Park County.

A special allocation for the High Park Fire Assessment is still active. \$150,000 of this \$175,000 grant was contributed by the Colorado Water Resources and Power Development Authority.

A special release of the Colorado Watershed Restoration Program was opened in November 2013 for watersheds recovering from the September 2013 floods. Funding for \$1,925,000 was made available for the special release, and the money was contributed by the Department of Public Safety, Division of Homeland Security and Emergency Management. The funds are dedicated to watershed master planning efforts.

23. Weather Modification Program

Authorization: HB 04-1221 to HB 14-1333

Water Source: N/A

Location: Denver

Sponsor: CWCB

Project Type: Cost Share Grants

Project Manager: Joe Busto

Beneficiary: Statewide

The CWCB grants is matched with funding from the Lower Basin States of Arizona, Nevada, California, and New Mexico to help locally sponsored wintertime cloud seeding programs in the Upper Colorado, Grand Mesa, Gunnison and Southwestern basins. The funding is a mix of grants to operators, modernization of aging cloud seeding equipment, and studies and evaluations. High lights for this year were to import two Idaho Power remote generators, a full winter's use of a thermodynamic liquid profiler (radiometer) at Vail, a climatology and modeling evaluation of the Central Mountains program, a planning report and inventory of needs assessment by Wilson Water Group of all seven programs, and the developed of 88 new daily modeled weather balloon launches through the Colorado Avalanche Information Center to create new atmospheric data in Colorado. The new modeled weather balloon launches will compliment the twice a day weather balloon launches by the Denver and Grand Junction National Weather Service. Plans for the next year include more modeling studies to keep contractors in compliance with the new WM Rules that require periodic evaluations, continued importation of remotes to retire low elevation manual

generators and this will increase effectiveness of these programs. Staff seeks to purchase a few more Idaho Power remotes and lease two Desert Research Institute remotes for the Mancos area and Telluride this year.

24. Arkansas River Decision Support System (ArkDSS)

Authorization: SB 07-122, HB 11-1274, SB 13-181, HB 14-1333

Water Source: N/A

Location: Arkansas Basin

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, \$250,000 was authorized in SB 13-181, and \$500,000 was authorized in HB 14-1333. 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. A Request for Proposals for major components of ArkDSS will be released in 2015.

25. Colorado Decision Support Systems O & M

Authorization: SB 13-181, HB 14-1333

Water Source: N/A

Location: N/A

Sponsor: CWCB

Project Type: O&M

Project Manager: Andy Moore

Beneficiary: Statewide

The primary use of these funds is to support the movement of the CDSS technical software to an Open Source format. The future support and enhancement of CDSS software tools will be facilitated in this project. A Request for Proposals to initiate this effort will be released in 2015.

26. 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: Andy Moore / 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.

27. 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 there remains \$75,000 in funds that will be disbursed, as needed, within the next year or two, as we commence with implementation phases.

28. Colorado River Basin Study Implementation

Authorization: SB 13-181

Water Source: Colorado River

Location: Colorado River Basin

Sponsor: CWCB

Project Type: Study

Project Manager: Ted Kowalski

Beneficiary:

The Colorado River Basin States have been engaged in a “Next Steps Process”, following the work of the Colorado River Basin Study. This process established three different work groups—Municipal and Industrial Conservation and Reuse, Agricultural Conservation and Transfers, and Environmental and Recreational Flows. This work is complete and there was a “Next Steps” Report that was released in May 2015.

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

Managers: A. Moore / M. Garrison

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.

Approximately \$840,000 has been expended to date on Phase 2 activities including:

- examination of the new global climate modeling data, CMIP 5, with comparison to the CMIP3 data used in Phase I,
- updates to the CDSS models and tools, and
- updates to the basin datasets for the Yampa, White, Colorado, Gunnison and San Juan river basins, including irrigated acreage and diversion structure data, consumptive use estimates and documentation.

Fiscal Year 2016-2017 work may include CDSS support for SWSI, additional updates and enhancements to models and tools, and development of model scenarios that incorporate future demands and climate change projections.

31. Gunnison Basin Irrigation System Planning and Optimization

Authorization: HB 14-1333
Water Source: Gunnison River
Location: Gunnison River Basin
Sponsor: CWCB

Project Type: Salinity Control Planning
Project Manager: Steve Miller
Beneficiary: Local Water Users

In April 2015, technical assistance grants between \$1,000 and \$5,000 were awarded to approximately 20 ditch companies in Delta County to investigate the feasibility of participating in the USBR Colorado River Basin Salinity Control Program. About half of these companies submitted responsive applications to the 2015 USBR Funding Opportunity Announcement ("FOA"). The results of the 2015 FOA will be made known in September. The approximately \$150,000 of remaining funds will be used to conduct irrigation planning studies in the Delta area and to work with the unsuccessful applicants to prepare for the next FOA, expected to be released in 2017.

32. Instream Flow Decision Support System

Authorization: SB 03-110
Water Source: Statewide Streams
Location: Statewide
Sponsor: CWCB

Project Type: Decision Support System
Managers: Andy Moore/ 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 and should be completed by the end of 2015.

33. Litigation Fund

Authorization: HB 95-1155 to HB 14-1333
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. This fund is typically refreshed each fiscal year to be restored to \$2 million on July 1, from the Construction Fund.

34. 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: Ted Kowalski
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.

35. 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: Carolyn Fritz

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 2015 concentrated on system operating and maintenance.

36. 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. Due to continuing permitting issues and timing of partner funds the CWCB funds were not utilized until the Spring of 2015. The funds from this authorization were finally used to procure \$25,000 of large rock that was installed for bank stabilization and to create pools as part of the multi-party river restoration project within the City.

37. South Platte Groundwater Data Collection and Analysis

Authorization: SB 12S-002 to HB 14-1333

Water Source: N/A

Location: South Platte Basin

Sponsor: CWCB

Project Type: Data Collection/Planning

Project Manager: Andy Moore

Beneficiary: Local Water Users

This project is a cooperative effort with the Division of Water Resources in response to reported high groundwater levels in the Gilcrest-LaSalle and Sterling areas. It includes the collection of alluvial aquifer water level data at pilot projects at each of the areas. Continuous water level monitoring equipment has been installed in 20 new observation wells in the Sterling area, and groundwater level data are also being collected in 16 existing wells in the area. In the Gilcrest-LaSalle area, 47 existing wells are being monitored. Data from both areas are available online. This effort includes an independent analysis and interpretation of the potential causal relationships of the high groundwater; the report was completed in July 2015. As part of this project, the SPDSS alluvial groundwater model is also being enhanced and extended to include more recent data; this project is ongoing through June 2016.

38. 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: Andy Moore

Beneficiary: Local Water Users

In 2012, the Colorado Legislature passed HB 12-1278, which commissioned an independent study of the South Platte alluvial aquifer by the Colorado Water Institute at Colorado State University. A report was provided to the legislature on December 31, 2013. Additionally, final costs associated with the project were submitted in FY 2015. This project is now closed and the remaining funds should be returned to the Construction Fund.

39. South Platte Decision Support System (SPDSS)

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: Andy Moore

Beneficiary: Statewide Water Users

The development of SPDSS is almost complete; the surface water planning model is the only component remaining to be finalized. The model development is currently underway for the St. Vrain, Big Thompson, Boulder Creek and the Denver metro area basins. There have been delays due to StateMod code enhancement, but it is expected that this modeling effort will be completed in approximately six months.

40. Wild and Scenic Rivers Fund

Authorization: SB 09-125

Water Source: Various

Location: Various

Sponsor: CWCB

Project Type: Study

Managers: T. Kowalski / S. Sellers

Beneficiary: Statewide

Within Colorado, a number of river segments have been classified as eligible or suitable for "wild and scenic" designation by various federal agencies and the federal agencies. In response, a number of stakeholder groups have formed to explore and implement alternatives for resource protection that would include wild and scenic designation as well as many other options. These groups currently exist in the San Juan River Basin, the Dolores River Basin, and the Upper 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. Since the Wild and Scenic River

Study (below) account is now 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.

41. Wild and Scenic Rivers Study

Authorization: HB 08-1346

Water Source: Various

Location: Various

Sponsor: CWCB

Project Type: Study

Managers: T. Kowalski / S. Sellers

Beneficiary: Statewide

Within Colorado, a number of river segments have been classified as eligible or suitable for "wild and scenic" designation by various federal agencies. In response, a number of stakeholder groups have formed to explore and implement alternatives for resource protection that would include wild and scenic designation as well as many other options. These groups currently exist in the San Juan River Basin, the Dolores River Basin, and the Upper Colorado River Basin. To date, funds have been used within each of these different basins for facilitators, informational studies, and other operating expenses. This Wild and Scenic River Study account is now depleted, Staff will continue to use the Wild and Scenic Rivers Fund (above) to continue this work.

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

Authorization: SB 07-122 to HB 14-1333

Water Source: Statewide

Location: Statewide

Sponsor: CWCB

Project Type: Alternative Methodologies

Project Manager: Craig Godbout

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.

Through FY 2014-2015 the Board approved twenty-four grant applications that totaled approximately \$4,300,000. The most recent amount awarded in May 2015 was approximately \$173,000 for a rotational fallowing project on the Catlin Canal in the Arkansas River with the Lower Arkansas Valley Water Conservancy District as the fiscal agent with an anticipated 500 acre-feet per year potential for agricultural-to-urban transfers.

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.

43. 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, especially water resources. Building on the release of the Climate Change in Colorado in August 2014; CWCB managed the development of the Colorado Climate Plan, set to be release in 2015. These two documents have supported the climate components of Colorado's Water Plan. Following the release of the Colorado Climate Plan CWCB will engage in a number of outreach activities to further develop Colorado's strategy on climate change impact to water resources.

44. Colorado Drought Mitigation and Response Plan Implementation Program

Authorization: HB 14-1333

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 updated that report in 2013. The plan was 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. CWCB has been working with local, state and national partners to prioritize and implement these recommendations.

45. Statewide Water Supply Initiative Continuation

Authorization: SB 13-181

Water Source: N/A

Location: N/A

Sponsor: CWCB

Project Type: Study

Project Manager: Rebecca Mitchell

Beneficiary: Statewide Water Users

The Colorado Water Conservation Board (CWCB) officially approved the Statewide Water Supply Initiative (SWSI) 2010 Report in January 2011. Like the original SWSI study completed in 2004, the purpose of SWSI 2010 was to provide a comprehensive statewide analysis of water supply, demand, and resulting gaps. In addition, SWSI 2010 continued the inventory of local solutions to meet water supply gaps. At the completion of SWSI 2010 the Board recommended a six year planning cycle for updating SWSI. These periodic updates are important so that SWSI can continue to provide the basis for tracking demands, supplies and other drivers that inform which future scenario Colorado is entering and therefore which water strategies should be implemented.

Since 2010 the Governor has requested that a Colorado Water Plan (CWP) be completed by the end of 2015. This outline for the current SWSI Update has been developed to accommodate this timeline and articulate how the each chapter of the SWSI Update will incorporate and inform the CWP, Basin Implementation Plans, Colorado River Water Availability Study Continuation (CRWAS Continuation), and other efforts. Each of the chapters outlined below will be submitted for Board review as they are completed.

In addition to incorporating the basin implementation plans and the CRWAS, new aspects of this SWSI update will include:

- Incorporation of scenario planning and adaptive management
- Incorporation of climate change into demand and supply analyses
- Hydrologic variability (examine droughts and floods in addition to average conditions)
- Agricultural gap
- Non-consumptive gap

It is envisioned that SWSI Update will serve as the primary technical basis for the development of the CWP, which in turn will focus on addressing key policy issues. SWSI Update will build off information from the previous SWSI reports and other efforts completed in the interim, such as the adaptive management and scenario planning work of the IBCC and basin roundtables (BRT's).

46. Water Adaptation Partnership Program

Authorization: SB 09-125
Water Source: N/A
Location: Statewide

Project Type: Planning
Managers: T. Finnessey /A. Moore/
M. Garrison/J. 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 FY 2014-2015, this fund was utilized to fund NASA areal snow observatory snow pack mapping for hydrologic modeling in the Rio Grande as part of the Rio Grande Forecasting Project.

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. During the last 1.5 years, the Water Efficiency Data Portal has functioned and now houses 2 years of data. The data collected from the portal is informing planning work and will be invaluable for the next SWSI update. CWCB staff created a Scope of Work for additional output tools and reports from the data within the web portal and set up a multi-year maintenance and customer support plan to spend down the remaining balance. At present, the Scope of Work is in procurement and should be operational within the next month.

48. Water Planning Studies

Authorization: SB 99-173, SB 09-125
Water Source: N/A
Location: Statewide
Sponsor: CWCB

Project Type: Water Planning
Project Manager: Rebecca Mitchell
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.

49. Long Hollow Reservoir Project

Authorization: HB 14-1333
Water Source: La Plata River
Location: La Plata County
Sponsor: CWR&PDA

Project Type: Reservoir Construction
Project Manager: Kirk Russell
Beneficiary: Animas La Plata Project

This grant was used to assist in the construction of the Long Hollow Reservoir Dam (151 feet high dam with a span of 800 feet) located approximately 22 miles southwest of Durango, Colorado. This grant assisted with the budget shortfall and allowed the Project to move forward. Construction began in summer of 2012 and the dam was dedicated in October of 2014. The Reservoir will hold 5,400 acre-feet of storage water to supplement irrigation needs of the area and to assist the State of Colorado in meeting its delivery obligations under the La Plata River Compact. The Project will allocate 300 acre-feet of storage annually for the State Engineer's Office to use for deliveries to New Mexico during the mid-summer low-flow period, with the remaining water to be used for irrigation purposes. It is estimated that the reservoir would fill 4 of 14 years, with an average fill of 3,450 acre-feet per year.

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

Severance Tax Operational Fund

The following table summarizes the Severance Tax Operational Fund 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.

<u>No.</u>	<u>Project</u>	<u>Project Manager</u>	<u>FY15 Amount</u>
Interstate, Federal, and Water Information Programs			
1	3D Visualization of South Platte Alluvial Aquifer	Moore	\$ 25,000
2	Colorado River Contingency Planning	Kowalski	\$ 50,000
3	Trinidad Project Irrigated Acres Map Reconciliation	Miller	\$ 26,450
4	Work Related to Recreational Projects	Sellers	\$ 72,275
5	High-precision GPS Survey of Observation Wells	Moore	\$ 69,000
6	Implementation of Elbert County Groundwater Network	Moore	\$ 50,000
7	Determination of Consumptive Water Use of Corn Grown	Miller	\$ 46,135
8	SPDSS Groundwater Model Review	Moore	\$ 49,900
9	Developing an Unmanned Aerial Remote Sensing of ET	Miller	\$ 49,990
10	Arkansas Basin Data Collection in Support of ArkDSS	Moore	\$ 50,000
11	Develop Visualization Tools for CDSS and CWCB	Moore	\$ 50,000
12	Arkansas Basin Exchange Tool	Moore	\$ 24,990
13	Water Commissioner Daily Report - Grape Creek	Moore	\$ 9,000
14	Water Commissioner Daily Report - Taylor Creek	Moore	\$ 7,300
15	Water Tables - CSU	Kowalski	\$ 5,000
16	Gilcrest-LaSalle Groundwater Mapping	Moore	\$ 4,580
Finance Programs			
17	Inundation Mapping for SEO Projects	Hernandez	\$ 24,180
18	Bull Creek Reservoir #4 Wetlands Study	Russell	\$ 14,250
19	Fraser Firing Project	Johnson	\$ 50,000
Stream and Lake Protection Programs			
20	Case Management and Litigation Support	White	\$ 35,520
21	Computing Discharge Under Ice	Baessler	\$ 99,800
22	Stream and Lake Operations Support	Bassi	\$ 1,580
Watershed and Flood Protection Programs			
23	Flood Mitigation and Project Compliance	Houck	\$ 17,000
24	FEMA Coordinator Matching Program	Houck / Prochno	\$ 62,000
25	Colorado Dust on Snow	Busto	\$ 40,000
26	Empowering Future Management & Conservation	Sturm	\$ 55,280
27	Watershed Program	Sturm	\$ 24,980
28	FEMA LIDAR Mapping	Patton	\$ 40,000
29	Weather Modification Program	Busto	\$ 22,200
30	NOAA Mobile Radar Project	Busto	\$ 6,700

Water Supply Planning, Drought, and Conservation Programs

31	Surface Water Supply Index Automation	Finnessey	\$ 50,000
32	Water Planning and Operational Needs	Mitchell	\$ 45,300
33	Irrigation Deficits on Hay as part of a Western Water Bank	Mitchell	\$ 49,500
34	CoAgMet Network	Finnessey	\$ 40,580
35	Water Efficiency Grant	Wade	\$ 4,000

Total Severance Tax Expended for FY 15

\$1,269,490

Details of the Grants Provided for the above Projects are as follows:

1. Three-Dimensional Visualization of the South Platte Alluvial Aquifer

Water Source: N/A	Project Type: Data Analysis
Location: South Platte River Basin	Project Manager: Andy Moore
Sponsor: CWCB	Beneficiary: Local Water Users

This project investigated a three-dimensional method to help visualize groundwater data in the South Platte alluvial aquifer. Visualization examples were focused on the Gilcrest-LaSalle and Sterling areas; this facilitated a concurrent analysis of the high groundwater issues in those areas (described in Non-Reimbursable Investments item #37).

2. Colorado River Contingency Planning

Water Source: Colorado River	Project Type: Planning Study
Location: Colorado River Basin	Project Manager: Ted Kowalski
Sponsor: CWCB	Beneficiary: Local Water Users

The Colorado River Basin has experienced the greatest 15 year drought since hydrologic records began to be kept. In addition, this 15 year drought is one of the worst 15 year periods even comparing this drought to tree records for the last several centuries. These funds were used to fund engineering and modeling work associated with developing a drought contingency plan should the Colorado River drought continue. In particular, this funding was used to model the effects of using stored water from specific upstream reservoirs in order to protect critical elevations at Lake Powell.

3. Trinidad Project Irrigated Acres Map Reconciliation

Water Source: Purgatoire River	Project Type: Data Collection
Location: Las Animas County	Project Manager: Steve Miller
Sponsor: CWCB / PRWCD	Beneficiary: Local Water Users

The funds from this grant were used by the Division 2 Engineer's office in Pueblo to scan and digitize 1960 era maps of the Trinidad Project area to allow analysis and comparison of currently irrigated acres to the legal documents creating the district. The work was performed by temporary employees hired and supervised by Div. 2 and SEO GIS managers. The analysis has been completed and several minor discrepancies were discovered which will be resolved in cooperation with the Purgatoire River Water Conservancy District.

4. Work Related to Recreational Projects

Water Source: Various	Project Type: Technical Assistance
Location: Various	Managers: T. Kowalski / S. Sellers
Sponsor: CWCB	Beneficiary: Local Water Users

These funds were used to help assist mountain communities with their economies by increasing recreation-based tourism. In particular, these funds were granted to two local communities to assist with the repair of existing whitewater park (WWP) structures. The Town of Lyons used the funds to study fish passage which will inform a design to rebuild their WWP structures in Meadow Park that were washed away in the September 2013 flood. Gunnison County used these funds to complete repair work on the Gunnison WWP.

5. High-precision GPS Survey of Observation Wells in the South Platte River Basin

Water Source: N/A

Location: South Platte River Basin

Sponsor: USGS

Project Type: Survey

Project Manager: Andy Moore

Beneficiary: Local Water Users

This project included the surveying of 100 monitoring wells in the South Platte alluvium. Many of the monitoring wells are in the DWR network for the Lower South Platte. Accurate location information, especially for the elevation of the site, is very helpful in analyses and contouring of the groundwater levels.

6. Implementation of Elbert County Groundwater Monitoring Network

Water Source: N/A

Location: Elbert County

Sponsor: USGS

Project Type: Evaluation

Project Manager: Andy Moore

Beneficiary: Local Water Users

This is part of a multi-year groundwater monitoring effort of domestic wells completed in the Denver Basin bedrock aquifers in Elbert County. Pressure transducers and dataloggers have been installed in selected wells in the network; these will provide a continuous record of water level trends that will be useful in water resources planning and management in the county.

7. Determination of Consumptive Water Use of Corn in the Arkansas Valley (Year 2)

Water Source: Arkansas River

Location: Otero County

Sponsor: CSU

Project Type: Study

Project Manager: Steve Miller

Beneficiary: Ark Valley Water Users

In this grant the Board provided \$46,135 of funding to support continued operation of the two lysimeters installed with previous Board funding at the Arkansas Valley Research Center in Rocky Ford. The funds covered approximately 6 months of lysimeter staff time. For 2014 and 2015 the large lysimeter was used to complete the evaluation of the consumptive use of corn and to begin analysis of a third crop, winter wheat. The smaller lysimeter continues to remain planted with the alfalfa reference crop. CSU has provided periodic updates of the water use data and the senior investigator will prepare a scientific journal article at the conclusion of the corn CU experiment.

8. South Platte Decision Support System Groundwater Model Review

Water Source: N/A

Location: N/A

Sponsor: CSU

Project Type: Study

Project Manager: Andy Moore

Beneficiary: CSU

This is a multi-year CSU research project that is focusing 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. Year three of this effort has been completed.

9. Developing an Unmanned Aerial Remote Sensing of Evapotranspiration (ET) System

Water Source: N/A

Location: N/A

Sponsor: CSU

Project Type: Study

Project Manager: Steve Miller

Beneficiary: CSU

This project, designed and proposed by CSU, was an effort to collect remote sensing evapotranspiration data by using unmanned aerial vehicles ("UAV"s or drones). CSU was unable to perfect the technology within the 1 year project time frame and will attempt to complete the data collection and analysis portion of the project at its own expense in the summer of 2015. The CWCB funds were used to purchase and license a UAV, and develop remote sensing equipment that could be deployed on it. Due to the long time involved in licensing and certifying the student UAV operator there was insufficient time left to collect the ET data and do the necessary calibration of the equipment.

10. Arkansas Basin Data Collection and Analysis in Support of ArkDSS

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

Project Type: Data Collection
Project Manager: Andy Moore
Beneficiary: Ark Basin Water Users

Colorado State University (CSU) recently completed a multi-year water resources data collection project funded through the Arkansas Basin Roundtable and the WSRA. This project continues that data collection effort, which will provide useful data in the upcoming development of the Arkansas River Decision Support System (ArkDSS).

11. Development of Visualization Tools for CDSS and CWCB

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

Project Type: Tool Development
Project Manager: Andy Moore
Beneficiary: Statewide

This project focused on developing visualization tools for data and information utilized by Colorado's Decision Support Systems (CDSS) and the various programs within CWCB. The Open Water Foundation (OWF) worked CSU student interns in developing these tools.

12. Arkansas Basin Exchange Tool

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

Project Type: Tool Development
Project Manager: Andy Moore
Beneficiary: Local Water Users

This project initiated the development of a tool to provide on the web current information on exchanges on the river and to aid in real-time requests for exchanges. The contractor worked with water users and the Division 2 office of DWR to provide a useful tool for water rights administration.

13. Water Commissioner Daily Report - Grape Creek

Water Source: Grape Creek
Location: Custer and Fremont Counties
Sponsor: UAWCD

Project Type: Data Collection
Project Manager: Andy Moore
Beneficiary: Local Water Users

This project developed more accurate water rights administration information on various tributaries in the Upper Arkansas Basin. This information will assist DWR in providing real-time call information.

14. Water Commissioner Daily Report - Taylor Creek

Water Source: Taylor Creek
Location: Custer County
Sponsor: UAWCD

Project Type: Data Collection
Project Manager: Andy Moore
Beneficiary: Local Water Users

This project developed more accurate water rights administration information on various tributaries in the Upper Arkansas Basin. This information will assist DWR in providing real-time call information.

15. Water Tables Conference

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

Project Type: Outreach
Project Manager: Ted Kowalski
Beneficiary: : Local Water Users

This funding was used to educate and inform the water community and the greater public about a variety of water related activities, including the Colorado Water Plan, the implementation of the U.S.-Mexico agreement involving the Colorado River, and federal permitting processes for new water projects.

16. Gilcrest-LaSalle Groundwater Mapping

Water Source: N/A
Location: South Platte Basin
Sponsor: Colorado Geological Survey (CGS)

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

Groundwater level contour maps were updated by CGS for the area with data through 2014. These will be useful in evaluating the high groundwater issues in the area.

17. Dam Safety Inundation Mapping Grant Program

Water Source: Various
Location: Various
Sponsor: SEO

Project Type: Mapping Study
Project Manager: Jonathan Hernandez
Beneficiary: Local Water Users

These funds were for the preparation of flood inundation mapping for two different entities, totaling four 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 calculations prepared by a licensed professional engineer.

18. Bull Creek Reservoir #4 Wetlands Study

Water Source:
Location: Mesa County
Sponsor: BCRPC

Project Type: Study
Project Manager: Kirk Russell
Beneficiary: Local Water Users

As a result of a Corp of Engineers Permit Stipulation during the approval for construction of a #4 Reservoir Dam, Bull Creek had to monitor the effects of a periodic inundation of wetlands and fens associated within the reservoir basin for 3 years. This funding covered the expense of that monitoring for the third and final year. CWCB has funded a portion of the previous 3 years of monitoring efforts.

19. Fraser Firing Project

Water Source: Upper Fraser River
Location: Grand County
Sponsor: Town of Fraser

Project Type: Technical Assistance
Project Manager: Derek Johnson
Beneficiary: Local Water Users

The Fraser Firing Project evaluated and analyzed current surface water sources available to Fraser with respect to possible augmentation reservoir alternatives that could be used to augment out-of priority alluvial well pumping. Within the framework of the project, a study was conducted to provide Fraser with preliminary engineering and planning information to consider regarding the evaluation and development of environmental considerations, design criteria, site analysis, preliminary design, water rights, and cost estimates for water system improvements related to augmentation reservoir alternatives. Preliminary water treatment alternatives for a possible new St. Louis Creek water supply were also developed.

20. 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 75 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.

21. Computing Discharge Under Ice

Water Source: Various
Location: Various
Sponsor: USGS

Project Type: Study
Project Manager: Jeff Baessler
Beneficiary: Statewide Water Users

These funds were used to collaborate with the USGS in the development of a method for computing discharge under ice using hydro-acoustics (up-looking acoustic Doppler current profiler) and an efficient computation scheme based on the Probability Concept developed by

Chiu and others (2001). The results of the study were encouraging and it is hoped that the results and methods investigated will allow decision makers to more accurately monitor temporal variations in stream flow throughout the year by providing a more comprehensive accounting of water. This project was recently completed and will be published in the Journal of Hydrology.

22. Stream and Lake Protection Section Operational Budget

Water Source: N/A

Location: Denver

Sponsor: CWCB

Project Type: Operations

Project Manager: Linda Bassi

Beneficiary: CWCB

These funds were used to support outreach activities conducted to address issues associated with new appropriations, including the Board's 2014 ISF appropriation on the Dolores River.

23. Flood Mitigation and Project Compliance

Water Source: N/A

Location: Various

Sponsor: CWCB

Project Type: Planning and Study

Project Manager: Kevin Houck

Beneficiary: CWCB

Due to a large portion of the Watershed and Flood Protection Section's staff time being taken by federally funded recovery activities, FY15 was a light year for mitigation and compliance activities. Hence, a large portion of the original funding to this account was repurposed and is described elsewhere. A joint project with the Nebraska Community Foundation to examine the effects of hydroclimatic indices on flood and water supply in the North and South Platte watersheds was funded.

24. FEMA Coordinator Matching Program

Water Source: N/A

Location: Various

Sponsor: CWCB

Project Type: Matching Program

Managers: K. Houck / J. 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

25. 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 and Colorado River Basin water management community, the Center for Snow and Avalanche Studies (CSAS), based in Silverton, conducts the Colorado Dust-on-Snow program (CODOS) at its Senator Beck Basin Study Area at Red Mountain Pass and at ten additional sites located throughout the Colorado Mountains. Over the past year CODOS created site-specific web pages for all of those sites, and for the CODOS program, containing archived dust-on-snow, Snotel, hydrologic, snowpack, snowmelt, and spring weather datasets for your handy reference. CODOS also introduced a conceptual Dust Enhanced Snowmelt Space capturing the interactions of March 1 snowpack conditions, dust-on-snow, and March/April/May weather. The WY Summary report is at: <http://www.codos.org/#codos>. CSAS has hired a successor to Chris Landry and his name is Jeff Derry and they will be transitioning duties over this next water year. Jeff Derry brings an exceptional record in conducting field science and applied research in Alaska, Greenland, Antarctica, and Kazakhstan landscapes, and an academic background in snow hydrology.

26. Empowering Future Management and Conservation of Water in Colorado by Building Mitigation Capacity

Water Source: N/A

Project Type: Study

Location: N/A
Sponsor: CSU

Project Manager: Chris Sturm
Beneficiary: CSU

This study developed an “in lieu fee” mitigation protocol for stream restoration banking. The protocols are still under review by private, state, and federal partners.

27. Watershed Restoration Program

Water Source: North St. Vrain Creek
Location: Boulder County
Sponsor:

Project Type: Restoration
Project Manager: Chris Sturm
Beneficiary: St. Vrain Creek Watershed

This project re-vegetated the riparian corridor of the North St. Vrain Creek outside of Lyons, Colorado. This area of creek was heavily impacted by the September 2013 floods, and the river was restored in this reach by CDOT and CWCB. The re-vegetation component was not addressed in the restoration. Wildlands Restoration Volunteers completed the restoration effort.

28. FEMA LIDAR Mapping

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

Project Type: LiDAR Mapping
Project Manager: Thuy Patton
Beneficiary: Statewide

The Colorado Light Detection and Ranging (LiDAR) mapping group’s main goal is to have complete LiDAR coverage at quality level two or three with derivative products (bare earth DEM, classified point clouds, appropriate contours) over the eastern plains in five years and over the mountainous terrain in seven years. The CWCB has and continues to utilize LiDAR to determine regulatory FEMA flood hazard mapping in the State. Potentially, we will be looking at utilizing LiDAR to develop floodplain mapping, debris flow, and erosion zone mapping as part of the State Hazard Mapping program. Other uses include High Water Mark and dam-inundation mapping.

29. Weather Modification Program

Water Source: N/A
Location: Statewide
Sponsor:

Project Type: Study
Project Manager: Joe Busto
Beneficiary: Statewide Water Users

The funding was used for cloud seeding operations, finish a climatology and modeling study by the National Center for Atmospheric Research, and have Wilson Water conduct a needs assessment project report of the local program sponsors and contractors of cloud seeding programs to help develop their priorities for growth and development. Funding was also provided to the San Juan Resource and Conservation Development Council that administers cloud seeding programs to assist with three southwestern cloud seeding programs.

30. NOAA Mobile Radar Project

Water Source: N/A
Location: Rio Grande
Sponsor: NOAA

Project Type: Study
Project Manager: Joe Busto
Beneficiary: Statewide Water Users

This funding was used to support the Rio Grande Forecasting Project. NOAA brought out a mobile X band dual polarized radar and parked it at the Alamosa airport. Oklahoma University and Adams State University and Rio Grande locals were trained on how to use it and would start it prior to snowfall in the Rio Grande and collect that data. The data was turned into a precipitating estimate for hydrologic modeling and volumetric water supply forecasts in the Conejos and Rio Grande basins. The use of mobile gap filling radars is helpful for summer flash flooding and severe weather but this project was to focus on winter precipitation and investigate whether winter radar precipitation estimates would perform well in WRF-Hydro. The early indication is this radar did provide a rich source of spatial data to make the detailed stream network of WRF-Hydro perform well.

31. Surface Water Supply Index Automation (SWSI)

Water Source: N/A

Project Type: Drought Planning

Location: N/A
Sponsor: CWCB

Project Manager: Taryn Finnessey
Beneficiary: Statewide

The SWSI is an index of surface water supply conditions in Colorado watersheds used to monitor drought conditions. It provides a numeric “score” of water supply in Colorado watersheds and is considered by the Governor’s WATF at monthly meetings when evaluating drought conditions. The preferred version of the SWSI was developed by NRCS and is calculated using spreadsheets by an retired NRCS employee. Due to staffing shortages at NRCS it is unclear that this labor-intensive duty will be taken on by other NRCS staff. This project developed a TSTool-based SWSI generator to automate the calculation and increase access the data that drives the end result for all Colorado watersheds each month. It is currently being tested and producing beneficial results.

32. Water Planning and Operational Needs

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

Project Type: Planning
Project Manager: Rebecca Mitchell
Beneficiary: Statewide

Funds were used for operational costs to continue the progress on the State Water Plan and other planning projects. Other funds were used for Lean Training, “The Pedal the Plains” project and the Colorado River WCD Water Bank project.

33. Assessing the Agronomic Feasibility of Single-season Irrigation Deficits on Hay as part of a Western Slope Water Bank

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

Project Type: Study
Project Manager: Joe Brummer
Beneficiary: CSU

Funds contributed to the continuation of this 2013 project to provide data collection to analyze deficit irrigation on hay versus normal irrigation. The Report can be obtained from CSU.

34. Improving Data Quality for an Enhanced Climate Data Delivery System for the Colorado Agricultural Meteorological (CoAgMet) Network

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

Project Type: Data Collection
Project Manager: Taryn Finnessey
Beneficiary: CSU

The Colorado Climate Center runs the CoAgMet network consisting of 70 stations statewide tracking agricultural weather. These stations and the data they collect are critical for long term climate monitoring, agricultural, fire weather, flood warning, water supply forecasting and drought monitoring. The CoAgMet network, in order to be run as a reliable mesonet and for calculations of consumptive use needs close attention paid to quality control and making sure all sensors are functioning properly as well as regular station visits. This funding aided with proper maintenance and operation of the network.

35. Water Efficiency Grant Program

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

Project Type: Water/Land Use Study
Project Manager: Ben Wade
Beneficiary: Statewide

Through a Water Efficiency Grant, this money is being used to bring together water providers, land use planners and developers, public officials and other key stakeholders in an effort to find solutions for sustainable balance between water and growth. The group will identify and explore impactful strategies that, if achieved, help reduce water use in new development and redevelopment. Research will be done to identify, better understand and quantify land use planning and development approaches that have been successful in Colorado and similar places. The findings of this project will help CWCB understand this nexus better as staff continues to work on statewide water planning projects.