



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

# **DIRECTOR'S REPORT**

**July 2016**

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



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**Colorado Water  
Conservation Board**

Department of Natural Resources

TO: Colorado Water Conservation Board Members

FROM: James Eklund  
Erik Skeie

DATE: July 20-21, 2016

SUBJECT: Agenda Item 7d, July 2016 CWCB Board Meeting Director's Report

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~STATEWIDE~

**GROUND WATER COMMISSION MEETING—** The Ground Water Commission (GWC) held its quarterly meeting on May 20, 2016 in Castle Rock, CO. The agenda items included routine reports and the Commission discussed the approach for amending the Designated Basin Rules. The Commission also passed a resolution indicating opposition to a proposed revision of the Water Quality Control Commission's regulations in a manner that would allow for the relaxation of standards for total dissolved solids (TDS) for designated ground water, and more specifically, opposition to Cherokee's proposal to relax the standard for TDS in the Upper Black Squirrel Creek alluvial aquifer. The Ground Water Commission will hold its next regular meeting on August 19, 2016, most likely in Colorado Springs, CO. For more information visit:

<http://water.state.co.us/groundwater/CGWC/Pages/default.aspx>. (*Suzanne Sellers*)

~COLORADO RIVER BASIN~

**COLORADO RIVER WATER USE—** As of June 27, 2016, the Lake Mead water level was at 1072.01 feet with 9.360 million acre-feet (MAF) of storage, or 36% of capacity, while the Lake Powell water level was at 3618.81 feet with 13.638 MAF of storage, or 56% of capacity. Total system active storage as of June 27 was 31.386 MAF, or 53% of capacity, which is slightly more than one year ago, when the total system content was 31.121 MAF, or 52% of capacity. As of June 16, 2016, the forecast unregulated inflow into Lake Powell for Water Year 2016 is 9.799 MAF, which is 90% of average.

2016 Water Use Forecast: As of June 27, the 2016 Reclamation forecast for the Lower Basin states' consumptive use of Colorado River water is 7.022 MAF, which includes Arizona at 2.602 MAF, California at 4.167 MAF, and Nevada at 0.253 MAF. The forecast for 2016 for California's agricultural consumptive use of Colorado River water is 3.308 MAF. The forecast for Metropolitan Water District of Southern California's 2016 use is 0.714 MAF. (*Andy Moore*)

~PLATTE RIVER BASIN~

**PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM—** The Platte River Recovery Implementation Program (PRRIP) Governance Committee (GC) held its regular meeting on June 7-8, 2016 in Cheyenne, WY. On June 7, 2016, the GC also held a Structured Decision Making (SDM) workshop to determine the "adjust" phase of adaptive management as a result of the conclusion that Short Duration High Flows (SDHFs) will not produce suitable nesting sandbars for terns and plovers.

Agenda items for the regular GC meeting in June included regular committee meeting and budget updates and an update on the J2 Reservoir Project. The GC approved a multi-year imagery acquisition contract, a contract with CPNRD for a airborne electromagnetic survey (AEM), the revised PRRIP Procurement Policy, the publication of the unvegetated channel width manuscript, the publication of both the peak flow habitat paradigm manuscript and the channel width and nest incidence manuscript, the publication of the flow and tern productivity manuscript, amendments to the Platte River Recreational Access (PRRA) Program, the sale of Tract 1501, and the eight-year lease of Tract 1008. Also during the meeting, the GC completed the SDM process by approving a hybrid approach that includes flexibility in acquiring 60 additional acres of off-channel habitat for terns and plovers and maximizing on-channel habitat using the moving complex approach (MCA) with a three-year budget of \$26,000. This hybrid approach would allow water to be released for nest initiation, so long as it is not released solely for this purpose. During the GC meeting, there were also in-depth discussions on a proposed 10-year extension for the first increment and next steps for studying the pallid sturgeon.



CWCB staff participated in Technical Advisory Committee (TAC), Land Advisory Committee (LAC), Water Advisory Committee (WAC), and Finance Committee (FC) meetings. The next regular GC meeting will be held on September 13-14, 2016 in Kearney, NE. Special meetings of the GC will be held on July 26-27, 2016 and August 17, 2016 in Denver, CO to discuss a possible extension of the first increment. For more information, please visit: <http://www.platteriverprogram.org/Pages/default.aspx>. (*Suzanne Sellers*)

#### ~ WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

##### CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE—

Three grant applications have been received since the May 2016 Director's Report

- St. Charles Mesa Water District- Water Meter Replacement Program
- City of Aspen- Landscape Regulations
- Western Resource Advocates- Tap Fee Workshops

Three grants have been approved since the May 2016 Director's Report

- St. Charles Mesa Water District- Water Meter Replacement Program (\$49,950)
- City of Aspen- Landscape Regulations (\$42,515)
- Western Resource Advocates- Tap Fee Workshops (\$28,200)

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

- The Keystone Center- Water-Land Use Dialogue Phase 2 - 50% 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—

###### Approved Plans

No new plans approved since the last Board Meeting

##### WATER EFFICIENCY PLANS—

###### Approved Plans

No new plans approved since the last Board Meeting

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.

- Skyland Metro District
- Mount Crested Butte
- Southeastern Colorado Water Conservancy District Supplemental Regional Plan

Water Efficiency Plans in review

- Parker Water & Sanitation District

(*Kevin Reidy & Ben Wade*)

**GOVERNOR'S WATER AVAILABILITY TASK FORCE**— The next Water Availability Task Force meeting will be held on July 19, 2016 from 1:00pm-3:00pm at the Colorado Parks & Wildlife Headquarters, 6060 Broadway, Denver, CO in the Red Fox 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**— Five percent of the state is currently classified as abnormally dry, no other drought classifications are present. While the state experienced below average temperatures in May, June has brought well above average temperatures and mostly dry conditions. Prolonged high temperatures have resulted in a rapid melt off of mountain snowpack. El Nino conditions have dissipated, but La Nina conditions have yet to develop. Should La Nina conditions emerge and continue into winter, a record high Pacific Decadal Oscillation would decrease its impact and would not necessarily foretell drought conditions for the state. The long term Climate Prediction Center forecast indicates a warm summer with no clear indication of wet or dry conditions going into monsoon season. Wildfire season is expected to be average for the state this year. (*Taryn Finnessey*)

**COLORADO CLIMATE PLAN IMPLEMENTATION**— Staff is working with state agencies to hold stakeholder public engagement sessions pursuant with Colorado's Climate Plan implementation efforts. A session for the materials management community was held in June and CDOT will hold a session in July. In light of the stay of the Clean Power Plan by the U.S. Supreme Court, CWCB is also working with relevant state agencies to develop a Colorado specific path forward that ensure clean air in Colorado for generations to come. (*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. Kevin Reidy is on the technical advisory group as well as the steering committee. At present time, Denver Water is still running numbers through their model but should be done very soon. The project is moving into the exploratory scenario planning phase. With the help of the Sonoran Institute, the group will run various scenarios and see how climate, economy and social trends affect the model runs. (*Kevin Reidy*)

**SB15-008 IMPLEMENTATION**— Staff is working with counterparts from DOLA to create trainings specified in SB 15-008 (AKA the land use bill). This bill stated that the CWCB and DOLA would create trainings for land use and water planning professionals in order to incorporate water conservation and demand management best practices into land use planning. Curriculum will be developed with webinars and in person trainings taking place in Summer-Fall of 2016. A successful training took place at the Rocky Mountain Land Use Institute's spring conference in early March. At present Kevin and DOLA staff are reviewing the first module. (*Kevin Reidy*)

**WESTERN LAND USE AND WATER INITIATIVE**— Kevin Reidy has been asked by the Sonoran Institute/Lincoln Institute of Land Policy to be part of a stakeholder process to offer input and guidance in developing their new joint program around water and land use. They are looking to figure out which activities they want to take on for the next three years, specifically in Colorado. Kevin attended the first meeting in Phoenix and will be participating in future calls and meetings. (*Kevin Reidy*)

U.S. WATER INFORMATION IN THE 21<sup>ST</sup> CENTURY: A CONVERSATION ON INTERGRATED INFORMATION AND SERVICES— Taryn Finnessey participated as a speaker in the "U.S. Water Information in the 21st Century: A Conversation on Integrated Information and Services" meeting, hosted by the University Corporation for Atmospheric Research (UCAR), along with NOAA Administrator Dr. Kathryn Sullivan. The intent of the meeting was to initiate an in-depth national conversation among key stakeholders about what steps can be taken to develop and deliver more robust and more integrated water-related data, information, and prediction services that will help communities and businesses manage risk and plan for the future. Taryn spoke on a panel regarding Drought and Water Availability. (*Taryn Finnessey*)

~WATERSHED AND FLOOD UPDATES~

MAPPING UPDATE—

FY15 Activities: The CWCB was awarded several FEMA grants this past year to fund Risk Map activities including: continuation of the Cache La Poudre Watershed Risk Map Project, develop approximate floodplain delineations in the Middle South Platte Watershed located in northeast Colorado, obtain IFSAR topographic data for over twenty un-modernized counties, continuation of Phase II of the flood forecasting tool development, and to begin Phase I of the Upper Gunnison Risk Map Project. The final scopes of work have been approved and awaiting final task orders to begin work.

FY14 Activities: The erosion zone study for the Salt Creek Wash near the Town of Collbran in Mesa County has been completed and approved by FEMA. This report will be made available on the Risk Map website. Survey work has been put on hold for the Upper White (Rio Blanco County) Risk Map study due to access issues and weather. A First Order Approximate (FOA) or countywide approximate mapping, for El Paso County will begin in the Spring 2016. Other non-mapping projects funded by FEMA this year included an inventory of the ongoing studies and other data in the post flood areas, developing a technical evaluation of flood forecasting methods using Risk Map products, and developing a model management system to store all available hydrologic and hydraulic models in the post-flood areas. All of these projects have been completed and approved by FEMA.

FY13 Activities: The El Paso County as a partial Countywide DFIRM will be published in the Federal Register in the next couple of months and shortly after the appeal period will begin. Purgatoire Watershed and Pueblo County mapping projects are currently in review and are nearing the Preliminary phase.

FY12 Activities: The grant for Purgatoire Watershed was funded through floodplain mapping. All tasks have been completed for this grant. A new grant was approved in 2013 to complete this project to effective. The field survey and hydrologic tasks were approved for the Cache La Poudre watershed project. The City of Fort Collins has provided local survey data to supplement the hydraulic model. The floodplain mapping tasks are anticipated to be completed in early spring 2016. A new FEMA grant was approved in September 2015 to complete additional tasks to finalize the maps as FEMA effective products.

FY11 Activities: Hydrology tasks for St. Vrain and Clear Creek watersheds have been completed and approved. The scope of work for the St. Vrain watershed was revised to include areas that were impacted by the flood. Work on Sunshine Canyon in now complete. Clear Creek Risk Map is in progress and the hydraulic analysis review has been completed by FEMA.

FY10 Activities: Chaffee and Pitkin Counties are now in the post preliminary phase. Both of these counties are awaiting the Federal Register posting before the appeal period will begin. Logan County Letter of Final Determination (LFD) was distributed on November 16, 2015. The maps are anticipated to become effective on May 16, 2016.

FY09 Activities: The Morgan County DFIRM has been converted to a seclusion project, which means a portion of the Wiggins levee will not be showing protection. The preliminary map package is being finalized for review. The Prowers County DFIRM appeal period has ended and the LFD letters were distributed on October 19, 2015. The maps are anticipated to become effective on April 19, 2016.

FY08 Activities: Montrose County DFIRMs became effective on January 6, 2012. The Elbert County and Rio Grande County DFIRMs are now effective. Gunnison County DFIRMs became effective on May 16, 2013.

The Pueblo County DFIRM scope of work has been altered to a Seclusion DFIRM and the remaining tasks were funded in 2013. The Pueblo County Arkansas River Levee floodplain study is in progress, finalization is still progressing. The Pueblo Levee Conservancy District has hired a consultant to assist in their levee certification process and District is working on resolving issues regarding the existing mural on the levee along the Arkansas River.

FY07 Activities: Summit County DFIRMs became effective November 2011. La Plata County received their effective maps in August 2010. Park County has gone effective in December 2009. Delta County maps became effective in July 2010. Teller County and Archuleta County have gone effective since September 2009. El Paso County DFIRM scope of work has been altered to complete this project as a Partial Countywide DFIRM. The Templeton Gap levee will not be included in the update. The FEMA grant was extended to September 2013 to complete this project to the preliminary phase.

FY06 Activities: Weld County completed the Appeal period in early December 2014. Weld County final DFIRMs will become effective in January 20, 2016. Fremont County DFIRMs became effective on January 6, 2012. Clear Creek County has gone effective July 17, 2012.

FY05 Activities: Mesa County DFIRM became effective in June 2010. The Garfield County DFIRMs are now in the post preliminary phase. The Montezuma County DFIRM went effective September 28th 2008.

FY04/03 Activities: Boulder County maps became effective on December 18, 2012.  
(Thuy Patton)

**COLORADO HAZARD MAPPING UPDATE—** The CWCB staff and their consultant team from AECOM meet quarterly with local and county officials within the project boundaries to give updates on the status of the program, discuss concerns, and ensure collaboration and transparency. The first quarterly meeting was held in November 2015 and the second in February 2016. The third took place on May 25, 2016 in Weld County and was followed by a Big Thompson Discovery Meeting. To date, the Hazard Mapping Field Reconnaissance & Survey, Topographic Data Development, and Hydrology tasks are complete, while Hydraulic Analysis is underway. Phase 1 streams are anticipated to be complete late this summer/early fall.

All project information can be found at <http://coloradohazardmapping.com/>. The Discovery effort mentioned above is also being led by the CWCB and is the process of evaluating a watershed in order to determine what components of a Flood Risk Project may be appropriate. Findings

from the Discovery will be used by FEMA to determine what efforts may or will be funded for further flood risk identification and assessment, taking into consideration the information collected from local communities during this process. Discovery initiates open lines of communication and relies on local involvement for productive discussions about flood and non-flood risk. The process provides a forum for a watershed-wide effort to understand how an individual community's risks are related to various risks present throughout the watershed. (*Stephanie DiBettito*)

#### CWCB - NATURAL RESOURCES CONSERVATION SERVICE (NRCS) EMERGENCY WATERSHED PROTECTION (EWP) PROGRAM UPDATE—

**Fact Sheet: Guidance on Project Operations and Maintenance:** A new fact sheet that provides information on operations and maintenance (O&M) for EWP projects, including requirements, sponsor responsibilities, cost considerations, and contractor warranty language has been made available on the EWP website [www.coloradoewp.com](http://www.coloradoewp.com). The document also includes examples and photos of when maintenance may be required after project construction.

**Formal Design Review Process for EWP Projects:** New guidance outlining the project design review process for the Colorado EWP program was recently made available on the website. Each project constructed with EWP funding must be approved through the formal process described in this document.

**Local Cost Share Requirements:** A new local cost share requirement fact sheet has been made available on the [www.coloradoewp.com](http://www.coloradoewp.com) website. This fact sheet provides guidance on the local cost share requirements of the EWP program. The fact sheet identifies acceptable and unacceptable match contributions.

**Fact Sheet: Permitting for Project Construction:** This fact sheet provides an overview of the permits required for the construction of projects funded by the Colorado EWP program is now available on the EWP website.

#### Upcoming Projects

**Watershed:** Fountain Creek (El Paso County)

**Rock Creek Restoration** - Streambanks are eroding and sediment is depositing in channel throughout the Rock Creek project reach. There is an unstable headcut in spillway and damaged access roads resulting in a threatened municipal water supply. The project proposes rip-rap and biostabilization to repair and stabilize streambanks that were damaged by flood waters as well as to remove excess sediment and debris that was left by the flood. This project will also provide protection to the damaged access road and water supply.

**Northwest Springs Chuckwagon** - The Middle Fountain Creek channel is over-wide, aggrading in some areas and degrading in others, and is being clogged by excessive sediment from the adjacent eroding hillsides and streambanks. The project aims to restore 3,600 feet of stream to a naturally functioning system with the capacity to transport and store the excess sediment loads. The project will provide grade control structures, streambank protection, bank shaping, erosion control, revegetation, and the restoration of a natural channel form to include a multi-stage cross-section for low, bankfull, and flood flows.

Middle Fountain Creek Restoration at Wildcat Gulch - Eroding channel and gully are causing sediment loading downstream in Sutherland Creek which poses hazards to the crossing on Crystal Park Road which is the only access for homes in Crystal Park subdivision. This project proposes 1100 linear feet of channel stabilization on this intermittent/ephemeral stream. Rock rip-rap and biostabilization will be used to help stabilize the banks in place.

(Jeff Conboy)



**STREAM RESTORATION GRANT PROGRAM—** The Colorado Water Conservation Board (CWCB) received a total of 24 applications for the Stream Restoration Grant Program, established by Senate Bill 14-179 (SB179) by the July 1, 2014 deadline. SB179 was funded with \$2.5 million, and all funds have been allocated to projects. Twenty projects were selected for funding. All projects must be completed by June 30, 2017.

This program is still in full swing as many grantees were busy planning and designing projects over the last two years. Over \$510,000 has been reimbursed for project work. Six projects are complete, five are ongoing, and the remainder are in various stages of contracting. Staff will continue to work diligently to ensure projects are completed by the end date. All projects are in areas of Boulder and Larimer Counties affected by the September 2013 floods.

The objective of the program is to protect life and property while restoring the ecological processes that connect land and water. This translates into projects that stabilize channel banks, restore riparian areas, create floodplains, and construct channels with dimensions based on hydrologic and hydraulic modeling. Most projects were selected from priority lists taken from post flood master plans. Local watershed coalitions, including local government stakeholders, defined their own process for prioritization. (Chris Sturm)

**FLOODPLAIN RULES AND REFULATIONS UPDATE—** The State of Colorado, through CWCB action in November 2010, adopted increased standards for floodplain management, which are contained in the Rules and Regulations for Regulatory Floodplains in Colorado (Rules), effective January 14, 2011. Communities were provided with a three-year transition period to adopt local regulations consistent with the Rules. Through sound floodplain management practices, these standards support enhanced public health, safety and welfare and will help communities reduce future flood risk to people and property.

Staff has been working very collaboratively with communities to assist them with technical questions, model ordinance templates, and transition support. CWCB staff has contacted each community that has not yet provided documentation of adoption of the Rules via phone or email to offer assistance. Staff has also met with several communities to answer questions and review the process for updating floodplain regulations. Most communities have made adopting the Rules into local floodplain regulations a priority. However, several communities have not completed the adoption or provided

documentation to CWCB. There are 16 out of 251 total National Flood Insurance Program participating communities that have not yet provided documentation of adopting the Rules. However, one of the 16 remaining communities has begun to adopt some of the standards. Staff will continue to provide outreach and technical assistance to communities. (*Stephanie DiBettito*)

**COMMUNITY RATING SYSTEM UPDATE**— The Colorado Water Conservation Board (CWCB) is looking to increase participation of Colorado communities in the National Flood Insurance Program's (NFIP) Community Rating System (CRS) as one of its resiliency goals for 2016. CRS is a voluntary program that rewards communities that are implementing proactive floodplain management programs exceeding the NFIP minimum requirements. CRS also provides incentives for communities to further improve their programs. Currently, only 46 Colorado communities out of the 244 NFIP-participating communities are participating in CRS. To reach more communities and to provide them resources about the CRS, CWCB tasked AECOM with developing a Colorado specific CRS website. The CRS website is a "one-stop shop" for Colorado communities to access information and resources on the CRS - geared towards two user groups: New Users and Participating Communities. New Users are able to quickly learn about CRS; use tools to determine if CRS might be a fit for their community; and consider the next steps towards participation. Participating Communities have access to Colorado specific resources for CRS activities. The website can be found at: [www.coloradohazardmapping.com/crs](http://www.coloradohazardmapping.com/crs) (*Stephanie DiBettito*)

**NASA SNOW-EX PROJECT**— Measuring snowpack snow water equivalent in forested areas is challenging. The new NASA Aerial Snow Observatory for the Jet Propulsion Labs is using LIDAR and spectral analysis, which has shown promise in California and flights in the Rio Grande. A field campaign to use many sensors to characterize snow water equivalent will be conducted by NASA and collaborators. The North American effort will focus on Colorado on the Grand Mesa and at the Senator Beck Basin where the Center for Snow and Avalanche Studies Program has its study plot. More information can be found at <http://neptune.gsfc.nasa.gov/hsb/index.php?section=322> (*Joe Busto*)

**TAYLOR RESERVOIR WATERSHED EXPERIMENT**— At its recently established field study site in the East River watershed near Crested Butte, Colorado, Lawrence Berkeley National Laboratory (Berkeley Lab) is seeking to quantify how perturbations to mountainous watersheds - such as floods, drought, fire and early snowmelt - impact the downstream delivery of water, nutrients, carbon, and metals over seasonal to decadal timeframes.

Supported by the U.S. Department of Energy, Berkeley Lab's "Watershed Function" Scientific Focus Area (SFA) (<http://watershed.lbl.gov/>) research team includes 65+ scientists, postdoctoral scholars, graduate and undergraduate students, and technical staff from Berkeley Lab, the University of California, Berkeley, Colorado School of Mines, Fort Lewis College, the University of Arizona, Desert Research Institute, Navarro, Inc., and Subsurface Insights. The Watershed Function SFA serves as a catalyst for engaging and organizing research teams performing complementary hydroclimate-focused investigations in the East River watershed including partners from the Los Alamos National Laboratory, USGS, NOAA, Ohio State University, Penn State University, the University of California, Merced, and Stanford University.

Data collection activities needed to parameterize integrated hydrological models describing water, nutrient, and metals fluxes across various watershed compartments (soils, bedrock, surface water, groundwater, etc.) as a function of climate perturbations were initiated in May 2014 and are ongoing. These include the following: stream water, groundwater, and precipitation sampling for geochemical and microbiological analysis; installation of a stream gaging network on the East River and its tributary

streams above the town of Gothic, Colorado; installation of 30+ piezometers for measuring seasonal variations in groundwater elevation and flow direction; upgrading and refurbishment of a meteorological station network established by the Rocky Mountain Biological Laboratory (RMBL) that spans a vertical elevation of 5000+ feet; installation of soil microclimate monitoring equipment across the montane, subalpine, and alpine life zones, LiDAR data collection for construction of a high-resolution (<0.5m) digital elevation model for the study area; and acquisition in close collaboration with the Colorado Water Conservation Board of a watershed scale snow density dataset using JPL's Airborne Snow Observatory.

Database management activities are compiling the aforementioned data types for public access, with the combined model-data integration activities at the East River location representing the establishment of a "community watershed" for partner institutions and stakeholder agencies. Both the research and modeling activities are meant to be extendable to other mountainous watersheds and scalable to the size of the basin (e.g. the upper Colorado River Basin), with the concentrated research activities underway at the East River broadly applicable to the greater community of water resource managers in the Western US and beyond. (*Joe Busto*)

**RIO GRANDE FORECASTING PROJECT UPDATE**— Water resources monitoring and prediction research in the Rio Grande is now demonstrating clear value in predicting seasonal water supplies. The 2015 runoff experiment showed that gap-filling radars and airborne LIDAR measurements through the NASA - ASO team significantly improved model simulations of snowpack and runoff in the basin. In WY 2016, the National Center for Atmospheric Research (NCAR) began creating seasonal Water Supply forecasts in coordination with the NWS West Gulf River Forecast Center for the DWR and Conejos Water Conservation District. These experimental water supply forecasts are now being used in management decisions by the DWR.

Moving forward, it is desired to expand the modeling and data integration framework from the Rio Grande. The program can provide a home for a variety of new experimental datasets such as new snowpack and streamflow data, new radar observations, and additional airborne LIDAR snowpack survey information. All of this work is being coordinated with ongoing U.S. National Water Model development. Colorado has water information needs above and beyond the services currently provided by the National Water Model and existing forecast methods and CWCB staff and its partners are working to meet those needs. (*Joe Busto*)

**NASA ASO WORKSHOP**— CWCB attended and presented at the first annual NASA Aerial Snow Observatory workshop at Cal Tech in Pasadena on June 29th. Many California water users and the snow research and modeling community gathered to discuss lessons learned and sculpt a vision for the path forward using remote sensing data like the NASA ASO data for resource management. The focus of this was partly on the value of NASA ASO products for water supply forecasting, the benefits for both land and water management, and creating a sustainable path forward to continue this valuable research to a point where it's operational and fully utilized in the western U.S. This visioning workshop had about 60 attendees and will be helpful as Colorado crafts the path forward for a more advanced watershed monitoring and modeling. Many of these talks will be valuable for Colorado water users and will be posted on this site in July 2016 <http://climatesciences.jpl.nasa.gov/events/1090>. (*Joe Busto*)



**NE COLORADO FLOOD AND STORMWATER MANAGEMENT PLAN**— Four northeastern Colorado counties will begin preparing a comprehensive stormwater and flood management plan, the first of its kind in that area of the state. Morgan, Washington, Logan, and Sedgwick Counties were awarded a Community Development Block Grant - Disaster Recovery (CDBG-DR) Program grant to undertake the effort. This grant program, funded by HUD and administered for the State by the Department of Local Affairs (DOLA), uses recovery funds tied to the 2013 flood disaster.

CWCB staff will serve as technical project manager and general technical assistance at the request of the four counties. The project will be managed administratively by DOLA. Morgan County will serve as the fiscal agent, local administrative lead, and overall point of contact for the grant recipients. However, an MOU is being prepared between the four counties to outline roles and responsibilities of the four counties.

A scoping meeting was held between DOLA, CWCB staff, and the recipient counties on June 28, 2016. The project is expected to commence late summer or early fall and continue through 2017. The goals of the project are to identify flood and stormwater risks and develop a conceptual plan to mitigate them. The study reaches will include the South Platte River from Morgan County to the Nebraska State Line as well as Beaver Creek and Pawnee Creek. The project will use newly developed flowrates by CDOT and CWCB as part of its effort. (*Kevin Houck*)

#### ~AGENCY UPDATES~

**RECENTLY DECREED ISF WATER RIGHTS**— On May 16, 2016, the Division 4 Water Court decreed an instream flow water right to the CWCB on Alkali Creek in Case No. 15CW3079 for 2.0 cfs (5/16-7/31), 1.5cfs (8/1-8/31), 0.8 cfs (9/1-10/31), and 0.3 cfs (11/1-5/15), with an appropriation date of January 26, 2015. The upstream terminus is the Alkali Creek headwaters and the lower terminus is the Lone Starr Ditch headgate. This ISF reach is approximately 5.1 miles long and flows in a southerly direction through parts of Delta County.

On May 16, 2016, the Division 4 Water Court decreed instream flow water rights to the CWCB on Terror Creek in Case No. 15CW3101 for 4.8 cfs (4/1-9/30), 1.5 cfs (10/1-3/31) in the upper reach, and 4.2 cfs (4/1-5/31) in the lower reach, both with an appropriation date of January 26, 2015. The upstream terminus for the upper reach is the confluence of East and West Terror Creeks and the lower terminus is the Terror Ditch headgate. The upstream terminus for the lower segment is the Terror Ditch headgate and the lower terminus is the Fire Mountain Canal headgate. This upper ISF reach is approximately 1.55 miles long and lower ISF reach is approximately 1.52. Both reaches flow in a southerly direction through parts of Delta County.

On June 1, 2016, the Division 6 Water Court decreed an instream flow water right to the CWCB on East Douglas Creek in Case No. 15CW3045 for 2.1 cfs (5/1-7/15), and 0.5 cfs (7/16-10/15), with an appropriation date of January 26, 2015. The upstream terminus is the confluence with Bear Park Creek and the lower terminus is the confluence with Brush Creek. This ISF reach is approximately 1.56 miles long and flows in a northwesterly direction through parts of Garfield and Rio Blanco Counties. This right is in addition to an existing instream flow right on East Douglas Creek decreed in Case No. 5-85CW259 in the amount of 1.0 cfs (1/1-12/31), with an appropriation date of 5/3/1985.

On June 5, 2016, the Division 5 Water Court decreed an instream flow water right to the CWCB on Timber Springs Gulch in Case No. 15CW3111 for 1.3 cfs (4/1-10/31), and 1.0 cfs (11/1-3/31), with an

appropriation date of January 26, 2015. The upstream terminus is a spring complex and the lower terminus is the Bureau of Land Management Property boundary. This ISF reach is approximately 0.47 miles long and flows in a southerly direction through parts of Eagle County.

On June 5, 2016, the Division 6 Water Court decreed an instream flow water right to the CWCB on Armstrong Creek in Case No. 15CW3047 for 1.0 cfs (4/1-6/30), 0.5 cfs (7/1-7/31), and 0.22 cfs (8/1-3/31), with an appropriation date of January 26, 2015. The upstream terminus is the lower terminus of the ISF previously decreed in case 6-06CW0035 and the lower terminus is the confluence with Elkhead Creek. This ISF reach is approximately 0.1 miles long and flows in a northwesterly direction through parts of Routt County.

On June 5, 2016, the Division 6 Water Court decreed an instream flow water right to the CWCB on Brush Creek in Case No. 15CW3048 for 0.65 cfs (4/1-10/31), and 0.50 cfs (11/1-3/31), with an appropriation date of January 26, 2015. The upstream terminus is the Brush Creek headwaters and the lower terminus is the confluence with East Douglas Creek. This ISF reach is approximately 5.31 miles long and flows in a northeasterly direction through parts of Garfield and Rio Blanco Counties.

On June 7, 2016, the Division 4 Water Court decreed an instream flow water right to the CWCB on Schaefer Creek in Case No. 15CW3102 for 1.7 cfs (12/1-4/15), 4.6 cfs (4/16-7/31), and 2.9 cfs (8/1-11/30), with an appropriation date of January 26, 2015. The upstream terminus is the Schaefer Creek headwaters and the lower terminus is the confluence with Grouse Spring Creek. This ISF reach is approximately 5.92 miles long and flows in a northwesterly direction through parts of Gunnison County.  
(*Rob Viehl*)

**NEW SECTION CHIEF FOR INTERSTATE, FEDERAL, AND WATER INFORMATION SECTION—** Carlee Brown started as the new section chief earlier this month in replacement of Ted Kowalski. As Policy Advisor for water at the Western Governors' Association (WGA), Carlee led WGA's bipartisan efforts on drought, the Clean Water Act, water data, and groundwater. She worked on endangered species and wildlife management issues as coordinator of the State-Federal Sage Grouse Task Force and project manager for the Crucial Habitat Assessment Tool, a GIS mapper for wildlife habitat. Carlee also served as WGA's Manager of Federal Relations, a role in which she was responsible for maintaining effective working relationships with administration and interest group leaders in Washington, D.C. Most recently, Carlee took a foray into the world of technology as the Director of Operations and Outreach for a language-learning startup. Carlee graduated from Stanford University with an MS in Earth Systems and a BA in American Studies.

The Interstate, Federal, & Water Information Section would also like to thank Andy Moore for his hard work and leadership as Interim Section Chief during the transition. (*Andy Moore, Erik Skeie*)

~GENERAL ATTACHMENTS~

- 01 Steam and Lake Protection De Minimis Cases
- 02 Instream Flow and Natural Lake Level Program - Summary of Resolved Opposition Cases

~LOAN PROGRAM ATTACHMENTS~

- 01 Water Project Loan Program Interest Rates
- 02 Prequalified Project List and Loan Prospect Summary
- 03 Design and Construction Status Report
- 04 Emergency Loans Status Report
- 05 Loan Repayment and Delinquency Report - Loan Financial Activity Report

**Director's Report Attachment - July 20-21, 2016 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 (CFS)	Percent Injury (%)	Cumulative Injury (%)	Count
16CW3033	Larry Darien	Crystal River 5-75W2721	40 (10/1-4/30) 80 (5/1-9/30)	0.00040 0.00080	0.16551 0.32569	8
16CW3033	Larry Darien	Rapid Creek 5-80CW0115	4 (1/1-12/31)	0.00750 0.00750	0.00750 0.00750	1
92CW0084	Gerald B. Ireland & Virginia L. Ireland	Cottonwood Creek 2-79CW0115	20 (1/1-12/31)	0.00118 0.00021	0.67849 0.32504	209
94CW0041	Bruce W. Clements & Kathy M. Zehr	Chalk Creek 2-77W4662	18 (1/1-12/31)	0.00131 0.00024	0.16877 0.02050	31

July 20-21, 2016 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. 12CW303 (Water Division 1) - Application of City of Black Hawk

The Board ratified this statement of opposition at its March 2013 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed change and plan for augmentation do not injure the Board's instream flow water rights on North Clear Creek and Leavenworth Creek by not replacing out-of-priority depletions in the proper time, place, or amount. CWCB staff resolved this case and reported it to the Board as resolved in May of 2014. Since that time, applicant has amended the application twice, which necessitated revised terms and conditions to protect the instream flow water rights. Staff, in cooperation with the Attorney General's Office, negotiated a new settlement in June of 2016. A trial is set for December 2016. This case is not yet decreed, as of July 1, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
1-87CW273	North Clear Creek	1.5	12/11/1987	Clear Creek	Gilpin
1-85CW418	Leavenworth Creek	1.5	11/15/1984	Clear Creek	Clear Creek

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

- "For any water rights for which out-of-priority diversions are fully augmented at the time of the diversion under this decree, Applicant has the right to use, reuse, successively use and dispose of, by exchange, sale, lease, or otherwise, to extinction all such water lawfully diverted and fully augmented under this plan, subject to the limitations in" decree paragraph 20.b. regarding consumption rates.

(2) Case No. 03CW019 (Water Division 2) - Application of Upper South Platte Water Conservancy District & Center of Colorado Water Conservancy District

The Board ratified this statement of opposition at its May 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 from Twin Lakes Reservoir does not injure the Board's instream flow water rights on Currant Creek, Tallahassee Creek, and Badger Creek by not replacing out-of-priority depletions in the proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. The case was decreed on June 29, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
2-95CW231	Currant Creek	1.25 0.5	11/6/1995	Arkansas Headwaters	Fremont
2-95CW232	Tallahassee Creek	1 0.5	11/6/1995	Arkansas Headwaters	Fremont
2-74W4205	Badger Creek	3	12/4/1974	Arkansas Headwaters	Fremont

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

- "If a proposed Participating Diversion is located within or upstream of an instream flow or other vested water right senior to the proposed Participating Diversion, or if an instream flow or other vested water right is located within and is senior to an exchange that must operate in order to divert the Participating Diversion out of priority, the Customer Notice Application must include a Storage Vessel plan. The Storage Vessel plan shall describe the plan to use or install one or more Storage Vessels described in ¶ 6.4 to truck water to or to exchange water to such vessels and to release water from such vessels as needed to prevent injury to vested water rights including the instream flow right. The notice shall contain the exact location of the Storage Vessels, the maximum volume of water the vessel holds and the plan to fill the vessels with available augmentation supplies in an amount needed to fully augment out-of-priority depletions in the amount, time, and location to prevent injury as well as reasonable transit losses. Any comments or protests to the Storage Vessel plan shall proceed under the procedures identified in the decree."
- "Instream flow water rights. The CWCB's instream flow water rights, including those decreed on Badger Creek in Case No. W-4205, on Currant Creek in Case No. 95CW231, Thirty-one Mile Creek in Case No. 04CW87 and on Tallahassee Creek in Case No. 95CW232, may be injured if Applicants fail to replace depletions in time, place and amount. Subject to the provisions of ¶ 9.3.3., if the CWCB places a call on a decreed instream flow reach that would otherwise result in the curtailment of a Participating Diversion, Applicants will either curtail the diversion, if the diversion has no lagged depletions, or augment the out-of-priority depletions in time, place and amount with augmentation water released from storage to the extent necessary to prevent injury

to the instream flow water right. A CWCB call shall affect all of Applicants' Participating Diversions on an instream flow reach, unless the owners of the Participating Diversions have met their burden of proof that C.R.S. § 37-92-102(3)(b) applies, pursuant to the procedures in ¶ 9.3.3. Any such Participating Diversion must be authorized pursuant to ¶ 9. This provision shall be subject to the following express terms and conditions: [1] The CWCB call must be recognized and administered by the Division Engineer. [2] Applicants' replacement obligation for Participating Diversions within or upstream of a given instream flow reach shall be limited to the out-of-priority depletion attributable to a Participating Diversion, which may be the total amount of the diversion in the event the diversion is 100% depletive to any portion of the instream flow reach. Applicants shall make replacements for the Participating Diversion at a point at or upstream of such Participating Diversion to the extent necessary to prevent injury or shall curtail the subject Participating Diversion."

- "Limitation of Exchanges. Exchanges, including any future administrative exchanges, may only operate to: Storage Vessels; other storage structures; or points of depletion of interruptible water uses such as irrigation and pond use. Applicants will not operate exchanges to points of depletion to augment non-interruptible water uses such as domestic uses or uses causing lagged depletions."

### (3) Case No. 04CW130 (Water Division 2) - Application of Board of Water Works of Pueblo

The Board ratified this statement of opposition at its March 2005 meeting. The Board's main objective in filing the statement of opposition in this case was to ensure that the Applicant's proposed water storage right does not injure the Board's instream flow water right on Clear Creek by inundation. Other issues arose in the case such as applicant's claim to use the water anywhere in the Arkansas basin without declaring any exchanges to do so. 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 case was decreed on May 25, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
2-77W4668	Clear Creek	20	11/15/1997	Clear Creek	Chaffee

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

- At its March 18, 2014 board meeting, the CWCB deferred consideration of Applicant's request to inundate until permitting by other state, federal or local governmental agencies concerning the Clear Creek Reservoir Second Enlargement is completed. The decree includes a procedure for the future inundation request to the Board.
- "The Application in this matter did not seek, and this decree does not adjudicate, rights of exchange of water. The Applicant will not exchange, or deliver for exchange, water stored under the conditional storage water right decreed herein to points located on tributaries of the Arkansas River within or upstream of a decreed CWCB Instream Flow, except pursuant to a new decree, or alternatively, pursuant to

administrative approval subject to public notice on the SWSP notification list, authorizing such exchanges.”

- The decree describes limitations on recapture and reuse including a limitation that “recapture, reuse, and successive use of return flows derived from the conditional storage water right at other locations may not occur until entry of a subsequent water court decree or, alternatively, administrative approval subject to public notice on the SWSP notification list authorizing such use.”

**(4) Case No. 07CW128 (Water Division 2) - Application of Colorado Water Protective and Development Association**

The Board ratified this statement of opposition at its March 2008 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 of at least thirty-three wells does not injure the Board’s instream flow water rights on the Arkansas River by not replacing out-of-priority depletions in the proper time, place, or amount. Staff, in cooperation with the Attorney General’s Office, has negotiated a settlement to ensure that the CWCB’s instream flow water rights will not be injured. The case was decreed on June 7, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
2-77W4646	East Fork Arkansas River	15	1/19/1977	Arkansas Headwaters	Lake

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 removed some structures that would have impacted the CWCB’s instream flow water rights from the proposed decree that are no longer served by Applicant.
- “This decree does not approve or adjudicate any exchanges. If Applicant needs to exchange the augmentation water for use in this plan, it shall do so by separately approved exchanges or court approved exchanges. The exercise of any such exchanges shall be subject to the limitations of the prior appropriation system and to the other terms and conditions applicable to the respective approvals.”
- Applicant may 1). add additional augmented structures to this augmentation plan, 2). convert inactive structures to active structures, 3). change the use of an active Augmented Structure in a manner affecting the presumptive depletion factors for that structure, 4). change the input parameters described in section 13.4, or 5). change the locations of depletions or replacement reach for an Augmented Structure by filing a new application with this Court to add the structure and obtaining a decree from this Court authorizing the inclusion of the structure in this plan in such a way as to prevent injury to the owners of or persons entitled to use vested water rights or decreed conditional water rights. Such application shall include all relevant information regarding the proposed structures including location, presumptive depletion factor, lagging information, location of depletions, and timing, amount, and location of the augmentation supply to replace Depletions including proof of Applicant’s interest in



the water. Applicant shall provide notice of any such application in the manner provided by law for a new water right application. Applicant shall not add any additional structures located above Pueblo Reservoir without adding to this plan water that can sufficiently replace such depletions according to the provisions of this decree.

(5) Case No. 14CW3005 (Water Division 2) - Application of Helen Sharon Hammer

The Board ratified this statement of opposition at its May 2014 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 water rights does not injure the Board's instream flow water rights on Fourmile Creek by not replacing out-of-priority depletions in the proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. The case was decreed on May 20, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
2-00CW101-106	Fourmile Creek	Varies (2.75 - 9.5)	1/26/2000	Upper Arkansas	Teller & Fremont

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

- "A. Under C.R.S. § 37-92-102(3)(b), by agreement with the CWCB, and in recognition of Applicant's existing water uses and practices occurring at the time of the appropriations of the Fourmile Creek Instream Flow Rights, Applicant and CWCB agree Applicant may divert from Fourmile Creek for storage in Broken Shamrock Pond and for in-reservoir uses, including piscatorial and recreational uses, up to 2.0 acre feet annually (including refill), which storage and use may result in depletions by evaporative loss of not more than 1.15 acre feet per year, regardless of the amount of flow available for the Fourmile Creek Instream Flow Rights. Any diversions or depletions, whether made in-priority or out-of-priority and augmented pursuant to the augmentation plan decreed in this Case No. 14CW3005, in excess of the above amounts or for different uses than those existing at the time of the respective appropriation dates for the Fourmile Creek Instream Flow Rights are subject to administration during an instream flow call for the Fourmile Creek Instream Flow Rights."
- "B. This subordination of the Fourmile Creek Instream Flow Rights to Applicant's Broken Shamrock Pond water right, as described above, will not interfere with the administration of the Broken Shamrock Pond water right in priority as against other water rights, and will not result in general subordination of the Fourmile Creek Instream Flow Rights to any other junior water rights. While the Fourmile Creek Instream Flow Rights are, under C.R.S. § 37-92-102(3)(b), subject to Applicant's uses described above, Applicant's water rights will be administered subject to the prior appropriation system in relation to all other water rights."

**(6) Case No. 15CW019 (Water Division 2) - Application of Elin Parker Ganschow**

The Board ratified this statement of opposition at its March 2016 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 of the Side Hill Ditch water rights do not injure the Board's instream flow water rights on Grape Creek and Music Pass Creek by expanding historical use or altering the time, place and amount of return flows. Per Applicant's request, the court dismissed the case without prejudice on June 2, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
2-82CW142	Grape Creek	1	6/3/1982	Arkansas Headwaters	Custer
2-82CW150	Music Pass Creek	0.5	6/3/1982	Arkansas Headwaters	Custer

**(7) Case No. 09CW190 (Water Division 4)- Application of San Miguel Valley Corp**

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 amended plan for augmentation and change of water rights do not injure the Board's instream flow water rights on Cornet Creek and the San Miguel River by expansion of use or by not replacing out-of-priority depletions in the proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case is not yet decreed, as of July 1, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
4-05CW148	Cornet Creek	0.85 to 9	1/25/2005	San Miguel	San Miguel
4-84CW427	San Miguel River	6.5	7/13/1984	San Miguel	San Miguel
4-05CW154	San Miguel River	4	1/25/2005	San Miguel	San Miguel
4-84CW429	San Miguel River	20	7/13/1984	San Miguel	San Miguel Montrose
4-02CW277	San Miguel River	61 (10/15 - 4/30) 93 (5/1 - 10/14)	1/23/2002	San Miguel	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:

- Water right claims and changes were clarified throughout the draft decree. Applicant has agreed that a "fill" and refill" storage right does not include "freshening flows, and thus removed that description for its changed water rights."

- A map showing all exchanges is included in the stipulated decree.
- “In order to protect the Colorado Water Conservation Board's senior minimum in-stream flow water rights as described in the above referenced decrees the following terms and conditions are necessary to prevent such injury.
  - o A. In connection with the diversion of water under the junior priority water storage rights for the SMVC Blue Lake Nos. 2, 3 and 4, SMVC Blue Lake Diversion, or the SMVC Mill Creek Municipal Diversion, at any time when the stream flow of the San Miguel River (downstream from the diversion points for these water rights and within the decreed MISF reaches) is less than the amounts decreed to the CWCB in Case Nos. 84CW427 and 84CW429, Applicant agrees to either: (1) Curtail its diversions, or (2) Replace the depletions, or diversions in such instances as all diversions are depletive, by such means as available to Applicant including reservoir releases, in time and amount, upstream from the place where the depletions impact the river system and result in stream flows less than senior CWCB MISF appropriations.
  - o B. In connection with the diversion of water under the junior priority water rights for the SMVC Well Nos. 3 and 5 (including their associated well fields), and the accompanying augmentation plan, at any time when the stream flow of the San Miguel River (downstream from the points at which these wells depletions accrue to the San Miguel River and within the decreed MISF reaches) is less than the amounts decreed to the CWCB in Case Nos. 84CW427 and 84CW429, Applicant agrees to replace the depletions, or diversions in such instances as all diversions are depletive, in time and amount, upstream from the place where the depletions impact the river system.
  - o C. In connection with the diversion of water under the changed water rights (SMVC Blue Lake Diversion and the SMVC Mill Creek Municipal Diversion), the Applicant shall not divert more water at the new points of diversion than is physically and legally available at the original points of diversion. In addition, for the original water rights that are located downstream from the new points of diversion, the Applicant agrees not to divert at the new upstream points of diversion, unless all of the decreed MISF reaches between the original point of diversion and the new point of diversion are satisfied. In addition, during the irrigation season, the Applicant agrees not to exceed Applicant's ownership portion of the monthly historical consumptive use of these water rights set forth in Paragraph 22 of the original decree in consolidated Case Nos. 91CW127 and 98CW239, as allocated in Case No. 04CV22.
  - o D. With regard to the Applicant's appropriative rights of exchange (SMVC Deep Creek Exchange, Mill Creek System Exchange, and San Miguel River Exchange), the Applicant agrees not to operate these exchanges at times and in those reaches of the San Miguel River in which the CWCB holds MISF water rights when the CWCB's minimum in-stream flow water rights in such reaches are not satisfied, to the extent that said MISF water rights are senior to said exchanges.

(8) Case No. 12CW193 (Water Division 5) - Application of Thomas P. and Lucy L. Danis  
The Board ratified this statement of opposition at its March 2013 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 of the Danis Well Pond System does not injure the Board's instream flow water rights on Snowmass Creek, Capitol Creek, and the Roaring Fork River by not replacing out-of-priority depletions in the proper time, place, or amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case is not yet decreed, as of July 1, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
5-76W2943B	Snowmass Creek	11/12	1/14/1976	Roaring Fork	Pitkin
5-92CW281	Snowmass Creek	10.5	9/15/1992	Roaring Fork	Pitkin
5-76W2943A	Snowmass Creek	12	1/14/1976	Roaring Fork	Pitkin
5-92CW280	Snowmass Creek	3	9/15/1992	Roaring Fork	Pitkin
5-76W2941	Capitol Creek	10	1/14/1976	Roaring Fork	Pitkin
5-85CW646	Roaring Fork River	30/55	11/8/1985	Roaring Fork	Pitkin, Eagle

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

- "Applicants' 1.0 c.f.s. interest in the Williams No. 4 Ditch, Priority 63A water right will be used in the following manner. The changed 0.294 c.f.s. can be used either in the augmentation plan described in paragraph 8 below, or, pursuant to the terms of this Decree, to continue to irrigate the 6.25 historically irrigated acres on the Donnelley Property shown on Figure 5. The remaining 0.706 c.f.s. may continue to be used to irrigate the approximately 15 historically irrigated acres on Applicants' property. Applicants will not irrigate different or additional acreage absent a separate change of water right case or substitute water supply plan."
- "The CWCB holds senior instream flow water rights that may place calls on Snowmass Creek from its confluence with Capitol Creek to the Roaring Fork River, and on the Roaring Fork River above its confluence with the Fryingpan River. Applicants have not demonstrated that any uses at either the Danis Well Pond System or Danis Entry Well Pond existed at the times that the CWCB appropriated its instream flow water rights listed in paragraph 9.H.ii below. The CWCB's water rights are therefore not subject to any uses at the Danis Well Pond System or Danis Entry Well Pond under C.R.S. § 37-92-102(3)(b)."
- "In the event of a valid and administered local call, Applicants will immediately implement the Dry-Up Covenant pursuant to paragraph 7.H.iii above, and will replace all out-of-priority evaporation depletions from the Danis Well Pond System and Danis Entry Well Pond by bypassing HCU credits created by the dry-up of the 6.25 acres of land historically irrigated under 0.294 c.f.s. in the Williams No. 4 Ditch, Priority 63A as described and changed in the Third Claim, surface water return flows, and the portion of the total decreed rate historically not diverted on average at the Williams No. 4

Ditch headgate in the following amounts. During a local call, Applicants will bypass and not divert 0.272 c.f.s. in May; 0.207 c.f.s. in June; 0.199 c.f.s. in July; 0.202 c.f.s. in August; 0.222 c.f.s. in September; and 0.249 c.f.s. in October.”

- “Applicants will install a staff gauge into, and create a detailed stage capacity curve for, both pond systems to fully implement this plan. Applicants will measure and account for the water put into the Danis Entry Well Pond and any water released from the lined water feature components of the Danis Well Pond System using methods acceptable to the Division Engineer.”
- “When a local call occurs in November and the lined water feature is used to release HCU credits pursuant to this Plan, the lined water feature must not store any water during this time. The lined water feature may then refill with overflow from the main pond only during free river or anytime with HCU credits.”
- “Applicants will not operate the exchange through the instream flow water rights identified in the table above at any time the instream flow water rights are not being met and are administered by the Division Engineer.”

**(9) Case No. 14CW3129 (Water Division 5) - Application of John I. Zabriskie Revocable Trust and Adelaide W. Zabriskie Revocable Trust**

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 plan for augmentation from Zabriskie Pond and change of a portion of Applicant’s water rights to Williams No. 4 Ditch do not injure the Board’s instream flow water rights on Snowmass Creek and the Roaring Fork River. The Board identified the potential for injury due to expansion of use, alteration in the timing, place, or amount of historical return flows, or out-of-priority depletions that are not replaced in the proper time, place, or amount. Staff, in cooperation with the Attorney General’s Office, has negotiated a settlement to ensure that the CWCB’s instream flow water rights will not be injured. This case is not yet decreed, as of July 1, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
5-85CW639	Roaring Fork River	75 145	11/8/1985	Roaring Fork	Pitkin, Garfield, Eagle
5-10CW184C	Roaring Fork River	0.05 to 0.52	6/30/1904	Roaring Fork	Pitkin
5-85CW646	Roaring Fork River	30 55	11/8/1985	Roaring Fork	Pitkin, Eagle
5-76W2943B	Snowmass Creek	11 12	1/14/1976	Roaring Fork	Pitkin
5-92CW281	Snowmass Creek	10.5	9/15/1992	Roaring Fork	Pitkin
5-92CW280	Snowmass Creek	3.0	9/15/1992	Roaring Fork	Pitkin
5-76W2943A	Snowmass Creek	12.0	1/14/1976	Roaring Fork	Pitkin

In addition to standard terms regarding measuring devices, accounting and retained jurisdiction, the Applicant agreed to further define its sources of water rights requested and agree to the following additional protective terms and conditions:

- Applicants shall install an Agri Drain or other style of outlet devices from the pond into the northerly lateral ditch and shall also install a low-level outlet to the northerly lateral ditch, acceptable to the Division 5 Engineer.”
- “Applicants shall install a capped monitoring well located within twenty (20) feet southerly of the Zabriskie Pond which monitoring well shall have an outside diameter of two (2) inches and a depth of eight (8) feet with a perforated section of pipe from a depth of seven (7) feet, which is bottom elevation of the pond, to a depth of 8 feet for the purpose of the Water Commissioner’s monitoring shallow groundwater table elevation relative to the bottom of the Zabriskie Pond and thereby determining whether shallow, unconfined, alluvial groundwater tributary to Snowmass Creek is being intercepted and diverted by, and stored in the pond.”
- “Applicants will maintain historical irrigation return flows as follows. The monthly non-consumptive flow rates provided in Table 1 will be diverted from Snowmass Creek at the Williams No. 4 Ditch headgate and immediately returned to Snowmass Creek through the Williams No. 4 Ditch return flow structure, or will not be diverted at the Williams No. 4 Ditch headgate depending on physical structures present at the headgate.”
- During a call when no HCU credits are available, “Applicants shall lower the elevation of the Zabriskie Pond and bypass all diversion of water from the unnamed stream as provided [in the decree] to prevent out-of-priority depletion of said stream reaches.”

(10) Case No. 14CW3168 (Water Division 5) - Application of Elk Wallow Ranch, 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 plan for augmentation does not injure the Board’s instream flow water rights on Roaring Fork River by not replacing out-of-priority depletions in the proper time, place, or amount. Staff, in cooperation with the Attorney General’s Office, has negotiated a settlement to ensure that the CWCB’s instream flow water rights will not be injured. The case was decreed on June 12, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
5-85CW639	Roaring Fork River	75 145	11/8/1985	Roaring Fork	Pitkin, Garfield, Eagle
5-10CW184C	Roaring Fork River	0.05 to 0.52	6/30/1904	Roaring Fork	Pitkin
5-85CW646	Roaring Fork River	30 55	11/8/1985	Roaring Fork	Pitkin, Eagle

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

- “It is assumed that all diversions augmented under this decree are 100% consumptive.”
- “The exchange [for this augmentation plan] shall only operate in priority and shall only operate at times and to the extent that the instream flow rights located within the pertinent exchange stream reaches is being satisfied.” Therefore, if the instream flow right is not being satisfied, “Elk Wallow will (1) bypass out-of-priority inflows from all surface tributaries and springs; (2) curtail all diversions junior to the local calling right; and (3) store only senior surface water.”
- References to a “local call” as used in this decree refers to a call from a water right upstream of the confluence of the Roaring Fork River and Fryingpan River that is senior to the storage rights [to be augmented] or senior to the exchange decreed herein.”

**(11) Case No. 15CW3000 (Water Division 5) - Application of the Town of Silverthorne**

The Board ratified this statement of opposition at its May 2015 meeting. The Board’s main objective in filing the statement of opposition in this case was to ensure that the Applicant’s proposed correction for Silverthorne Well Nos. 1 and 2 does not injure the Board’s instream flow water rights on the Blue River by altering engineering assumptions used in the existing plans for augmentation. Staff, in cooperation with the Attorney General’s Office, has negotiated a settlement to ensure that the CWCB’s instream flow water rights will not be injured. This case is not yet decreed, as of July 1, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
5-86CW211, 211A, 204, 217	Blue River	1 to 32	3/14/1986	Blue	Summit
5-87CW294, 295, 296, 297, 298	Blue River	50 to 125	10/2/1987	Blue	Summit
5-05CW264	Blue River	Varies (0.02 to 3.51)	5/23/1904	Blue	Summit
5-87CW299	Blue River	60 to 85	10/2/1987	Blue	Summit

In this case, Applicant sought to correct points of diversion for two wells. The new location could have impacted several augmentation plans and changed water rights for these wells. To resolve the case, Applicant has agreed to the following protective term and condition:

- “The maximum instantaneous diversion from each structure is limited to 300 gpm (0.67 cfs) regardless of the water right diverted through the structure.”

**(12) Case No. 15CW3107 (Water Division 5) - Application of Michael Dalton, Suzanne Dalton, and Mary McMahon**

The Board ratified this statement of opposition at its March 2016 meeting. The Board’s main objective in filing the statement of opposition in this case was to ensure that the Applicant’s proposed plan for augmentation does not injure the Board’s instream flow water rights on the Crystal River by not replacing out-of-priority depletions in the proper time, place, or amount.

Furthermore, the Board identified that the proposed flow through water right could injure the CWCB's instream flow water right because it is fully depletive to a segment of the intervening instream flow. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case is not yet decreed, as of July 1, 2016.

The CWCB holds the following ISF water right(s) that could have been injured by this application:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
5-75W2721	Crystal River	40 80	5/1/1975	Roaring Fork	Gunnison, Pitkin
5-75W2720	Crystal River	60 100	5/1/1975	Roaring Fork	Garfield, Pitkin

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 of a local call [ References to a "local call" refer to a call from a water right on the Crystal River upstream of its confluence with the Roaring Fork River and downstream of Applicants' diversions, which is senior to the storage right decreed herein, or senior to the exchange decreed herein] on the Crystal River, the claimed water rights will be administered in priority or water will be allowed to flow through the pond and back to a point at or above the point of diversion together with an amount to cover any evaporative depletions."
- "The Gordon Pond will operate as a flow-through pond, receiving freshening flows from the Gordon Pump and Pipeline at a rate not to exceed 0.5 cfs throughout the year pursuant to the plan for augmentation described below. The Gordon Pond will be constructed with a staff gauge and low level outlet to allow for releases to be made consistent with the plan for augmentation described below. In addition, the pond will be constructed in a manner that it will not intercept groundwater. In the event ground water is exposed, Gordon Pond will be backfilled so as not to expose ground water until such time as: 1) a well permit has been obtained for the ground water pond pursuant to CRS §37-90-137 and any associated water storage rights have been vacated; or 2) Gordon Pond is lined in accordance with the State Engineer's guidelines dated August 1999."

The following case was partially resolved by Staff through negotiated letters in lieu of filing a water court Statement of Opposition. This method of settlement is preferred when facts and time allow such negotiation before the Statement of Opposition period ends. This case was negotiated to resolution in May 2016:

**(1) Case No. 16CW3007 (Water Division 4) - Application of Dr. Ruth L. Willey**

During the February 2016 Water Court Resume Review, conducted in April 2016, CWCB staff identified concerns regarding potential injury to CWCB's instream flow water rights decreed in Case Nos. 4-80CW381, 4-80CW382, 4-10CW183, and 4-10CW182 on Cebolla Creek. This case has been partially resolved by a letter agreement in which CWCB agreed to not to file a statement of opposition provided Applicant agreed to the following:



- Applicant will file an amended application before the end of May 2016 for the change of water rights to be made under the standard change statute rather than the simple change statute.
- Applicant will not oppose a CWCB motion to intervene filed by the end of June 2016 if the amended application is not filed by the end of May 2016.
- Applicant will work with CWCB during the statement of opposition period after the amended application is filed to substantiate any of Applicant's pre-existing uses for the changed water right.



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street  
Denver, CO 80203

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

John Hickenlooper, Governor

Robert Randall, DNR Executive Director

James Eklund, CWCB Director

**TO:** Colorado Water Conservation Board Members

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

**DATE:** July 20-21, 2016 Board Meeting

**DIRECTORS REPORT:** Water Project Loan Program  
Interest Rates

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### 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:

- 1.55% - Agricultural
- 2.20% - Low-income Municipal
- 2.50% - Middle-income Municipal
- 2.85% - 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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James Eklund, CWCB Director

**TO:** Colorado Water Conservation Board Members

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

**DATE:** July 20-21, 2016 Board Meeting

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

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The Finance Section compiles a list of prequalified projects for the Water Project Loan Program. In order to be included on this list, potential borrowers must submit a Loan Application and three 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						
City of Fort Collins Utilities	Michigan Ditch Reconstruction	Nov 1, 2015	North Platte* (Project location)	The purpose of this project is to repair the section of the Michigan Ditch that failed as a result of a land slide.	\$7,050,000	\$6,345,000
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
Totals					\$9,550,000	\$7,107,500

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 loan feasibility study.

### South Platte River Basin

Borrower	Project	Potential Loan Amount
•NISP Participants	NISP	\$100,000,000
•Colorado Trout Group	Reservoir Rehabilitation	\$300,000
•Kembel Reservoir	Reservoir Rehabilitation	\$100,000
•Upper Platte & Beaver Ditch Co.	Diversion Structure	\$5,000,000
•Bijou Irrigation District	Reservoir Rehabilitation	\$500,000
•St Vrain and Left Hand WCD	Reservoir Rehabilitation	\$1,000,000
•Town of Firestone	Water Rights/Storage	\$3,000,000
•Central CO WCD	Pipeline Project	\$4,000,000
•Larimer and Weld Irr. Co.	Reservoir Inlet	\$4,000,000
•Parker Water & Sanitation District	Water Meter Project	\$5,000,000
•Metro Homeowners Association	Water Meter Project	\$300,000
•Chatfield Reallocation Members	Chatfield Reallocation Project	\$40,000,000
•Subtotal		\$163,200,000

### Arkansas River Basin

•City of Walsenburg	Reservoir(s) Rehabilitation	\$6,000,000
•Stonewall Springs, LLC	Reservoir Construction	\$5,500,000
•Colorado Springs Flycasting Club	Reservoir Rehabilitation	\$450,000
•Oxford Ditch	Siphon Repair	\$1,800,000
•Town of Manitou Springs	Raw Water Pipeline	\$3,000,000
•City of Woodland Park	Storage Project	\$1,000,000
•Subtotal		\$17,750,000

### San Miguel/San Juan River Basin

•Town of Norwood	Dual Water System	\$1,700,000
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### Colorado River Basin

•Kendall Reservoir	Reservoir Rehabilitation	\$200,000
•Orchard Mesa Irrigation District	Hydro Project	\$5,000,000
•Private Borrower	Reservoir Rehabilitation	\$250,000
•Subtotal		\$5,650,000

### Gunnison River Basin

•Gunnison County Electric	Hydroelectric Project	\$1,000,000
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### Rio Grande Basin

•Manasa Land & Irrigation Co.	Ditch Rehabilitation	\$6,000,000
•Baca Grande Water and San District	Water Rights Purchase	\$1,000,000
•Sanchez Ditch and Reservoir Co.	Dam Rehabilitation	\$4,000,000
•Rio Grande WCD	Water Rights Purchase	\$5,000,000
•Subtotal		\$11,000,000

### Yampa River Basin

•Town of Oak Creek	Reservoir Rehabilitation	\$500,000
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**TO:** Colorado Water Conservation Board Members**FROM:** Jodie Tavares, Loan Program Assistant  
Kirk Russell, P.E., Finance Section Chief**BOARD MEETING:** July 20-21, 2016**DIRECTORS REPORT:** Water Project Loan Program  
Design & Construction Status Report

The CWCB Loan Program has Substantially Completed twenty-one (21) projects in Fiscal Year 15/16 as shown in Table 1. There are currently fifty-six (56) projects authorized to receive loan funding totaling \$238.8 million. There are forty-eight (48) projects currently under contract and in the Design and Construction phase totaling \$176 million. There are an additional nineteen (19) Emergency Loans approved totaling \$23 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	East Mesa Water Company	Ditch Piping Project	Pitkin/Weld	\$732,927	7/1/15
2	Greeley Irrigation Company	Greeley Canal No. 3 Rehab.	Weld	\$1,134,839	7/1/15
3	Eckhardt Farms Inc.	Water Rights Purchase	Weld	\$1,232,036	9/1/15
4	Penrose Water District	Water Rights & Pipeline Install	Fremont	\$8,615,684	10/1/15
5	Santa Maria Reservoir Co.	Siphon and Canal System Rehab.	Hinsdale/ Mineral	\$1,405,163	11/1/15
6	Santa Maria Reservoir Co.	Dam Spillway Restoration	Hinsdale/ Mineral	\$3,677,663	11/1/15(a)
7	Lower Poudre Augment. CO.	Cornish Water Rights Purchase	Larimer/Weld	\$1,163,500	11/1/15
8	Crystal Lakes W&S Assoc.	Lower Lone Pine Enlargement	Larimer	\$2,016,460	1/1/2016 (b)
9	Town of Ridgway	Lake Otonowanda Rehabilitation	Ouray	\$606,000	1/1/16 (c)
10	Lower Poudre Augment. Co.	Box Elder Water Rights Purchase	Larimer/ Weld	\$454,500	1/1/16
11	Lower Arkansas Valley WCD	Water Rights Purchase	Lower Ark. Dist.	\$2,560,350	3/1/16
12	Fort Lyon Canal Company	Replace of Horse Creek Flume	Otero/Bent/ Prowers	\$1,542,296	4/1/16
13	Fulton Irrigating Ditch Co.	Diversion Structure Rehab.	Adams	\$1,947,138	4/1/16
14	Bergen Ditch & Reservoir Co	Bergen Reservoir No. 2 Rehab.	Jefferson	\$2,110,765	4/1/16 (d)
15	Upper Platte & Beaver Cr. Canal Co	Hospital Rd Recharge Fac. & Bridge	Morgan	\$119,685	4/1/16
16	Owl Creek Reservoir Co.	Owl Creek Reservoir Rehab.	Weld	\$485,000	5/1/16
17	Brighton Ditch Company	River Breach Repair Project	Adams	\$225,000	5/1/16
18	McDonald Ditch Company	Ditch Diversion and Headgate Replace	Rio Grande	\$101,000	5/1/16
19	Las Animas Con. Canal Company	Repair & Replace of Spillway Structure	Bent	\$95,054	6/1/16
20	Left Hand Ditch Company	Allen Lake and Lake Isabelle Repair	Boulder	\$1,332,562	6/1/16 (e)
21	Colorado Parks & Wildlife	Beaver Park Reservoir Rehabilitation	Rio Grande	\$10,000,000	6/1/16 (f)
		Total:		\$41,557,621	

Fiscal Year 15/16 has added or preserved 16,380 AF of reservoir storage [ (a) 12,000, (b) 90, (c) 109, (d) 726, (e) 1,254 (f) 2,201]





### 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		

## Water Rights Purchase

Eckhardt Farms, Inc.  
Substantially Complete September 2015



### Project Description

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 intended to purchase the water it had been leasing for the past seven years and continue to use it for agricultural production. Those shares later became unavailable to purchase and the Corporation identified a total of 16.06 shares of Farmers Independent and 2 shares of Western Mutual to be purchased under this loan. The loan was modified to reflect the new shares.

P R O J E C T D A T A		
<i>Sponsor:</i> Eckhardt Farms Inc.	<i>County:</i> Weld	<i>Water Source:</i> South Platte River
<i>Type of Loan:</i> Water Rights Purchase		<i>Board Approval Date:</i> Sept 2012/Jan 2015
<i>Terms of Loan:</i> \$1,232,035.88 at 1.75% for 30 years		
<i>Design Engineer:</i> White Sands Water Engineers, Inc		
<i>Contractor:</i> N/A		
<i>Project Elements:</i> Purchase of 16.06 Shares of Farmers Independent Ditch Company and 2.0 Shares of the Western Mutual Ditch Company.		





## Raw Water Acquisition and Utilization Project

Penrose Water District

Substantially Complete October 1, 2015



### Project Description

The District is located in Fremont County about 35 miles southwest of Colorado Springs and 20 miles west of Pueblo, and currently provides domestic water to approximately 4000 people with the equivalent of 1,870 residential taps in and around the unincorporated town of Penrose. The District entered into this project to secure water supplies for projected future growth and demand in drought years. The District's water supply is obtained by a lease with the Beaver Park Water, Inc., which 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.

This project saw the acquisition of water rights from the purchase of the Goodwin Ranch, 10/ 12 of the Pleasant Valley Ditch, with a change in use and change in point of diversion to approximately 6 miles downstream. With the construction of well infrastructure, a storage tank, pump station, and pipeline, water can now be diverted from 6 shallow alluvial wells immediately north of the Arkansas River and pumped approximately 6 miles through a 12- inch transmission line to Brush Hollow Reservoir or to the District's water plant. The Project also saw the installation of a flow monitoring gage at the headgate of the Pleasant Valley Ditch in support of the District's augmentation plan.

P R O J E C T D A T A		
<i>Sponsor:</i> Penrose Water District - Water Activity Enterprise	<i>County:</i> Fremont	<i>Water Source:</i> Arkansas River - Pleasant Valley Ditch
<i>Type of Loan:</i> Water Rights Purchase/ Pipeline	<i>Board Approval Date:</i> January 2007	
<i>Terms of Loan:</i> \$8,615,684 at 3.25% for 30 years		
<i>Design Engineer:</i> GMS Inc.		
<i>Contractor:</i> Pate Construction Company		
<i>Project Elements:</i> water rights purchase, well construction, storage tank and booster pump station construction, 36,400 LF of pipeline construction		



**Santa Maria Reservoir**  
**Siphon and Canal System Rehabilitation Project**  
Santa Maria Reservoir Company  
Substantially Complete November 1, 2015



### Project Description

The 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 completed a two phased approach to rehabilitate its system. The first phase (this project) was the rehabilitation of the conveyance system between the reservoirs including repairs to the siphon support system and lining of the canal. Funding for this project also included \$463,750 in grant funds from the CWCB's WSRA program.

P R O J E C T D A T A		
<i>Sponsor:</i> The Santa Maria Reservoir Company	<i>County:</i> Hinsdale & Mineral	<i>Water Source:</i> North Clear Creek
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> March 19, 2013
<i>Terms of Loan:</i> \$1,405,163 @ 1.75% for 30 years		
<i>Design Engineer:</i> AECOM		
<i>Contractor:</i> RMS Utilities, Inc.		
<i>Project Elements:</i> 3,600 LF of 42-inch pipe, 1,060 LF of canal lining, 39 cubic yards of reinforced concrete overlays for thrust blocks		





## Continental Dam Spillway Restoration Project

Santa Maria Reservoir Company  
Substantially Complete November 1, 2015



### Project Description

The 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 completed a two phased approach to rehabilitate its system. The second phase (this project) was the rehabilitation of the spillway at Continental Reservoir and seepage control system added to the dam embankment. Funding for this project also included \$1,013,750 in grant funds from the CWCB's WSRA program.

P R O J E C T D A T A		
<i>Sponsor:</i> The Santa Maria Reservoir Company	<i>County:</i> Hinsdale & Mineral	<i>Water Source:</i> North Clear Creek
<i>Type of Loan:</i> Dam Rehabilitation		<i>Board Approval Date:</i> September 25, 2013
<i>Terms of Loan:</i> \$3,677,663 @ 1.75% for 30 years		
<i>Design Engineer:</i> AECOM		
<i>Contractor:</i> Moltz Constructors, Inc.		
<i>Project Elements:</i> 1,200 CY of concrete placed for spillway replacement, 6,000 CY of filter material placed in dam embankment		

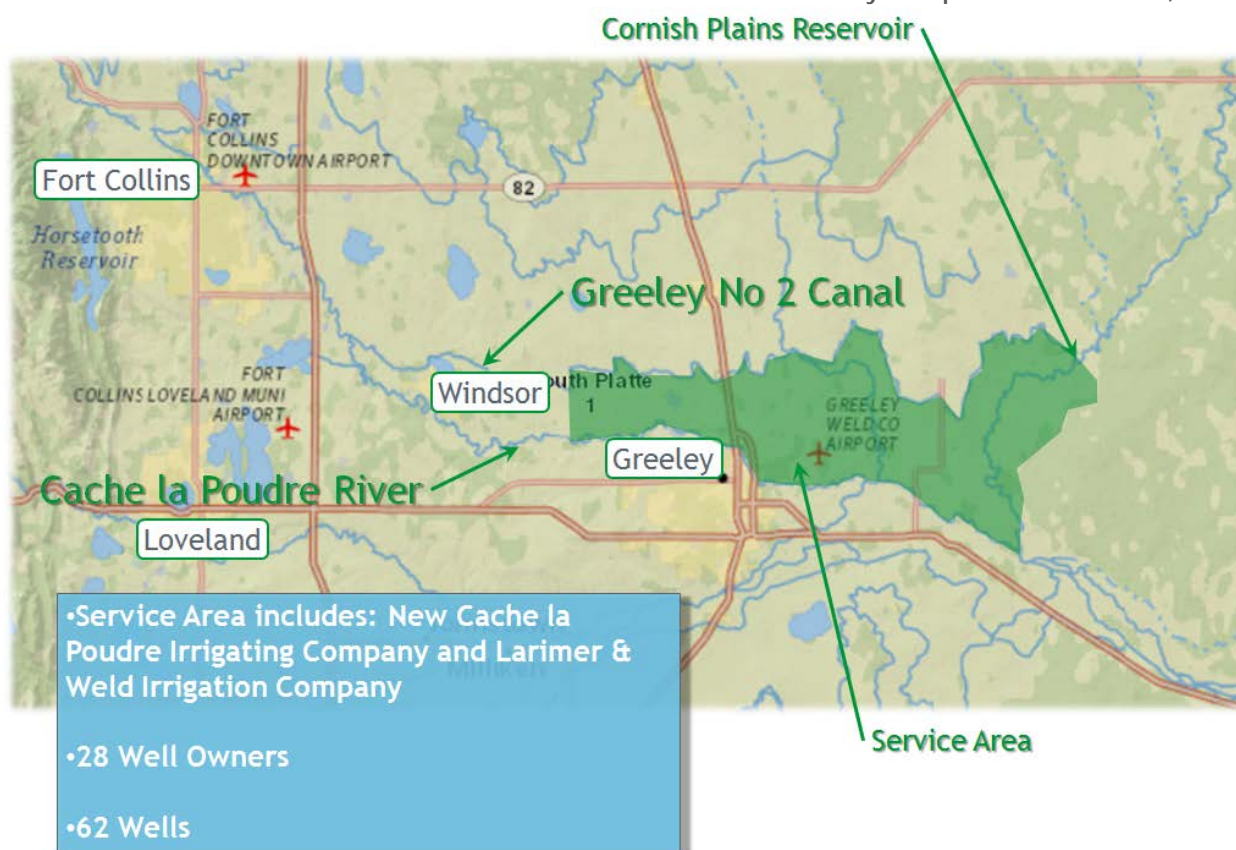


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## Cornish Water Rights Purchase

### Lower Poudre Augmentation Company

Substantially Complete November 1, 2015



### Project Description

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 a 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 were historically used on the Cornish Plains Farm but have been leased to the Company for use in its augmentation plan since 2004. This Project purchased those shares for permanent inclusion in the Company's augmentation plan.

P R O J E C T D A T A		
<i>Sponsor:</i> Lower Poudre Augmentation Company	<i>County:</i> Larimer & Weld	<i>Water Source:</i> Cache la Poudre River
<i>Type of Loan:</i> Water Rights Purchase		<i>Board Approval Date:</i> May 2015
<i>Terms of Loan:</i> \$1,163,015 @ 1.75% for 30 years		
<i>Design Engineer:</i> HRS Water Consultants, Inc.		
<i>Contractor:</i> NA		
<i>Project Elements:</i> Purchase of 34.5 shares of the Cache La Poudre Irrigating Company, and 4.0 shares of the Cache La Poudre Reservoir Company.		





# Lower Lone Pine Lake Enlargement Project

Crystal Lakes Water and Sewer Association  
Substantially Complete January 1, 2016



AFTER



BEFORE

## Project Description

Crystal Lakes Water and Sewer Association borrowed funds to enlarge Lower Lone Pine Lake from 10.5 AF to 100.5 AF. The increase provided augmentation water for the Crystal Lakes subdivision, located in Larimer County, servicing over 800 residences. These residences derive their water supply from individual wells. This increased storage capacity will protect the community against possible well curtailments.

P R O J E C T D A T A		
<i>Sponsor:</i> Crystal Lakes Water and Sewer Association	<i>County:</i> Larimer	<i>Water Source:</i> North Lone Pine Creek (tributary to Cache la Poudre River)
<i>Type of Loan:</i> Reservoir Enlargement		<i>Board Approval Date:</i> November 15, 2011
<i>Storage Increase:</i> 90 AF		
<i>Loan Terms: (Original)</i> \$2,016,459 @ 4.0% for 30 years <i>(Final)</i> \$2,016,459.59 @ 4.0% for 30 years		
<i>Design Engineer:</i> Wenck Associates, Inc.		
<i>Contractor:</i> American Civil Constructors, Inc.		
<i>Project Elements:</i> 550 CY of concrete placed for spillway replacement, 28,000 CY of filter material placed in dam embankment, and 2,500 CY of riprap		



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## Lake Otonowanda Rehabilitation Project

Town of Ridgway

Substantially Complete January 1, 2016



### Project Description

The rehabilitation improvements and enlargement of Lake Otonowanda was to ensure a reliable water supply of raw water that would be 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. 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, provided 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.

P R O J E C T   D A T A		
<i>Sponsor:</i> Town of Ridgway	<i>County:</i> Ouray	<i>Water Source:</i> Ridgway Ditch
<i>Type of Project:</i> Reservoir Enlargement		<i>Board Approval Date:</i> September 2012
<i>Loan Terms: (Original)</i> \$606,000 @ 3.0% for 30 years <i>(Final)</i> \$606,000		
<i>Design Engineer:</i> Joanne Fagan, PE, City Engineer		
<i>Contractor:</i> Rundle Construction, Hotchkiss CO		
<i>Project Elements:</i> replacment of outlet works, earthwork, and reservoir lining		



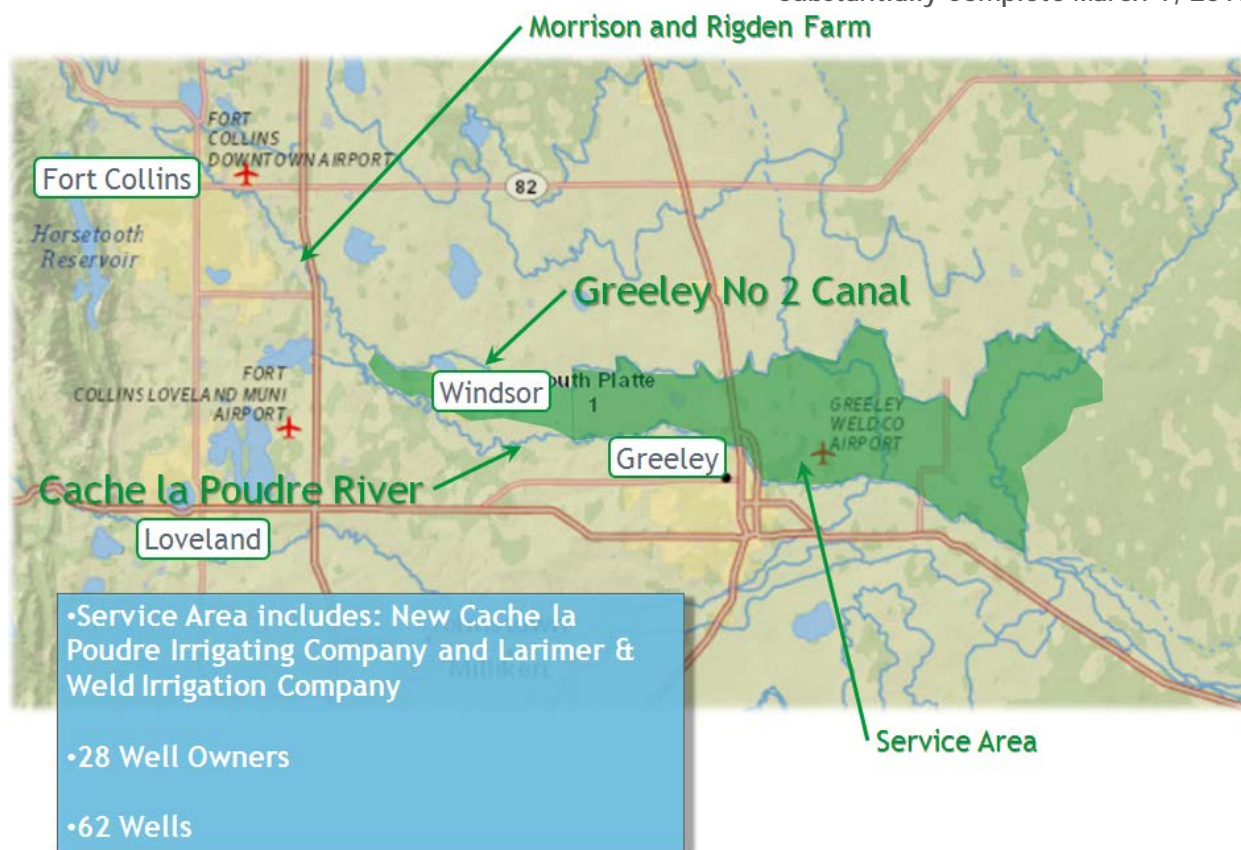


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## Box Elder Water Rights Purchase

### Lower Poudre Augmentation Company

Substantially Complete March 1, 2016



### Project Description

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 a 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. The Project purchased 0.5 Box Elder Ditch shares historically used on the Morrison Farm, and 1.5 Box Elder Ditch shares historically used on the Rigden Farm. The land historically irrigated by these shares is now the site of an active gravel pit and will become a lined reservoir at the conclusion of mining. Therefore, dry-up associated with the Subject Shares has already occurred. It is expected that while the Subject Shares are undergoing a change of use case in water court, that they will be available for use in the Company's augmentation plan as early as 2016 through a Substitute Water Supply Plan.

P R O J E C T   D A T A		
<i>Sponsor:</i> Lower Poudre Augmentation Company	<i>County:</i> Larimer & Weld	<i>Water Source:</i> Cache la Poudre River
<i>Type of Project:</i> Water Rights Purchase	<i>Board Approval Date:</i> September 2015	
<i>Loan Terms: (Original)</i> \$454,500 @ 1.85% for 30 years <i>(Final)</i> \$454,500 @ 1.85% for 30 years		
<i>Design Engineer:</i> Applegate Group, Inc.		
<i>Contractor:</i> NA		
<i>Project Elements:</i> Purchase of 0.5 Box Elder Ditch shares (Morrison Farm) and 1.5 Box Elder Ditch shares (Rigden Farm)		



## Water Rights Purchase Project

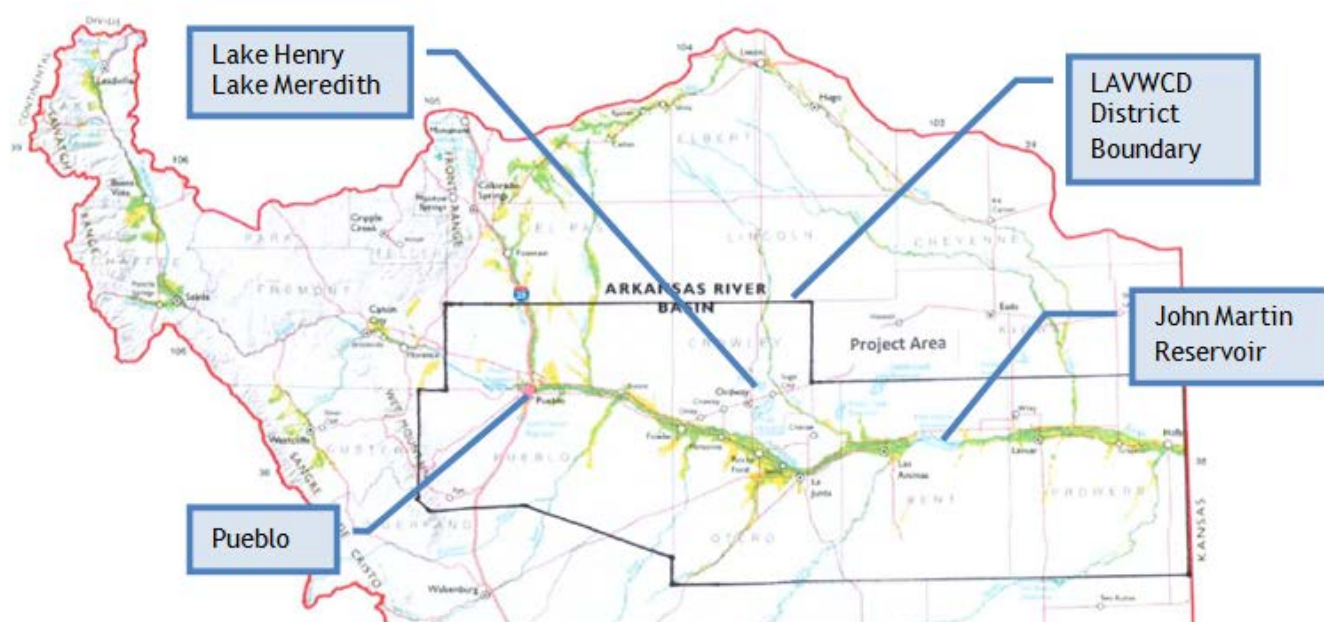
### Lower Arkansas Valley Water Conservancy District

Substantially Complete 1/1/2016

### Project Description

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 purchases 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.



P R O J E C T D A T A		
<i>Sponsor:</i> Lower Arkansas Valley WCD	<i>County:</i> Bent, Crowley, Prowers, Pueblo	<i>Water Source:</i> Arkansas River
<i>Type of Loan:</i> Water Rights Purchase		<i>Board Approval Date:</i> May 2015
<i>Terms of Loan:</i> \$2,560,350 @ 1.45% for 20 years		
<i>Design Engineer:</i> NA		
<i>Contractor:</i> NA		
<i>Project Elements:</i> Purchase of Water Rights		



## Replacement of the Horse Creek Flume

Fort Lyon Canal Company  
Substantially Complete April 1, 2016



### Project Description

The Horse Creek Flume has been in operation since 1938. The flume is a 400- foot- long, 10- foot- diameter, elevated steel pipe located on the Fort Lyon Canal where it crosses Horse Creek, approximately 10 miles northeast of La Junta and about 8 miles west of Las Animas, in Bent County, Colorado. Evaluations by multiple professional engineers found the flume to be in extremely poor condition and in need of immediate replacement. Failure of the flume, designed to convey 1800 cfs, could result in the loss of more than 50 million in crop revenue and loss of supply to more than 14, 000 acres of wildlife habitat in the downstream Queens and Thurston State Wildlife Areas. The flume was replaced with new 10-foot diameter pipe, tied into rehabilitated inlet and outlet works.

P R O J E C T D A T A		
<i>Sponsor:</i> Fort Lyon Canal Company	<i>County:</i> Otero, Bent, Prowers	<i>Water Source:</i> Horse Creek
<i>Type of Project:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> September 2015
<i>Terms of Loan:</i> 1.75% for 30 years (Original) \$1,629,130 (Final) \$1,542,296		
<i>Design Engineer:</i> SM&RC Structural Engineers, Inc.		
<i>Contractor:</i> Moltz Construction, Inc.		
<i>Project Elements:</i> Replacement of elevated flume structure, repair of inlet and outlet works		



## Diversion Structure Rehabilitation

### Fulton Irrigating Ditch Company

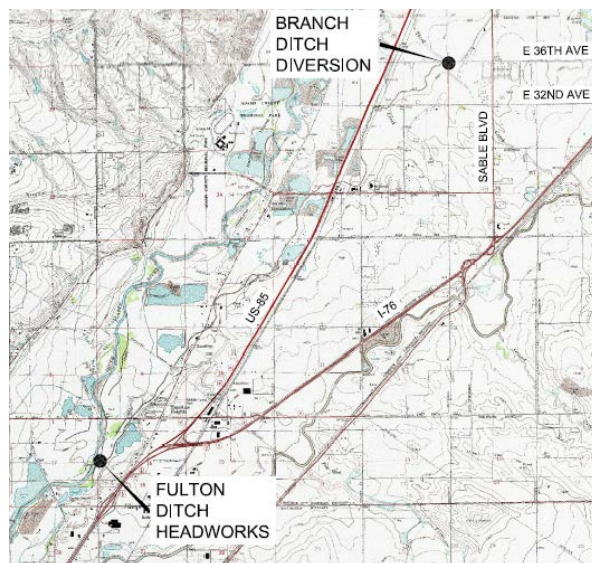
Substantially Complete April 1, 2016



### Project Description

The purpose of the Project was to replace the Company's South Platte River diversion gates, rehabilitate the existing trash rack, and install a gantry crane system to clean the trash gates automatically. The Project included reconstruction of the Branch Ditch Diversion Structure on the Fulton Ditch at a different site.

The Company diverts South Platte River water near 100th Avenue in Commerce City to a 38,000-acre service area. Increasing sago pond weed in the South Platte River was beginning to obstruct the flow of water through the existing trash rack. Construction began in spring of 2014, and completed spring of 2016.



P R O J E C T   D A T A		
<i>Sponsor:</i> Fulton Irrigating Ditch Co.	<i>County:</i> Adams	<i>Water Source:</i> South Platte River
<i>Type of Project:</i> Diversion Rehabilitation	<i>Board Approval Date:</i> May 2014	
<i>Loan Terms:</i> 2.45% for 30 years <i>(Original)</i> \$2,027,070 <i>(Final)</i> \$1,947,139		
<i>Design Engineer:</i> Deere and Ault Consultants, Inc.		
<i>Contractor:</i> Lillard & Clark Construction Company; Rodney Hunt - Fontaine (gates and hardware)		
<i>Project Elements:</i> Construction and installation of gantry crane grate cleaning system, rehabilitate trash rack, replace diversion gates and operators		





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## Bergen Reservoir No. 2 Rehabilitation

Bergen Ditch and Reservoir Company  
Substantially Complete April 1, 2016



### Project Description

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 of Bergen No. 2 Reservoir 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 generally consisted of removing and replacing the existing outlet works with a concrete encased 24 inch HDPE outlet, modifications to the embankment drain system, and upstream slope rehabilitation. Major construction activities occurred between June 2015 and December 2015. The SEO issued their Acceptance of Construction on February 29, 2016.

P R O J E C T   D A T A		
<i>Sponsor:</i> Bergen Ditch & Reservoir Company	<i>County:</i> Jefferson	<i>Water Source:</i> Turkey Creek
<i>Type of Loan:</i> Dam Rehabilitation	<i>Board Approval Date:</i> November 2012	
<i>Loan Terms: (Original)</i> \$2,111,102 @ 3.15% for 30 years <i>(Final)</i> \$2,110,764.54 @ 3.15% for 30 years		
<i>Design Engineer:</i> W.W. Wheeler & Associates		
<i>Contractor:</i> American West Construction		
<i>Project Elements:</i> 272 LF concrete encased 24” HDPE outlet pipe, concrete inlet and outlet structures, toe drain system, riprap upstream slope		



# Hospital Road Recharge Facility

## Upper Platte and Beaver Canal Company

Substantially Complete April 1, 2016



### Project Description

The Upper Platte & Beaver Canal Company, provides irrigation water to a 9,500-acre service area composed of irrigated alluvial land situated between the South Platte River and Beaver Creek, extending from its Platte River diversion headgate just west of the City of Fort Morgan to approximately 4 miles east of the Town of Brush.

Along with supplying irrigation water to shareholders, the Company operates a recharge plan that generates recharge credits to replace out-of-priority depletions attributable to well pumping. The Company has a decreed recharge plan involving recharge ponds, reaches, and augmentation wells. Currently, the operation of the recharge plan results in restrictions on well pumping due to the lack of recharge credits and requires the use of augmentation wells. The Company needed an additional recharge pond and especially needed a pond at a greater distance to the South Platte River.

This project included the construction of an additional recharge pond at a greater distance from the river to generate recharge credits of sufficient volume and proper timing to allow well pumping to provide a full water supply.

Note that the original project included the widening of an existing bridge at its main diversion facilities on the Platte River; this element project was not constructed, as the Company is investigating additional river diversion projects that will likely include those elements.

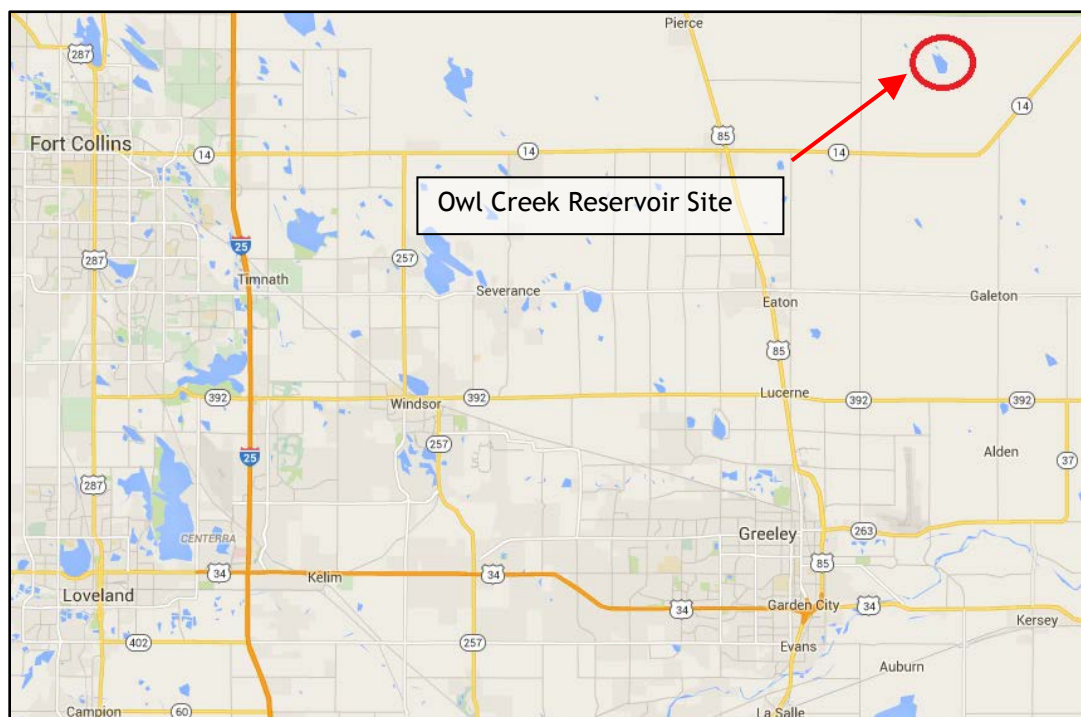
P R O J E C T   D A T A		
<i>Sponsor:</i> Upper Platte & Beaver Canal Co.	<i>County:</i> Morgan	<i>Water Source:</i> South Platte River
<i>Type of Project:</i> Augmentation	<i>Board Approval Date:</i> July 2014	
<i>Loan Terms:</i> 1.75% for 10 years <i>(Original)</i> \$190,890 <i>(Final)</i> \$119,685.76		
<i>Design Engineer:</i> TZA Water Engineers		
<i>Contractor:</i> Castle Rock Construction Company		
<i>Project Elements:</i> Excavation of an augmentation pond		





## Owl Creek Reservoir Project

Owl Creek Reservoir Company  
Substantially Complete May 2016



### Project Description

The Owl Creek dam was originally constructed in 1896 to store water for irrigation. It was constructed of a granular material that over the years suffered structural damage due to seepage. In 1983 sand boils appeared along the toe of the dam giving evidence that piping was occurring along the dam embankment. Given the condition of the dam embankment and the potential for failure, the dam was intentionally breached in 1983. The Owl Creek Reservoir is located in Weld County, approximately 6 miles east and 3 miles north of the Town of Ault. The source of water is from surface runoff from the Owl Creek basin, encompassing over 160 square miles of drainage area. The average flow in Owl Creek ranges from 1 to 10 cfs.

The Owl Creek Reservoir Company received a loan in 2001 to rehabilitate the Owl Creek Reservoir's dam and spillway, and to increase the storage capacity of the reservoir from approximately 800 acre-feet to 1,200 acre-feet. The Company has not made substantial progress towards completion of the project and allowed the loan contract to expire. The CWCB has decided to close out the project without a construction start.

P R O J E C T D A T A		
<i>Sponsor:</i> Owl Creek Reservoir Company	<i>County:</i> Weld	<i>Water Source:</i> Owl Creek
<i>Type of Project:</i> Reservoir Rehabilitation	<i>Board Approval Date:</i> May 2001	
<i>Loan Terms:</i> 3.25% for 30 years (Original) \$1,125,000.00 (Final) \$485,000.00		
<i>Design Engineer:</i> Applegate Group		
<i>Contractor:</i> Did not construct the project		
<i>Project Elements:</i> Design plans complete		



Diversion Prior to Flood



Diversion During Flood



Diversion After Construction

## Project Description

In May and June of 2015, the South Platte River experienced extended high flows. This resulted in a breach of the river bank between the Company's diversion structure and the upstream Ken Mitchell Ponds headgate owned by the City of Brighton. Approximately 120 feet of the east bank was washed out, directing the river away from the Company's diversion. The City of Brighton owns the property where the breach is located and the City of Aurora owns the Prairie Water Pipeline which was exposed by this breach. Neither the City of Brighton nor Aurora planned any immediate repairs to the breach. In order to restore flows to its headgate, the Company constructed a cofferdam on the east bank of the river to close this breach in July 2015.

P R O J E C T D A T A		
<i>Sponsor:</i> Brighton Ditch Company	<i>County:</i> Adams	<i>Water Source:</i> South Platte River
<i>Type of Project:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> September 2015
<i>Loan Terms: (Original)</i> \$225,000 for 30 years @ 2.55% <i>(Final)</i> \$225,000 for 30 years @ 2.55%		
<i>Design Engineer:</i> Deere & Ault Consultants, Inc.		
<i>Contractor:</i> Claystone Construction, LLC		
<i>Project Elements:</i> Repair bank breach on the South Platte River adjacent to diversion dam.		





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## McDonald Ditch Diversion and Headgate Replacements

McDonald Ditch Company

Substantially Complete May 1, 2016



*Photos courtesy from Rio Grande Headwaters Restoration Project's McDonald Ditch Final Report*

### Project Description

The McDonald Ditch Company is a Mutual Ditch Company formed in 1921. Their diversion structure and headgate were 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. The McDonald Ditch project was the first implementation phase of the Plaza Project and included the final engineering design and construction of a new diversion and headgate for the McDonald Ditch Company. During the final engineering the diversion was moved upstream of the W CR5 N Bridge (Sevenmile Plaza Bridge) in order to provide flood control benefits to the community. The project was successfully completed and was coordinated through the Colorado Rio Grande Restoration Foundation to incorporate improving community safety, enhancing aquatic and wildlife habitat, and providing boat and fish passage in addition to the Ditch Company's benefit of improving diversion efficiency and reducing maintenance.

P R O J E C T D A T A		
<i>Sponsor:</i> McDonald Ditch Company	<i>County:</i> Rio Grande	<i>Water Source:</i> Rio Grande River
<i>Type of Loan:</i> Ditch Rehabilitation		<i>Board Approval Date:</i> September 2013
<i>Terms of Loan:</i> \$101,000 for 20 years @ 2.50%		
<i>Design Engineer:</i> Natural Resources Conservation Service (NRCS)		
<i>Contractor:</i> Robins Construction		
<i>Project Elements:</i> 88 ft diversion dam with fish and boat passage; (2) radial gates with automation; 1,054 LF of 36 in HDPE pipe.		



## Repair & Replacement of the Canal Spillway Structure

Las Animas Consolidated Canal Company  
Substantially Complete June 1, 2016



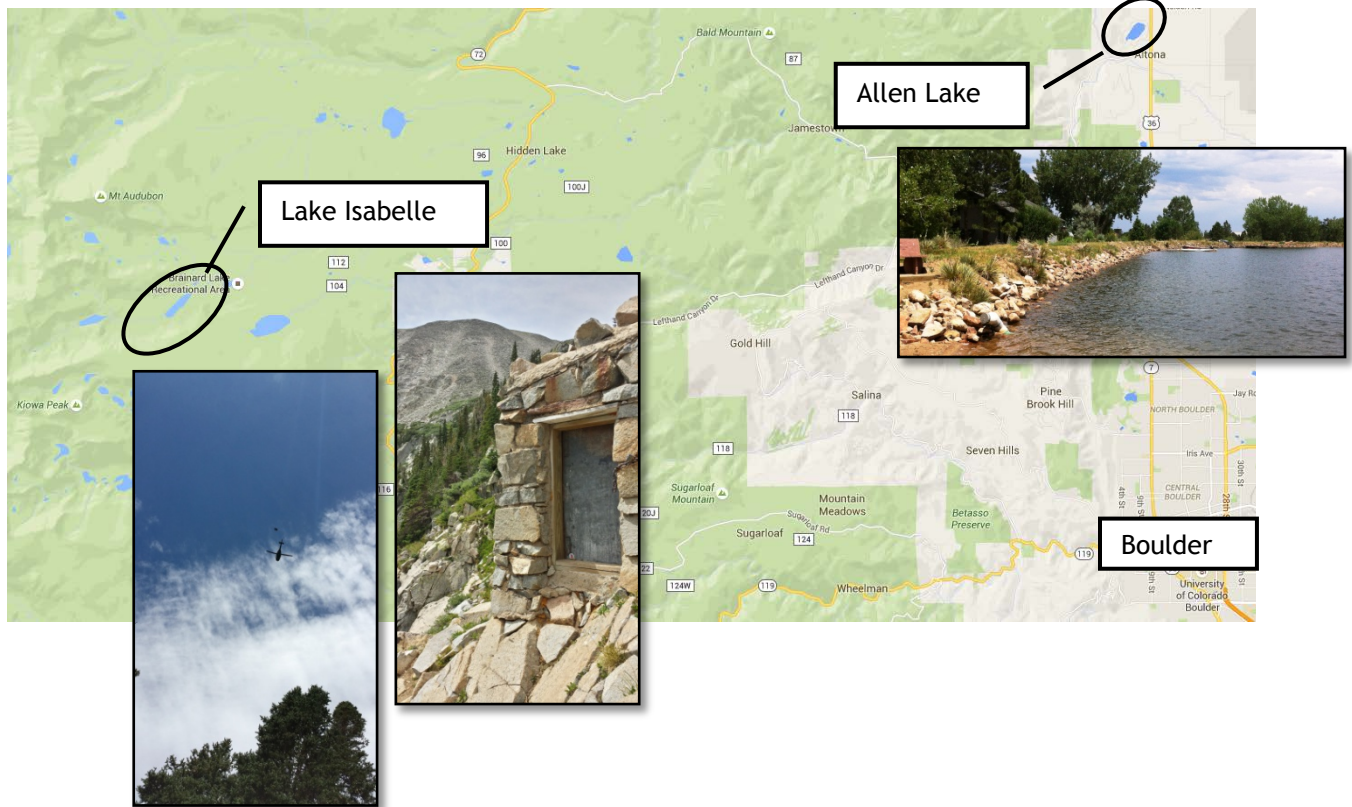
### Project Description

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. The Company replaced 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.

The Company ownership is comprised of 23% agricultural interests and 77% by Xcel Energy. The loan contract was amended upon completion based upon the satisfaction of a contract condition whereby the interest rate would be reduced from 5.05% to 2% pending payment of all non-agricultural interests in the project.

P R O J E C T   D A T A		
Sponsor: Las Animas Consolidated Canal Company	County: Bent	Water Source: Arkansas River
Type of Project: Ditch Rehabilitation	Board Approval Date: November, 2014	
Terms of Loan: (Original) \$363,782, 5.05% for 30 years (Final) \$95,054, 2.00% for 30 years		
Design Engineer: Wayne E. Eckas, P.E.		
Contractor: Tezak Heavy Equipment		
Project Elements: Replacement of elevated flume structure, repair of inlet and outlet works		





## Project Description

The Left Hand Ditch 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, were the subject of the CWCB loan request. Lake Isabelle lies within the Indian Peaks Wilderness which is operated by the Forest Service. The outlet works were deteriorated and unreliable and were replaced as a part of this project. The existing outlet pipe was sleeved with new pipe and a new gate valve was installed. In addition a new access gate to the outlet works was constructed. All construction materials had to be flown in via helicopter or carried in by the construction crew. The second reservoir, Allen Lake, is located north of Boulder and west of Highway 36. The 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 flattened out the slope and re-armored it with rock rip-rap. A new outlet pipe was also installed.

P R O J E C T   D A T A		
<i>Sponsor:</i> Left Hand Ditch Company	<i>County:</i> Boulder	<i>Water Source:</i> Left Hand and St. Vrain Creek
<i>Type of Loan:</i> Dam Rehabilitation		<i>Board Approval Date:</i> July 2012
<i>Loan Terms:</i> 2.45% for 30 years (Original) \$1,475,307.00 (Final) \$1,332,562.39		
<i>Design Engineer:</i> Smith Geotechnical		
<i>Contractor:</i> Left Hand Excavating		
<i>Project Elements:</i> Lake Isabelle: Sleeved existing outlet pipe with 80-feet of new pipe. Installed 20-inch double disk valve. Allen Lake: 125 LF of 20-inch cast-in-place concrete outlet pipe, 5,600 CY embankment fill material, 4,750 tons of rip rap placed.		



Prior to Construction

## Project Description

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 constructed a downstream filter/drain system, constructed a new outlet control structure, lined and extended the outlet 42in. outlet pipe, and raised and rehabilitated the spillway.

P R O J E C T   D A T A		
<i>Sponsor:</i> Colorado Parks and Wildlife	<i>County:</i> Rio Grande	<i>Water Source:</i> Beaver Creek
<i>Type of Loan:</i> Reservoir Rehabilitation		<i>Board Approval Date:</i> September 2012
<i>Loan Terms:</i> 0% for 30 years (Original) \$10,000,000.00 (Final) \$10,000,000.00		
<i>Design Engineer:</i> AECOM, URS		
<i>Contractor:</i> Phase 1 - Aslan Construction, Berthoud, CO; Phase 2 - ASI Constructors Inc, Pueblo CO		
<i>Project Elements:</i> raised and rehabilitated spillway, 6,000SF of soil nail wall, 450Ft of 42in. (linning and new outlet) pipe, 24,000CY Riprap, new outlet gates and structure		

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

Contract Borrower		County	Loan Amount	Annual Delivery	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	11	100%	Feb 2015 - Aug 2016	90%	ACM	A test well was drilled in winter of 2015 and did not produce the amount of water required by the District to meet its needs. That well was capped in Oct 2015 and appears to have had a positive impact on the water availability of the District's 2 remaining wells. The District is in a holding pattern as it continues to monitor the wells.
2	Bennett, Town of >Wells #3 and #6 Replacement Project CT2015-161	Adams Arapahoe	\$145,400	261	100%	May 2015 - Nov 2016	80%	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 winter 2016.
3	Bow Mar Water & Sanitation District >Rehabilitation and Replacement of Water Meters CT2016-2516	Arapahoe & Jefferson	\$332,795	338	100%	July 2016 - Sept 2016	1%	DRJ	Preconstruction meeting occurred. Construction imminent.
4	Boxelder Basin Regional Stormwater Authority > East Side Detention Facility Project C150353 (CT2015-070)	Larimer/ Weld	\$7,171,000	N/A	100%	Aug 2015 - June 2016	95%	JMH	SC 7/1/2016
5	Boxelder Basin Regional Stormwater Authority > County Rd 52 Culvert Project C150393 (CT2015-069)	Larimer/ Weld	\$818,100	N/A	100%	Aug 2015 - June 2016	98%	JMH	SC 7/1/2016
6	Boxelder Basin Regional Stormwater Authority > Larimer & Weld Canal Crossing Structure Project C150352 (CT2015-071)	Larimer/ Weld	\$1,010,000	N/A	100%	Dec 2015 - April 2016	99%	JMH	Construction began in December 2015. Construction is complete and contractor has turned site back over to ditch company control. Loan to substantially completed on August 1 after final pay request has been drawn in July.
7	Central CO WCD - WAS > Augmentation Water Supply Project C150337 (CT2015-060)	Weld/ Adams/ Morgan	\$3,030,000	20,400	50%	Apr 2013 - Mar 2017	30%	JMH	Purchased a portion of the water rights on 4/25/13. Additional water rights/projects being identified.
8 - CHATFIELD Reallocation Project - First Cost of Storage				44,456					\$54,633,223
	Castle Pines North Metropolitan District >(C150404A) CT2016- 2049	Arapahoe Douglas Park Weld	\$723,160		N/A	2019	N/A	JMH	This contract is to provide reimbursement for the Chatfield Reallocation Project, specific to the "first cost of storage." To date, Chatfield participants have not yet had to make this payment. It is now estimated funds may not be required until 2019.
	Centennial Water & Sanitation District >(C150405A) CT2016- 2053	Arapahoe Douglas Park Weld	\$4,978,290		N/A	2019	N/A	JMH	
	Center of Colorado Water Conservancy District >(C150406A) CT2016- 2047	Arapahoe Douglas Park Weld	\$94,637		N/A	2019	N/A	JMH	
	Central Colorado Water Conservancy District >(C150407A) CT2016- 2057	Arapahoe Douglas Park Weld	\$3,187,560		N/A	2019	N/A	JMH	

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

Contract Borrower		County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
9 - CHATFIELD Reallocation Project - Phase 1 Mitigation									\$31,486,120
	Castle Pines North Metropolitan District >(C150404B) CT2016- 2050	Arapahoe Douglas Park Weld	\$4,143,020		0%	2016 - 2022	0%	JMH	This contract is to provide reimbursement for the Chatfield Reallocation Project, for engineering, recreation facilities construction, on-site mitigation, off-site mitigation, and mitigation monitoring. Phase 1 covers the work required to be done to allow storage to occur.  The Chatfield Reservoir Mitigation Company has been formed and CDM Smith/Leonard Rice has been selected at the Project Program Manager. Engineering work to develop a final design and more specific construction cost estimate can now start.
	Centennial Water & Sanitation District >(C150405B) CT2016- 2055	Arapahoe Douglas Park Weld	\$28,527,450		0%	2016 - 2022	0%	JMH	
	Center of Colorado Water Conservancy District >(C150406B) CT2016- 2048	Arapahoe Douglas Park Weld	\$511,363		0%	2016 - 2022	0%	JMH	
	Central Colorado Water Conservancy District >(C150407B) CT2016- 2058	Arapahoe Douglas Park Weld	\$18,263,830		0%	2016 - 2022	0%	JMH	
10 - CHATFIELD Reallocation Project - Phase 2 Mitigation									\$1,558,810
	Castle Pines North Metropolitan District >(C150404C) CT2016- 2051	Arapahoe Douglas Park Weld	\$1,587,720		0%	2022 - 2028	0%	JMH	This contract is to provide reimbursement for the Chatfield Reallocation Project, for engineering, recreation facilities construction, on-site mitigation, off-site mitigation, and mitigation monitoring. Phase 2 will cover work remaining after storage is allowed.
	Centennial Water & Sanitation District >(C150405C) CT2016- 2056	Arapahoe Douglas Park Weld	\$10,934,260		0%	2022 - 2028	0%	JMH	
	Central Colorado Water Conservancy District >(C150407C) CT2016- 2060	Arapahoe Douglas Weld	\$700,310		0%	2022 - 2028	0%	JMH	
11	City of Cortez > Water Meter Replacement Project CT2015-152	Montezuma	\$858,500	2,600	100%	June 2015 - Sept 2016	95%	ACM	Notice to proceed was issued in June 2015. All of the meters that required relocation have been moved. New AMR meters have replaced the City's meters. Software upgrades are underway.
12	Ephraim Ditch Company > Ephraim Diversion and Headgate Rehabilitation C150402 (CT2015-090)	Rio Grande	\$101,000	4,100	100%	Aug 2015 - Jul 2016	95%	JMH	Fabrication of steel structures began August 2015. Diversion structure concrete work began Jan 2016. Structure is operational and automation has been installed. Work continues on getting automation fully operational
13	Farmers Pawnee Canal Company > Diversion Structure Replacement Project C150394 (CT2015-132)	Logan	\$2,067,470	27,956	100%	Mar 2014 - Nov 2015	99%	DRJ	Substantial completion expected Aug 1, waiting on company decision on finalizing.
14	Fowler, Town of > Augmentation Pipeline Project C150359 (CT2015-054)	Otero	\$277,245	157	100%	Fall 2016 - Winter 2016	0%	DRJ	Bid process imminent. Contract extension process completed..

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

	Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
15	Georgetown, Town of > Outlet Works Modification Project C150321 (CT2015-055)	Clear Creek	\$2,976,975	208	100%	Aug 2014 - Nov 2016	99%	ACM	Construction began in August 2014. Gate testing occurred on 4/28/15. The gate has operational issues. The gate manufacturer is fabricating replacement parts to be installed in the fall of 2016.
16	Grand Mesa Water Conservancy District > Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	\$227,250	400	100%	Mar 2013 - Nov 2016	50%	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 project is on hold until the permits are issued. SEO approved construction drawings in June 2016.
17	Greeley and Loveland Irrigation Company > Irrigation System Improvements C150362 (CT2015-022)	Larimer	\$3,745,080	45,000	100%	Summer 2014 - Apr 2016	99%	JMH	SC 7/1/2016
18	Gypsum, Town of > LEDE Ditch and Reservoir Rehabilitation C150296 (CT2015-058)	Eagle	\$2,690,000	1,200	100%	Jul 2013 - Sep 2016	75%	DRJ	2016 construction season commenced.
19	Huerfano County Water Conservancy District > Regional Augmentation Project C150364 (CT2015-047)	Huerfano	\$2,222,000	20	75%	Mar 2014 - Mar 2017	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 augmentation site.
20	Lake Canal Reservoir Company > North Gray Reservoir Rehab Project C150322 (CT2015-042)	Larimer/ Weld	\$204,298	333	100%	Nov 2015 - Mar 2016	99%	JMH	SC 7/1/2016
21	Lake Durango Water Authority > Source Water Supply Project C150317 (CT2015-013)	LaPlatta	\$2,525,000	309	100%	Mid 2016 - Mid 2017	0%	KGR	Project bid was higher than expected. Sponsors are looking into ways to reduce project costs.
22	Lake McIntosh Reservoir Company >Lake McIntosh Outlet Works Repair CT2016-2794	Boulder	\$1,727,100	1,533	80%	Fall 2016 - Spring 2017	0%	JMH	Final Design is near complete. Construction planned for after the 2016 irrigation season.
23	Lookout Mountain Water District > Upper Beaver Brook Dam Spillway CT2016-2515	Clear Creek	\$3,099,690		100%	June 2016 - August 2017	2%	DRJ	SEO approved plans and specifications. Contractor mobilizing.
24	Louden Irrigating Canal & Reservoir Company > Emergency Diversion Structure and Ditch Repair C150398 (CT2015-151)	Larimer	\$ 161,600	8,000	100%	Summer 201 - Jul 2016	90%	JMH	Initial repair phase of project is complete. Improvements to the diversion and heatgate system occurred in Fall of 2015. Handrails to be installed in spring 2016
25	Monte Vista, City of > Augmentation Water Rights Acquisition C150309 (CT2015-011)	Rio Grande	\$1,693,770	1,212	N/A	Oct 2010 - Jul 2017	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.
26	North Poudre Irrigation Co > Reservoir No. 4 Rehabilitation C150378 (CT2015-003)	Larimer	\$2,263,410	44,400	100%	Nov 2015 - Jun 2016	98%	JMH	Design was updated per SEO suggestion to upsize spillway to meet higher classification. Wildlife Mitigation completed in January 2015. Reservoir construction began November 2015. Final Walkthru occurred 6/28

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

	Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
27	Northern Colorado WCD- Hydropower Enterprise > Granby Hydropower Project C150396 (CT2015-140)	Grand	\$5,135,183	210,000	100%	May 2015 - May 2016	99%	JMH	Project has been complete and powerplant has been commissioned. Substantial Completion to occur after final pay request has been made.
28	Oligarchy Irrigation Company > Dam Outlet Works Rehabilitation CT2016-1597	Boulder	\$860,000	7,966	100%	May 2016 - Aug 2016	20%	JMH	SEO approved plans and specification on 3/1/16. Project was put out to bid in March 2016 and construction began in May 2015.
29	Overland Ditch and Reservoir Company > Overland Reservoir Rehabilitation C150206 (CT2015-034)	Delta	\$1,141,300	17,000	50%	Permitting	0%	KGR	Permitting issues are being addressed to enlarge reservoir. Company is concerned about the impact of increased costs to the project
30	Parkville Water District > Evans Reservoir Bypass Flume Project CT2016-2004	Lake	\$181,800	1,500	100%	Aug 2016 - Oct 2016	0%	DRJ	Contractor selected. Precon mid-July.
31	Pisgah Reservoir and Ditch Company > Mount Pisgah Dam/Wrights Res Rehabilitation C150341 (CT2015-027)	Teller	\$1,172,261	86,000	100%	June 2015 - Sep 2016	95%	JMH	Approved for additional loan funds at November 2014 and July 2015 Board Meeting. Phase 1 complete. Phase 2 began September 2015. Phase 3 began November 2015. Outlet works are now operational for 2016 irrigation season but due to a failure in a gate frame material, full completion will not occur until Fall 2016.
32	Plum Valley Heights Subdistrict > Raw Water Supply Project CT2015-176	Douglas	\$2,248,260	150	99%	Summer 2016 - Winter 2017	0%	JMH	Project has completed final design and is in process of US Fish and Wildlife Section 7 Consultation which they have till Mid-April to review, and then undergoes a 30 day public comment period. Construction is hoped to commence this summer and be completed by early 2017.
33	Prairie Ditch Company > Plaza Phase 3: Prairie Ditch Imp. Project C150400 (CT2015-134)	Rio Grande	\$131,300	16,000	100%	Oct 2015 - June 2016	99%	JMH	Bids for the diversion dam were received August 27, 2015 and construction began October 2015. Headgate phase was bid and awarded in November 2015. Diversion dam and headgate structures are complete.
34	Riverside Ditch and Allen Extension Company > Ditch System Rehabilitation C150301 (CT2015-050)	Chaffee	\$186,345	3,260	85%	Jul 2010 - June 2016	80%	KGR	Ditch lining phase of the project was completed in December 2010. NRCS La Junta Fld office has completed design plans for replacement of the river diversion structure. Const. expected in summer of 2017.
35	Riverside Reservoir and Land Company > Riverside Reservoir Spillway Enlargement C150291 (CT2015-026)	Weld	\$2,838,100	105,000	90%	Fall 2016+	0%	DRJ	Plans under review by SEO. Construction timing indeterminate.
36	San Luis Valley Water Conservancy District > Anaconda Ditch Water Right Acquisition C150348 (CT2015-166)	Alamosa	\$839,000	386	N/A	2016	N/A	ACM	Water rights purchase was pending a water court change case completion. The case was settled in December 2015. The District expects to close on the shares in late 2016.
37	Sanchez Ditch and Reservoir Company > Sanchez Reservoir Outlet Rehabilitation Project C150342 (CT2015-012)	Costilla	\$1,381,276	15,000	100%	Oct 2014 - March 2017	90%	ACM	Construction began in Oct 2014. Outlet works work was completed in Jan 2015. Seepage and monitoring work is scheduled for 2016.
38	Sanford Canal Company > Sanford Diversion and Headgate Rehabilitation C150401(CT2015-091)	Rio Grande	\$101,000	4,000	100%	Aug 2015 - Aug 2016	90%	JMH	NRCS has finalized design. Fabrication of steel structures began August 2015. Construction of diversion dam and headgates began in October 2015 and nearing completion. Concrete work is finished, sluice gate will be installed one river flow decreases



# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

	Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
39	Thunderbird W&S Dist > Lambert Ranch Water Rights Purchase C150320 (CT2015-049)	Douglas	\$318,150	55	100%	N/A	N/A	JMH	Closing was delayed until 2015 due to easement access to purchased wells. Closing on water rights occurred September 2015. Easement aquisition process is still underway.
40	Tunnel Water Company >Laramie-Poudre Tunnel Rehabilitation CT2016-2001	Larimer	\$1,111,000	6,875	100%	Sep 2015 - Fall 2016	60%	JMH	Phase 1 (Inlet) construction started September 2015. Box culverts installed and functional. Currently working on final grading and revegetation, to be completed by July 31. Phase 2 (outlet) construction not a part of current construction contract. Phase 2 to occur in Fall 2016.
41	Uncompahgre Valley Water Users Association >Drop 5 Hydroelectric Project CT2015-174	Montrose/ Delta	\$6,999,300	N/A	100%	Dec 2015 - Aug 2016	80%	KGR	Excavation and concrete placment underway. P
42	Upper Arkansas Water Conservancy District > Reservoir Rehabilitation C150192 (CT2015-052)	Chaffe/ Custer	\$3,009,800	500	100%	Permitting	90%	KGR	The first phase of construction was awarded to ASI, Buena Vista, CO, and completed in May 2007. The Permitting effort for the enlargment is underway and expected to be complete by Dec 2018.
43	West Reservoir and Ditch Company >Repair of West Reservoir No. 1 Outlet Works CT2015-169	Delta	\$248,378	604	100%	May 2015 - Sept 2016	50%	DRJ	Summer 2016 construction season under way.
44	Windsor, Town of > Kyger Reservoir Project C150366 (CT2015-057)	Larimer/ Weld	\$4,545,000	2,035	100%	Summer 2016 - Fall 2016	0%	JMH	Town purchased reservoir and water rights in summer 2014. Town completed design and permitting in spring 2016. Construction contract was awarded at the end of June 2016.
45 - WISE Project - ECCV Pipeline Purchase									\$2,227,050
	Cottonwood W&S Dist - C150408A (CT2015-102)	Douglas/ Arapahoe	\$381,780		N/A	Fall 2014 - Spring 2015	N/A	DRJ	80% funds disbursed.
	Inverness W&S Dist - C150409A (CT2015-117)	Douglas/ Arapahoe	\$1,845,270		N/A	Fall 2014 - Spring 2015	N/A	DRJ	No Inverness Request for Reimb received.
46 - WISE Project - Phase 1 Infructure									\$18,484,600
	Cottonwood W&S Dist - C150408B (CT2015-106)	Douglas/ Arapahoe	\$2,900,000		7%	Spring 2015 - Jan 2017	7%	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	\$1,300,000		18%	Spring 2015 - Jan 2017	18%	DRJ	
	Parker W&S Dist - C150410B (CT2015-108)	Douglas/ Arapahoe	\$7,464,600		9%	Spring 2015 - Jan 2017	9%	DRJ	

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
Pinery (Denver SE Sub W&S Dist) C150411B (CT2015-085)	Douglas/ Arapahoe	\$6,820,000		4%	Spring 2015 - Jan 2017	4%	DRJ	
47 - WISE Project - Phase 2 Infructure								\$7,400,078
Cottonwood W&S Dist - C150408C (CT2015-105)	Douglas/ Arapahoe	\$1,127,160		0%	Spring 2018 - Fall 2021	0%	DRJ	
Inverness W&S Dist - C150409C (CT2015-119)	Douglas/ Arapahoe	\$1,427,130		0%	Spring 2018 - Fall 2021	0%	DRJ	
Parker W&S Dist - C150410C (CT2015-109)	Douglas/ Arapahoe	\$3,418,658		0%	Spring 2018 - Fall 2021	0%	DRJ	
Denver SE Sub W&S Dist - C150411C (CT2015-086)	Douglas/ Arapahoe	\$1,427,130		0%	Spring 2018 - Fall 2021	0%	DRJ	
48 - WISE Project - DIA Connection								
Cottonwood W&S Dist - C150408D (CT2015-104)	Douglas/ Arapahoe	\$363,600		N/A	Spring 2015 - Spring 2021	NA	DRJ	11% funds disbursed.
Inverness W&S Dist - C150409D (CT2015-120)	Douglas/ Arapahoe	\$454,500		N/A	Spring 2015 - Spring 2021	NA	DRJ	No Inverness Request for Reimb received.
Parker W&S Dist - C150410D (CT2015-110)	Douglas/ Arapahoe	\$1,099,890		N/A	Spring 2015 - Spring 2021	NA	DRJ	20% funds disbursed.
Denver SE Sub. W&S Dist (Pinery) - C150411D (CT2015-087)	Douglas/ Arapahoe	\$454,500		N/A	Spring 2015 - Spring 2021	NA	DRJ	21% funds disbursed.

Projects Under Contract SubTotal =

\$176,100,129 679,225

Approved Projects - Not Under Contract

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

	Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
a	Southeastern CO Water Conserv. District > Arkansas Valley Conduit C150238	Crowley	\$60,600,000	6,555	In Contracting			KGR	Pending Federal Appropriation. Hydro project may be considered from these loan funds
b	Lamar, City of >Repurposing of Wells 12 and 13 CT2016-2003	Prowers	\$101,000	2,005	In Contracting			DRJ	
c	Orchard Ranch Ditch Company >Orchard Ranch Ditch Pipe Project CT2016-2795	Delta	\$151,500	2,750	In Contracting			DRJ	
d	City of Grand Junction >Hallenbeck Reservoir No. 1 Dam Rehabilitation CT2016-3070	Mesa	\$1,010,000	5,218	In Contracting			AM	
e	Duke Ditch Company >Piping the Duke Ditch CT2016-3070	Delta	\$90,000	2,424	In Contracting			AM	
f	Dixon Canon Ditch & Reservoir Company >Dixon Reservoir Dam Improvements CT2016-3461	Larimer	\$278,100	312	In Contracting			JH	
g	Julesburg Irrigation District >Reconstruction of the Harmony No. 1 Dam Structur CT2016-3462	Sedgwick	\$203,616	54,423	In Contracting			DRJ	
h	Union Well Augmentation Group >Union Reservoir Water Rights Purchase CT2016-3463	Weld	\$248,157	116	In Contracting			JH	

Not Under Contract SubTotal = \$62,682,373 73,803

Grand Total = \$238,782,502 753,028

Reservoir construction projects involving storage: new, enlargement, dredging or remo

## Projects Substantially Completed in Fiscal Year 15/16

1	East Mesa Water Company > Ditch Piping Project C150360 (CT2015-141)	Pitkin/ Garfield	\$732,927	9,669	100%	Feb 2015 - May 2015	100%%	KGR	7/1/2015
2	Greeley Irrigation Company > Greeley Canal No. 3 Rehabilitation C150239 (CT2015-021)	Weld	\$1,134,839	18,000	100%%	Feb 2008 - Dec 2015	100%%	KGR	7/1/2015

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

	Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
3	Eckhardt Farms Inc > Water Rights Purchase C150338 (CT2015-051)	Weld	\$1,232,036	694	N/A	N/A	N/A	JMH	9/1/2015
4	Penrose Water District > Water Rights Purchase and Pipeline Installation C150237 (CT2015-040)	Fremont	\$8,615,684	339	100%	Summer 2014 - Spring 2016	100%	DRJ	10/1/2015
5	Santa Maria Reservoir Company > Siphon and Canal System Rehabilitation Project C150350 (CT2015-005)	Hinsdale/ Mineral	\$1,405,163	6,300	100%	May 2014 - Oct 2015	100%	ACM	11/1/2015
6	Santa Maria Reservoir Company > Continental Dam Spillway Rehabilitation Project C150365 (CT2015-006)	Hinsdale/ Mineral	\$3,677,663	3,600	100%	May 2014 - Nov 2015	99%	ACM	11/1/2015
7	Lower Poudre Augmentation Company > Cornish Water Rights Purchase CT2015-171	Larimer & Weld	\$1,163,500	4,000	N/A	N/A	N/A	JMH	11/1/2015
8	Crystal Lakes Water and Sewer Association > Lower Lone Pine Lake Enlargement Project C150325 (CT2015-045)	Larimer	\$2,016,460	10	100%	Apr 2012 - Nov 2014	100%	ACM	1/1/2016
9	Ridgway, Town of > Lake Otonowanda Rehabilitation Project C150340 (CT2015-056)	Ouray	\$606,000	280	100%	June 2014 - July 2015	99%	KGR	1/1/2016
10	Lower Poudre Augmentation Company > Box Elder Ditch Water Rights Purchase CT2016-2005	Larimer, Weld	\$454,500	4,000	N/A	N/A	N/A	JMH	1/1/2016
11	Lower Arkansas Valley WCD > Water Rights Purchase CT2015-175	Bent, Crowley, Otero, Prowers, Pueblo	\$2,560,350	442	NA	Fall 2015	100%	DRJ	3/1/2016
12	Fort Lyon Canal Company > Replacement of Horse Creek Flume CT2016-1987	Otero, Bent, Prowers	\$1,542,296	221,000	100%	Nov 2015 - Apr 2016	100%	DRJ	4/1/2016
13	Fulton Irrigating Ditch Company > Diversion Structure Rehabilitation Project C150399 (CT2015-092)	Adams	\$1,947,138	29,684	100%	Fall 2014 - Summer 2015	100%	DRJ	4/1/2016
14	Bergen Ditch & Reservoir Company > Bergen Reservoir No. 2 Rehabilitation C150344 (CT2015-017)	Jefferson	\$2,110,765	800	100%	June 2015 - Apr 2016	100%	JMH	4/1/2016

# Design and Construction - Summary - Status Report

Loan Program  
Attachment 3

	Contract Borrower	County	Loan Amount	Annual Delivery	Design Status	Const. Start/End	Const. Status	PM	Status Description/Update
15	Upper Platte & Beaver Canal Company > Hospital Rd Recharge Facility & Bridge Project CT2015-101	Morgan	\$119,685	35,000	49%	Nov 2014 - Spring 2017	49%	DRJ	4/1/2016
16	Owl Creek Reservoir Company > Owl Creek Reservoir Rehabilitation C150089 (CT2015-048)	Weld	\$485,000	1,200	N/A	N/A	N/A	TF	5/1/2016
17	Brighton Ditch Company > River Breach Repair Project CT2016-2040	Adams	\$225,000	7,125	100%	July 2015 - Aug 2015	100%	JMH	5/1/2016
18	McDonald Ditch Company > Ditch Diversion and Headgate Replacement C150334 (CT2015-044)	Rio Grande	\$101,000	45,000	100%	Dec 2014 - Apr 2016	99%	JMH	5/1/2016
19	Las Animas Consolidated Canal Company > Repair and Replacement of the Las Animas Consolidated Canal Spillway Structure CT2016-1007	Bent	\$95,054	26,000	100%	Jan 2016 - Spring 2016	100%	DRJ	6/1/16
20	Left Hand Ditch Company > Allen Lake and Lake Isabelle Repair Project C150336 (CT2015-088)	Boulder	\$1,332,562	22,700	100%	Nov 2012 - Oct 2015	99%	ACM	6/1/16
21	Colorado Parks & Wildlife > Beaver Park Reservoir Rehabilitation C150343	Rio Grande	\$10,000,000	4,434	Ph1 100% P2 100%	July 2013 - Nov 2015	100% 99%	KGR	6/1/16

SubTotal = \$41,557,621 440,277

**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

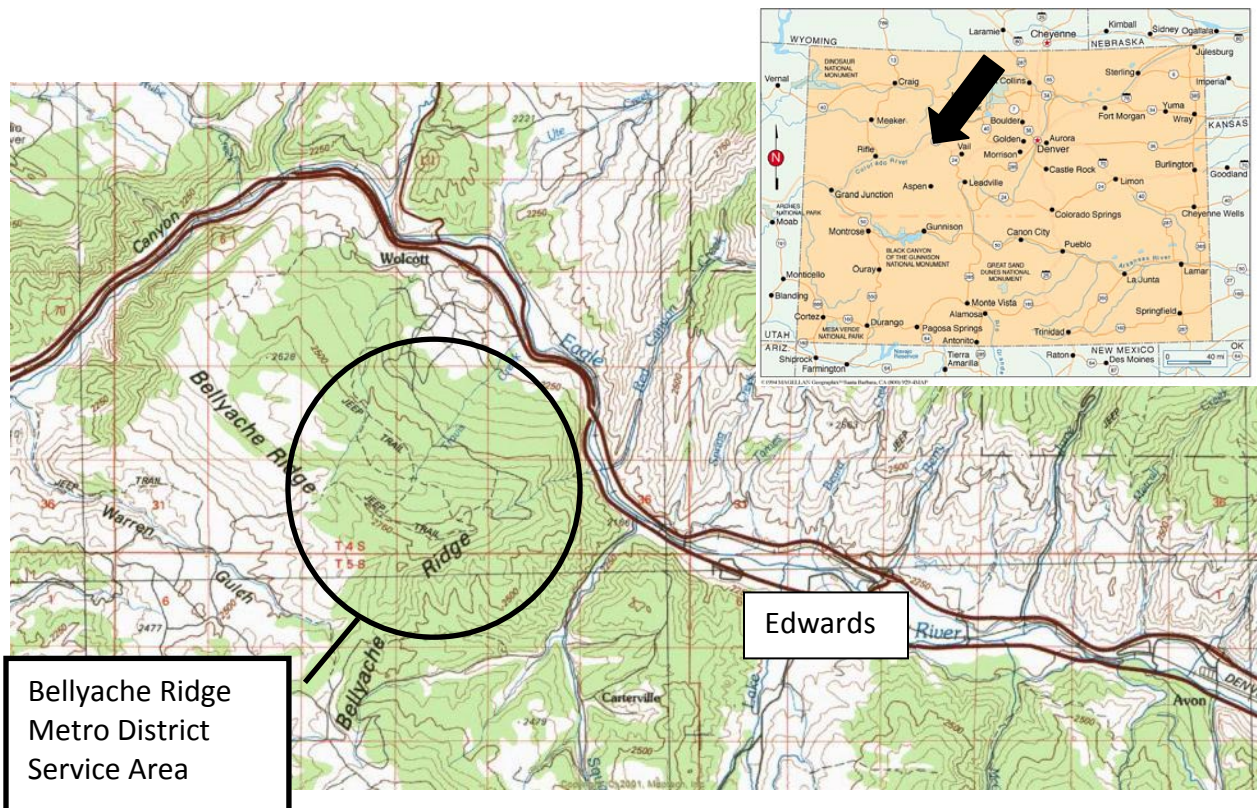
**Type of Borrower:** Municipal (High)

**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.



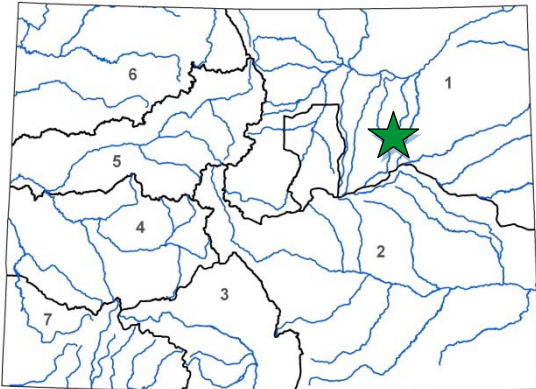


## Wells #3 and #6 Replacement Project

Town of Bennett

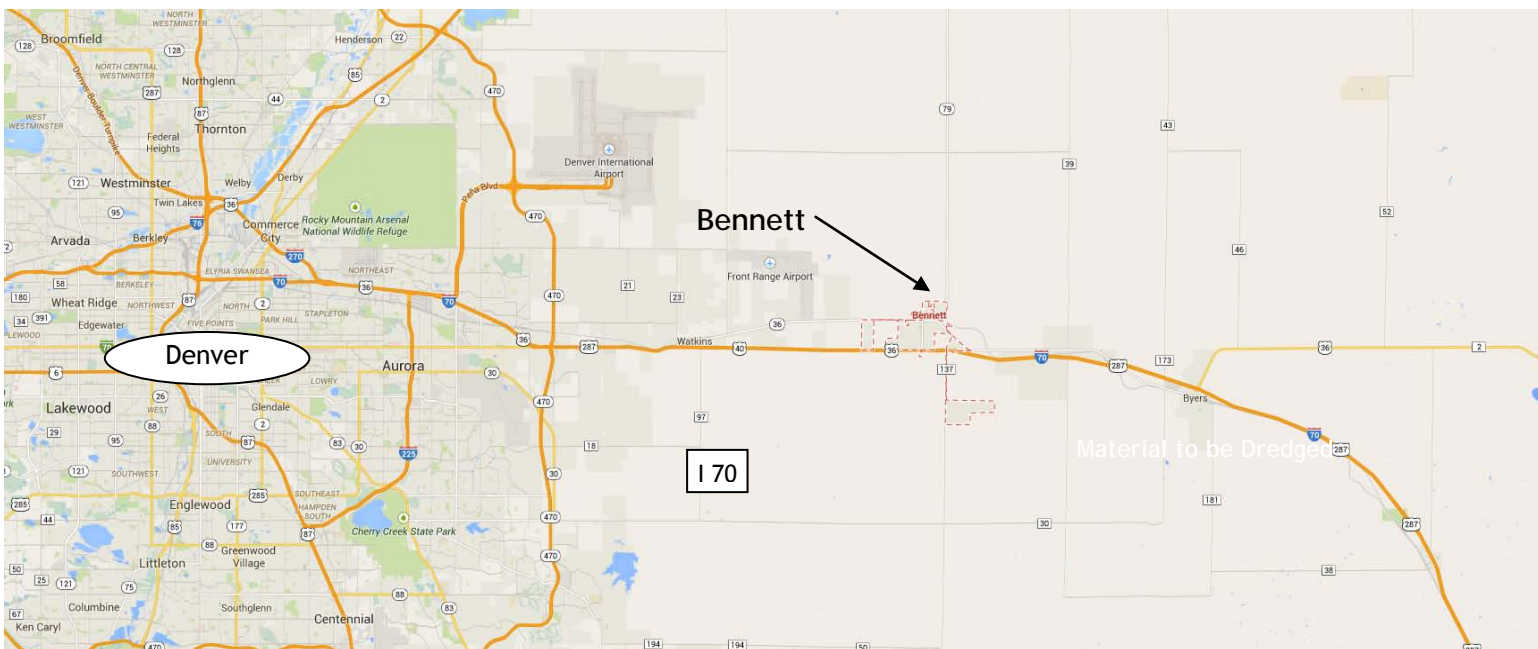
November 2014 Board Meeting

L O A N   D E T A I L S	
<i>Project Cost:</i>	\$1,600,000
<i>CWCB Loan (with Service Fee):</i>	\$1,454,400
<i>Loan Term and Interest Rate:</i>	30 Years @ 3.25%
<i>Funding Source:</i>	Construction Fund
B O R R O W E R   T Y P E	
<i>Agriculture</i>	<i>Municipal</i>
0%	0% Low - 100% Mid - 0% High
	<i>Commercial</i>
	0%
P R O J E C T   D E T A I L S	
<i>Project Type:</i>	Well Drilling
<i>Average Annual Delivery:</i>	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	
<i>County:</i>	Adams & Arapahoe
<i>Water Source:</i>	Non-Tributary Groundwater
<i>Drainage Basin:</i>	South Platte
<i>Division:</i>	1
<i>District:</i>	1







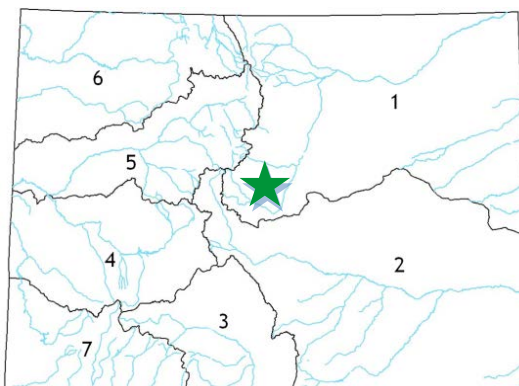
Water Project Loan Program  
Project Data Sheet

## Rehabilitation and Replacement of Water Meters

Bow Mar Water & Sanitation District

March 2015 Board Meeting

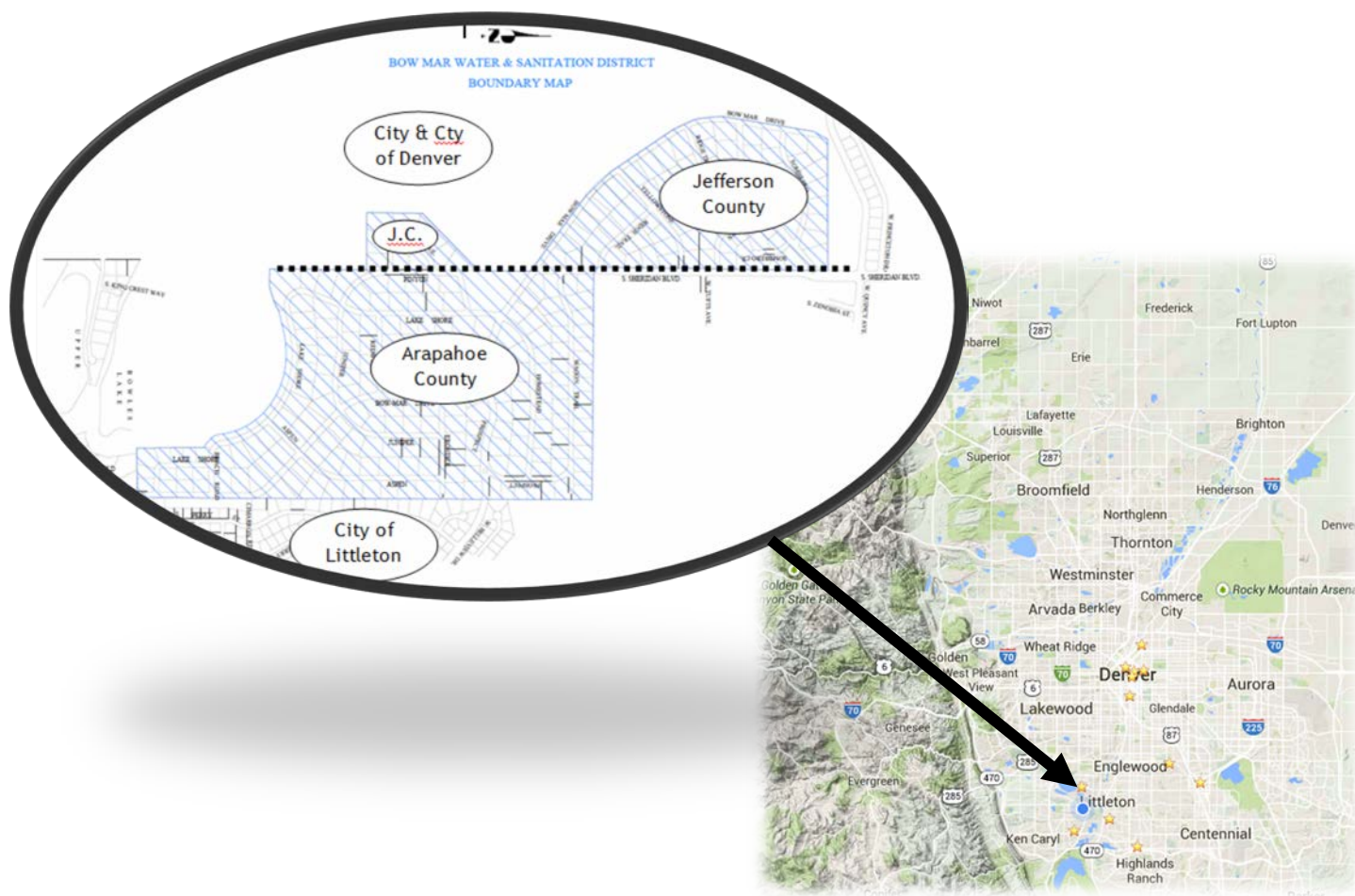
L O A N   D E T A I L S	
Project Cost:	\$366,102
CWCB Loan (with Service Fee):	\$332,795
Loan Term and Interest Rate:	10 Years @ 2.65%
Funding Source:	Construction Fund
Agriculture	Municipal
0%	0% Low 0% Mid 100% High 0%
P R O J E C T   S U M M A R Y	
Project Type:	Municipal Water
Residential Customers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

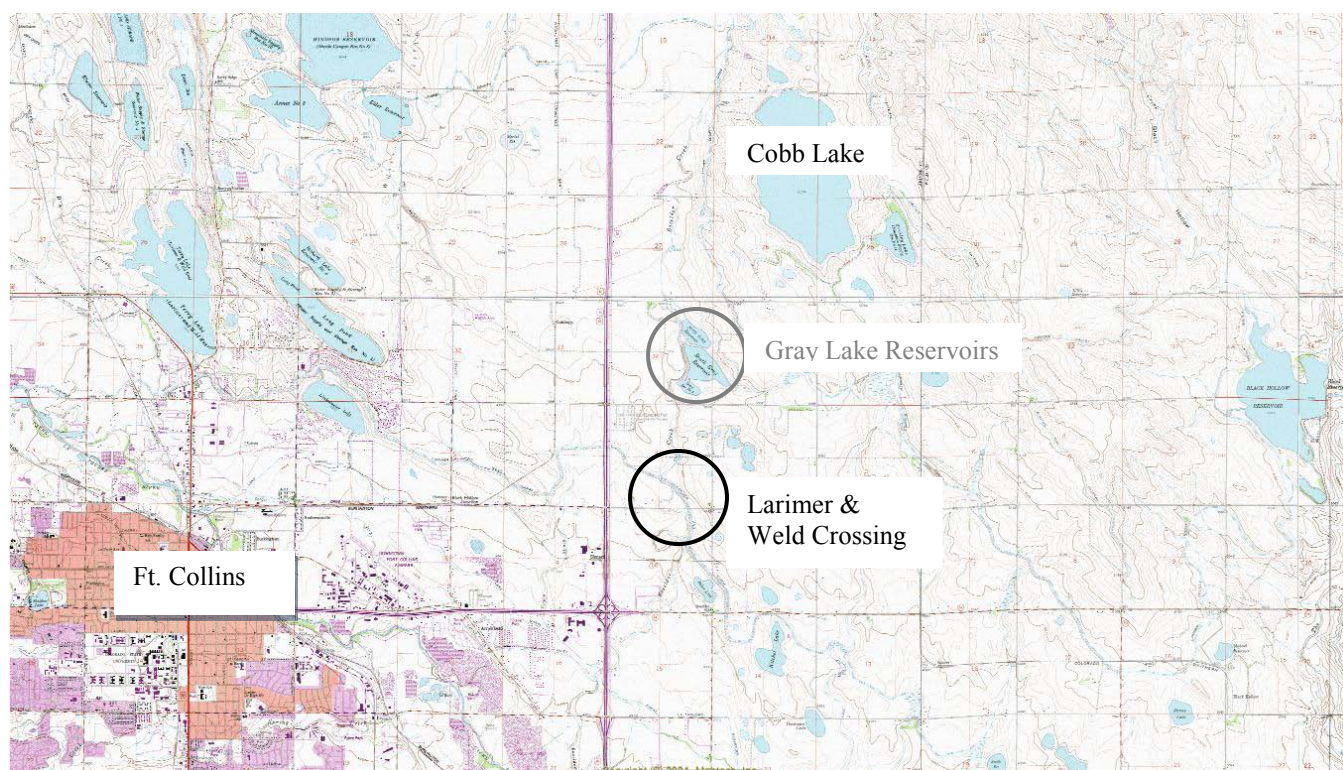




**CWCB Water Project Loan Program  
Project Data Sheet**

<b>Borrower:</b> Boxelder Basin Regional Stormwater Authority	<b>County:</b> Larimer
<b>Project Name:</b> Larimer-Weld Canal & Boxelder Creek Crossing Structure	<b>Project Type:</b> Flood Control
<b>Drainage Basin / District:</b> South Platte / 3	<b>Water Source:</b> Boxelder Creek
<b>Total Project Cost:</b> \$1,139,000	<b>Funding Source:</b> Construction Fund
<b>Type of Borrower:</b> Middle Income Municipal	<b>Average Annual Diversion:</b> N/A
<b>CWCB Loan:</b> \$1,010,000 (with 1% service fee)	<b>Interest Rate:</b> 2.75% <b>Term:</b> 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.

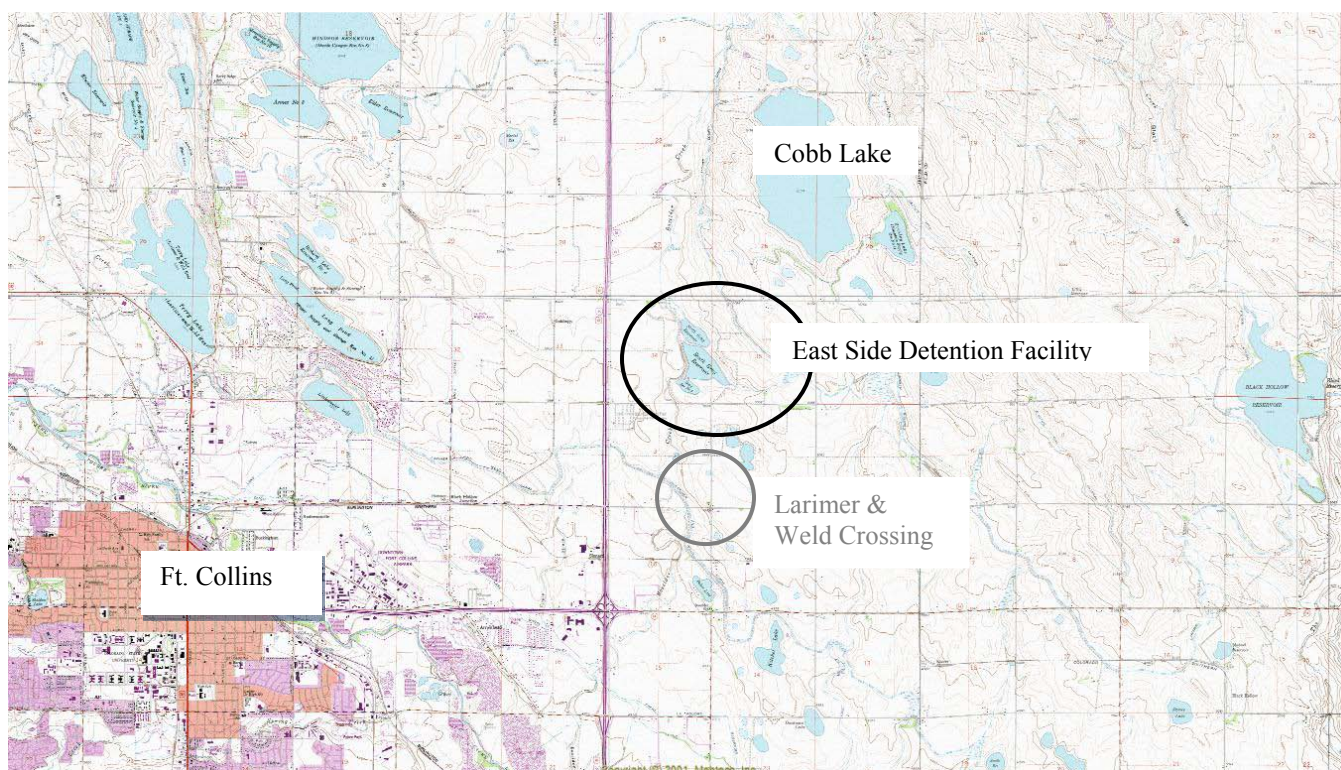




## CWCB Water Project Loan Program Project Data Sheet

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

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

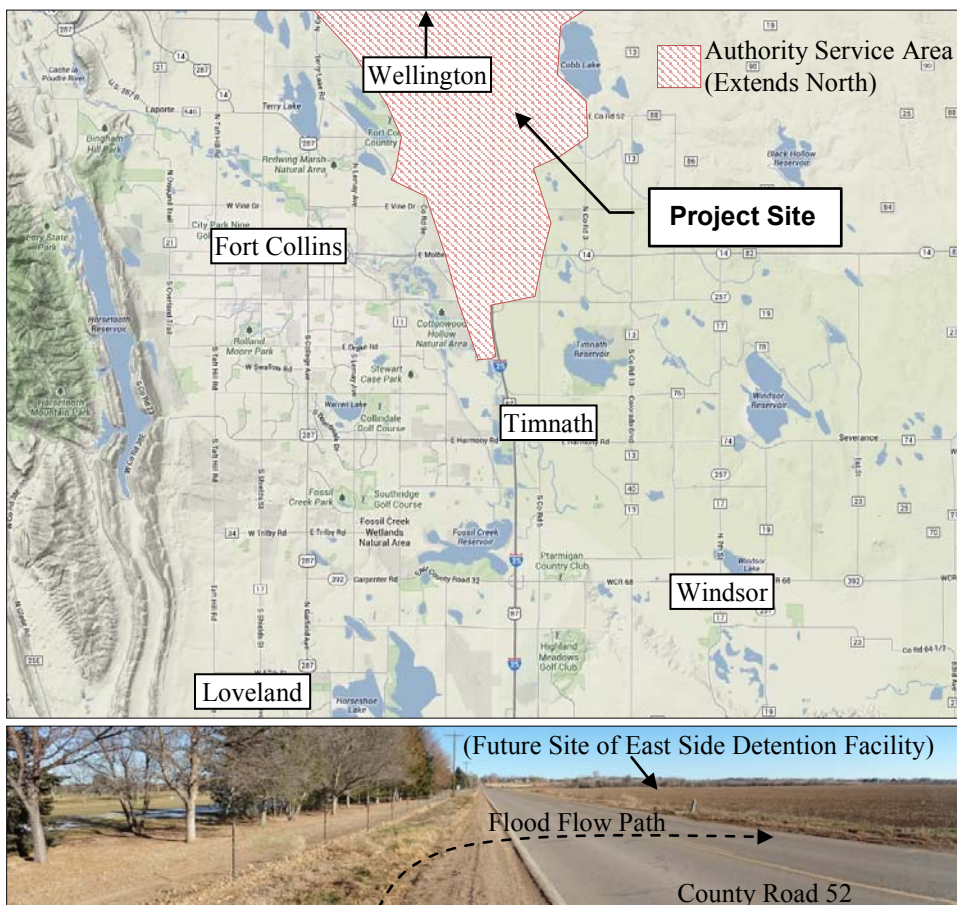
**Type of Borrower:** Middle Income Municipal

**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.



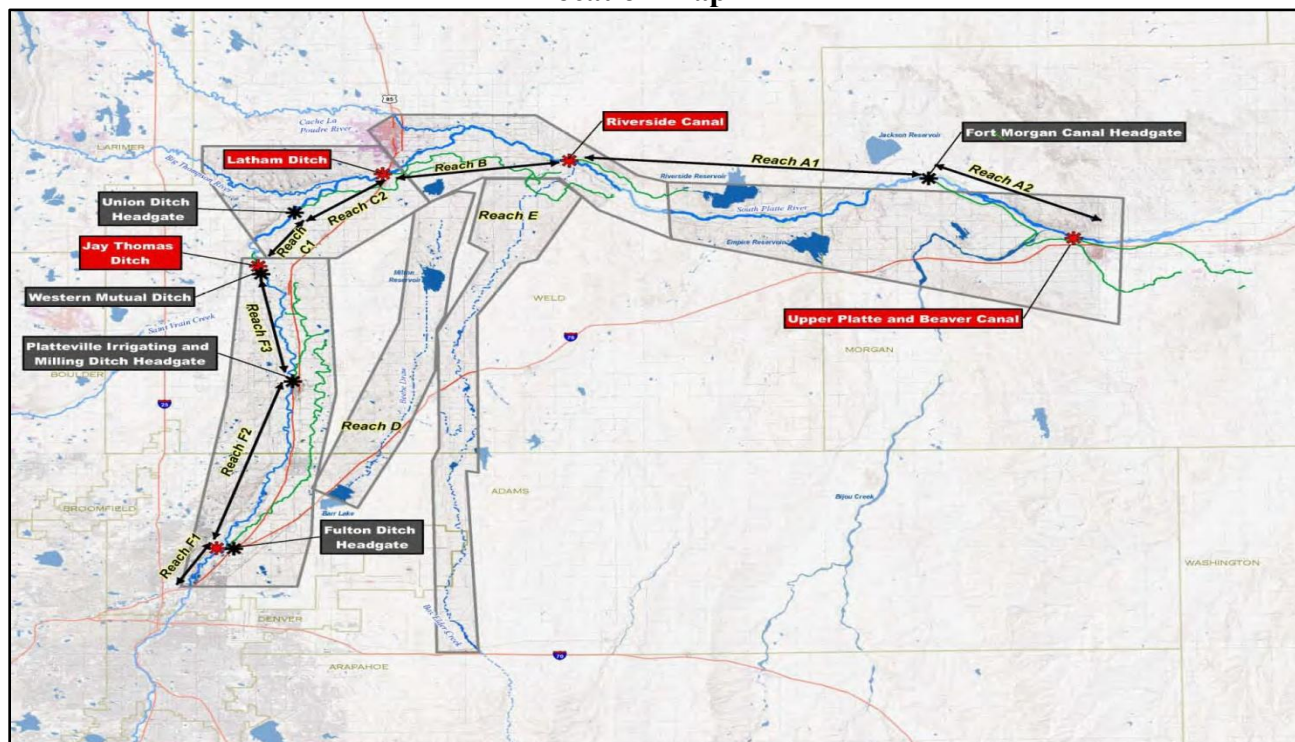


## Water Project Loan Program – Project Data Sheet

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

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

### Location Map



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

**C150404**

**Borrower:** Castle Pines North  
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:** \$7,100,000

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

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

**Average Annual Delivery:** 1,300 AF

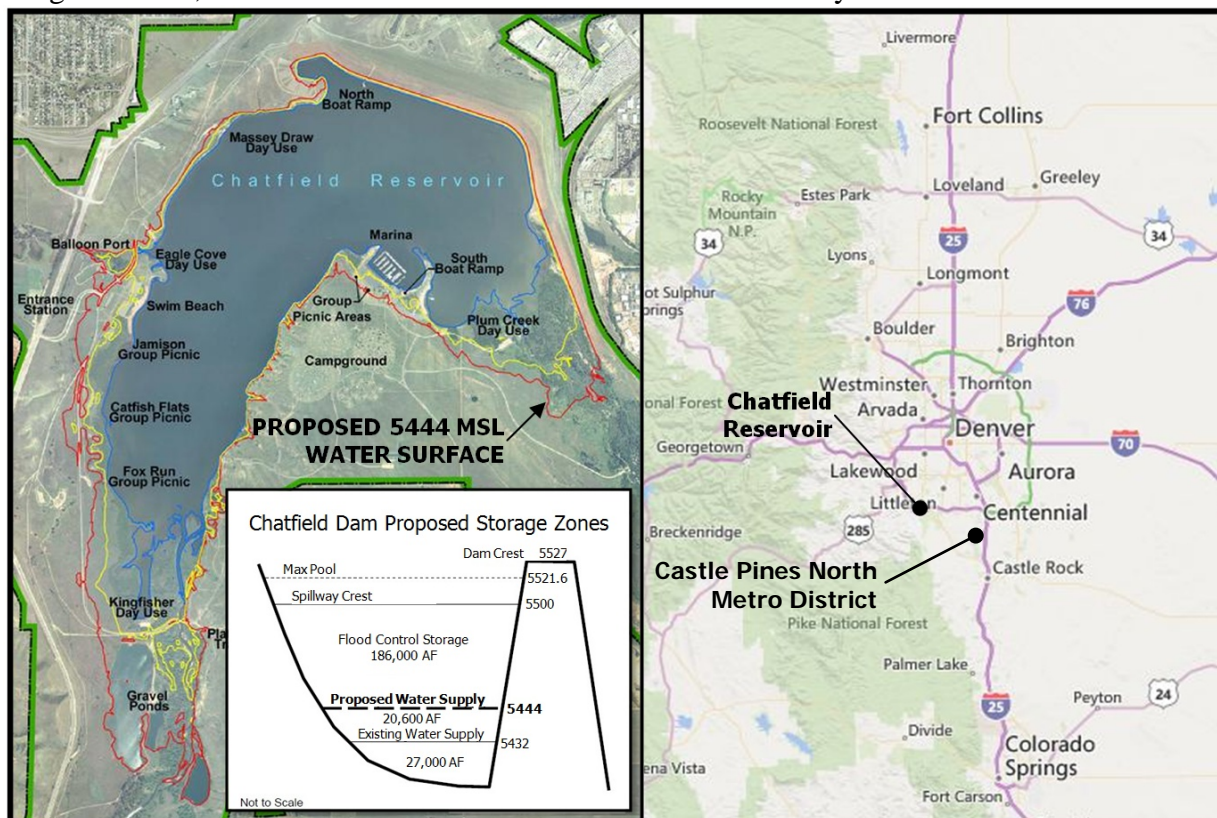
**Added Water Supply Storage:** 1005.8 AF

**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

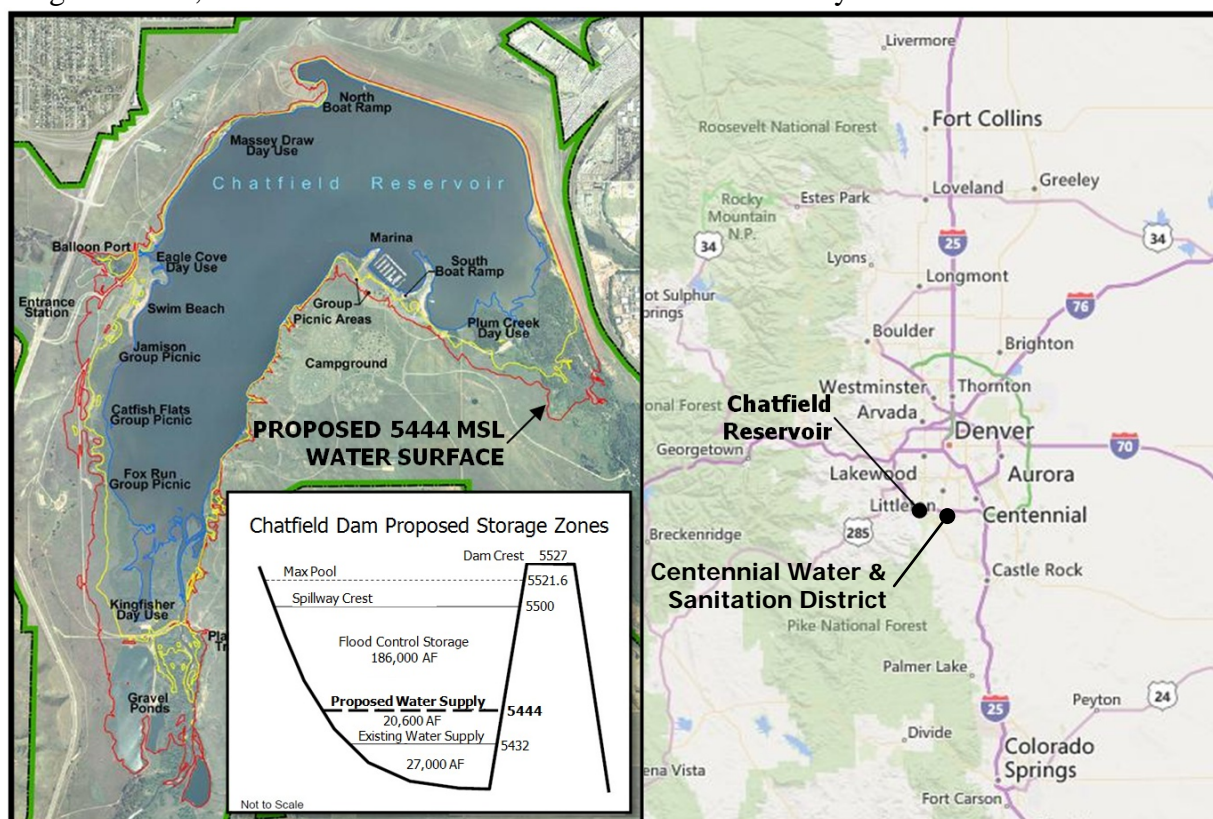
**Average Annual Delivery:** 17,500 AF

**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

**County:** Park

**Project Name:** Chatfield Reallocation Project

**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

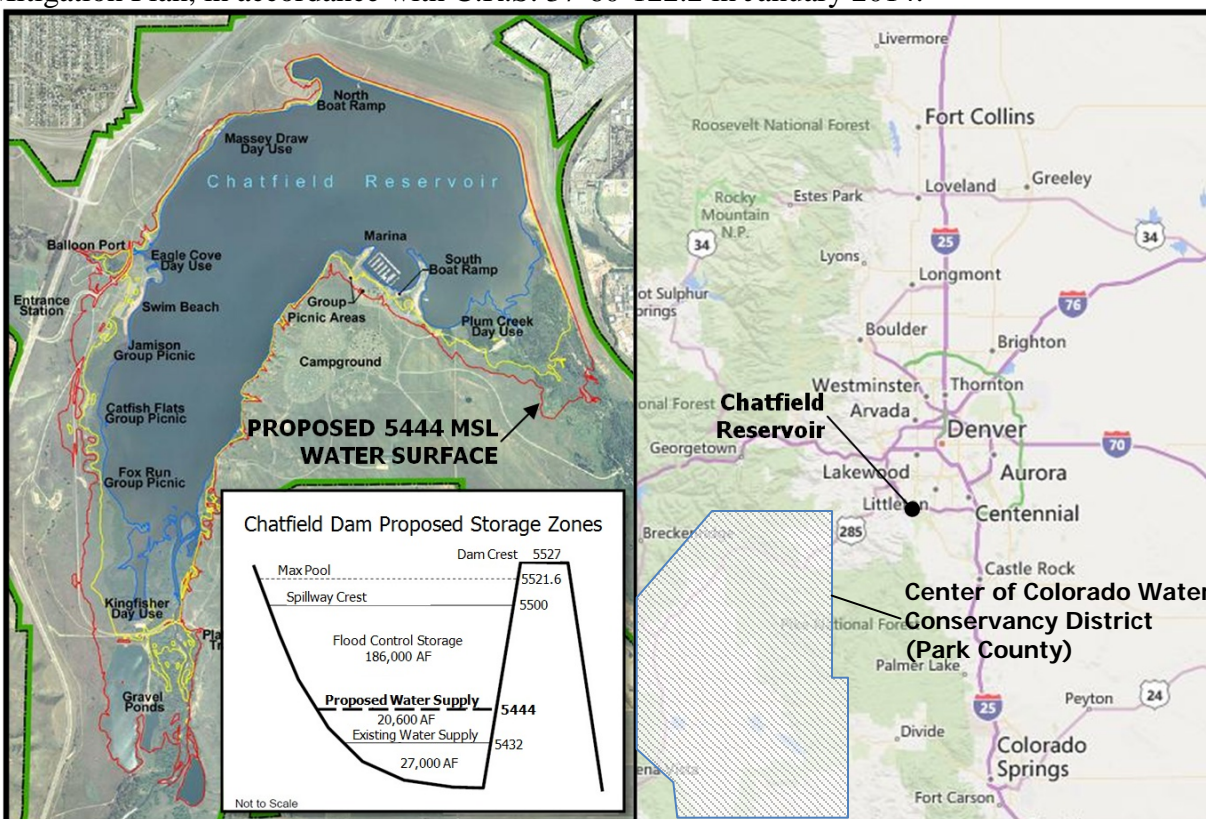
**Average Annual Diversion:** 700 AF

**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

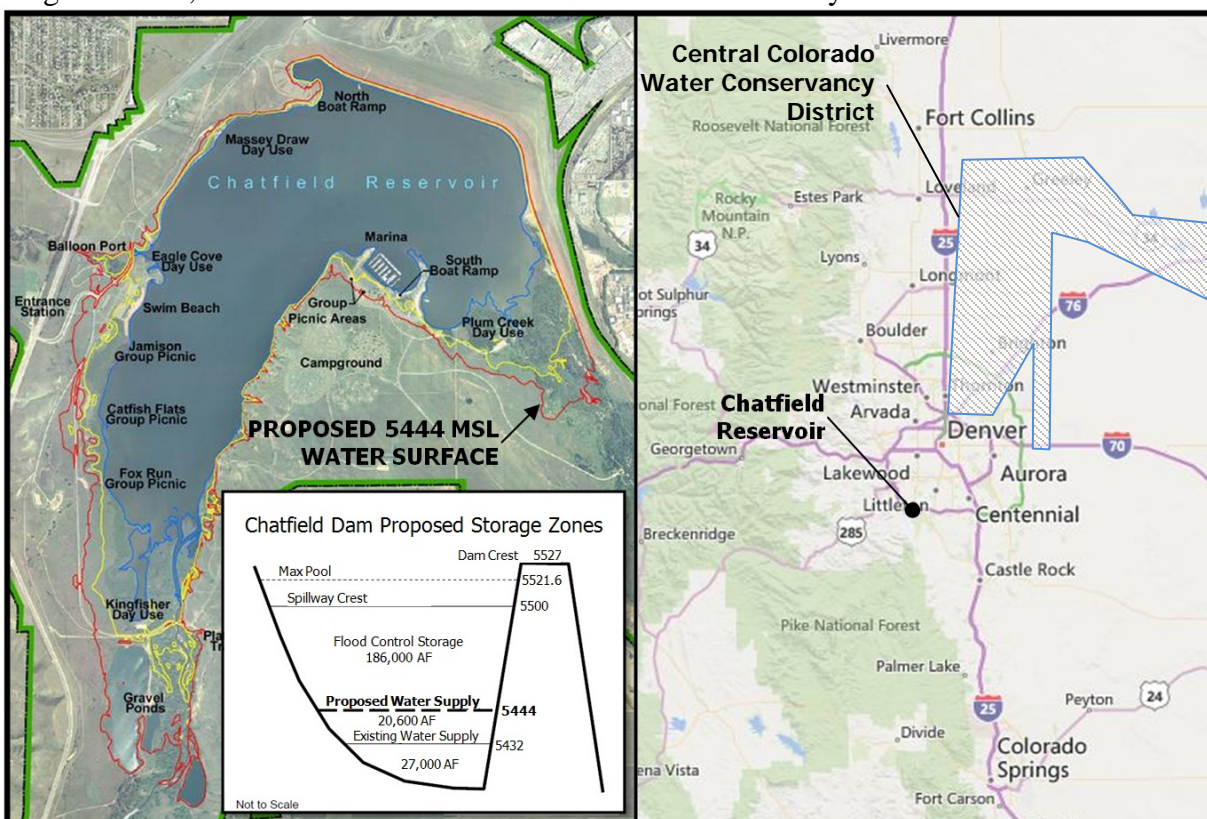
**Type of Borrower:** Agricultural

**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.

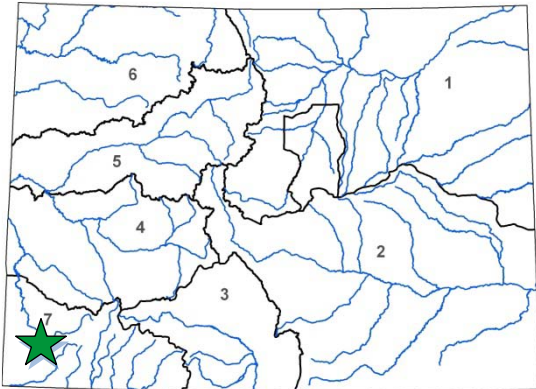
The US Army Corps of Engineers issued the Project's Feasibility Report and Environmental Impact Statement (FR/EIS) in July 2013 and a Record of Decision is expected in 2014. The Selected Alternative recommended in the Final FR/EIS will provide 20,600 acre-feet of storage in Chatfield between the elevations 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.







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.



**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

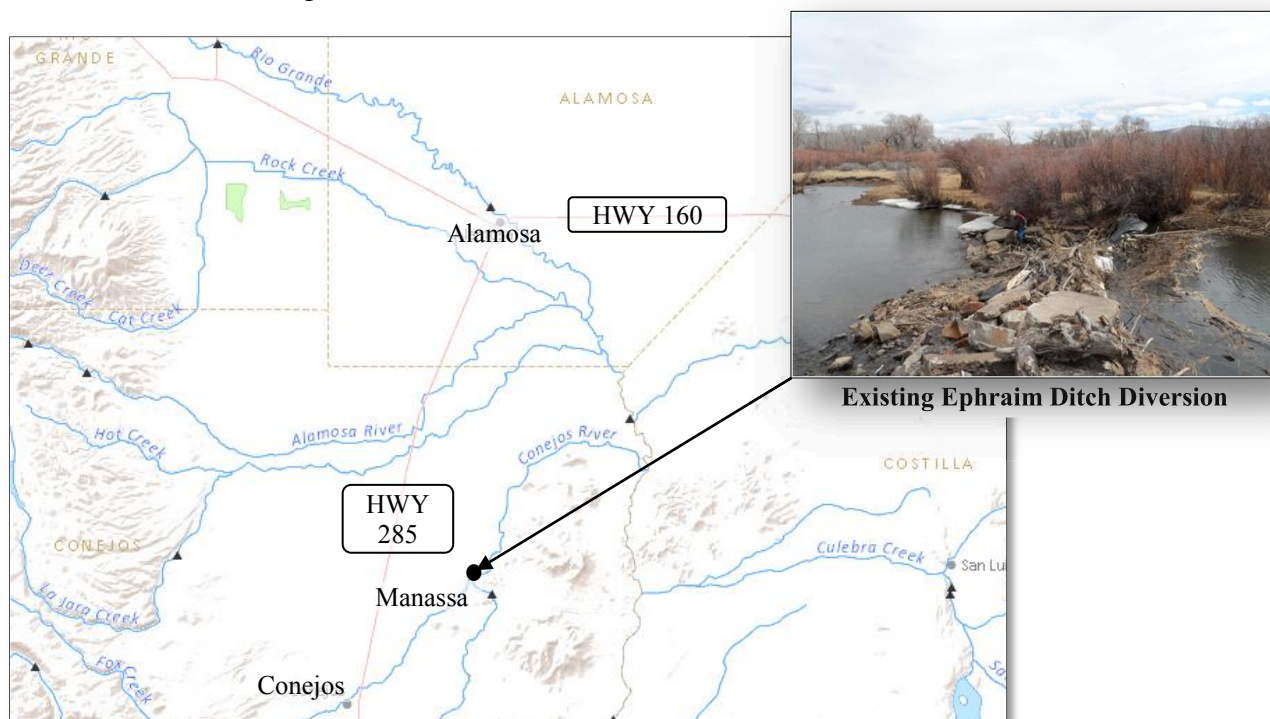
**Average Annual Diversion:** 4,100 AF

**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.





**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

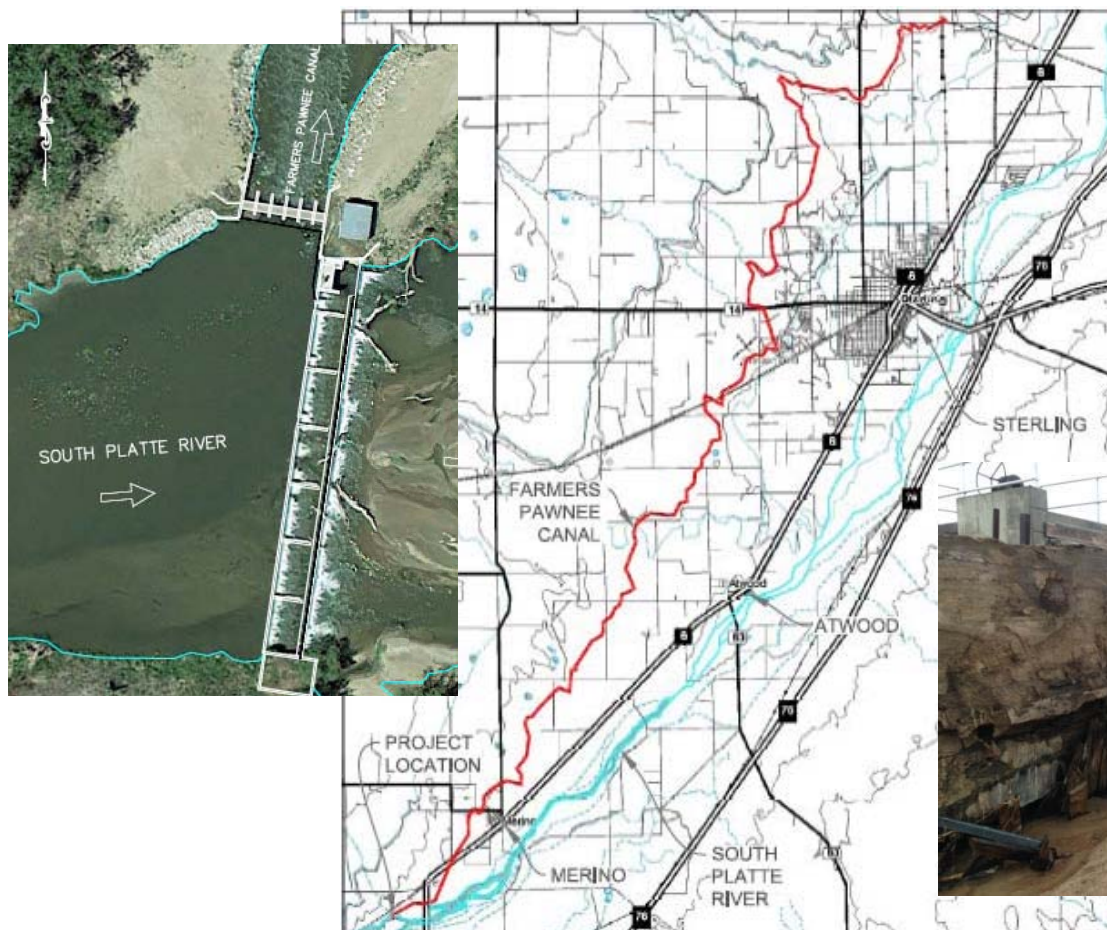
**Type of Borrower:** Agricultural

**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

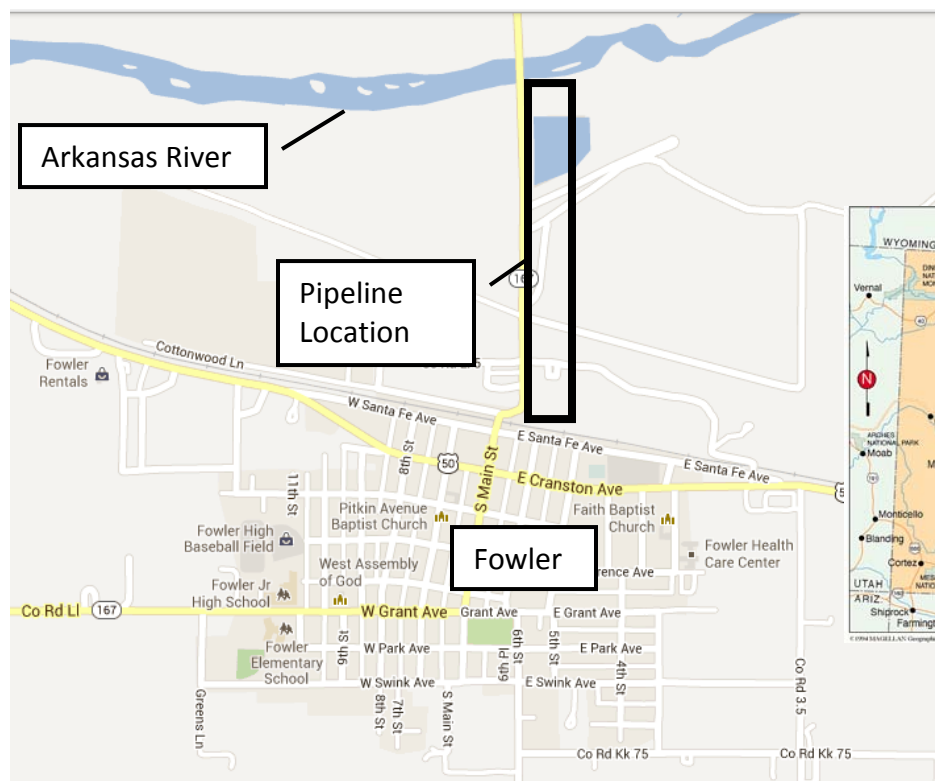
**Type of Borrower:** Municipal (Low)

**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**

**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

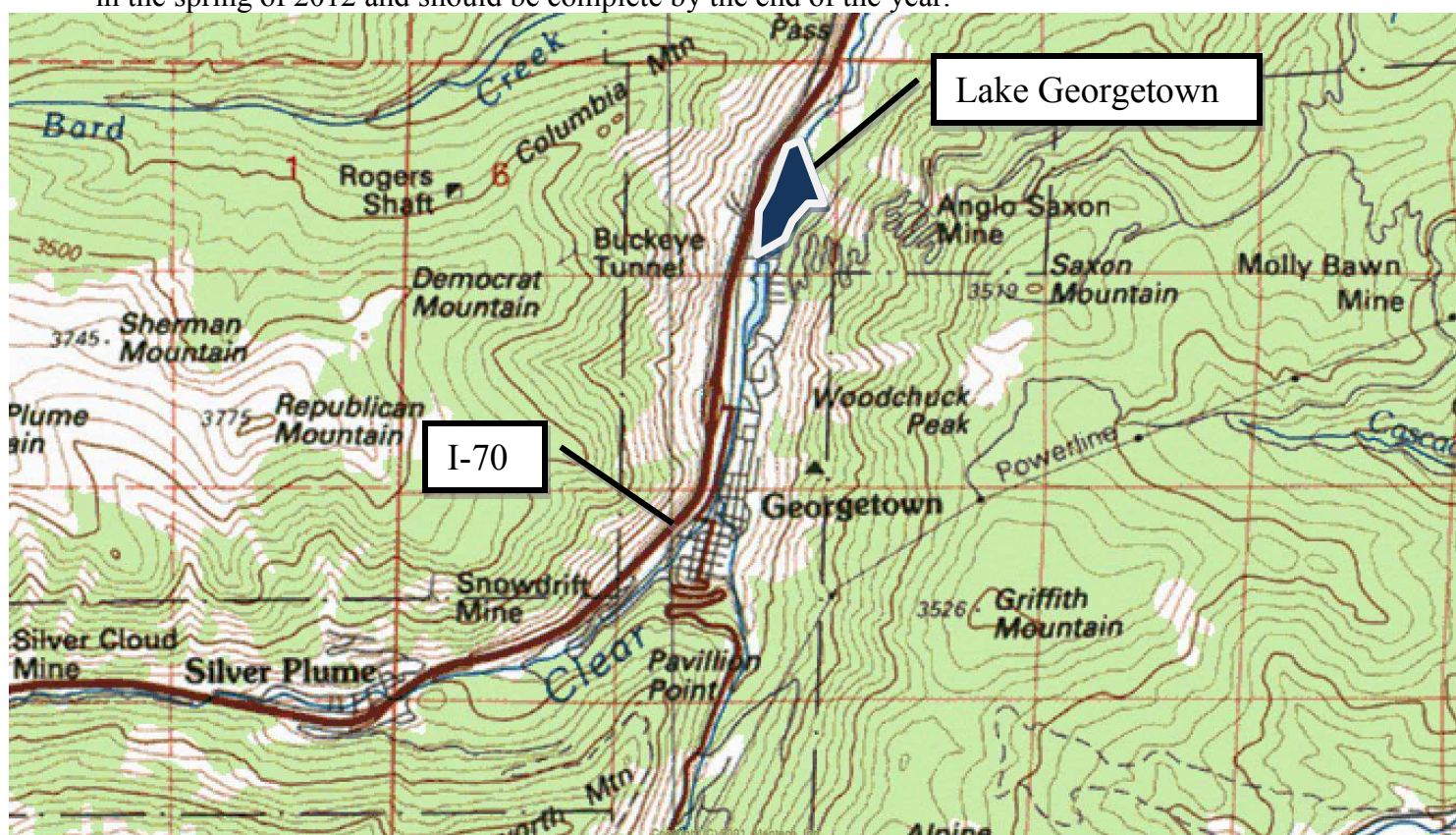
**Type of Borrower:** Middle-Income Municipal

**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.





# CWCB Water Project Loan Program Project Data Sheet

**Borrower:** Grand Mesa Water Conservancy District

**County:** Delta

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

**Project Type:** Reservoir Rehabilitation

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

**Water Source:** Surface Creek

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

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

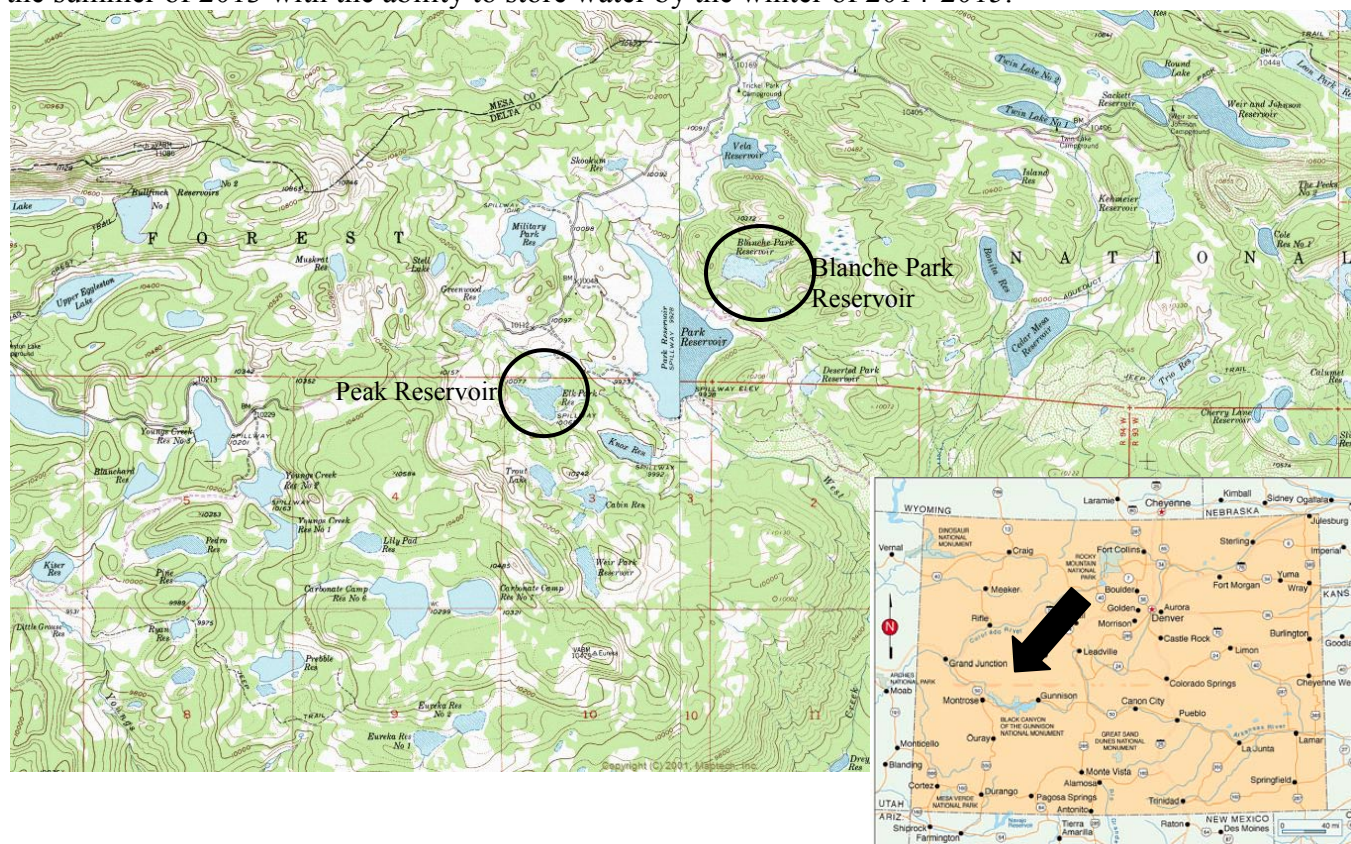
**Type of Borrower:** Municipal/Agricultural

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

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

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

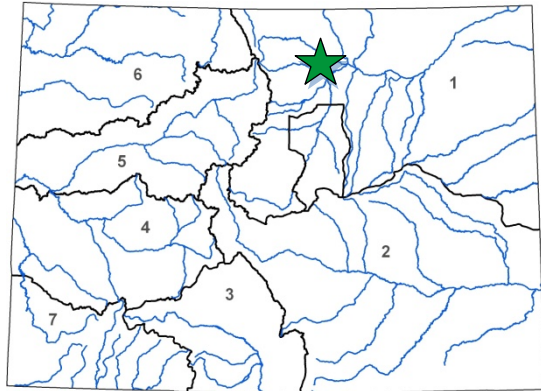
The Grand Mesa Water Conservancy District owns several reservoirs and a network of ditches to service agricultural users and municipal users including the Town of Orchard City and Cedaredge. It is requesting a loan to rehabilitate Peak Reservoir and Blanche Park. Both reservoirs are located in the Grand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







L O A N   D E T A I L S	
Project Cost:	\$4,120,000
CWCB Loan (with Service Fee):	\$3,745,080
Loan Term and Interest Rate:	30 Years @ 2.15%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
34%	53% Low - 12% Mid - <1% High
	Commercial
	<1%
P R O J E C T   D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	45,000 AF
Storage Preserved:	56,986 AF



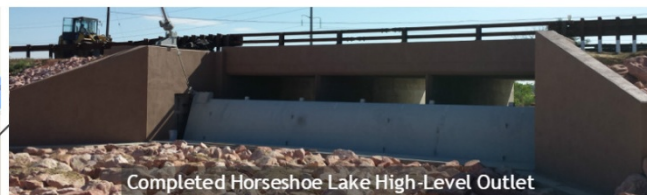
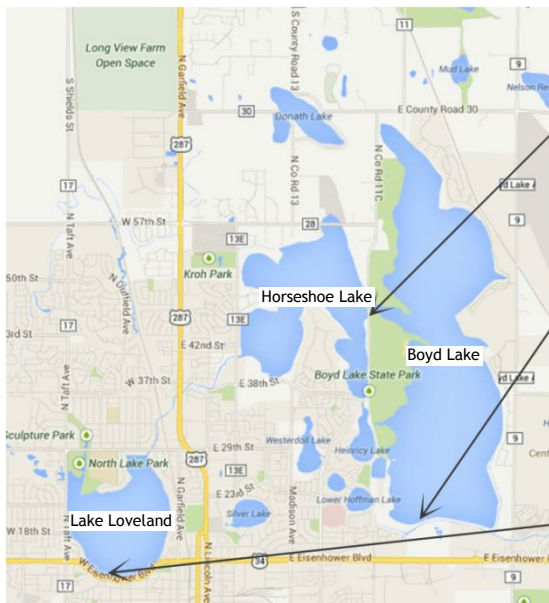
L O C A T I O N	
County:	Larimer
Water Source:	Big Thompson River
Drainage Basin:	South Platte
Division:	1
District:	4

The Greeley and Loveland Irrigation Company (Company) is a mutual ditch company established in 1900. Together with the Seven Lakes Reservoir Company 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 48,871 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. This project was completed in May 2015

Horseshoe Lake, owned by Seven Lakes, has a surface area of 650 acres and a storage capacity of 8,115 acre-feet. The Horseshoe Lake project will 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. This project was completed in March 2016.

Lake Loveland, owned by the Company, had a significant amount of sand and silt deposited during the September 2013 flood and subsequent irrigation seasons. In order to ensure water could continue to flow into the lake, and therefore into Horseshoe Lake and Boyd Lake as well, construction crews removed 24,821 CY of material adjacent to the lake's inlet. This project was completed in March 2016.



## CWCB Construction Loan Program Project Data Sheet

**Borrower:** Town of Gypsum

**County:** Eagle

**Project Name:** LEDE Ditch & Reservoir  
Upgrade Project

**Project Type:** Reservoir Rehabilitation

**Drainage Basin:** Colorado River

**Water Source:** Gypsum Creek

**Total Project Cost:** \$3,162,000

**Funding Sources:** Construction Fund

**Type of Borrower:** High Income Municipal

**Average Delivery:** 1,200 AF

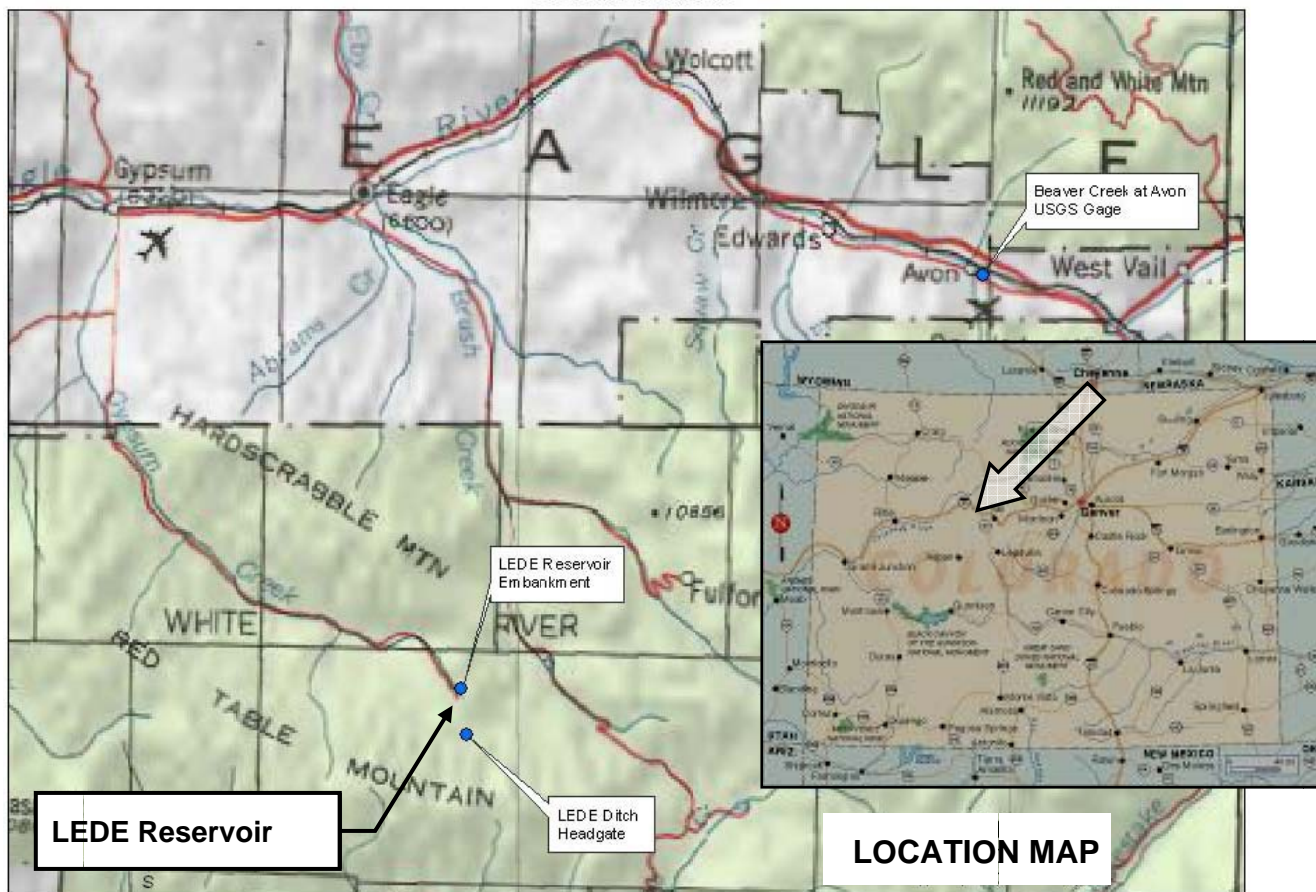
**New Storage:** 254 AF

**Loan Amount:** \$2,689,731 (Including 1% fee)

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

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

**General Locations**

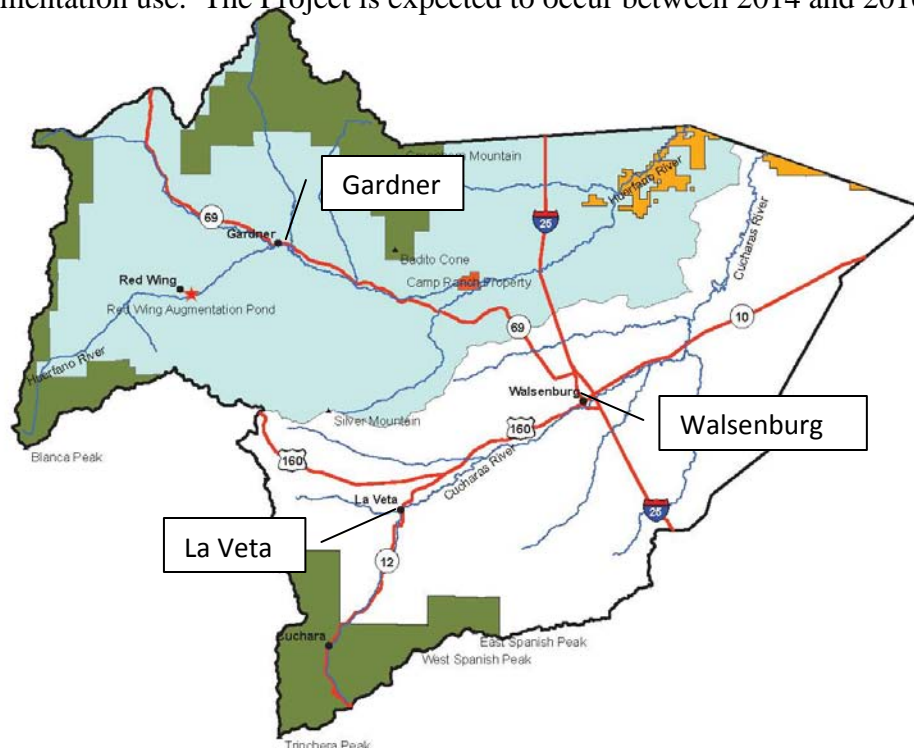




## Water Project Loan Program Project Data Sheet

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

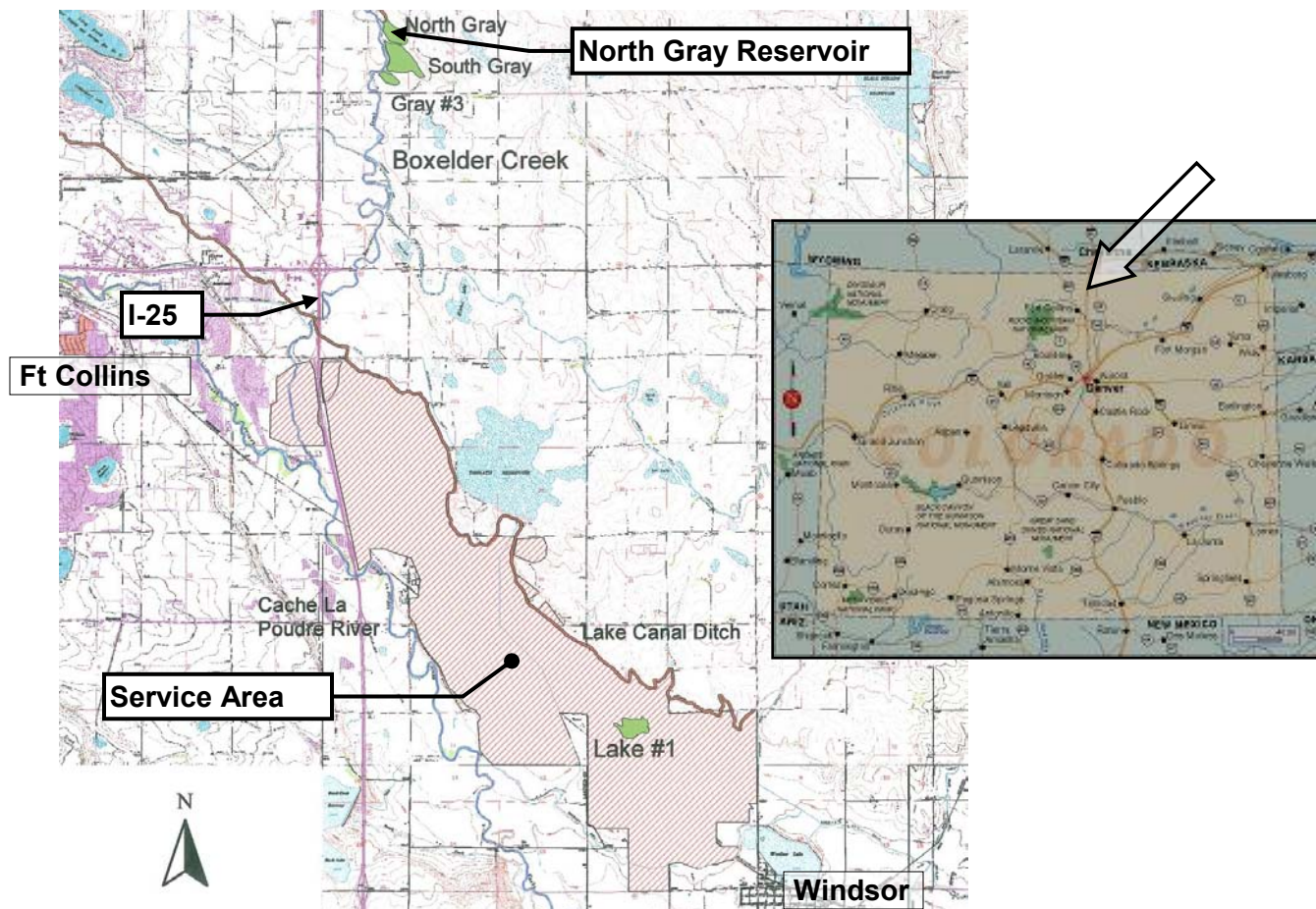
**Details:** 333 AF Stored  
75 AF Recovered

**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





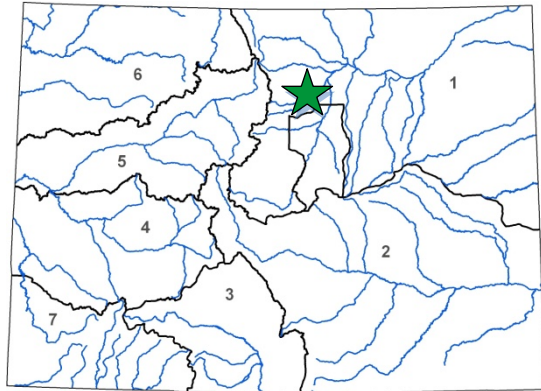


## Lake McIntosh Outlet Works Repair

Lake McIntosh Reservoir Company

January 2016 Board Meeting

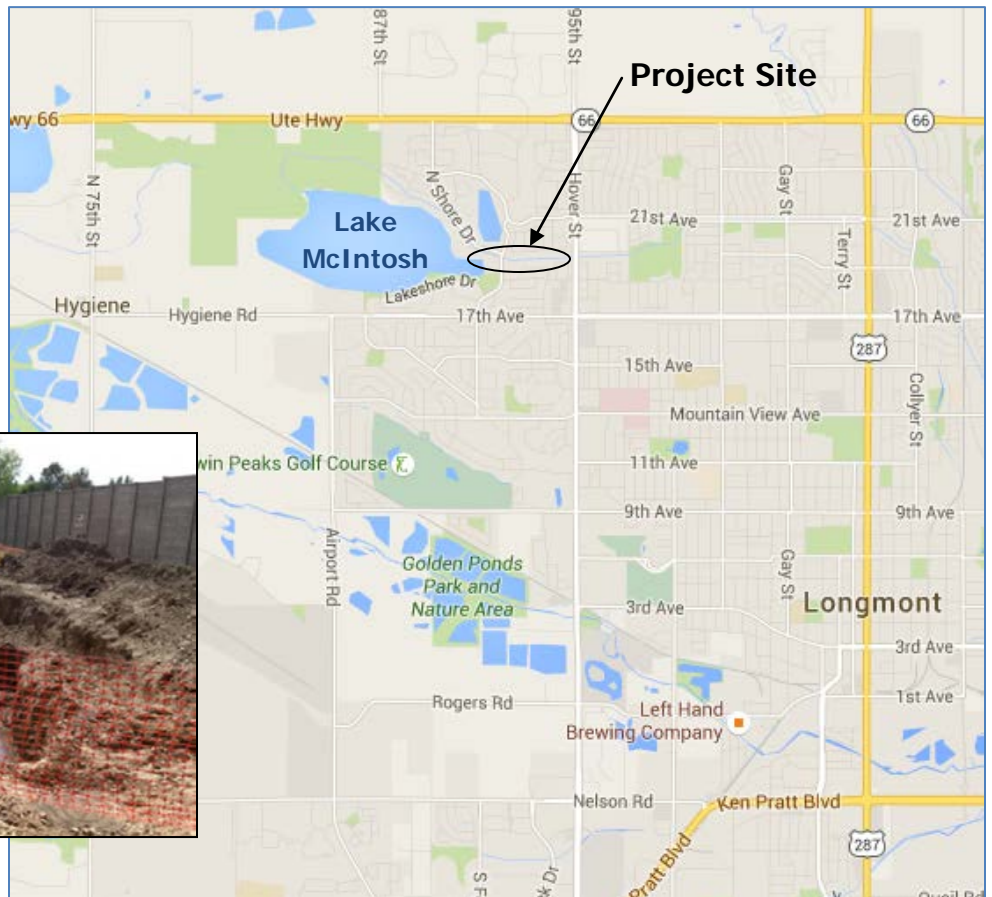
L O A N   D E T A I L S	
Project Cost:	\$1,900,000
CWCB Loan (with Service Fee):	\$1,727,100
Loan Term and Interest Rate:	30 Years @ 2.70%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
28%	0 % Low - 61% Mid - 9% High
	Commercial
	2 %
P R O J E C T   D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	1,533 AF
Storage Preserved:	2,476 AF



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

Lake McIntosh Reservoir Company is a mutual irrigation reservoir company formed in 2001. The Company owns Lake McIntosh Reservoir which is used as part of an exchange between the Highland Ditch Company and the Oligarchy Ditch Company.

The reservoir was constructed in 1890 and enlarged in 1902. In May 2015, a section of the reservoir's outlet pipe collapsed, creating a sinkhole which deposited soil in the outlet works pipes downstream for approximately 300 feet. This has rendered the reservoir's outlet works unusable and thus water cannot be delivered without the use of a temporary pump. The goal of this project is to restore the reservoir's functionality by repairing its damaged outlet works. Construction is planned to begin in summer 2016 and completed by winter, prior to the 2017 irrigation season.



May 2015 Sinkhole

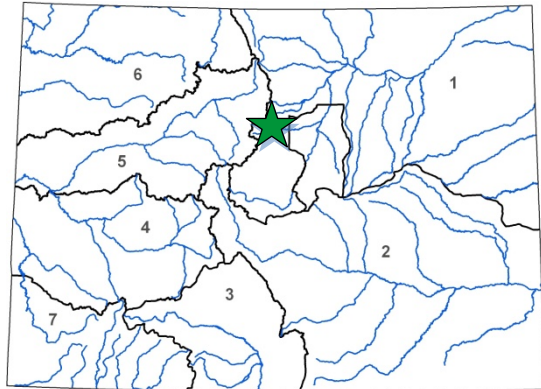


# Upper Beaver Brook Dam Spillway

## Lookout Mountain Water District

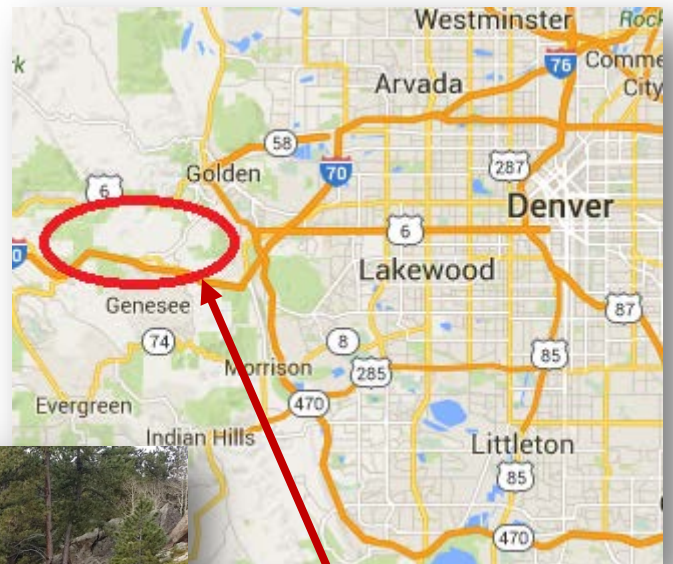
November 2015 Board Meeting

L O A N   D E T A I L S	
Project Cost:	\$3,410,000
CWCB Loan:	\$3,099,690
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%	High-income 100%
Commercial	0%
P R O J E C T   D E T A I L S	
Project Type:	Reservoir Enlargement
Average Annual Diversion:	107 acre-feet
Added Reservoir Storage:	134 acre-feet



L O C A T I O N	
County:	Clear Creek
Water Source:	South Fork Beaver Brook
Drainage Basin:	South Platte River
Division:	1 District: 7

The Lookout Mountain Water District, a drinking water provider with 565 taps in Jefferson County, seeks to increase the storage capacity of the Upper Beaver Brook Dam. By designing and constructing a new labyrinth spillway structure in the location of the existing spillway, a raise in the normal reservoir pool elevation will provide approximately 140 acre-feet of additional storage.



Service Area





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

**C150398**

**Borrower:** Louden Irrigating Canal  
and Reservoir Company  
**Project Name:** Emergency Diversion Structure  
and Ditch Repair  
**Drainage Basin/ District:** South Platte / 4

**County:** Larimer

**Project Type:** Ditch Rehabilitation

**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 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

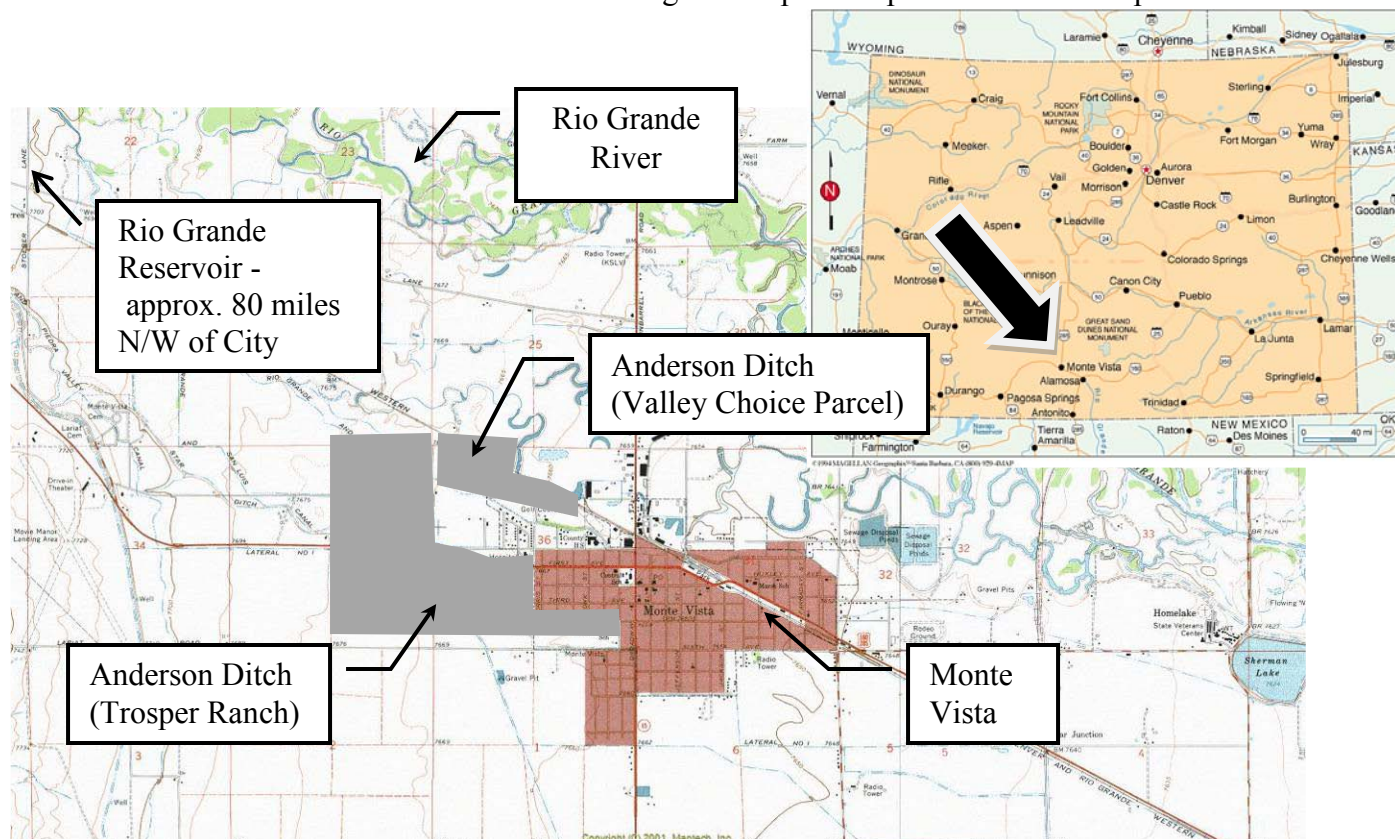
**Water Source:** Rio Grande River

**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

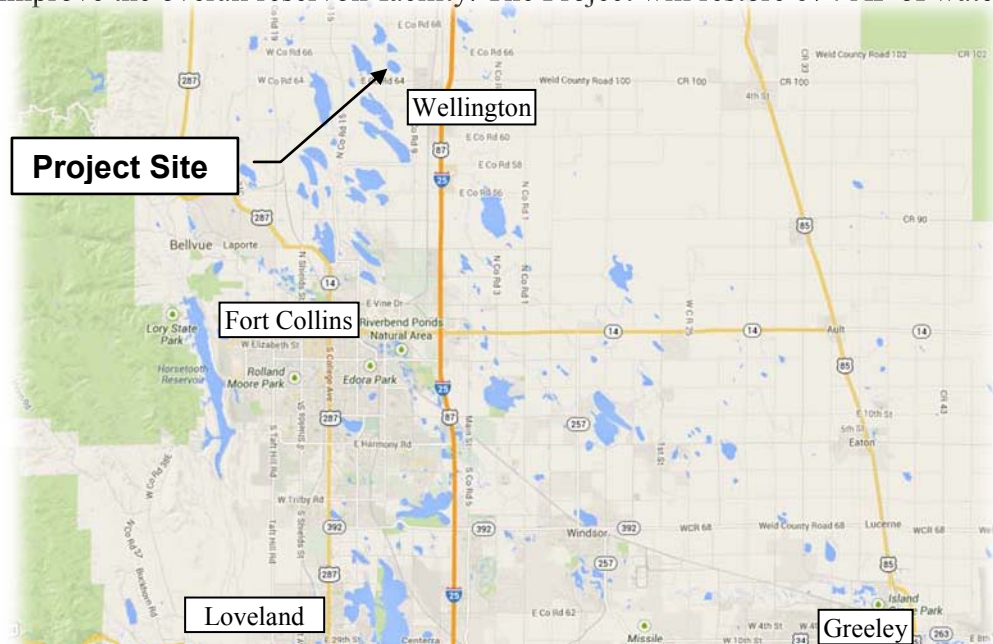
**Type of Borrower:** Blended

**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.



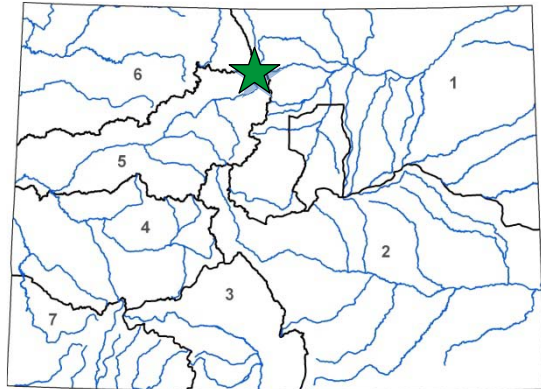




# Granby Hydropower Project

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.

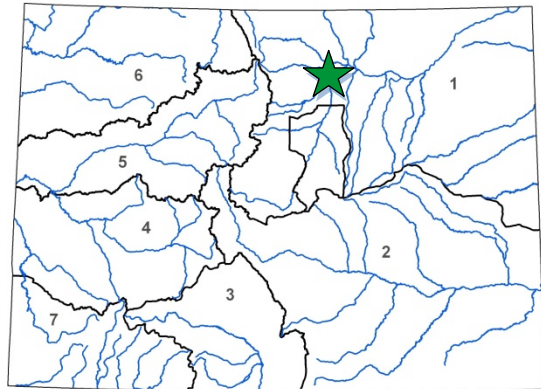
The hydro station will use the minimum streamflow obligations and a portion of additional releases to generate power through a 1.2-megawatt facility. The Project is being performed under the U.S. Bureau of Reclamation's Lease of Power Privilege (LOPP) process. Power generated will be purchased by Mountain 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

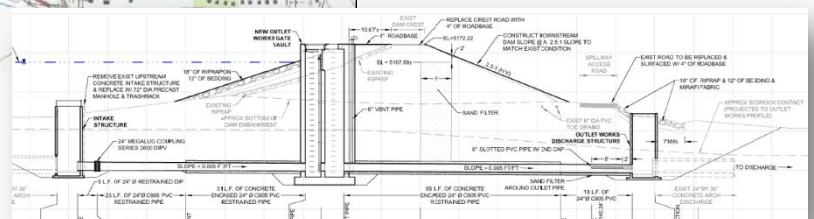
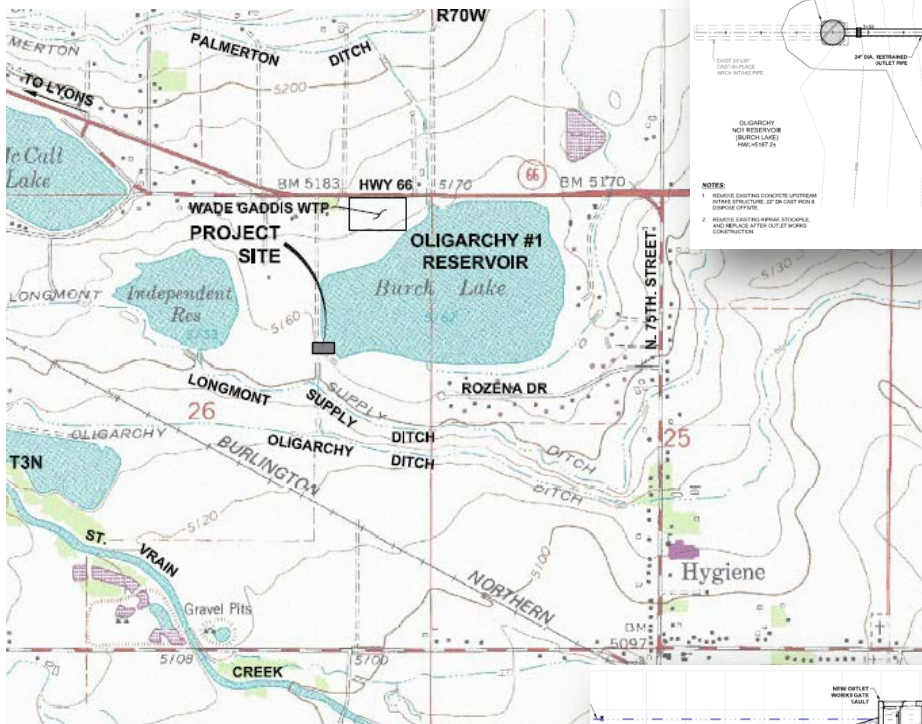
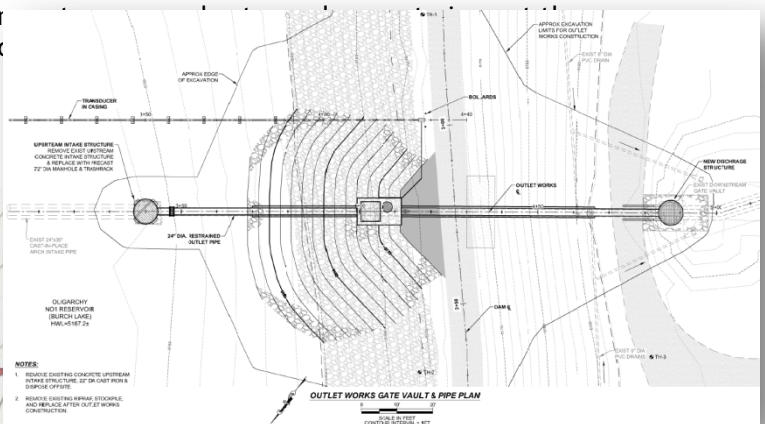


LOAN DETAILS	
Project Cost:	\$860,000
CWCB Loan (with Service Fee):	\$781,740
Loan Term and Interest Rate:	30 Years @ 2.40%
Funding Source:	Construction Fund
BORROWER TYPE	
Agriculture	Municipal (TBD)
25.4%	0% Low - 74.6% Mid - 0% High
Commercial	0%
PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average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

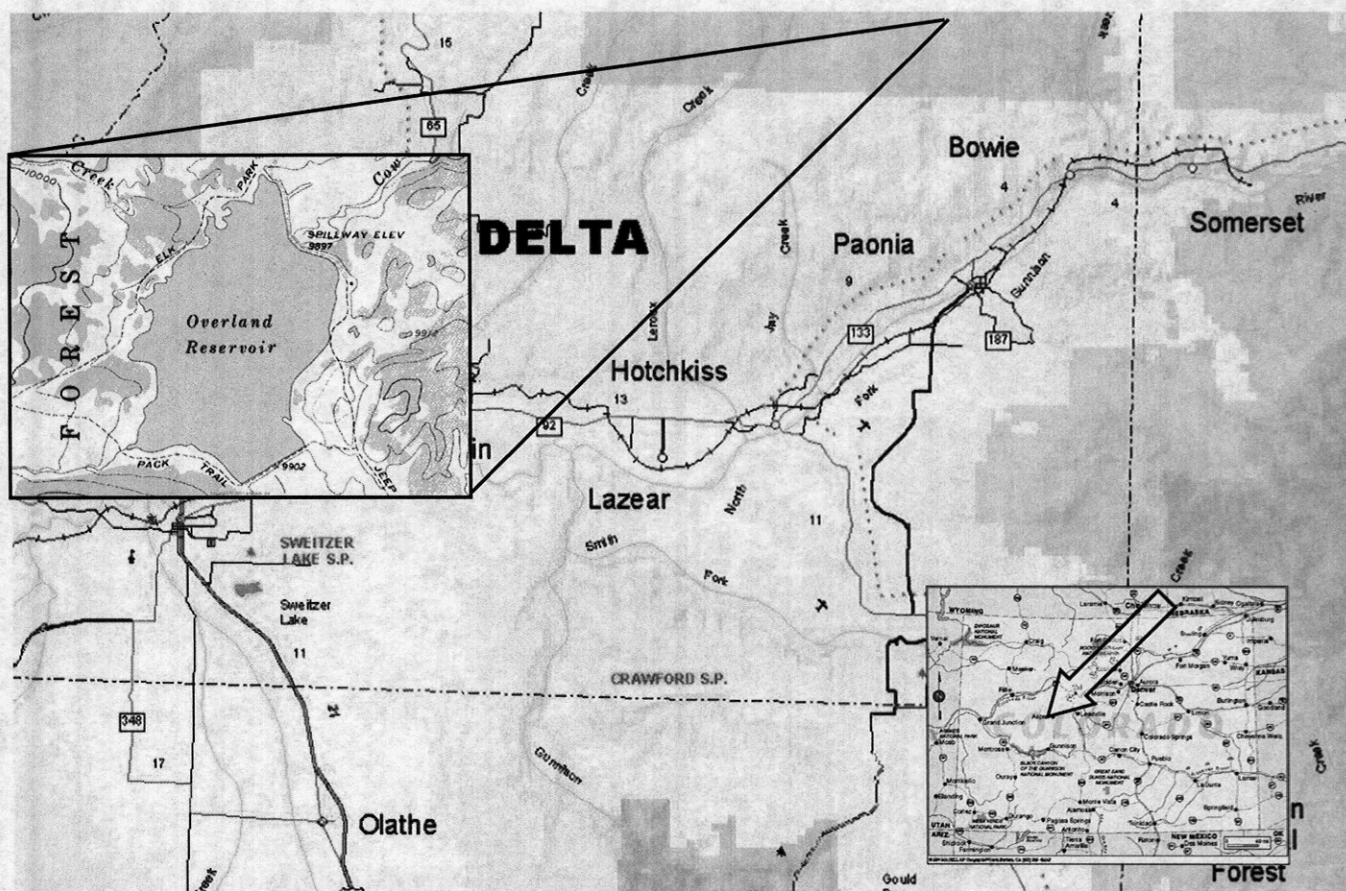




## CWCB Construction Loan Program Project Data Sheet

<b>Borrower:</b> Overland Ditch and Reservoir Co. <b>Project Name:</b> Overland Reservoir Enlargement <b>Drainage Basin:</b> Gunnison River Basin <b>Total Project Cost:</b> \$1,255,555 <b>Type of Borrower:</b> Agricultural <b>Loan Amount:</b> \$1,130,000	<b>County:</b> Delta <b>Project Type:</b> Reservoir Enlargement <b>Water Source:</b> Cow Creek <b>Funding Sources:</b> CWCB & Local Bank <b>Average Delivery:</b> 17,000 acre-feet <b>Interest Rate:</b> 2.5% <b>Term:</b> 30 years
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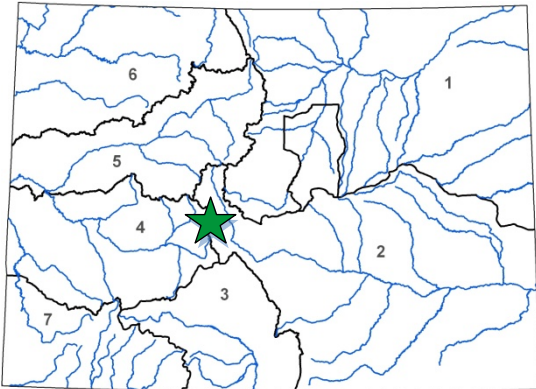
The Overland Reservoir Company is a non-profit mutual ditch company established in the State of Colorado in 1895. The Company owns and operates the Overland Reservoir for the 120 shareholders and delivers an average of 17,000 AF of irrigation water annually. The Reservoir is located in Delta County in 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



L O A N   D E T A I L S	
Project Cost:	\$533,430
CWCB Loan (with Service Fee):	\$181,800
Loan Term and Interest Rate:	10 Years @ 1.95%
Funding Source:	WSRA & Sev. Tax Perpetual Base 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:	Municipal & Industrial
Average Annual Delivery:	1,500 AF



L O C A T I O N	
County:	Lake
Water Source:	Evans Gulch
Drainage Basin:	Arkansas River
Division:	2
District:	11

The Evans Reservoir Bypass Flume, constructed around 1904, is a wooden trough measuring 6' x 5' x 450', including inlet and outlet structures. The flume carries Evans Creek contaminated water around Evans Reservoir and through the dam.

Annual maintenance of the wooden structure has required increasingly heavy efforts and expense. Heavy runoff events in the last several years have caused the condition of the flume to become an extremely urgent situation. 8,000 acres of deep snow must be channeled through the flume during spring runoff each year. In the spring of 2014, sudden runoff combined with spring rains resulting in an unusually high snow melt. The flume was nearly overwhelmed and the portion that passes over the abutment of the dam failed. Fairly serious erosion of the dam resulted, but emergency repairs prevented further damage and contamination of the water supply. Runoff in 2015 was unusually high as well, due to the amount of snowfall in April and unusually warm temperatures in June, necessitating emergency action again. The State Engineer's Office has strongly recommended that the flume be replaced. This project proposes a buried pipeline to replace the flume. Concrete inlet and outlet structures will be constructed, and a trash rack will be installed at the inlet.

The two primary objectives of the project are to protect water quality for the City of Leadville, and to prevent failure of the Evans Reservoir dam.

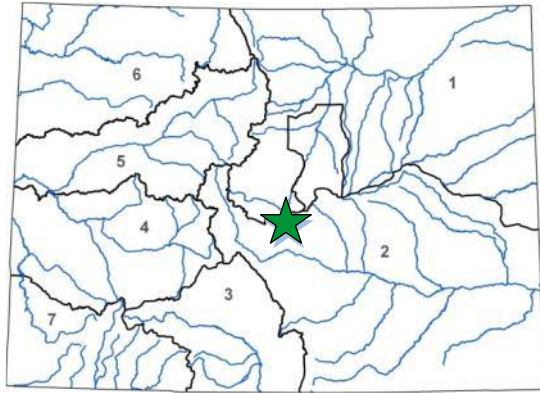






(Loan Increase)

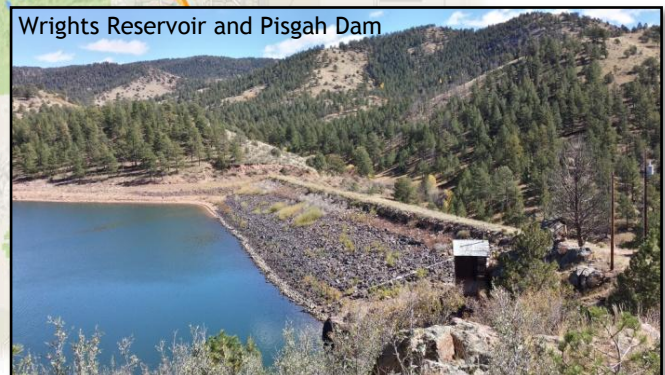
L O A N   D E T A I L S	
Project Cost:	\$745,000
CWCB Loan (with Service Fee):	\$549,091
Loan Term and Interest Rate:	30 Years @ 1.75%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
93%	7% Low - 0% Mid - 0% High      0%
P R O J E C T   D E T A I L S	
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.



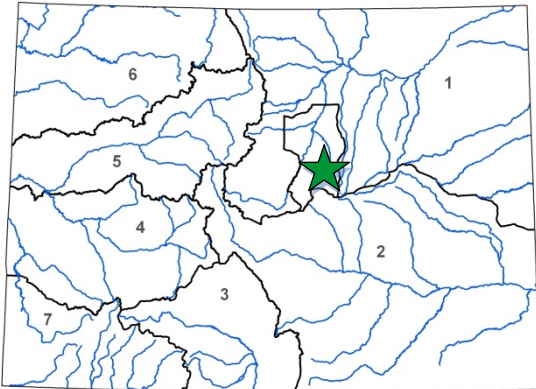


# Raw Water Supply Project

## Plum Valley Heights Subdistrict of the Roxborough Water and Sanitation District

May 2015 Board Meeting

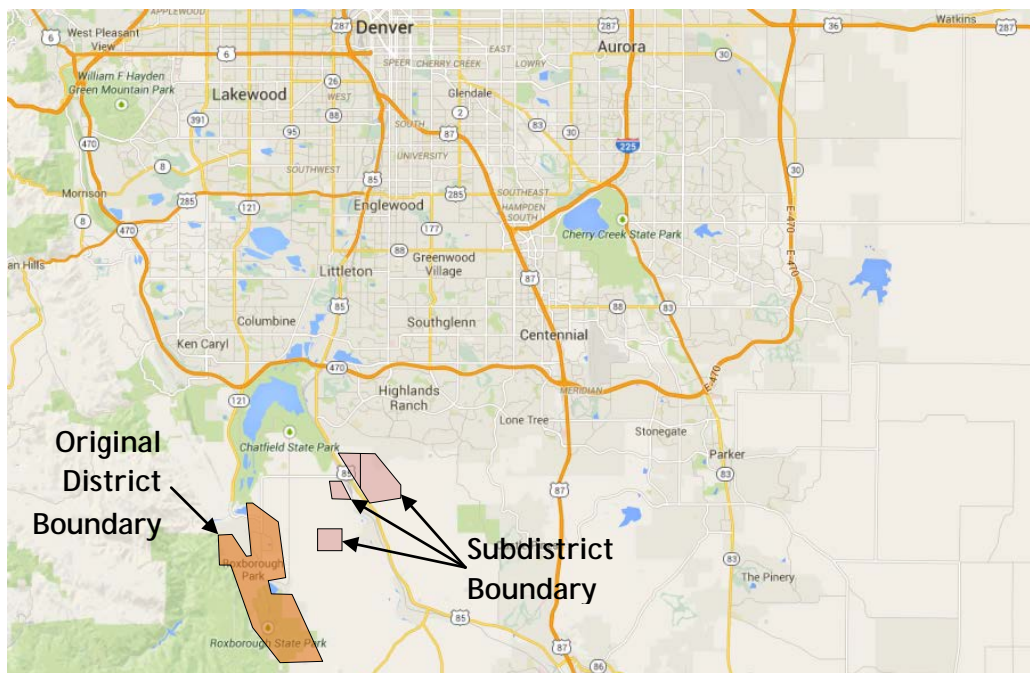
L O A N   D E T A I L S	
Project Cost:	\$2,473,605
CWCB Loan (with Service Fee):	\$2,248,260
Loan Term and Interest Rate:	30 Years @ 3.05%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
0%	0% Low - 0% Mid - 100% High
Commercial	0%
P R O J E C T   D E T A I L S	
Project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





**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.





## 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

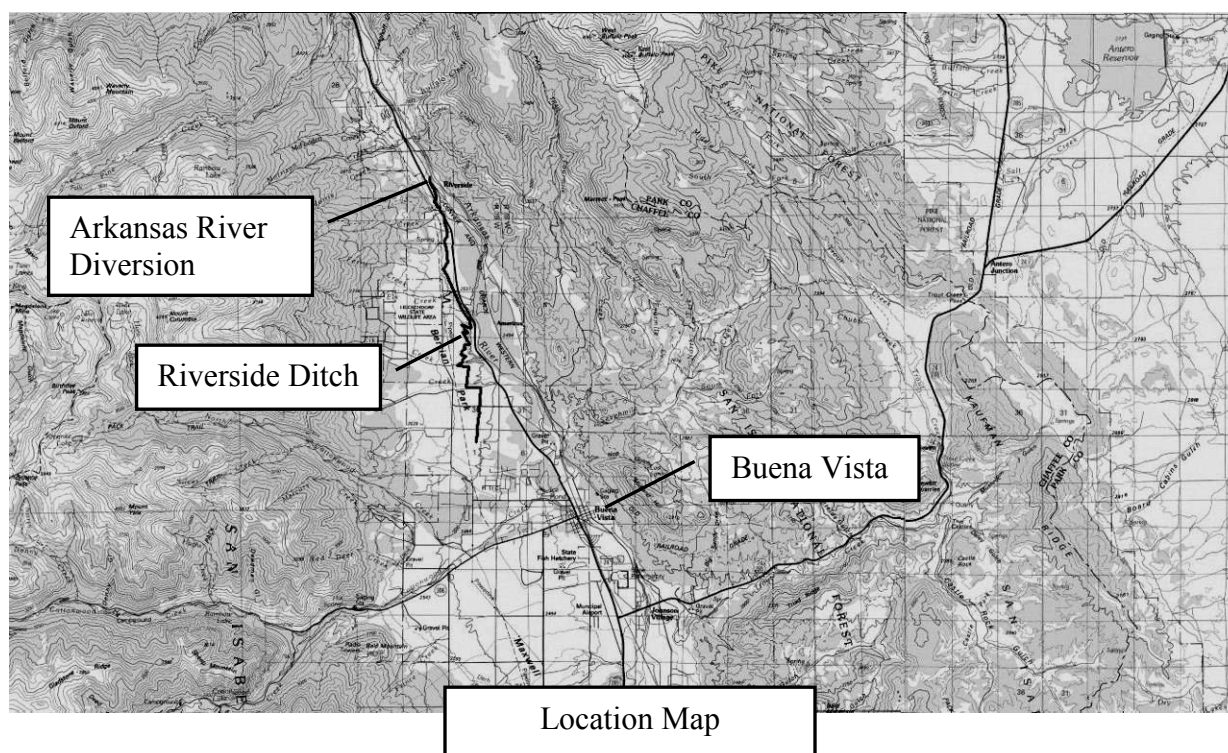
**Type of Borrower:** Agricultural

**Average Diversion:** 3,250 acre-feet

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

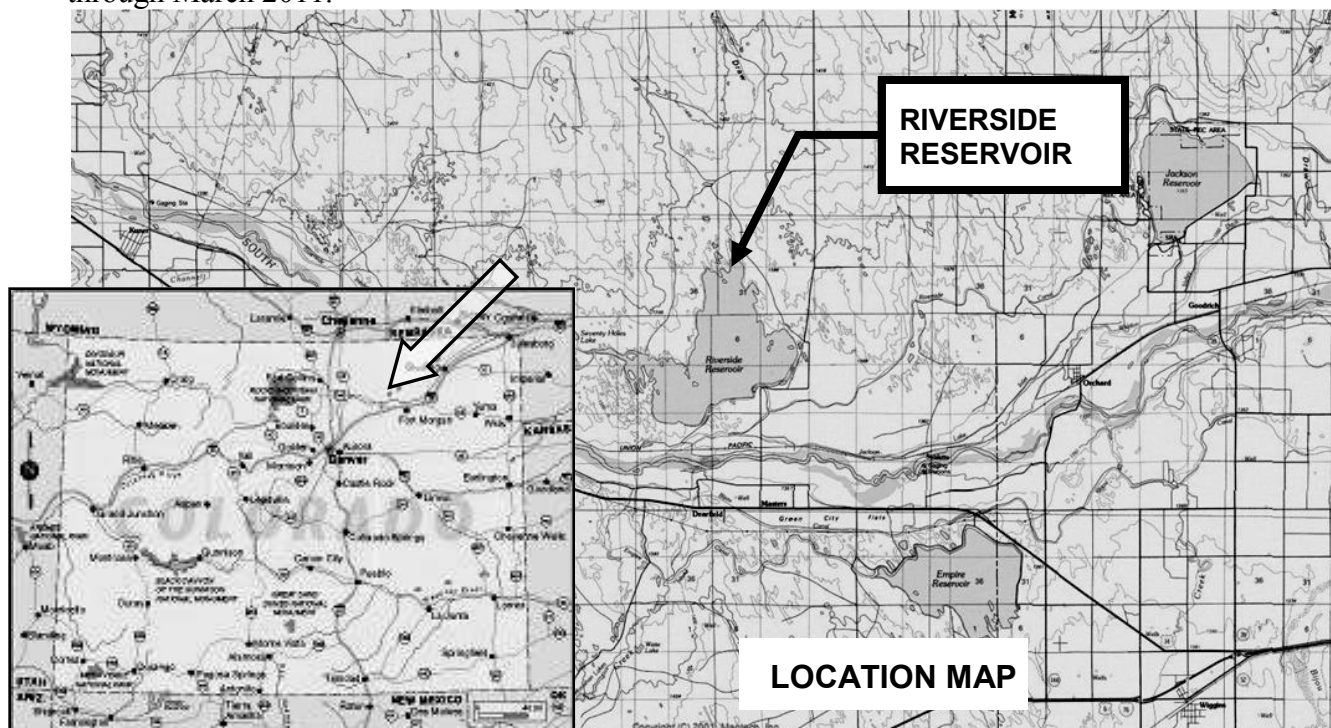
**Interest Rate:** 2.75% **Term:** 30 years

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

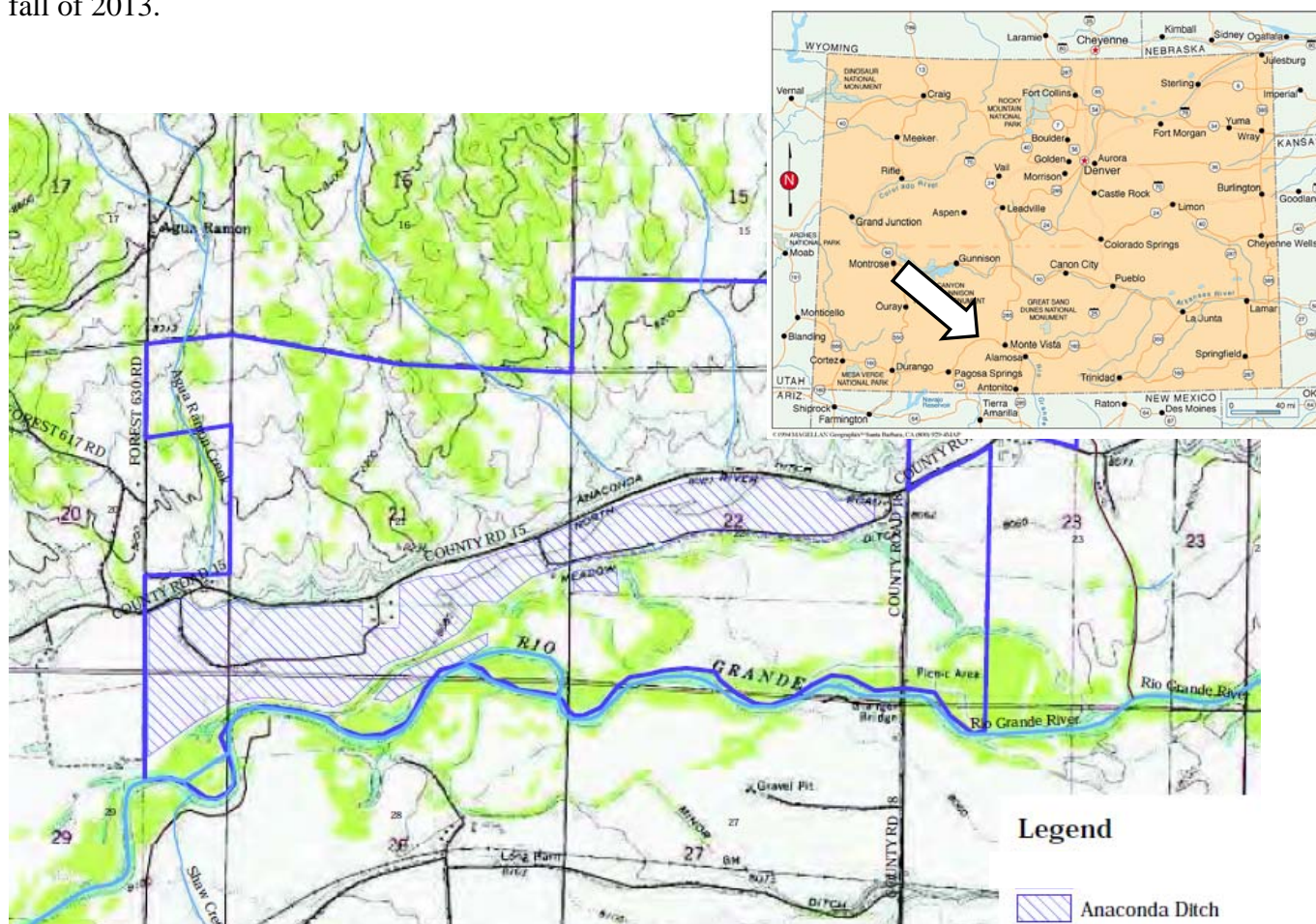
**Type of Borrower:** Municipal Low Income

**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

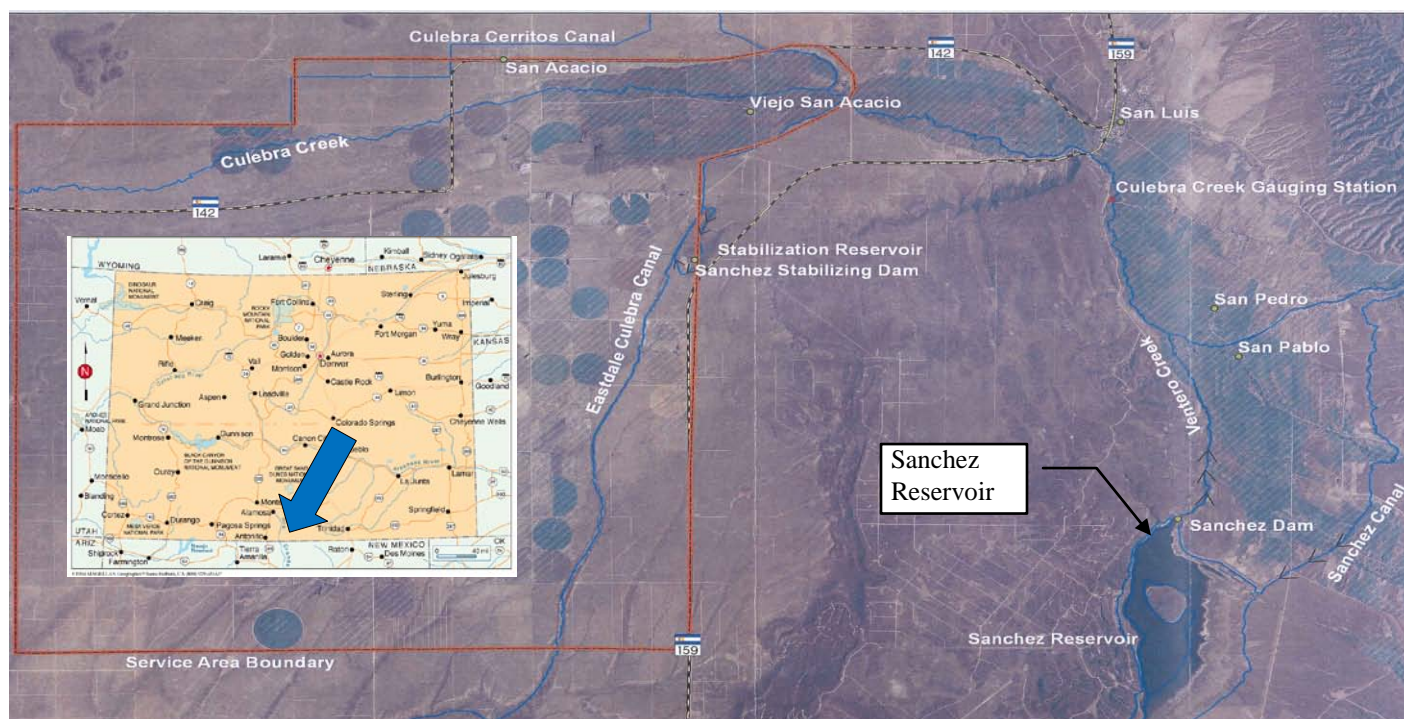
**Funding Sources:** Construction Fund &  
WSRA (Basin & Statewide funds)

**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.



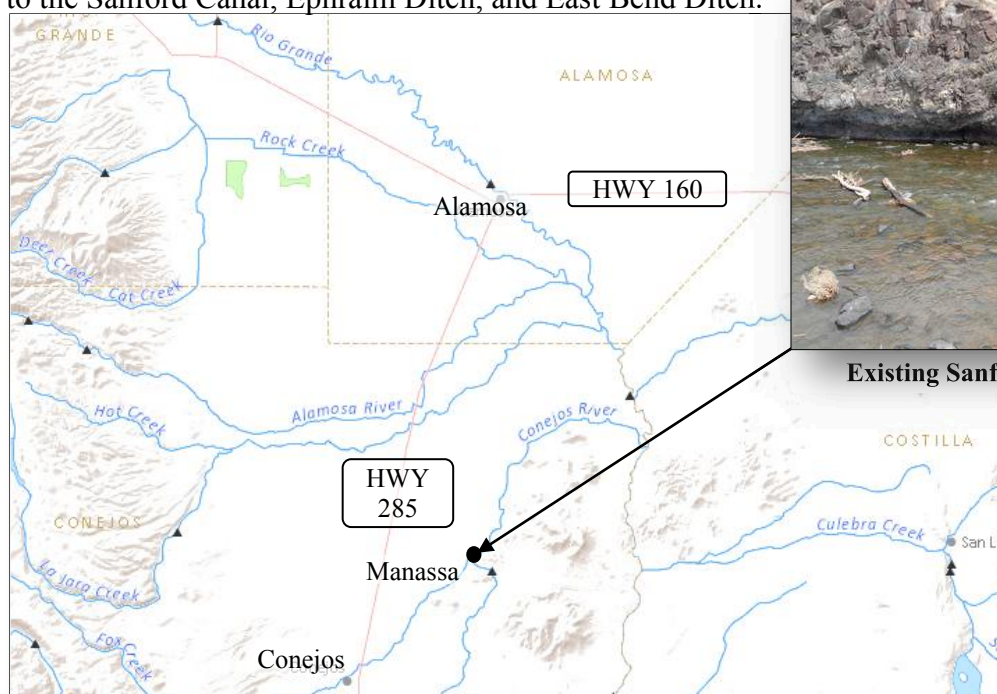
CWCW Water Project Loan Program  
Project Data Sheet

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:** 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

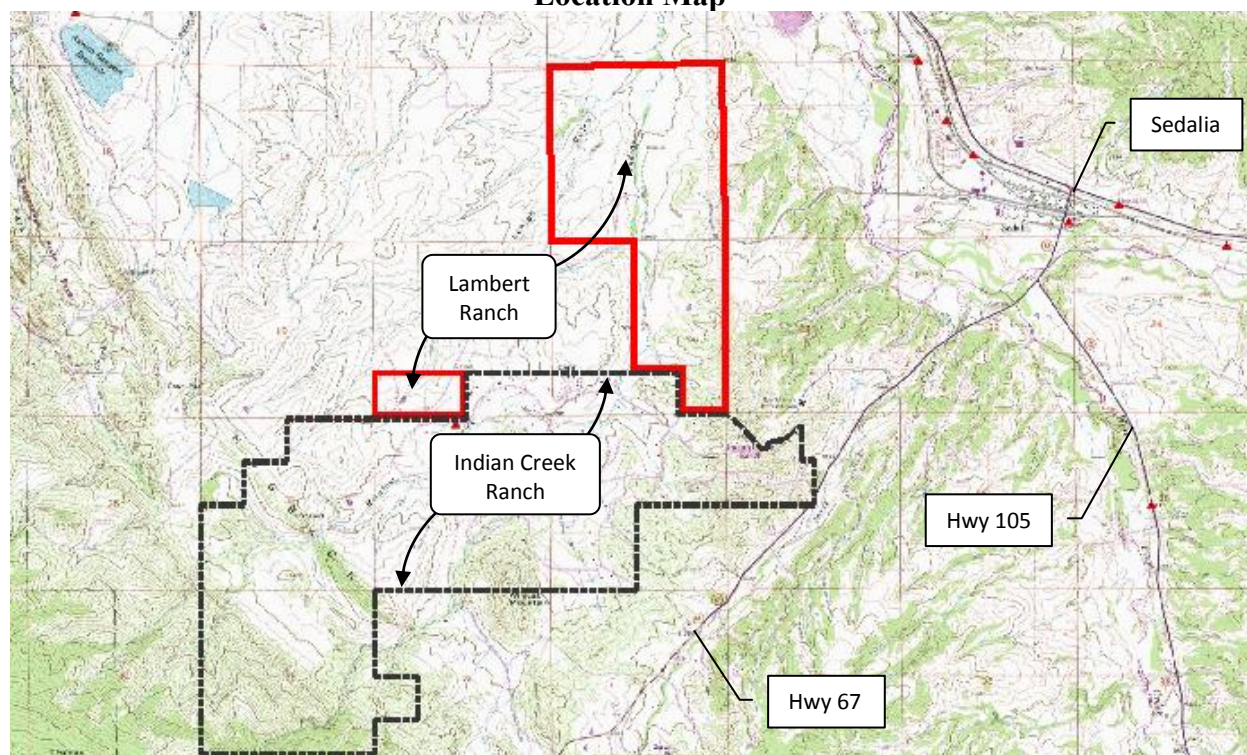
**Avg. Annual Delivery:** 55 AF

**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**



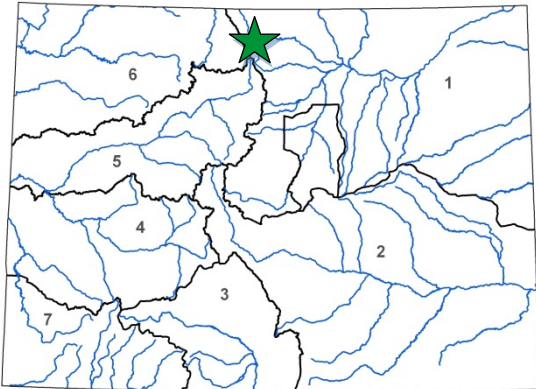




## Laramie-Poudre Tunnel Rehabilitation

The Tunnel Water Company  
September 2015 Board Meeting

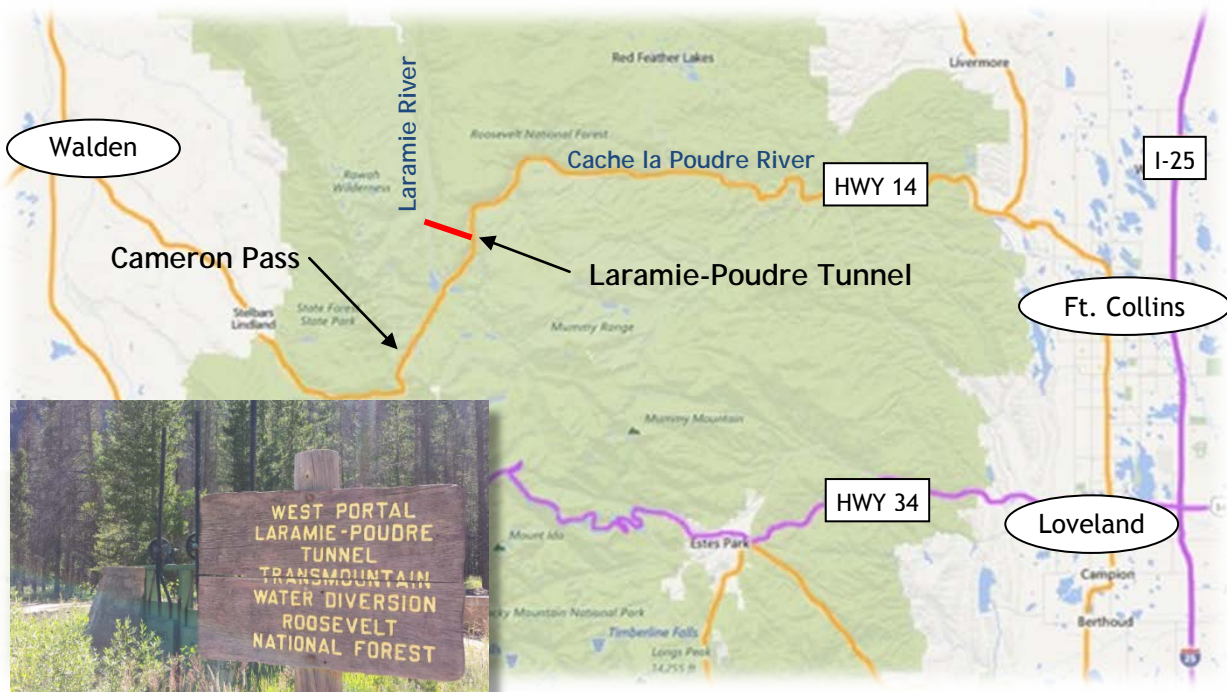
L O A N   D E T A I L S	
Project Cost:	\$1,225,000
CWCB Loan (with Service Fee):	\$1,111,000
Loan Term and Interest Rate:	30 Years @ 2.55%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
24%	20% Low - 24% Mid - 32% High      0%
P R O J E C T   D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	6,875 AF



L O C A T I O N	
County:	Larimer
Water Source:	Laramie River
Drainage Basin:	North Platte/South Platte
Division:	1      District: 48/3

The Tunnel Water Company operates the Laramie-Poudre Tunnel for the benefit of its two shareholders: Water Supply and Storage Company (WSSC) and Windsor Reservoir and Canal Company (WRCC). The tunnel diverts from the Laramie River, about 60 miles west of Fort Collins, and delivers water through a 2.15-mile tunnel to the Poudre River. WSSC delivers irrigation water to its shareholders, primarily for agricultural irrigation on approximately 40,000 acres lying below the Larimer County Canal. WRCC delivers water to its municipal shareholders via the Soldier Canyon and Bellvue Water Treatment Plants.

The Company purchased the Laramie Poudre Tunnel and its adjoining Laramie River System in 1938. The west portal (inlet) has deteriorated since it was originally constructed in 1910. The interior timber cribbing and concrete lining are at or near the end of their useful lives and the steepness of the slope of this section makes it very difficult to access the tunnel for maintenance. Additionally the east portal's (outlet) concrete energy attenuation structure, which has been resurfaced many times before, is heavily spalled and near failure. The Company is seeking this CWCB loan to cover 90% of construction cost associated with the west and east portal repairs. West portal repairs will occur after the 2015 irrigation season with the east portal repairs being completed after the 2016 irrigation season.



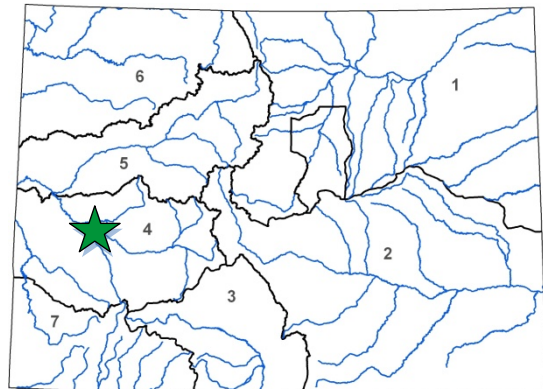


# Drop 5 Hydroelectric Project

## Uncompahgre Valley Water Users Association

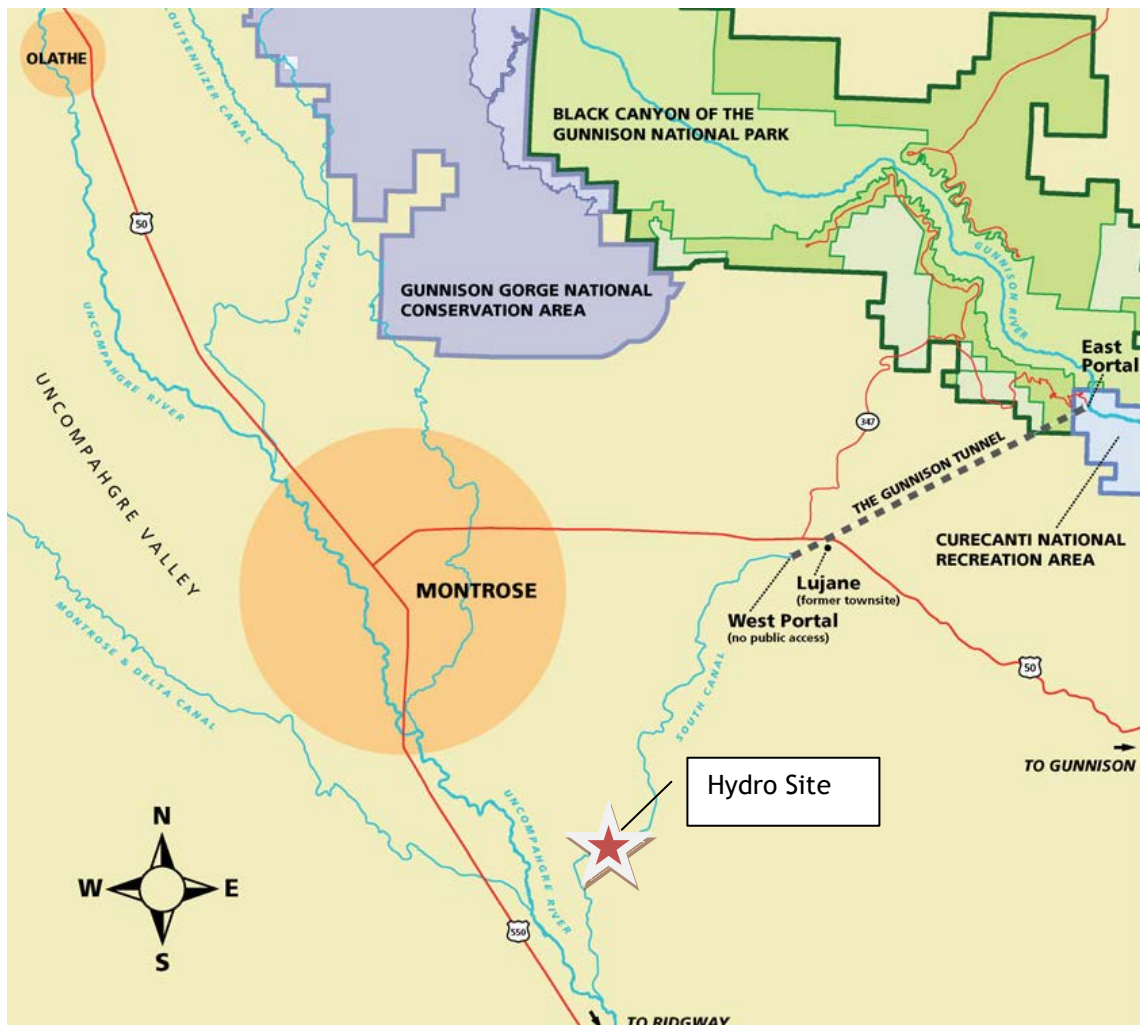
May 2015 Board Meeting

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.



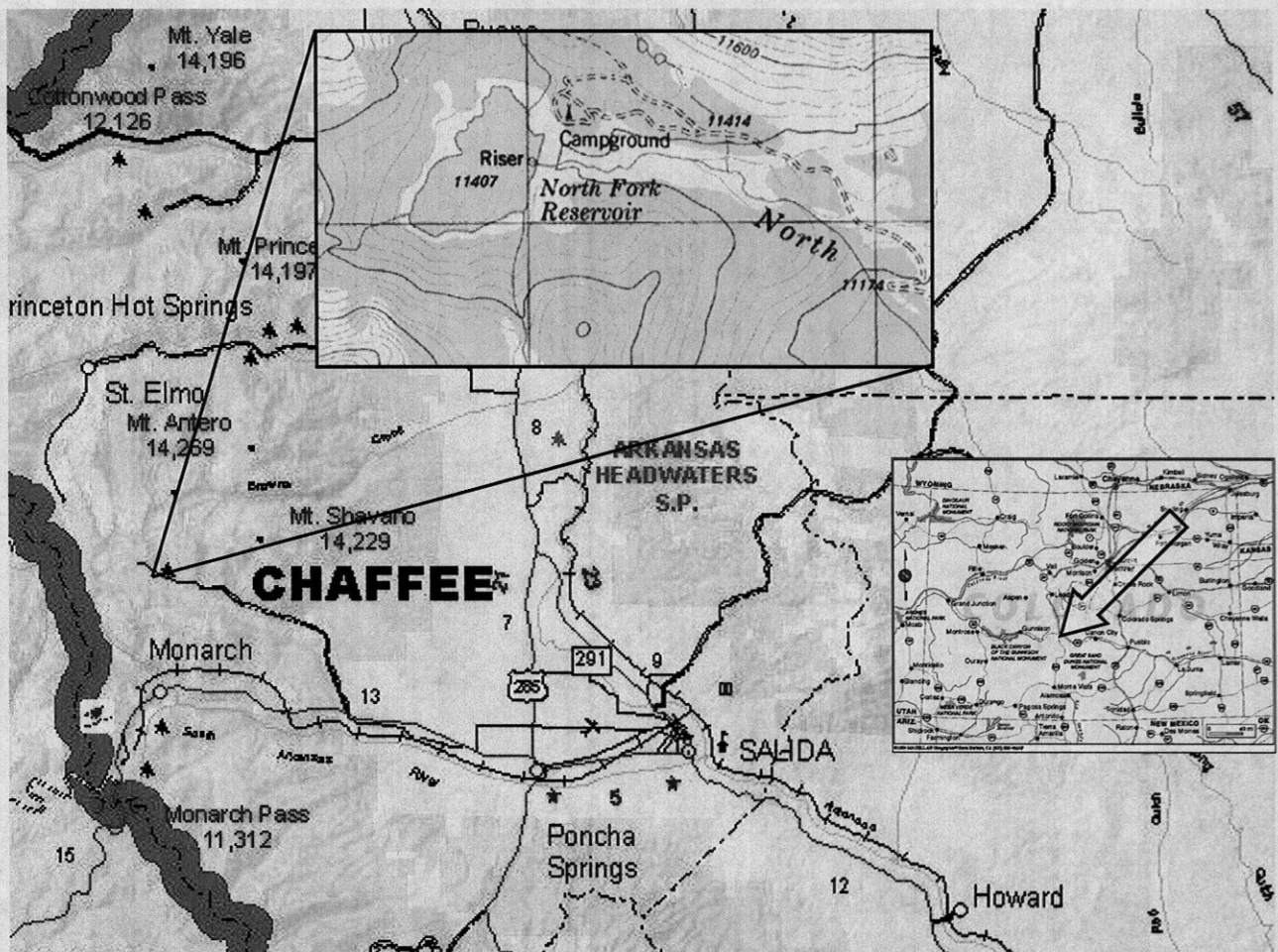


**CWCB Construction Loan Program  
PROJECT DATA SHEET**

Loan Program  
Attachment 3

<b>Borrower:</b> Upper Arkansas Water Conservancy District	<b>County:</b> Chaffee/Fremont/Custer
<b>Project Name:</b> North Fork Reservoir Rehab/Expansion	<b>Drainage Basin:</b> Arkansas River
<b>Project Type:</b> Dam and Spillway Modifications	<b>Water Source:</b> N. Fork of S. Arkansas
<b>Total Project Cost:</b> \$3,309,850	<b>Funding Sources:</b> CWCB & Company
<b>Loan Amount:</b> \$2,980,000	<b>Current Reservoir Storage:</b> 500 acre-feet
<b>Type of Borrower:</b> Low Municipal/Agricultural	<b>Interest Rate:</b> 3.0% <b>Term:</b> 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.

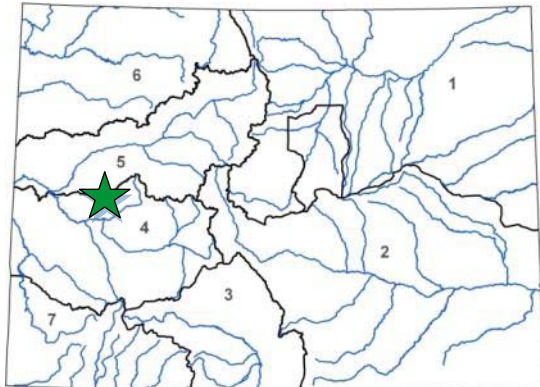


LOCATION MAP





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.

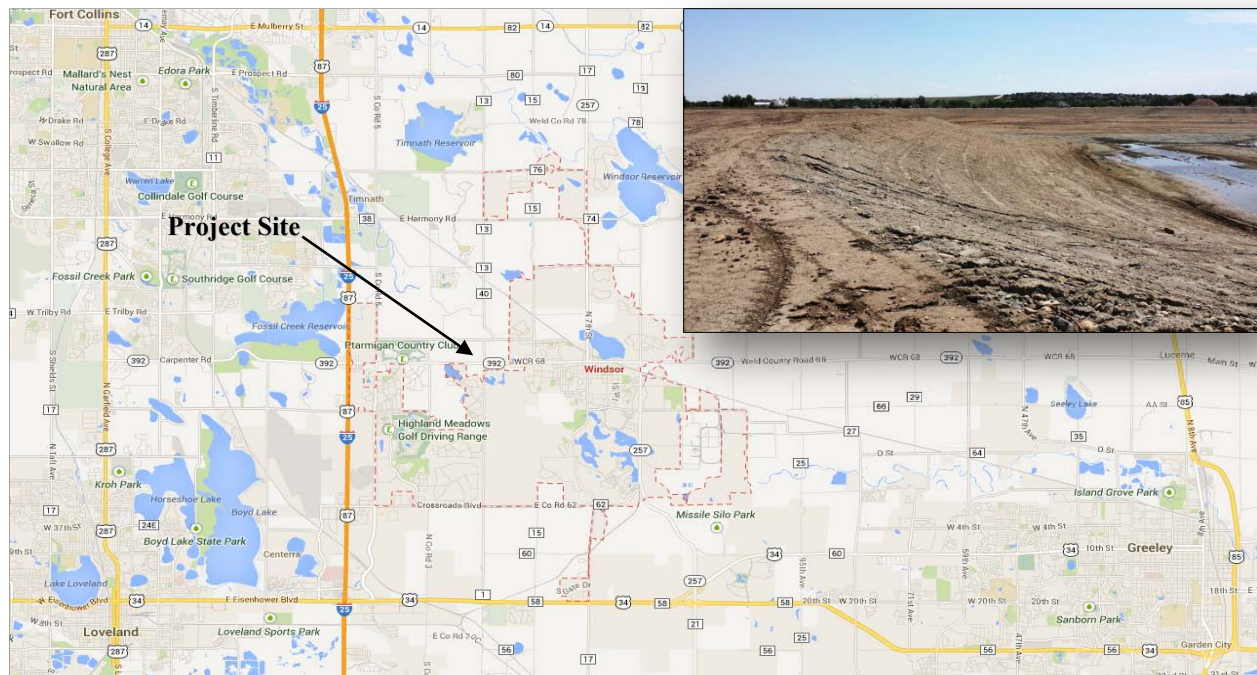


# **CWCB Water Project Loan Program Project Data Sheet**

**C150366**

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

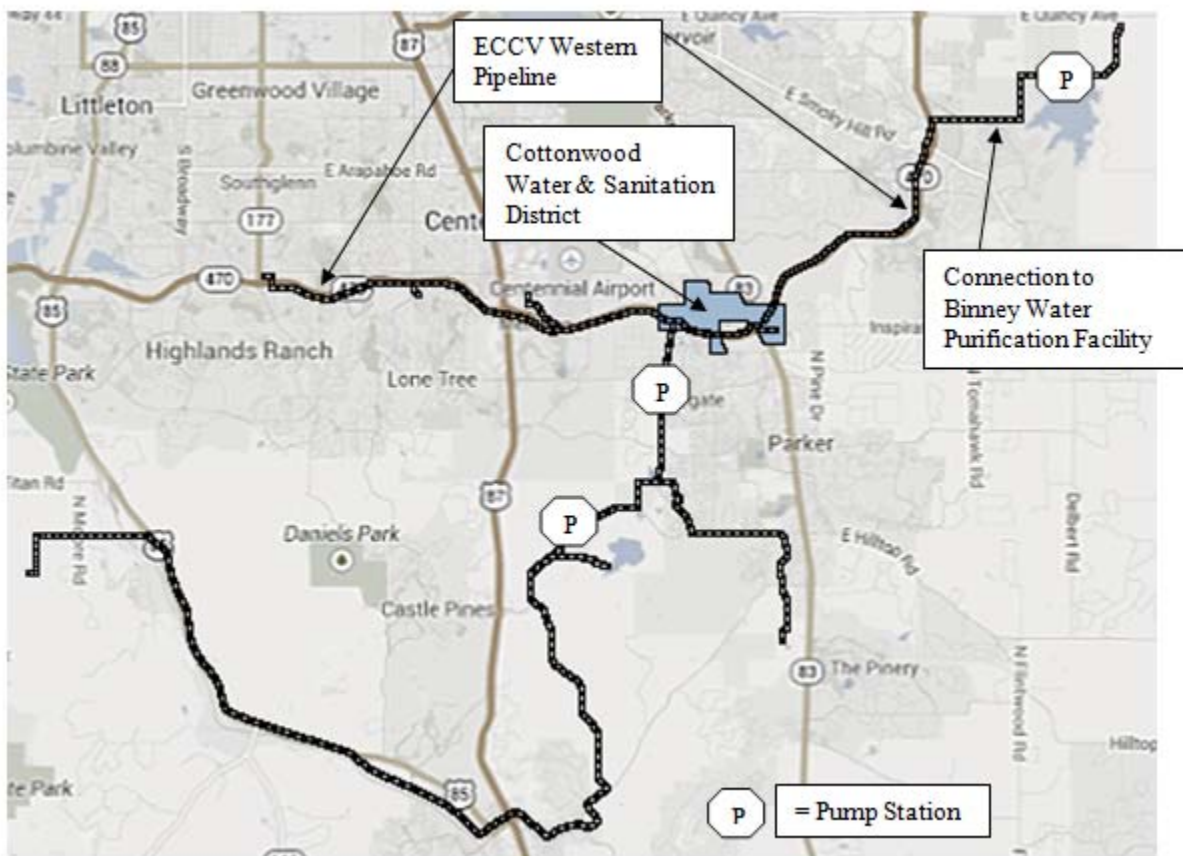
**Average Annual Delivery:** 789 AF

**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

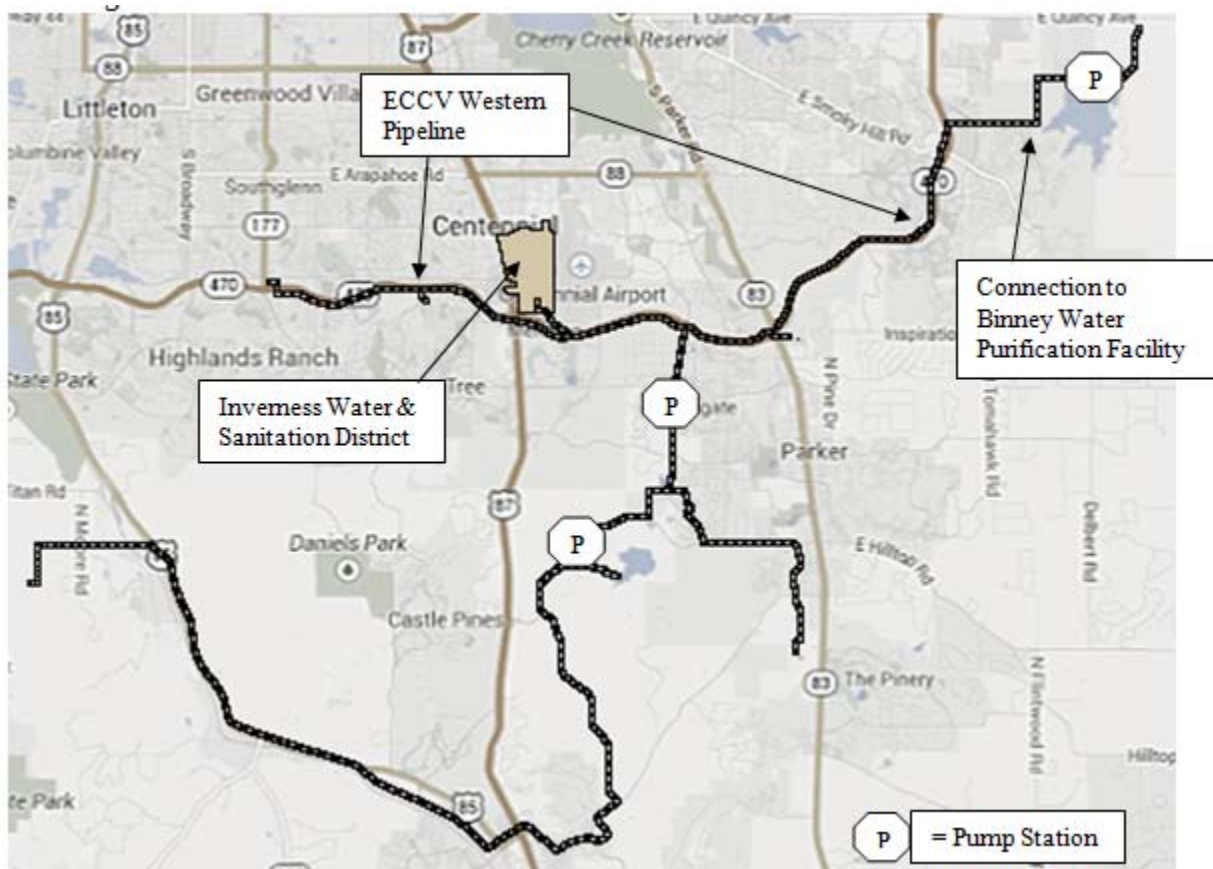
**Average Annual Delivery:** 1,100 AF

**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

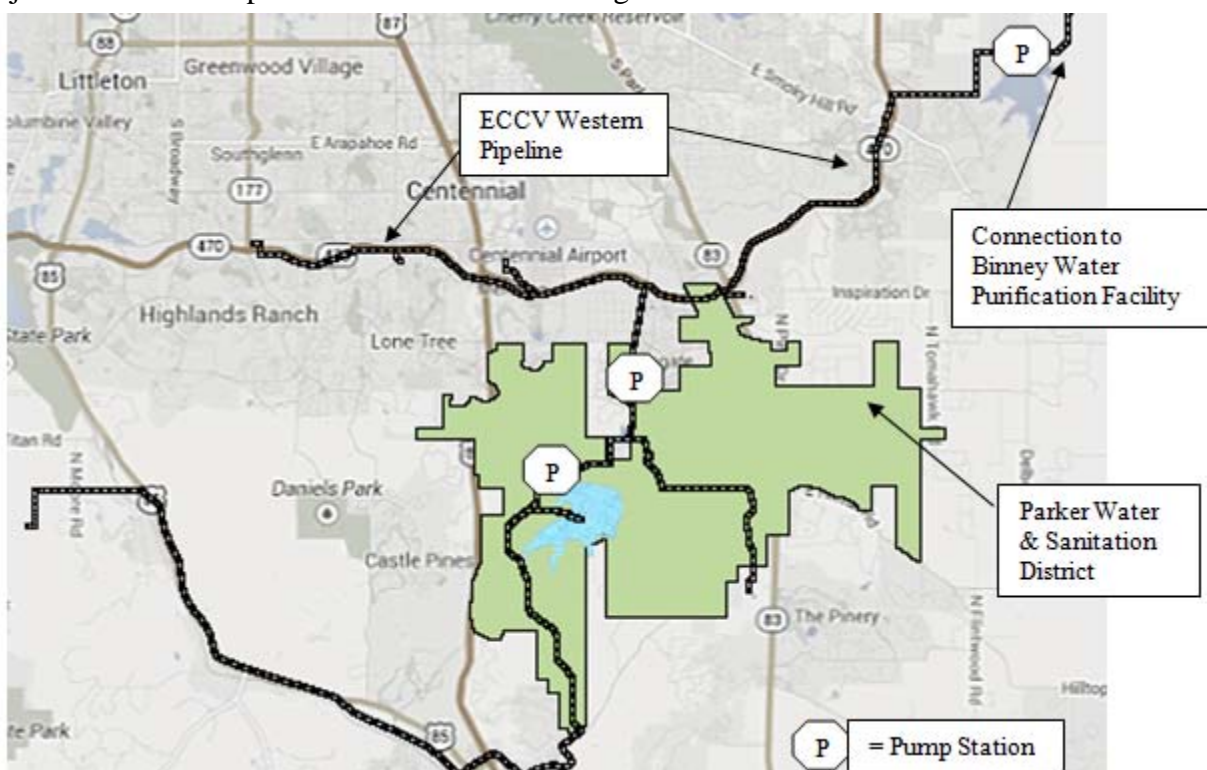
**Type of Borrower:** High-income Municipal      **Average Annual Delivery:** 5,000 AF

**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**

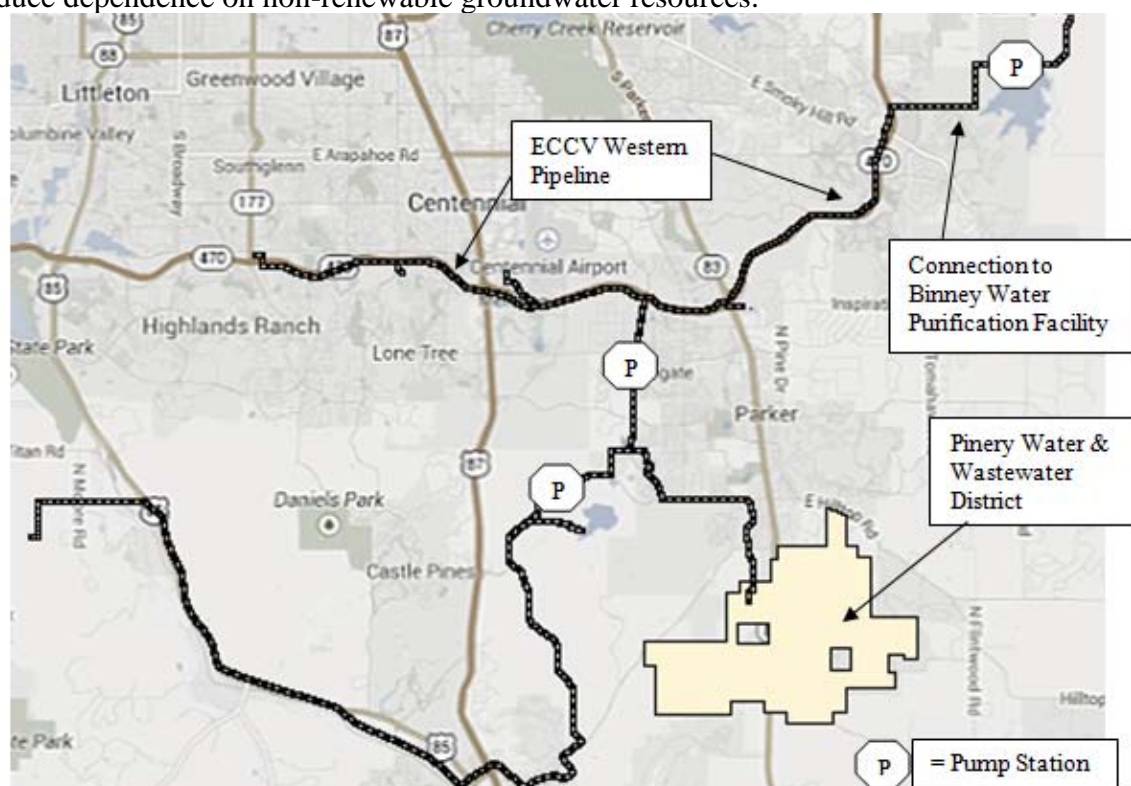
**C150411**

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



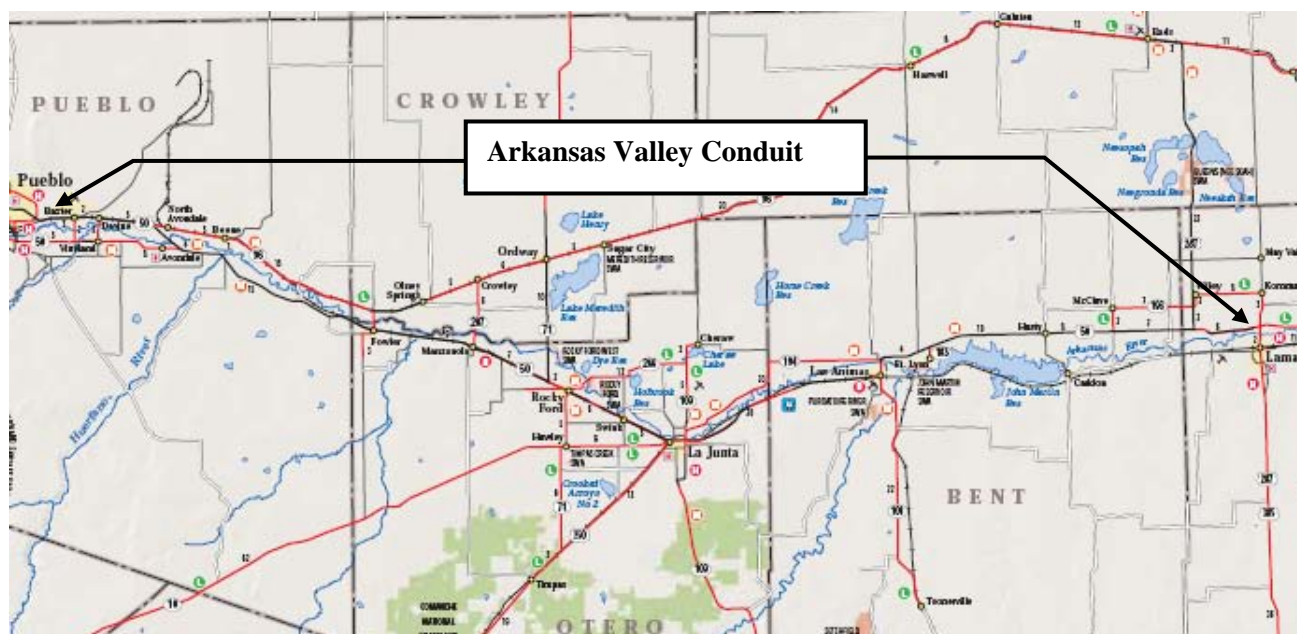


## **Projects Not Under Contract**

## Water Project Construction Loan Program - Project Data

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

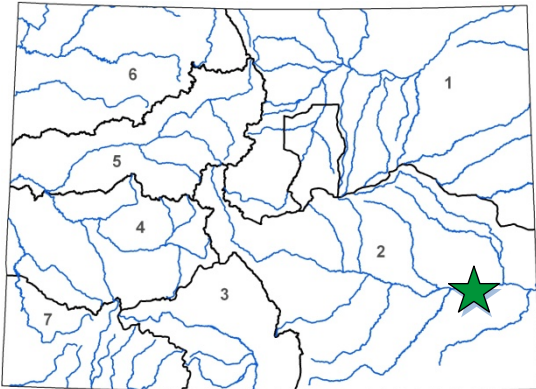
The Arkansas Valley Conduit is designed to bring relatively clean raw water to 41 water providers in the lower Arkansas Valley, who currently either take water from the Arkansas River, and/or pump from shallow and/or deep aquifers. This pumped water has quality problems and requires significant treatment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



Location Map

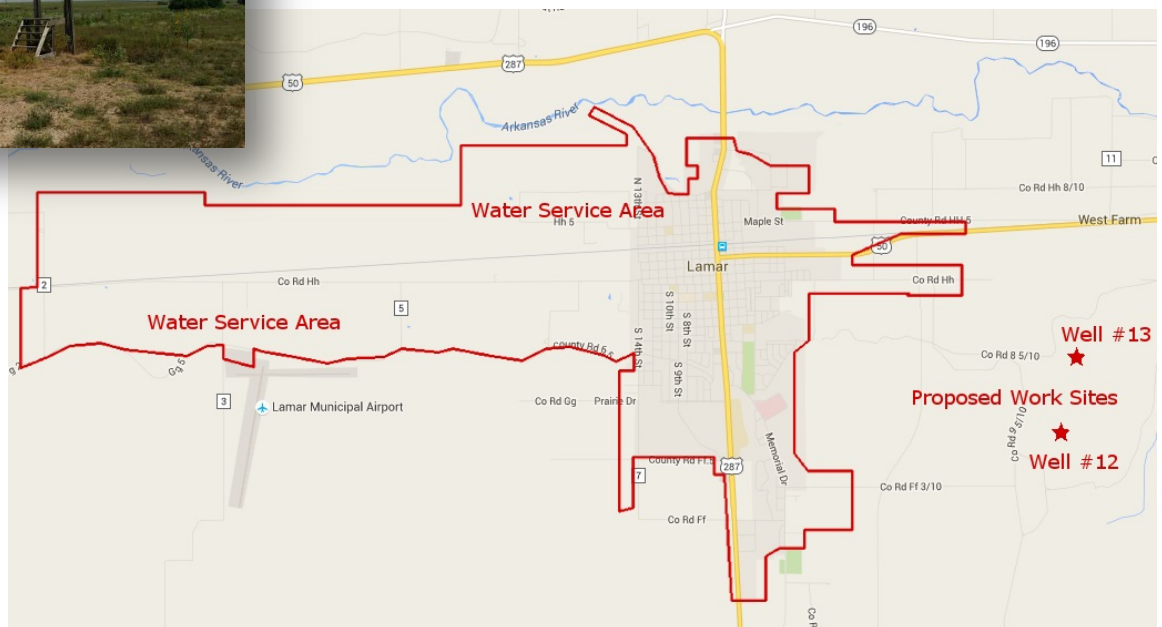


L O A N   D E T A I L S	
Project Cost:	\$400,000
CWCB Loan (with Service Fee):	\$101,000
Loan Term and Interest Rate:	10 Years @ 1.95%
Funding Source:	WSRA & Sev. Tax Perpetual Base Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
0%	100% Low - 0% Mid - 0% High      0%
P R O J E C T   D E T A I L S	
Project Type:	Municipal & Industrial
Average Annual Delivery:	2,005 AF



L O C A T I O N	
County:	Prowers
Water Source:	Arkansas River
Drainage Basin:	Arkansas River
Division:	2      District: 67

The City of Lamar, through its Water and Wastewater Department, has been providing the city with water and sewer services for over 135 years. Although the City has undertaken numerous upgrades, rehabilitation, and expansion projects over the years, most of the existing infrastructure was funded and built during New Deal-era programs. The City's Wells 12 and 13 were developed in the 1950s and used for municipal potable water supply until 2012, when Microscopic Particulate Analysis water quality testing was conducted, resulting in a reclassification of both wells as Ground Water Under Direct Influence of Surface Water (GWUDI) by the Colorado Department of Public Health and Environment (CDPHE). The wells were taken out of service at that time. A Feasibility Study conducted in 2014 concluded that it is feasible to redevelop both wells for non-potable irrigation use. Once this project is completed, water can be used for any non-potable municipal application, including irrigation of a city-owned cemetery and a golf course, both of which are currently watered with potable water.

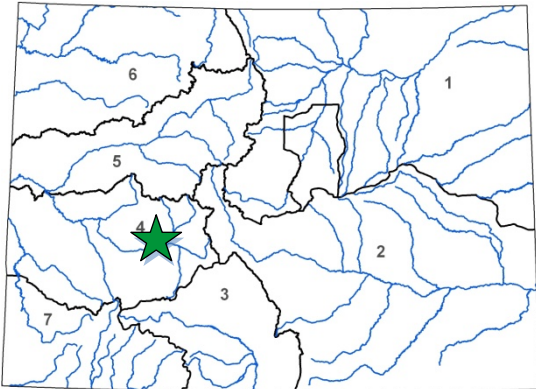


Water Project Loan Program - Project Data Sheet



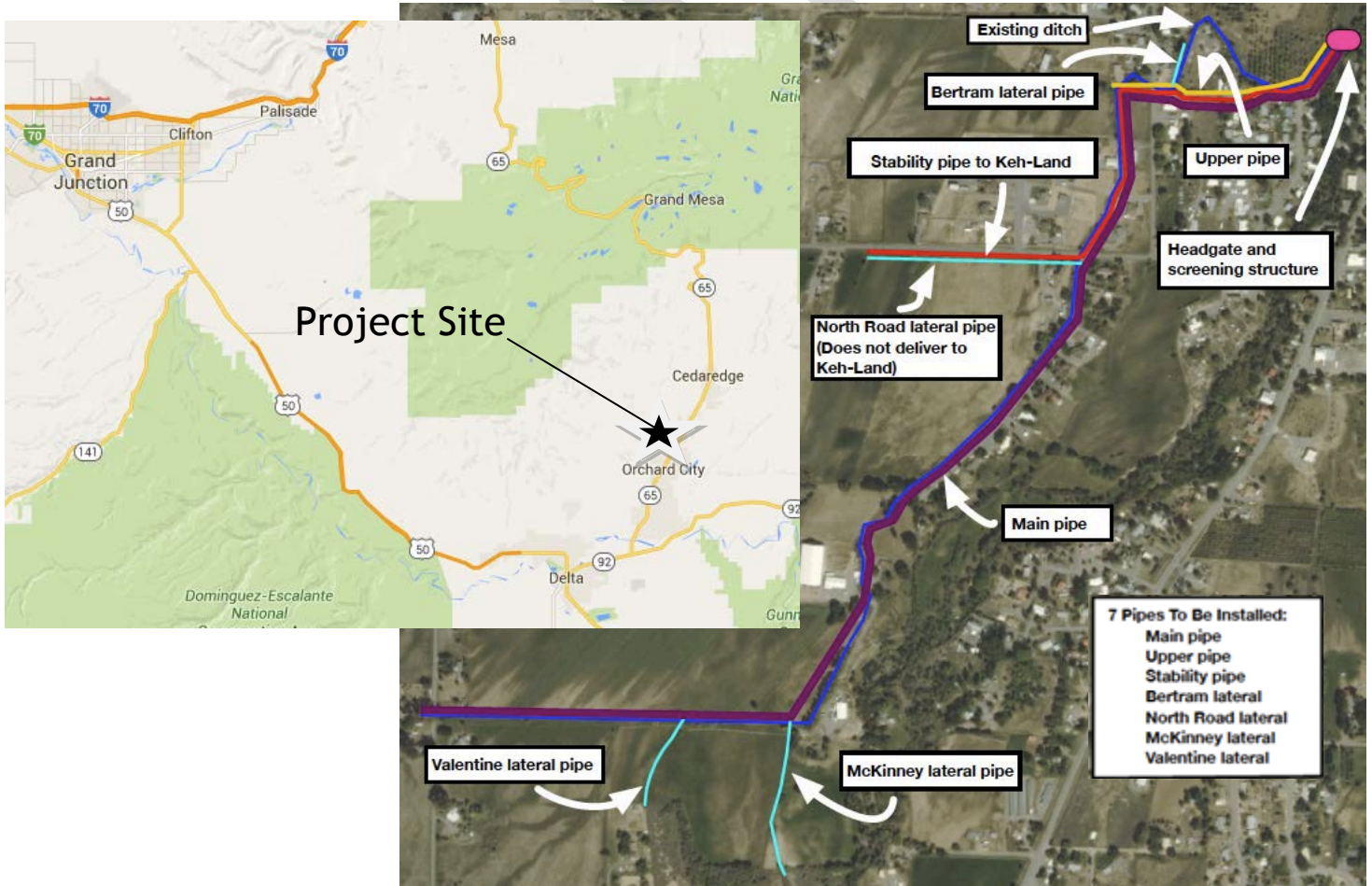


L O A N   D E T A I L S	
Project Cost:	\$1,430,720
CWCB Loan (with Service Fee):	\$151,500
Loan Term and Interest Rate:	30-Years @ 1.95%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
86%	14% Low - 0% Mid - 0% High      0%
P R O J E C T   D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,750 AF



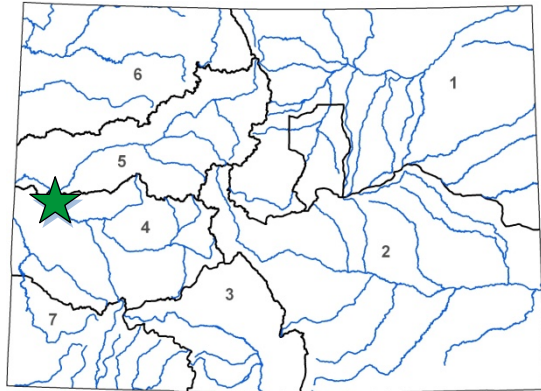
L O C A T I O N	
County:	Delta
Water Source:	Surface Creek
Drainage Basin:	Gunnison River
Division:	4      District: 40

The Company serves approximately 350 irrigated acres in Delta County, approximately 10 miles north of the town of Delta, diverting all its supplies via a concrete diversion structure on Surface Creek. The Company's ditch was constructed in the late 1800s by a group of early settlers cooperating to get water to their new farms, and has been in continuous operation since that time. The proposed project will pipe the 1.6 mile long main earthen canal and portions of 4 laterals. The project will be done in conjunction with the U.S. Bureau of Reclamation's Colorado River Basin Salinity Control Program. Approximately 90% of project costs will be provided by a grant from the the U.S. Bureau of Reclamation. Construction is expected to begin in mid-2016 with completion by mid-2017.





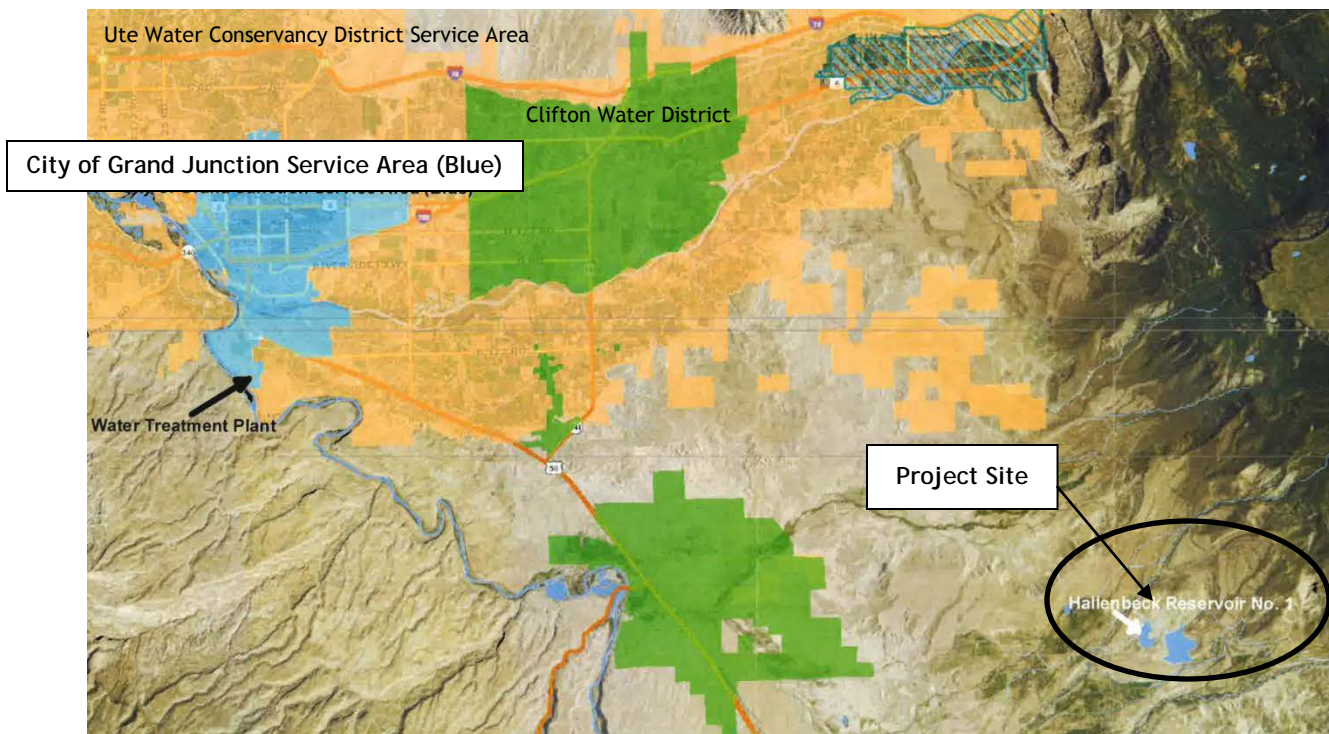
L O A N   D E T A I L S	
Project Cost:	\$1,153,782
CWCB Loan (with Service Fee):	\$1,010,000
Loan Term and Interest Rate:	20 years @ 2.65%
Funding Source:	Construction Fund and WSRA Grants
B O R R O W E R   T Y P E	
Agriculture	Municipal
0%	0% Low - 100% Mid - 0% High
	Commercial
	0%
P R O J E C T   D E T A I L S	
Project Type:	Dam Rehabilitation
Average Annual Delivery:	5,218 AF
Recovered Storage:	699 AF



L O C A T I O N	
County:	Mesa
Water Source:	Kannah Creek
Drainage Basin:	Gunnison
Division:	4
District:	42

Hallenbeck Reservoir No. 1 is one of the City of Grand Junction's 14 reservoirs. It has a capacity of 699 acre-feet. In 2014 the City of Grand Junction developed plans to mitigate seepage through the dam; however, during the evaluation process, seepage increased and an 80-foot crack developed on the downstream face of the dam.

Water was immediately released from the reservoir in an effort to relieve hydrostatic pressure within the dam. The City completed a forensic evaluation of the dam that included a geotechnical investigation and structural evaluation. The purpose of this project is to repair the dam to allow the City to use all of the storage capacity. Construction involves removal of several feet of material on the downstream face of the dam, removal of the existing toe drain system, installation of a blanket filter on the downstream face, installation of a new toe drain system, installation of a buttress on the downstream face, and installation of new piezometers and monuments. This will allow the City to make use of its 1939 absolute irrigation right, and 1993 conditional municipal right. Construction is expected to occur in the summer of 2016.



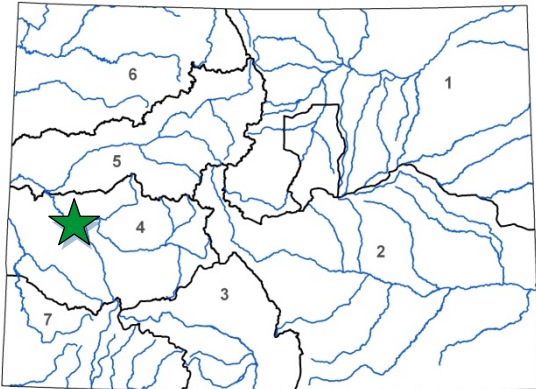




# Piping the Duke Ditch

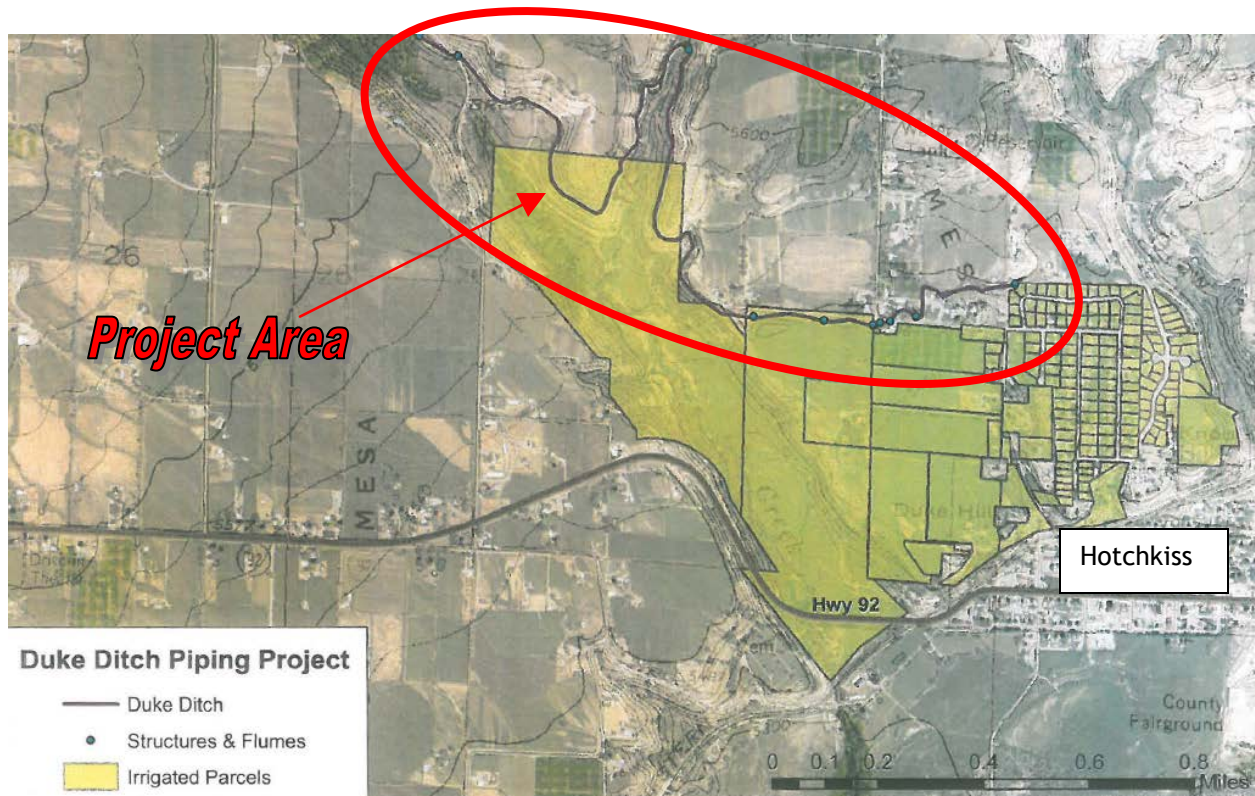
Duke Ditch Company  
March 2016 Board Meeting

L O A N   D E T A I L S	
Project Cost:	\$749,374
CWCB Loan (with Service Fee):	\$90,900
Loan Term and Interest Rate:	30 years @ 2.0%
Funding Source:	Construction Fund, WSR, Salinity Control
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
68%	32% Low - 0% Mid - 0% High      0%
P R O J E C T   D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,424 AF



L O C A T I O N	
County:	Delta
Water Source:	Leroux Creek
Drainage Basin:	Gunnison
Division:	4      District: 42

The Duke Ditch Company diverts from Leroux Creek and Barrow Gulch, west of the Town of Hotchkiss, and delivers water through the Company's ditch to a 380-acre service area. The earthen ditch traverses a steep hillside in the Leroux Creek canyon where it is prone to washout and is subject to significant seepage and evaporative losses. As a result of the location, it has significant maintenance and aquatic vegetation growth issues. The deep percolation of irrigation water in this area contributes salinity and selenium to the Colorado River system; therefore, the Company obtained a \$464,000 Salinity Control Program grant (61% of project costs) and a \$100,900 NRCS grant (13% of project costs), as the project is expected to reduce salt loading to the Colorado River system by 395 tons/year. In addition, the Company is applying for a \$47,237 basin grant and a \$47,237 statewide grant from the Water Supply Reserve Account Grant Program to pipe the entire 2.7 miles of ditch. Construction is scheduled for the fall/winter of 2016/2017.





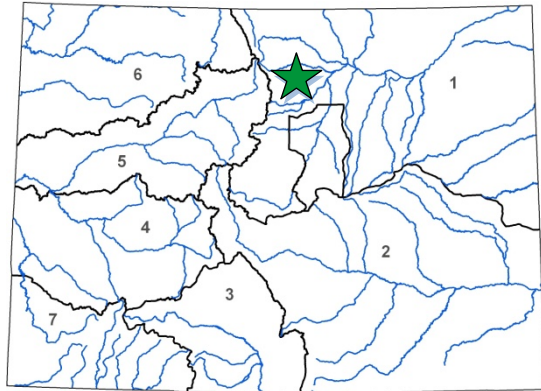


# Dixon Reservoir Dam Improvement

## Dixon Canon Ditch and Reservoir Company

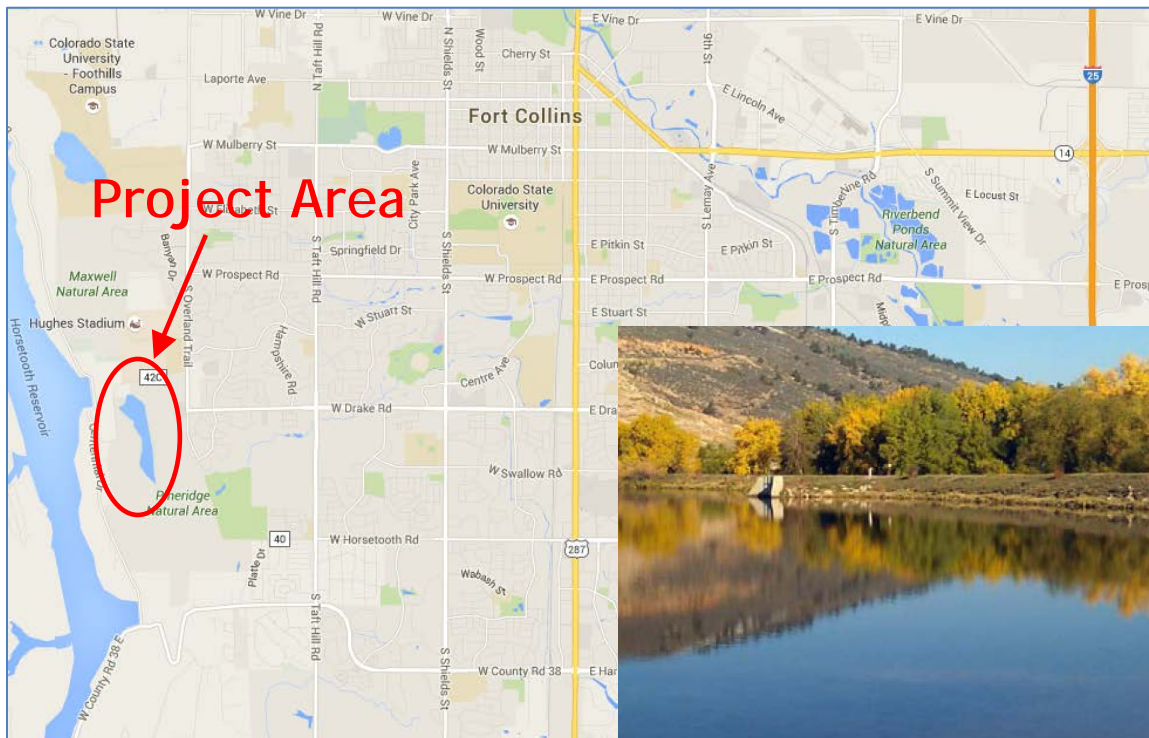
May 2016 Board Meeting

L O A N   D E T A I L S	
Project Cost:	\$309,000
CWCB Loan (with Service Fee):	\$278,100
Loan Term and Interest Rate:	30 years @ 2.55%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
17%	0% Low - 83% Mid - 0% High
	Commercial
	0%
P R O J E C T   D E T A I L S	
Project Type:	Dam Rehabilitation
Average Annual Delivery:	312 AF
Total Storage Effect:	412 AF



L O C A T I O N	
County:	Larimer
Water Source:	Dixon Creek
Drainage Basin:	South Platte River
Division:	1
District:	3

Dixon Canon Ditch and Reservoir Company owns and operates the Dixon Reservoir Dam and associated ditch located in Larimer County on the west side of Fort Collins. Dixon Reservoir is directly east of Horsetooth Reservoir. The ditch diverts water off of Dixon Creek and provides water for outdoor irrigation to a 206-acre service area via approximately 9,000 feet of pipe and ditch. The water is typically used to irrigate turf, agricultural crops, and the City of Fort Collins parks and open space. The dam was constructed in 1885 and is classified as a Significant Hazard Dam by the Dam Safety Branch of the Office of the State Engineer (SEO). The Reservoir has a decreed storage volume of 412 acre-feet. Recent SEO inspections identified areas of seepage that need to be addressed in order to maintain the full storage decrees. The purpose of this project is to address seepage issues and improve the dam outlet works so the Company can continue providing an adequate amount of irrigation water to shareholders while minimizing the risk of dam failure. Construction is expected to begin in late 2016.

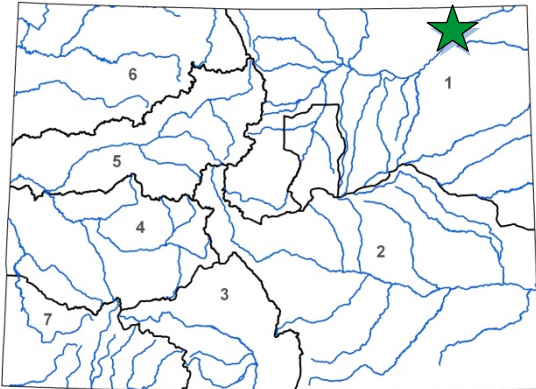




# Reconstruction of the Harmony No. 1 Measurement Structure

Julesburg Irrigation District  
May 2016 Board Meeting

L O A N   D E T A I L S	
Project Cost:	\$224,000
CWCB Loan (with Service Fee):	\$203,616
Loan Term and Interest Rate:	30 years @ 1.70%
Funding Source:	Construction 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:	Ditch Rehabilitation
Average Annual Delivery:	54,423 AF



L O C A T I O N	
County:	Sedgwick
Water Source:	South Platte River
Drainage Basin:	South Platte River
Division:	1      District: 64

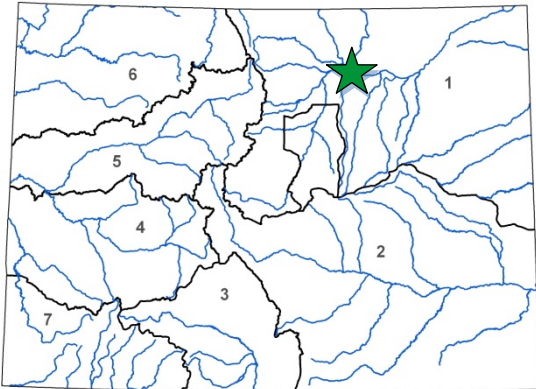
The Julesburg Irrigation District (District), part owner and the operator of the Harmony No. 1 Canal, delivers both Direct Flow rights and Storage water rights to the Julesburg Reservoir. The Canal diverts water from the South Platte River approximately three miles southwest of the town of Crook, Colorado. The Canal delivers direct flow irrigation water, storage water and augmentation water to approximately 17, 000 acres of land controlled by the Harmony Ditch Company and Julesburg Irrigation District. The Canal can also be used to deliver irrigation water to an additional 6,000 acres thru the Julesburg Reservoir rights administered to the Petersen Canal as a supplemental source if supplies at the Petersen head gate are not adequate. The existing 20 foot Parshall Flume has structural damage that will cause failure. The District wishes to replace the existing structure with a new structure located just upstream, prior to the 2017 reservoir fill season beginning in November 2016. The purpose of this project is to provide a reliable measurement structure to accurately measure the flow of the Harmony No. 1 Canal during the diversion of water for the various water rights being used by the Julesburg Irrigation District.







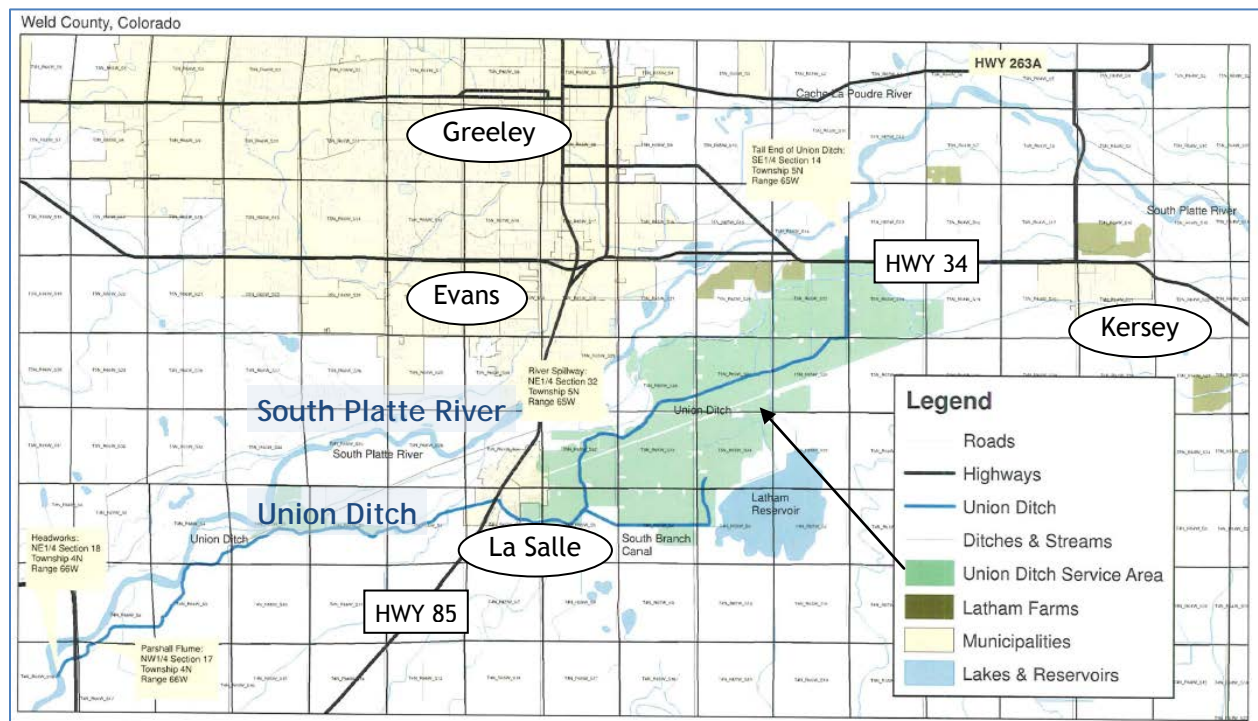
L O A N   D E T A I L S	
Project Cost:	\$273,000
CWCB Loan (with Service Fee):	\$248,157
Loan Term and Interest Rate:	20 Years @ 1.45%
Funding Source:	Severance Tax PBF
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
100%	0% Low - % Mid - % High      0%
P R O J E C T   D E T A I L S	
Project Type:	Water Rights Purchase
Average Annual Delivery:	116 AF



L O C A T I O N			
County:		Weld	
Water Source:		South Platte River	
Drainage Basin:		South Platte	
Division: 1		District: 2	

The Union Well Augmentation Group provides augmentation water for well owners of the Union Ditch Company, providing supplemental irrigation water to 29 wells covering 2,200 acres. The Company covers an average of 4 AF of well depletions per year.

The Augmentation Group seeks to purchase 2.0 shares of the Union Reservoir Company. The Augmentation Group will use these shares in the augmentation plan via a lease with the City of Longmont where Longmont will use the 2 shares and in return the Augmentation Group will receive the city's effluent, which is approved for use in the augmentation plan. It is expected that these 2 shares will add 15.3 AF to the Augmentation Group's average quota of 0.5 AF per well.







**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street  
Denver, CO 80203

P (303) 866-3441

F (303) 866-4474

John Hickenlooper, Governor

Robert Randall, DNR Executive Director

James Eklund, CWCB Director

**TO:** Colorado Water Conservation Board Members

**FROM:** Jodie Tavares, Program Assistant  
Kirk Russell, P.E., Finance Section Chief

**DATE:** July 20-21, 2016

**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 nineteen (19) projects authorized totaling \$24.6 million. 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	04/2014
2	Culver Ditch Company	Culver Mahoney Ditch Repair	Boulder/Larimer	\$151,500	05/2014
3	Ish Reservoir Company	Inlet Ditch & Div. Repair	Boulder	\$207,050	04/2014
4	Sylvan Dale Ranch, LLLP	Emergency Pond Excavation	Larimer	\$105,171	05/2014
			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: Boulder/Larimer      Water Source: Little Thompson River  
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 - Status Report

Loan Program  
Attachment 4

## Current Projects in Design or under Construction

	Borrower/Project	County	Loan	Design	Construction		PM	Status Description/Update
			Amount	Status	Start/End	Status		
1	Beeman Irrigation > Emergency Beeman Diversion Dam Repair C150385	Weld	\$ 2,020,000	100%	1/2014-5/2014	100%	JMH	Construction complete, loan funds remaining. No additional disbursements are anticipated.
2	Big Elk Meadows Association > Emergency Raw Water Storage Repair C150391	Boulder/ Larimer	\$ 1,515,000	75%	7/2014-4/2017	30%	JMH	Project includes the reconstruction of 5 dams in series. Mirror Dam complete as of April 2015. Rainbow Dam's outlet constructed in fall 2015. Site shut down for winter. Rainbow's embankment and last 3 dams still pending construction.
3	Big Thompson and Platte River > Big Thompson & Platte River Div. Structure Repair C150373	Larimer	\$ 808,000	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	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	100%	4/2014-5/2014	100%	JMH	Construction complete, loan funds remaining. No additional disbursements are anticipated.
6	Church Ditch Water Authority > Leyden Creek Crossing Repair C150377	Jefferson	\$ 606,000	100%	1/2014-5/2014	95%	JMH	Repair construction complete, small amount of loan funds remaining. Additional disbursements 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	\$ 3,506,720	100%	1/2014-9/2015	100%	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	100%	2/2014-5/2014	99%	JMH	Loan Increase request approved during July 2014 Board Meeting. Project is complete but there remains some miscellaneous items to be closed out.
9	Culver Ditch Company > Culver Mahoney Ditch Repair C150390	Boulder & Larimer	\$ 151,500	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	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 - Status Report

Loan Program  
Attachment 4

11	Highland Ditch Company > Highland Ditch System Repairs C150369	Boulder	\$ 1,999,800	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	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	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	\$ 876,680	100%	11/2015 - 3/2016	90%	JMH	Construction was delayed due to continuously high river conditions during winter of 2014/2015. Bids were received August 2015 and construction began November 2015. Major work has been completed. Work remaining includes the catwalk and operator for the radial gate.
15	Oligarchy Irrigation Company > Oligarchy Irr. Ditch River Diversion Struct. Repair C150372	Boulder	\$ 1,262,500	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	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	St. Vrain and Left Hand Water Conservancy District > Emergency Rock'n WP Ranch Lake No. 4 Repair	Boulder	\$ 4,545,000	50%	Spring 2016 - Fall 2016	0%	JMH	Approved July 2014 Board Meeting. Contract has been signed and final design is underway.
18	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.
19	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 = \$ 24,576,077

**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

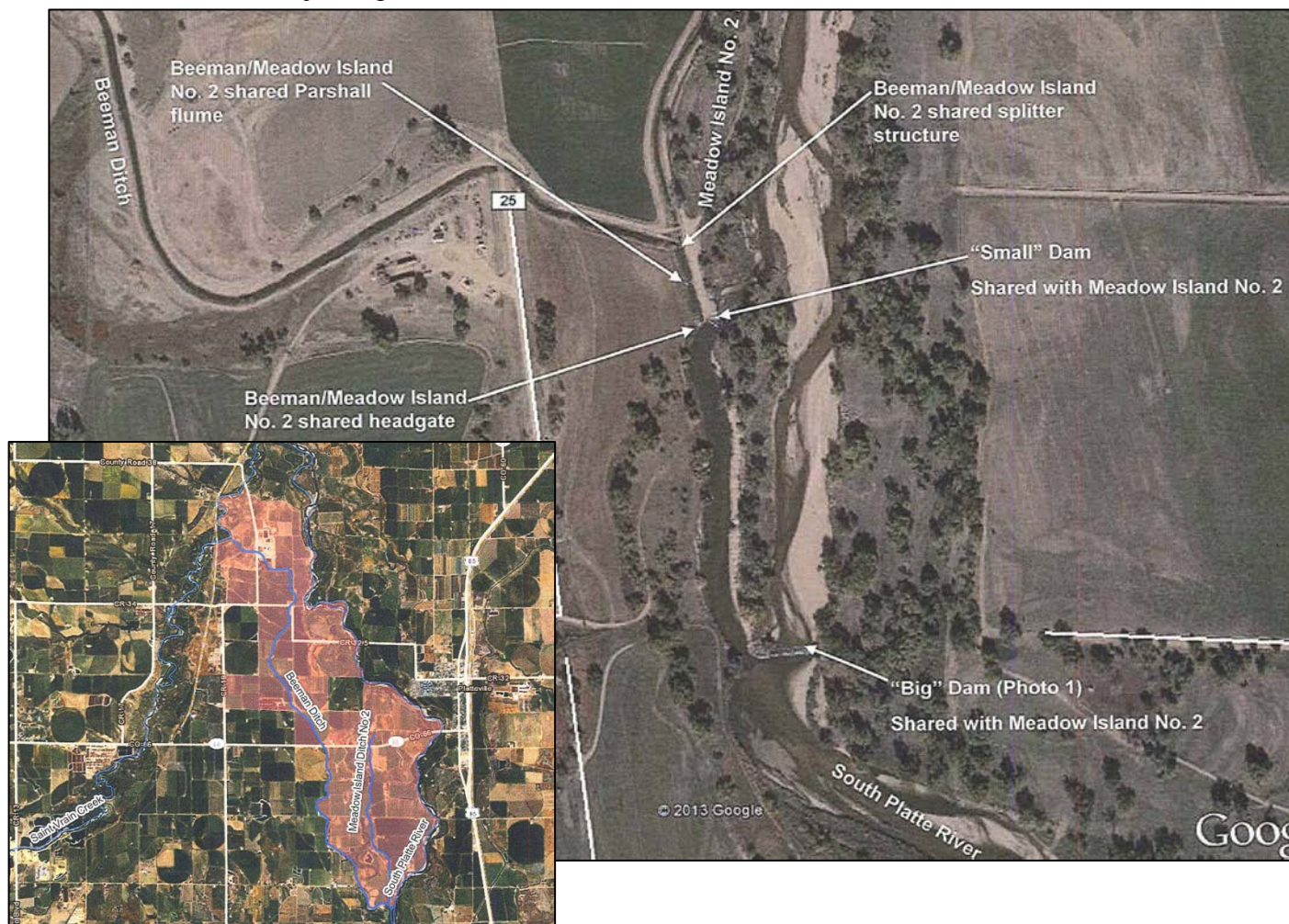
**Type of Borrower:** Agricultural

**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

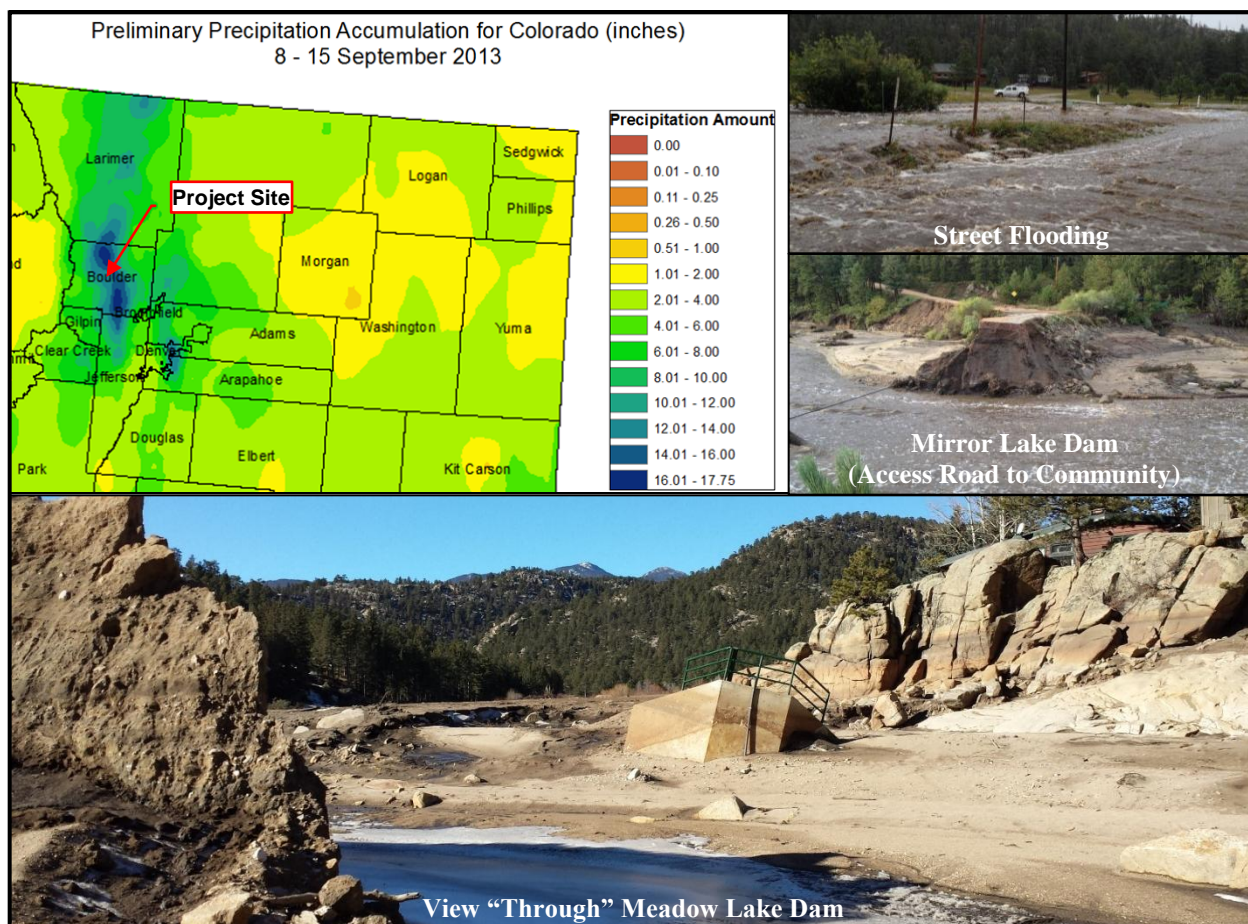
**Type of Borrower:** Middle-Income Municipal

**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

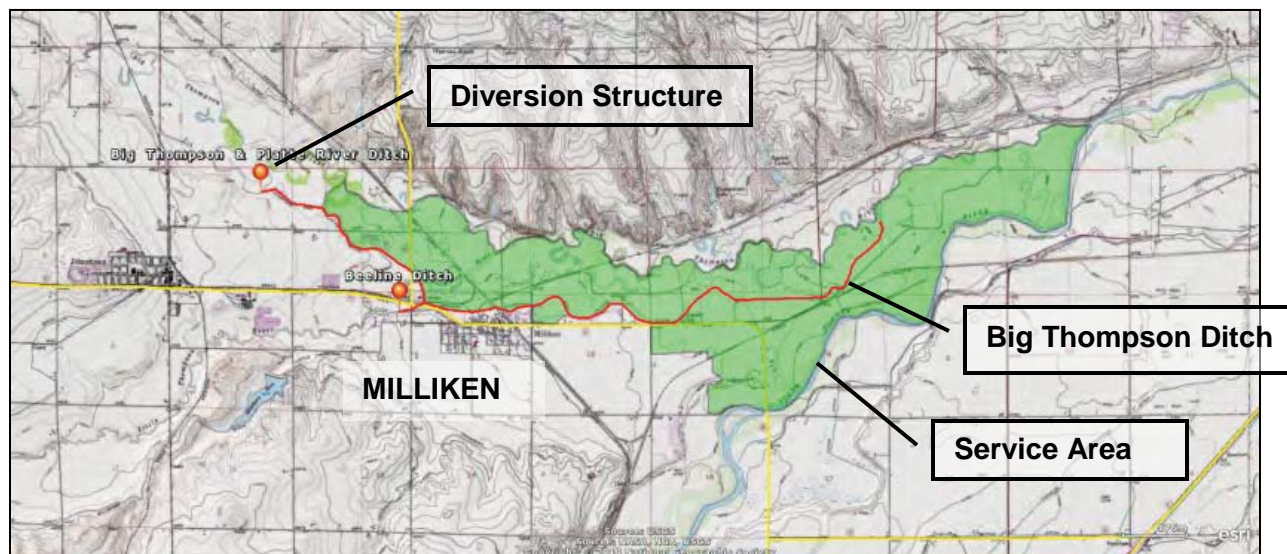
**Type of Borrower:** Blended

**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

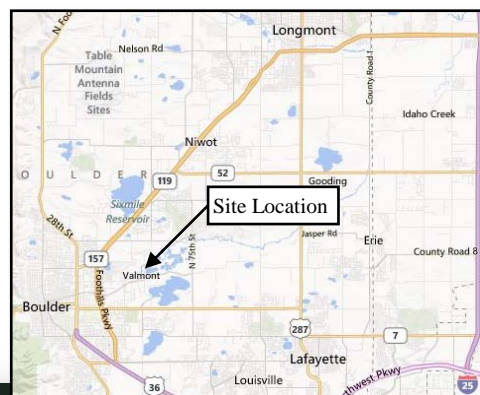
**Type of Borrower:** Blended

**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

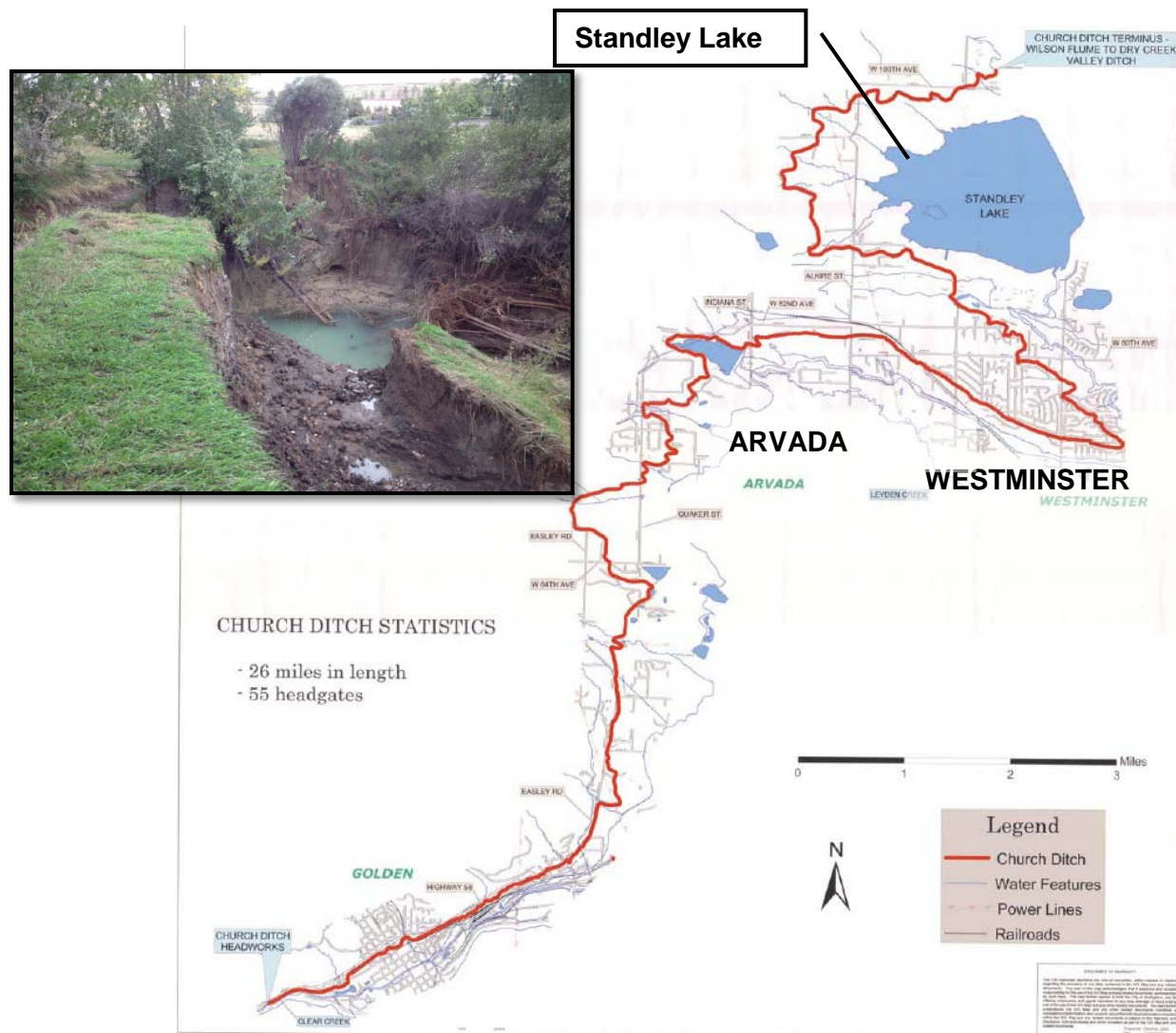
**Type of Borrower:** Blended

**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.







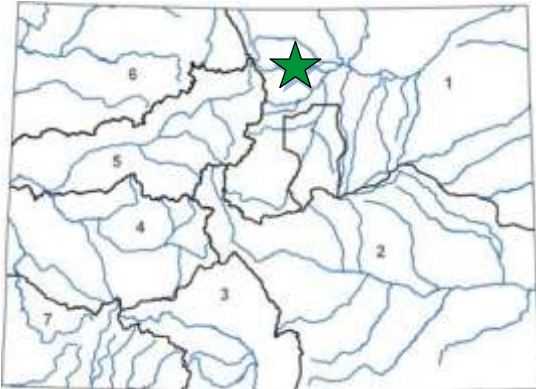
## Emergency Big Dam Diversion Structure Repair

Consolidated Home Supply Ditch & Reservoir Company

September 2014 Board Meeting

(Loan Increase)

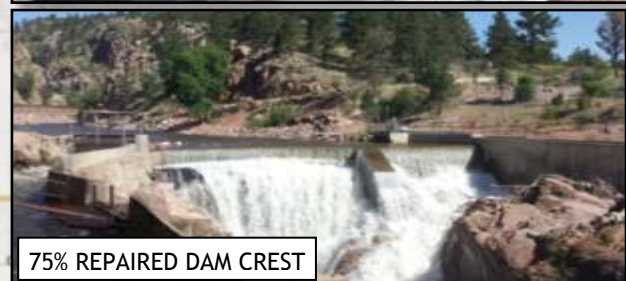
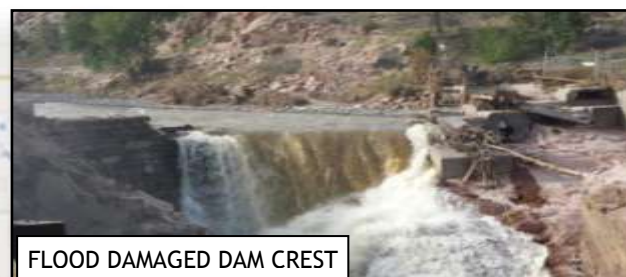
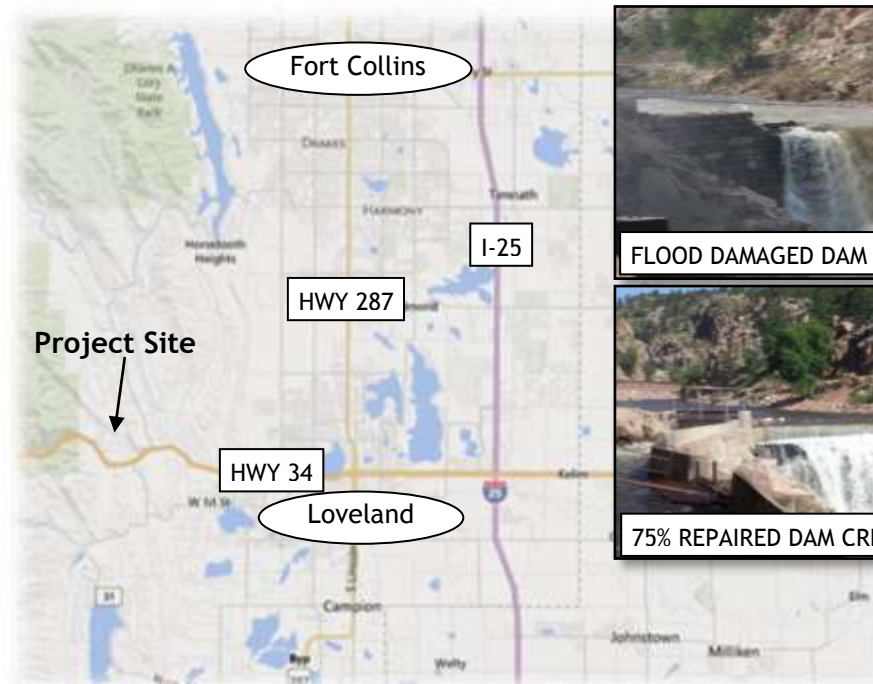
L O A N   D E T A I L S	
Project Cost:	\$2,775,000
CWCB Loan (with Service Fee):	\$1,840,000 (15% increase)
Loan Term and Interest Rate:	30 Years @ 1.95%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
76%	0% Low - 23% Mid - <1% High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

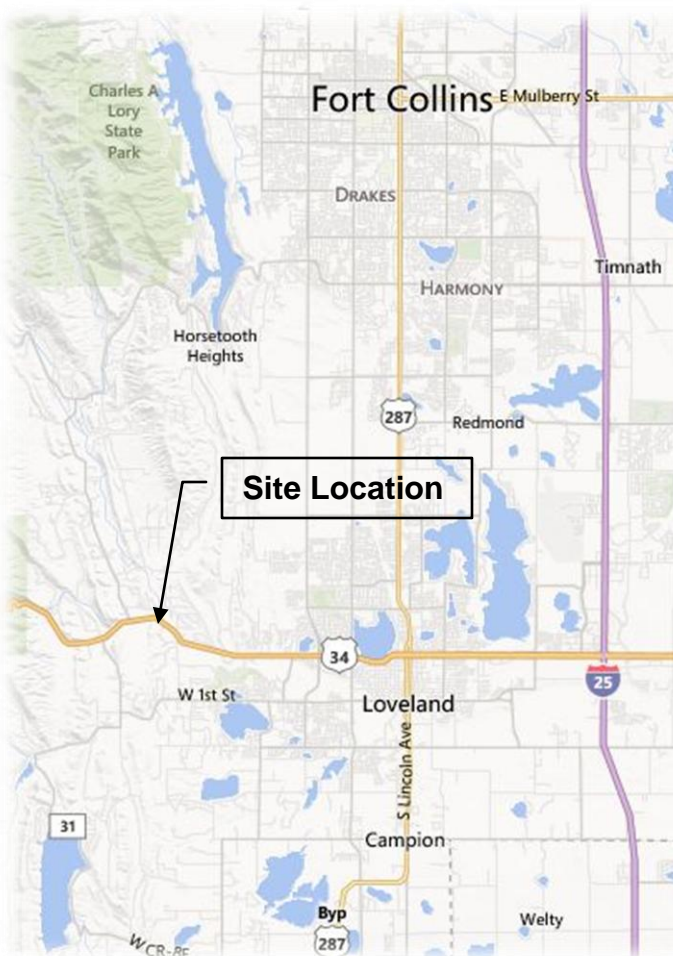


**CWCB Water Project Loan Program  
Project Data Sheet  
(Increase)**

**C150380**

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

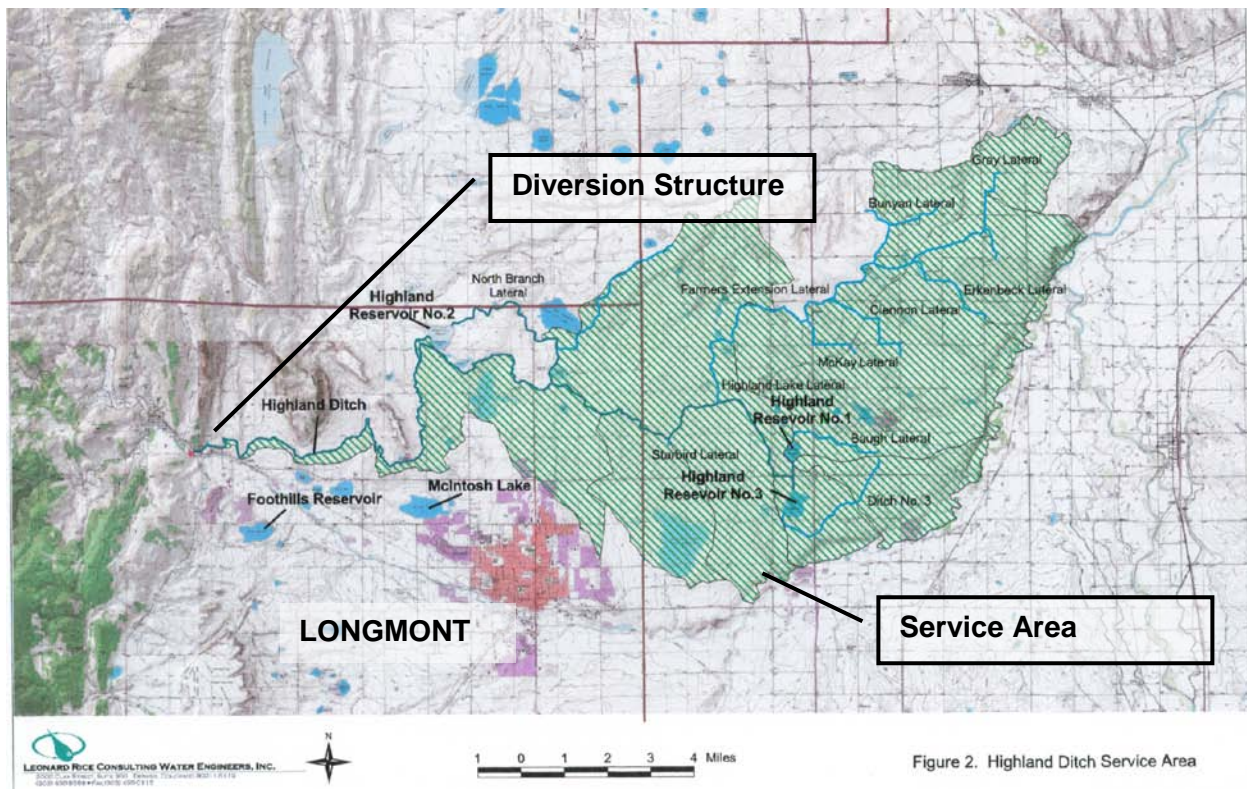


Figure 2. Highland Ditch Service Area

**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

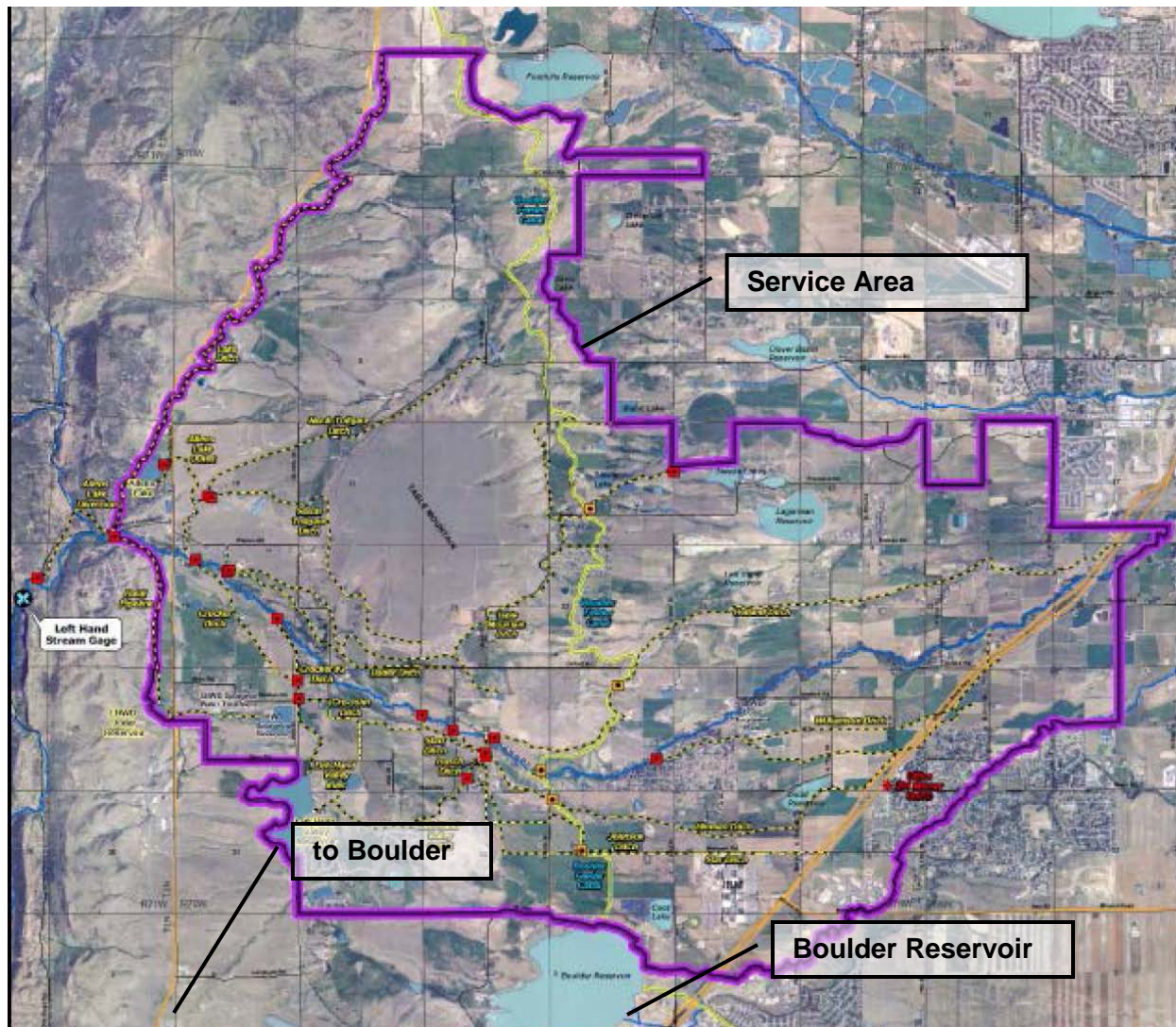
**Type of Borrower:** Blended

**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

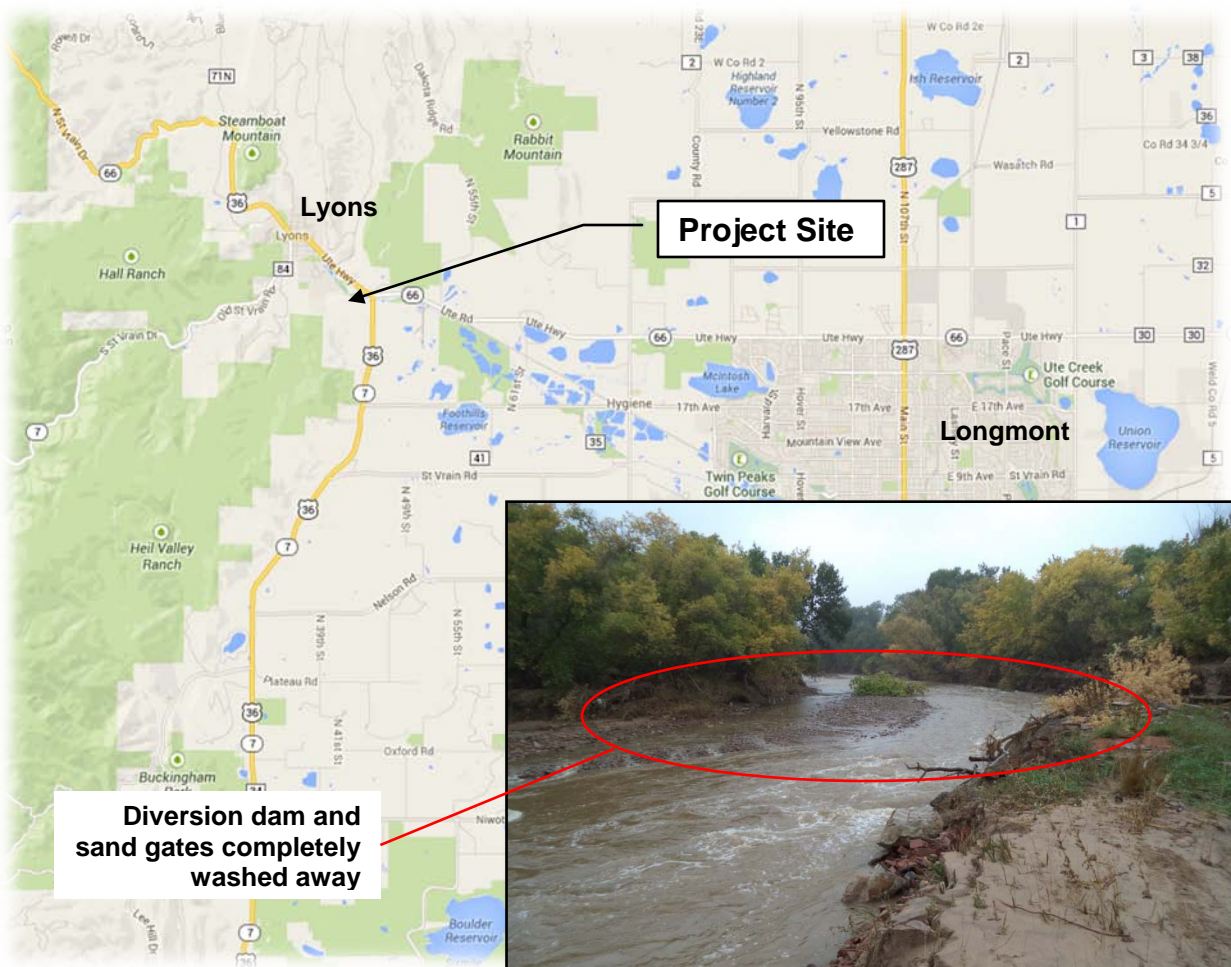
**Type of Borrower:** Blended

**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.





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

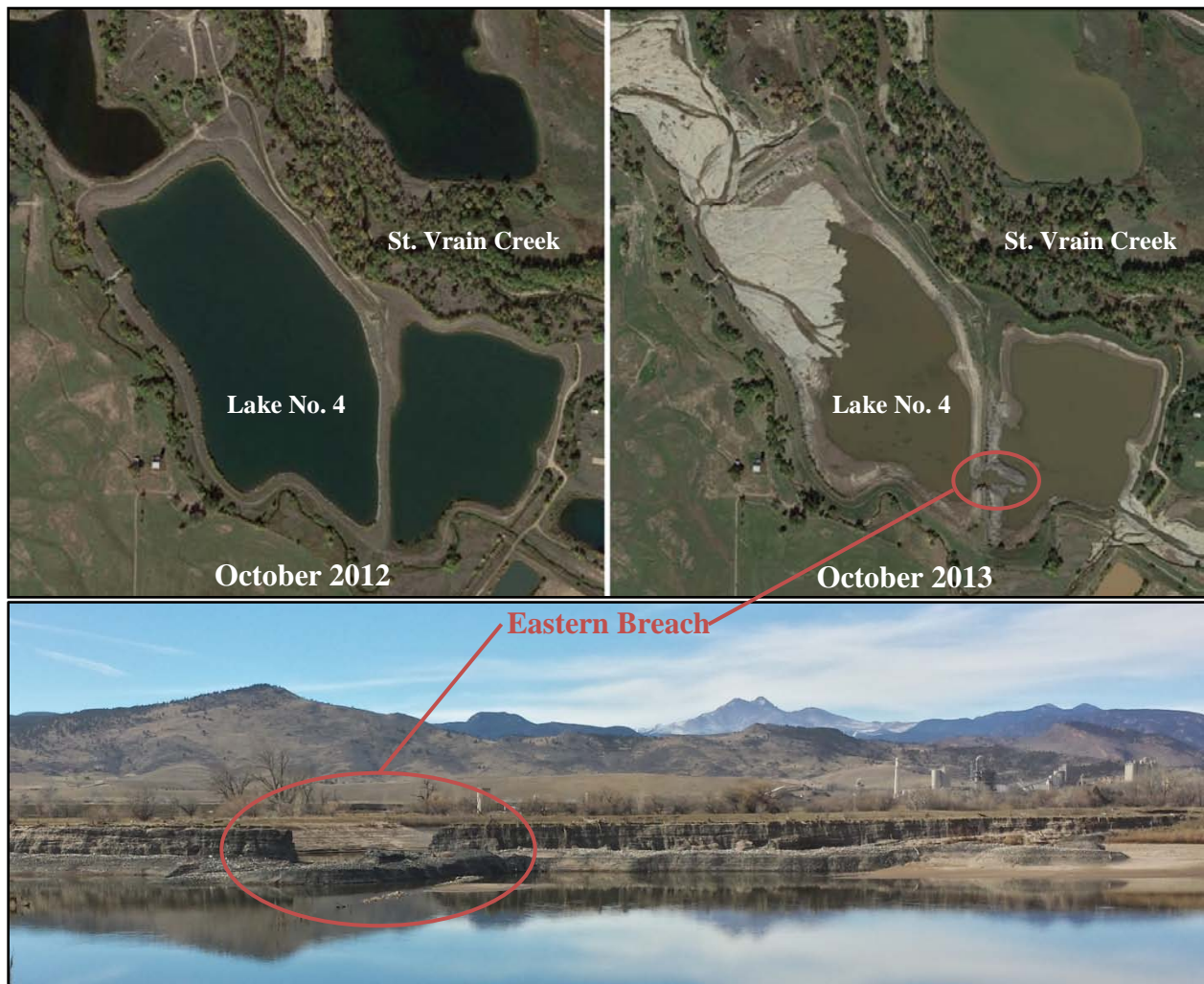
Type of Borrower: Blended

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)

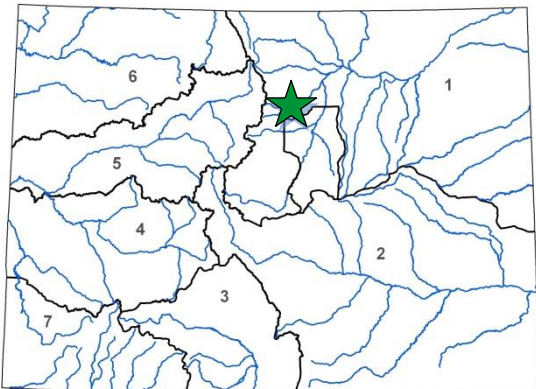
During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the District's Rock'n WP Ranch Lake No. 4. During the flood, St. Vrain Creek breached in over four locations 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.







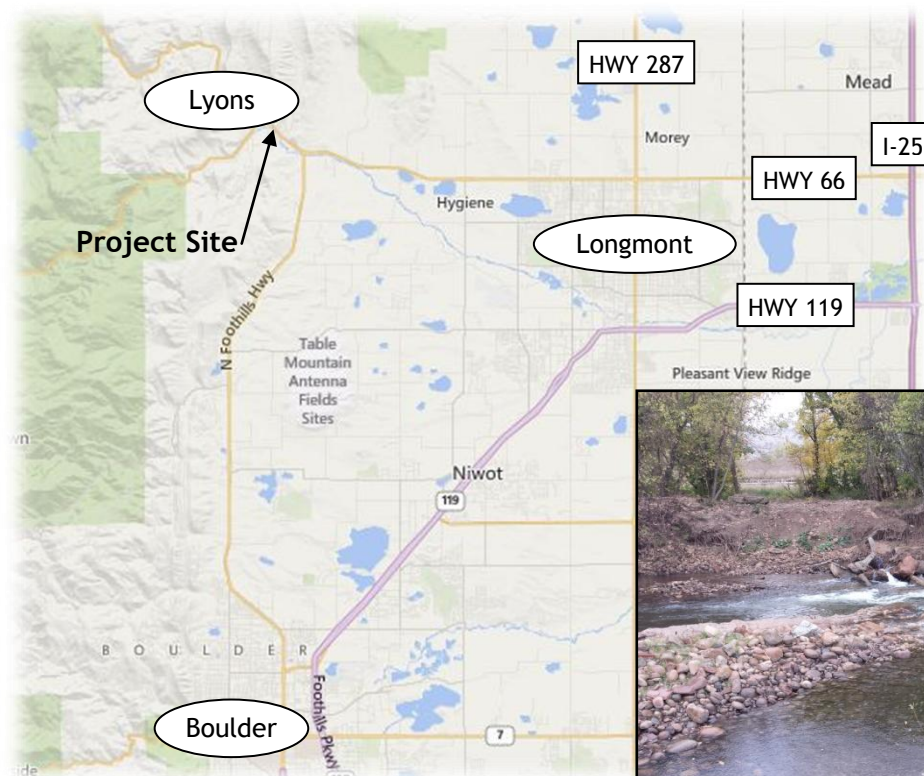
L O A N   D E T A I L S	
Project Cost:	\$321,000
CWCB Loan (with Service Fee):	\$324,210
Loan Term and Interest Rate:	27 Years @ 2.25%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
86%	0% Low - 5% Mid - 7% High      2%
P R O J E C T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



**WATER PROJECT CONSTRUCTION LOAN PROGRAM  
LOAN REPAYMENT DELINQUENCY REPORT  
LOAN FINANCIAL ACTIVITY REPORT  
JULY 2016**

### **LOAN REPAYMENT DELINQUENCY**

Loan Repayments received relative to the Water Project Construction Loan Program have been reviewed for the period covering July 2015 through June 2016. 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 Fiscal Year 2016 totaled 282. There were four loan payments not received on time during this period. The loan payments from the Grandview Irrigation Ditch Company and the Two Rivers Water Company were less than 30 days late. The loan payment from Fuchs Ranches, Inc. was less than 60 days late. The loan payment from the Spring Dale Ditch Company was over 60 days late. Thus, the on-time performance for the total repayments due was 99% in compliance or 1% not in compliance.

### **LOANS PAID OFF**

During Fiscal Year 2016, there were seven loans repaid in full to the Construction Fund and three loans repaid in full to the Severance Tax Perpetual Base Fund, detailed as follows:

	Borrower	Contract No.	Original Loan	Principal Received
1	Agricultural Ditch and Reservoir Company	C153769	\$ 300,000	\$ 19,487
2	Center of Co Water Conservancy District	C150335	\$ 404,000	\$ 330,977
3	Kings Row Homeowners Association	C153690	\$ 75,000	\$ 5,624
4	Lake Canal Reservoir Company	C153300	\$ 160,000	\$ 19,575
5	Loloff Lateral Ditch Company	C153656	\$ 81,500	\$ 57,401
6	Morgan County Quality Water District	C153718	\$ 3,000,000	\$ 1,519,858
7	Plumb and Dailey Ditch Company	C150048	\$ 42,000	\$ 6,062
	Totals for Construction Fund		\$ 4,062,500	\$ 1,958,984
8	Central Weld County Water District	C150209	\$ 4,994,955	\$ 3,186,194
9	Henrylyn Irrigation District	C150252	\$ 2,150,597	\$ 957,996
10	St. Vrain Sanitation District	C150036	\$ 2,002,400	\$ 1,623,315
	Totals for Severance Tax PBF		\$ 9,147,952	\$ 5,767,505

### **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 \$36.2 M for this year. Funds disbursed relative to new project loans totaled \$40.9 M for this year. Net activity resulted in \$4.7 M disbursed by the CWCB Construction Fund and the Severance Tax Perpetual Base Fund (STPBF) over the total received.

Further breakdown is summarized as follows: The Construction Fund portion consists of \$19.4 M in receivables and \$26.9 M in disbursements for a total net activity of \$7.5 M disbursed over received. The STPBF consists of \$16.8 M in receivables and \$14.0 M in disbursements for a total net activity of \$2.8 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	\$ 167,620	\$ 159,096	\$ 326,716	\$ 851,416	\$ (524,699)
September 2015	\$ 773,951	\$ 1,466,465	\$ 2,240,416	\$ 2,029,527	\$ 210,889
October 2015	\$ 89,456	\$ 55,105	\$ 144,561	\$ 2,941,371	\$ (2,796,810)
November 2015	\$ 656,695	\$ 926,743	\$ 1,583,439	\$ 10,269,744	\$ (8,686,305)
December 2015	\$ 755,208	\$ 452,434	\$ 1,207,642	\$ 1,103,224	\$ 104,418
January 2016	\$ 357,543	\$ 368,205	\$ 725,748	\$ 2,056,708	\$ (1,330,960)
February 2016	\$ 837,852	\$ 135,981	\$ 973,833	\$ 2,274,653	\$ (1,300,820)
March 2016	\$ 1,938,352	\$ 451,089	\$ 2,389,441	\$ 1,478,690	\$ 910,751
April 2016	\$ 1,139,958	\$ 666,068	\$ 1,806,026	\$ 1,925,345	\$ (119,320)
May 2016	\$ 2,707,882	\$ 3,416,102	\$ 6,123,985	\$ 1,198,718	\$ 4,925,267
June 2016	\$ 524,217	\$ 391,763	\$ 915,980	\$ 777,443	\$ 138,536
<b>FY 2016 Totals</b>	<b>\$ 10,756,728</b>	<b>\$ 8,668,930</b>	<b>\$ 19,425,658</b>	<b>\$ 26,906,839</b>	<b>\$ (7,481,181)</b>

### 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	\$ 554,447	\$ 415,873	\$ 970,320	\$ 764,226	\$ 206,094
October 2015	\$ 293,827	\$ 739,299	\$ 1,033,126	\$ 695,755	\$ 337,371
November 2015	\$ 245,008	\$ 78,674	\$ 323,682	\$ 729,016	\$ (405,335)
December 2015	\$ 3,579,920	\$ 310,698	\$ 3,890,618	\$ 771,083	\$ 3,119,535
January 2016	\$ 167,195	\$ 80,064	\$ 247,258	\$ 908,417	\$ (661,159)
February 2016	\$ 1,129,326	\$ 136,198	\$ 1,265,524	\$ 872,171	\$ 393,354
March 2016	\$ 922,407	\$ 289,691	\$ 1,212,098	\$ 2,779,817	\$ (1,567,719)
April 2016	\$ 86,713	\$ 74,898	\$ 161,611	\$ 2,793,168	\$ (2,631,558)
May 2016	\$ 882,875	\$ 586,649	\$ 1,469,524	\$ 523,967	\$ 945,557
June 2016	\$ 202,513	\$ 191,811	\$ 394,324	\$ 250,723	\$ 143,601
<b>FY 2016 Totals</b>	<b>\$ 12,686,766</b>	<b>\$ 4,126,215</b>	<b>\$ 16,812,981</b>	<b>\$ 13,958,813</b>	<b>\$ 2,854,168</b>

<b>GRAND TOTALS</b>	<b>\$ 23,443,494</b>	<b>\$ 12,795,145</b>	<b>\$ 36,238,639</b>	<b>\$ 40,865,652</b>	<b>\$ (4,627,013)</b>
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