COLORADO

Colorado Water Conservation Board

Department of Natural Resources

DIRECTOR'S REPORT

September 2018

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

STATE OF COLORADO

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

TO: Colorado Water Conservation Board Members

FROM: Rebecca Mitchell
Andrew Rickert

DATE: September 19-20, 2018

SUBJECT: **Agenda Item 5d, September 2018 CWCB Board Meeting Director's Report**

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~STATEWIDE~

CWCB SMALL FEASIBILITY STUDY GRANT FUND UPDATE—
New grant applications approved:

1. Logan Irrigation District – Prewitt Reservoir Rehabilitation ($29,512)
2. Town of Oak Creek – Sheriff Dam Rehabilitation ($30,250)

Previously approved grants in FY18/19:

(None to date)

Total funds approved for feasibility study grants in FY18/19: $59,762

(*Anna Mauss*)

WATERS OF THE U.S.— CWCB staff has been participating in discussions with the Department of Natural Resources (DNR) Executive Director's Office and other DNR agencies to stay engaged in the Environmental Protection Agency's (EPA's) and the Department of the Army's (Army's) ongoing process to define Waters of the United States (WOTUS) under the Clean Water Act. DNR has been working with the Colorado Department of Public Health and Environment (CDPHE) and the Colorado Department of Agriculture (CDA) to coordinate a unified state agency response during public comment periods. Most recently, DNR sent a joint letter with CDPHE and CDA on August 13th in response to a supplemental proposal to repeal the 2015 Rule defining WOTUS and to recodify the pre-2015 regulations until the EPA and the Army finalize a new definition of WOTUS. The agencies emphasized the importance of the federal government engaging in significant dialogue with states and other affected entities prior to proposing any revised definition of WOTUS to ensure that the new definition will preserve the State's clear authority to administer and allocate water within its boundaries. Additionally, the agencies underscored that any revised WOTUS definition should reasonably protect the watersheds of states and should be an interpretation that the states are confident will withstand legal challenge. (*Carlee Brown & Amy Moyer*)

STATEWIDE WATER SUPPLY INITIATIVE (SWSI)— The Statewide Water Supply Initiative (SWSI) update is continuing to move forward with data analysis and modeling. At the same time, staff are actively coordinating on long-term integration with Basin Implementation Plans (BIPs) and the Colorado Water Plan. This includes developing communications, tools and planning strategies that enhance basin roundtable (BRT) engagement and set the stage for BIP updates. Staff will be meeting with each BRT from September to November to layout this timeline and identify the best ways staff can engage and support BRTs and other stakeholders.

To that end, staff envision a 30-person basin-led, "Implementation Working Group" that would meet monthly (starting in January) for six-months and would help inform the development of SWSI and BIP implementation guidance. Taking into account BRT feedback at recent meetings, staff are also considering a state-wide BRT summit which will tentatively be held in September 2019, just after the July release of SWSI. Ideally, BIP updates would be slated for completion by September 2020 to coincide with the 5-year anniversary of the Colorado Water Plan in November 2020. **(***Russ Sands***)**

~COLORADO RIVER BASIN~

UPPER COLORADO WILD AND SCENIC STAKEHOLDER GROUP UPDATE— The Upper Colorado Wild and Scenic Stakeholder Group (SG) held its quarterly meeting on August 13, 2018. The SG has been working to develop final Outstandingly Remarkable Values (ORVs) and Resource Guides related to fishing and floatboating. The stakeholder group has been collecting additional data in order to define the conditions that characterize those ORVs today. Ad-hoc committees proposed final ORV indicators at the June SG meeting. In some cases, the committees provided a structure for determining the ORV indicator metrics, while acknowledging there is insufficient data to create a specific numerical standard at this time. The SG discussed whether final numeric ORV indicators could be populated after the provisional period when the minimum amount of data can be collected. The SG returned to this topic at the August meeting and determined that the SG Management Plan allows for final ORV indicators that are dependent on additional data pursuant to an agreed-upon process. The SG also approved a proposed contract for macroinvertebrates sampling and analysis and approved an update to the group's recreational survey contract to include an email survey to help better understand visitor displacement. (*Jojo La*)

PARADOX VALLEY UNIT EIS— The Paradox Valley Unit (PVU) is a cornerstone element of the Colorado River Basin Salinity Control Program, removing more than 100,000 tons of salt from the Dolores River each year before it meets the San Miguel. The PVU is a combination of desalination treatment at the river and injection of the brine into a deep injection well. The injection well may be nearing the end of its useful life, so the Bureau of Reclamation is investigating alternatives for intercepting the brine through an Environmental Impact Statement (EIS) process. CWCB is participating as a Cooperating Agency (CA). Reclamation held a CA meeting on July 25, 2018 and reported that the agency is in the process of writing the Administrative Draft EIS. CAs will likely receive that document for review in Spring of 2019. Alternatives to be considered will include an additional injection well, evaporation ponds, and brine crystallization. (*Carlee Brown*)

NATIONAL PARK SERVICE EA ON NON NATIVE AQUATIC SPECIES BELOW GLEN CANYON DAM— The National Park Service (NPS) is engaged in a public process to expand existing environmental compliance in an Environmental Assessment (EA) to treat non-native aquatic species below Glen Canyon Dam. Recent increases of brown trout populations at Lees Ferry—along with the persistence of other non-native species of concern like the green sunfish—have led NPS to seek more management options through the expanded EA. The Upper Colorado River Commission (UCRC) is participating as a Cooperating Agency and Colorado is active in that process as a UCRC member. Options considered in the draft EA include incentivized harvest, mechanical removal, and chemical treatment. A public draft of the EA will be released in mid-September. (*Carlee Brown*)

GLEN CANYON DAM ADAPTIVE MANAGEMENT WORK GROUP— The Glen Canyon Dam (GCD) Adaptive Management Work Group (AMWG) was held on August 22-23 in Flagstaff, Arizona. Reclamation announced that sediment conditions below Glen Canyon Dam are sufficient to consider a High Flow Experiment (HFE) in early November. Flood conditions in the Paria River below Glen Canyon Dam can put a significant amount of sediment into the Colorado River. In an HFE, Reclamation opens the dam's release valves in order to simulate a flood, reaching as much as 45,000 cfs over the course of up to250 hours. The total monthly volume of water released does not change; other daily releases are reduced to account for the HFE. The purpose is to move sediment downstream to rebuild sandbars. Reclamation announced that it will convene a Technical Team to assess the possibility of a 96-hour HFE. Colorado will actively participate in this group. Research over the past two years has indicated that fall HFEs may be a significant factor in recent increasing populations of the highly piscivorous brown trout. This is a concern because brown trout may prey upon the endangered humpback chub that lives in the Grand Canyon below the dam. CWCB staff will be alert to this issue during Technical Team discussions.

AMWG received encouraging updates on increasing humpback chub populations in the Western Grand Canyon. Additionally, a "Bug Flow" experiment to increase insect populations below the dam was reported to show initial positive results for both egg laying and egg survival. Under a Bug Flow regime, Reclamation keeps releases low and steady over the weekend to eliminate the false tides that are created due to dam operations that typically fluctuate in response to power demand. Low and steady Bug Flows ensure that bug eggs laid on rocks at the water line do not dry out when the artificial tide drops along with the power demand schedule. This flow experiment does not affect the overall volume of water released from Glen Canyon Dam; rather, it is solely concentrated on timing. These encouraging results for macroinvertebrate production are designed to benefit fish populations by increasing the foodbase. (*Carlee Brown*)

COLORADO RIVER WATER USE—

2018 Colorado River Storage as of September 4th, 2018			
	Elevation (feet above mean sea level)	Storage (MAF)	Percent of Capacity
Lake Mead	1,079.28	9.951	38%
Lake Powell	3,596.69	11.437	47%
Total System Active Storage		28.800	48%
2017 Total Active Storage		33.379	57%
		Flow (MAF)	Percent of Average
Forecasted Unregulated Inflow into Powell		4.761	44%

Forecasted CY 2018 Lower Basin Consumptive Use			
State		Use (MAF)	Total (MAF)
Arizona		**2.597**	
California			
California Agricultural	3.516	**4.173**	**7.006**
Metro. Water District	0.641		
Other	0.016		
Nevada		**0.260**	

*****Note MAF = million acre-feet

~ WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE—

No grant applications have been received since the May 2018 Director's Report

- City of Thornton –Drought Management Plan
- San Juan County/Town of Silverton– Drought Management Plan
- City of Fort Lupton– Water Efficiency Plan Update

One grant was approved since the July 2018 Director's Report:

- City of Fort Lupton – Water Efficiency Plan Update ($30,000)

The following are deliverables sent to the CWCB since the last Director's Report:

- Denver Water – Reuse Demonstration Project – *75% Progress Report & Final Report*
- City of Monte Vista – Water Efficiency Plan Update – *Final Plan*
- Center for Resource Conservation – Turf Removal Study – 75% *Progress Report*
- Town of Castle Rock – Drought Management Plan – *Final Plan*
- City of Aspen – QWEL Certification Program – *50% & 75% Progress Report*
- Town of Wellington – Water Efficiency Plan – *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:

Colorado Drought Mitigation and Response Plan: Per FEMA requirements this updated plan presented to the CWCB Board at the September 2018 meeting and will then be integrated into the State's All Hazard Mitigation Plan and sent to the Governor for approval in the fall.

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:

<u>Approved Plans</u>

- Town of Castle Rock

<u>Drought Management Plans In Review:</u>

- No Plans in Review

WATER EFFICIENCY PLANS:

<u>Approved Plans:</u>

- City of Monte Vista
- Blue River Regional Water Efficiency Plan (Individual plans from Frisco, Copper Mt., Breckenridge, Dillon)
- Town of Severance
- Eagle River Regional Water Efficiency Plan

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.

- Thornton
- Lafayette

<u>Water Efficiency Plans in Review:</u>

- Widefield Water & Sanitation District
- North Weld County Water District

- Evans
- East Cherry Creek Valley
- The Pinery

(*Kevin Reidy & Ben Wade*)

GOVERNOR'S WATER AVAILABILITY TASK FORCE— There will be a Water Availability Task Force meeting will be on September 11th from 9:30am-11:30am 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— As a result of the persistent drought conditions throughout parts of Colorado, *the Governor activated the State Drought Response Plan on May 2, 2018 for the agricultural sector.* This activation is in effect for Montezuma, La Plata, Archuleta, Conejos, Costilla, Las Animas, Baca, Prowers, Bent, Otero, Huerfano, Alamosa, Rio Grande, Mineral, Hinsdale, San Juan, Dolores, San Miguel, Ouray, Montrose, Saguache, Custer, Pueblo, Crowley, Kiowa, Cheyenne, Lincoln, El Paso, Elbert, Gunnison, Mesa, Delta, Garfield, Rio Blanco counties.

The USDA has issued primary secretarial drought designations for 40 counties in the state, and contiguous designations for an addition 14 counties.

With only six weeks left in the 2018 water year, October through July of this year has been the second warmest and the fifth driest October through July period in the 123 year record. However, statewide values poorly convey the stark contrast across the state. July and August to-date have been as much as 5 degrees above average in parts of western Colorado, while the northeastern plains have been near normal with some isolated record low temperatures. Monsoon rains have brought beneficial moisture to some regions including the San Luis Valley and Arkansas Basin, however the Northwest has seen limited precipitation resulting in worsening drought conditions. This week brought nearly an inch of rain to parts of Mesa County, yet the 2018 water year remains the driest year on record for the Grand Mesa; indicating long term deficits continue to dominate.

As of August 21st, exceptional drought, D4, continues to affect southern Colorado covering nine percent of the state. Extreme drought, D3, has expanded to cover 37 percent of the state; severe drought 20 percent and nine percent is classified as moderate drought. An additional seven percent of the state is currently experiencing abnormally dry conditions.

Warm water temperatures, coupled with low flows continue to result in fish kills and water users have been working collaboratively across the state to maintain flows, where possible, and voluntary fishing restrictions are widespread.

Agriculture has been heavily impacted this growing season by both high temperatures, drought, and hail. Irrigation canals are being shut off early due to lack of supply, and fail and prevent crop acreage is high. Hay production is down and range conditions poor, producers are concerned about finding enough feed for cattle resulting in continued sell off.

Some small water systems are being impacted by both continued dry conditions resulting in limited supply, and some reports of water hauling to meet demands. Restrictions, both voluntary and mandatory have been enacted in some communities, with Front Range water providers better situated than small west slope communities with limited storage.

An El Niño watch has been issued, meaning there is a greater than 70 percent chance of an El Niño developing, which could bring an increased chance of wet extremes for southern Colorado beginning this Fall, however the Northwest corner remain an area of big concern going into the fall, as El Niño can result in dry conditions to the north. (*Taryn Finnessey*)

CLIMATE CHANGE— On June 19, Governor Hickenlooper signed an executive order that calls for the state to adopt air quality standards that will protect our quality of life in Colorado. Governor Hickenlooper said "Low emissions vehicles are increasingly popular with consumers and are better for our air. Every move we make to safeguard our environment is a move in the right direction."
The executive order instructs the Colorado Department of Public Health and Environment to

- develop a rule to establish a Colorado LEV program, which incorporates the requirements of the California LEV program; and
- propose that rule to the Colorado Air Quality Control Commission during its August 2018 meeting for possible adoption into the Colorado Code of Regulations by December 30, 2018.

(*Taryn Finnessey*)

CO WATER LOSS INITIATIVE— Kevin has started the CO Water Loss Initiative which will culminate in a 2-year training and technical assistance water loss control program for water providers across Colorado. Kevin convened a small advisory group to weigh in on the scope of work and to assist with the development of the programming. The project team hosted an in person kick off meeting in mid-August and sent out 3 registration announcements for water providers across the state. At the time of this report, 45 water providers had registered. Registration deadline is set for September 28. (*Kevin Reidy*)

LAND/WATER PLANNING NEXUS— CWCB Staff is working with counterparts from DOLA to create trainings and other related projects 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. Additional work is as follows:

- CWCB and DOLA are working with the Babbitt Water Center, out of AZ, to develop more guidance on integrating land and water use planning in CO and to assess which communities are doing this already.
- CWCB and DOLA convened a third meeting for the Water and Land Use Planning Alliance on June 28 to check in and monitor progress on various projects as well as solidify a charter for the group.
- Anne Castle, Getches Wilkinson Center, is creating a guidance addendum to the CWCB Water Efficiency Guidance Document that will assist water providers in integrating water efficiency into land use planning. Kevin is on the advisory group and the project is funded through a CWCB grant.
- Sonoran Institute, through a CWCB water plan grant, has extended their Colorado Growing Smart initiative to carry out 3 more additional workshops over the nest 18-24 months. Kevin is on the advisory group for these trainings.

(*Kevin Reidy*)

CONFERENCES AND WORKSHOPS/OUTREACH—
Global Climate Action Summit: Taryn will be attending the Global Climate Action Summit as part of the Colorado Delegation, which will also include Gov. Hickenlooper and staff from the Governor's Office. The event will bring leaders and people together from around the world to "Take Ambition to the Next Level." It will be a moment to celebrate the extraordinary achievements of states, regions, cities, companies, investors and citizens with respect to climate action. It will also be a launch pad for deeper worldwide commitments and accelerated action from

countries—supported by all sectors of society—that can put the globe on track to prevent dangerous climate change and realize the historic Paris Agreement. This follows on Colorado's participation at the One Planet Summit last December and our ongoing engagement in the US Climate Alliance and implementation work on the Governor's Executive Orders.

Water and Planning Connect Conference: Kevin has been asked to present on CWCB's work in integrating water planning into land use planning. This is the inaugural conference is being organized by the American Planning Association with input from the American Water Works Association and water planners from across the country. The Water and Planning Connect conference took place in Kansas City on September 11-12

Commercial, Industrial, Institution (CII) Audit Training: Kevin attended a 3 day CII audit training in Fort Collins August 22-24 that was funded in part by a CWCB Water Efficiency Grant. The training consisted of 3 days of site visits to Poudre Valley Hospital, Colorado State University campus and the Broadcom campus. This is an area of water efficiency that water providers are in need of much more information and that usually consists of a substantial proportion of their annual water demands. It was a very well organized and thorough training and showed a need for other trainings like this in the future.

~WATERSHED AND FLOOD UPDATES~

MAPPING UPDATE—

FY17 Activities: The CWCB received a $212,558 grant from FEMA to provide an updated hydrologic and hydraulic engineering and floodplain mapping for the Roaring Fork River and floodplain mapping services for the Colorado River within Garfield County. A kick off meeting was held on April 5, 2018 and the project is now underway.

The CWCB was able to leverage $929,729 from FEMA to continue CHAMP through the FEMA regulatory process. This study involves analyzing streams across seven counties in northeast Colorado and will include 233 FIRM panel updates. The counties include Boulder, Logan, Larimer, Morgan, Weld, Washington, and Sedgwick Counties. The State Task order is finalized and work will begin in summer 2018.

The CWCB previously funded a Discovery project in the Animas River Watershed. From that effort, the local communities were able to identify several mapping needs. FEMA has awarded CWCB $654,717 to fund the proposed projects that identified from the Discovery effort. This includes updated hydrologic and hydraulic engineering, (including post-fire conditions for Junction Creek), updated floodplain mapping, and sediment-bulked flooding along the Animas River, and an evaluation of ice jamming conditions in Silverton. Field survey work is underway and additional scope will be added at the request of local communities due to the local wild fires occurring recently.

The CWCB is funding a regional hydrology update for the Arkansas River from the headwaters near Leadville, Colorado to the Kansas State line. The CWCB is working with Wood (formerly Amec Foster Wheeler) on this analysis. Preliminary results will be ready in summer 2018.

FY16 Activities: Upper White Watershed Risk Map Phase II preliminary map issuance will be delayed. A revised scope of work was submitted and approved by FEMA to conduct additional analysis, including a levee

study, in Rio Blanco County and the Town of Rangely. St. Vrain Risk Map Phase III is also well under way. FEMA has approved the hydraulic and floodplain mapping tasks.

CWCB received $3.4 million FEMA grant for LiDAR acquisition in Colorado for future floodplain mapping projects. This money was used to leverage an additional $1 million from the USGS to supplement a late spring 2018 LiDAR acquisition in Eastern Colorado. This data has been collected and is now in the post-processing phase.

A regional hydrology study update on the Colorado River near Granby to the border with Utah has been completed and the results have been approved by FEMA. The CWCB has met with nearly every local community affected by this update. Final results are available for viewing on the Colorado Hazard Mapping website and on the CWCB website.

FY15 Activities: The Cache La Poudre Phase III project funds will be re-scoped to address comments from Fort Collins, City of Greeley, and the City of Windsor. Comments are now being addressed and an updated schedule for this project will be provided this Fall 2018.

FY14 Activities: The erosion zone study for the Salt Creek Wash near the Town of Collbran in Mesa County was approved by FEMA. This report is now available on the Risk Map website.

FEMA has provided funding to conduct a countywide approximate floodplain mapping for El Paso County, referred to as a Base Level Engineering (BLE) study. A part of this grant funding will be rescoped to fund the revised preliminary project for the El Paso County DFIRM project, which will become effective at the end of 2018.

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 are complete and have been approved by FEMA.

FY13 Activities: The El Paso County as a partial Countywide DFIRM project is now in the final compliance period and the effective date of the maps will be December 7, 2018.

Purgatoire Watershed Risk Map project is now in the post appeal period. An additional scope of work will be submitted to resolve tie in issues. This project includes Las Animas County, City of Trinidad, as well as a few other incorporated towns in Las Animas County.

The Pueblo County DFIRM is now in the post-preliminary phase, however, issues were found tying into the effective floodplains. The CWCB is funding a separate LOMR effort to resolve this issue. Field survey work has been completed and work on the LOMR is continuing, awaiting the approval for the State Task order.

FY12 Activities: The grant for Purgatoire Watershed was funded through floodplain mapping and all tasks have been completed under the 2012 grant. A new grant was approved in 2013 to complete the Purgatoire Risk Map project to effective and the progress report is found under FY 13 Activities. The Cache La Poudre Risk Map project was funded in FY 2012 and the hydraulic and floodplain mapping tasks are almost complete. A

new FEMA grant was awarded in FY 2015 to complete the Cache La Poudre Risk Map project under Phase III. Additional tie in work is needed and the State Task order is being completed now.

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. All tasks under this grant have been completed through to floodplain mapping. The FEMA grant for this project has expired and a new grant was approved in 2016 to complete additional tasks to finalize the maps as FEMA effective products. Updates for the St. Vrain Risk Map project will be provided under FY 2016 activities. Some streams updated through the Colorado Hazard Mapping Project will be included in the St. Vrain map update.

Clear Creek Risk Map preliminary maps were distributed on February 8, 2017. The community review meeting was held on March 30, 2017. Clear Creek is now in the post appeal period. (Thuy Patton)

FLUVIAL HAZARD MAPPING UPDATE— The floods of September 2013 reminded Coloradans how quickly rivers and streams in their state can change and morph into extreme storm events. Approximately half of the private structure damages and losses experienced in the 2013 flood were located outside of the regulatory floodplain, or Special Flood Hazard Area (SFHA), designated by the Federal Emergency Management Agency (FEMA). These flood-related risks associated with erosion, deposition, degradation, lateral migration, and avulsion created disastrous outcomes in 2013, and those outcomes may occur again in future flood events in Colorado. The identification of fluvial hazard zones has become a high priority as Colorado recovers from the September 2013 floods and transitions toward long-term river corridor planning. Planning for erosion hazards is an essential component of effective river corridor management and the prevention of future flood damages. Broadly defined, the Fluvial Hazard Zone (FHZ) is the area a stream has occupied in recent history, could occupy, or could physically influence as it stores and transports sediment and debris during flood events. In early 2015, Colorado's Legislature passed a funding bill for the Colorado Hazard Mapping Program, which aims to provide a mitigation and land use framework in areas likely to be affected by future flooding, erosion, and debris flow events. The fluvial hazard mapping component of the project began in January 2017. The engineering firm Amec Foster Wheeler has been contracted to do the work. The program will refine mapping methodology and perform a series of pilot studies on fluvial hazards throughout the State. Communities interested in participating in the pilot studies submitted applications to the CWCB and selections were made in May of 2017. Community selections were based on physio-geographic location, geomorphic setting, existing data availability, and other technical elements, as well as community support, budget, and time constraints. Communities selected include Boulder, Eagle, Saguache, and San Miguel Counties, and the Town of Castle Rock, City of Delta, Town of Estes Park and Town of Nederland. Fluvial/erosion hazard mapping in these communities is current underway, and map products and a model land use code will be available for voluntary adoption by communities by the end of June 2019. (*Stephanie DiBetitto*)

FLOODPLAIN RULES AND REGULATIONS 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, there are still communities that have not completed the adoption or provided documentation to CWCB. There are 2 out of 252 total communities that participate in the National Flood Insurance Program and have Special Flood Hazard Areas identified that have not yet provided documentation of adopting the Rules. A three-year transition period was provided and all Colorado communities had until January 14, 2014 to adopt floodplain regulations consistent with the Rules. Therefore, the three remaining communities are considered to be non-compliant. Non-compliance is taken into consideration by CWCB staff when awarding grant funding, and can prevent a community from receiving CWCB funds. In accordance with the procedure outlined in Rule 16, staff is continuing to provide outreach and technical assistance to these communities and the two remaining communities are working with the CWCB to adopt the Rules. These communities are the Town of Dove Creek and Town of Holyoke. Both non-compliant communities have provided the CWCB with an update of their progress to date and are working towards final adoption at the local level. The CWCB anticipates receiving final ordinances from each community no later than January 2019. (*Stephanie DiBetitto*)

FLOODPLAIN HAZARD MAPPING UPDATE— The Colorado Hazard Mapping Program (CHAMP), funded under Senate Bill 15-245, is making significant progress with approximately one year remaining. Phases 1 and 2 have acquired all necessary funding. Phase 1 of CHAMP involves conducting new flood hazard analyses and floodplain delineations for streams particularly affected by the September 2013 flood event. Streams in Boulder, Larimer, and Weld County and small portions of Jefferson and Gilpin County. CHAMP Phase 2 focuses streams excluded from Year 1 in the Big Thompson and St. Vrain Hydrologic Unit Code 8 (HUC8) Watersheds and updating of the South Platte River from the Weld-Adams County line to the Colorado-Nebraska State line. Since many aspects of the project take multiple months to complete, many projects are in same phases of work as described in the last report.

Floodplain Mapping for all Year 1 streams have been approved by FEMA. Stream modeling of Big Thomas Year 2 streams is complete, and working with local agencies, the data is being reviewed. We are coordinating with Larimer County, Estes Park, and EWP team. The St. Vrain Watershed Year 1 floodplain mapping will be submitted to FEMA next month. The floodways are also being analyzed for St. Vrain Creek in Longmont and East of Longmont, and Boulder Creek in Weld County. Most Year 2 streams' hydraulic modeling is complete- except for Left Hand Creek. We are coordinating with Boulder County for data reviews and will hold flood risk reviews with other communities soon. Stream modeling is completed and being reviewed by local agencies for South Plate Year 2 streams, and floodplain mapping will begin shortly.

Phase 3 of CHAMP focuses on counties and communities that are still utilizing paper FEMA floodplain maps. This scope includes digitizing existing Flood Insurance Rate Maps (FIRM) panels in select communities and jurisdictions, and wherever topographic data is available, updated flood risk information will be provided as best available information for local communities to utilize.

We have completed the hydrologic analysis the 12 studied counties with the last of the initial hydrologic submittals completed in 2017. Stream modeling began in January 2018, and the Southwest Hydraulic Kick-off is on-going this spring. We plan on starting floodplain mapping by summer 2018 and begin flood risk review meeting in fall 2018. Funding for Phase 3 is limited, and therefore, the communities have selected and prioritized areas based on interest level, local mapping needs, and available topography data.

Check out the revamped CHAMP website, which was expanded to host all Colorado Risk MAP projects. It has a new look and capabilities including all ongoing project information and documentation. Please visit www.coloradohazardmapping.com for all the latest updates. (*Thuy Patton*)

COLORADO FLOOD HAZARD MITIGATION PLAN UPDATE— The CWCB is working to update the Colorado Flood Mitigation Plan, which was last updated in 2013. The Plan will reassess the State's flood risk and mitigation strategies. The Flood Mitigation Plan will be incorporated into Colorado's Enhanced State Hazard Mitigation Plan as an appendix. Multiple state agencies are included in the plan preparation process and it will ultimately be adopted by the Governor by its affiliation with the Enhanced State Hazard Mitigation Plan. The plan is now complete after undergoing a 30-day public comment period. CWCB staff will request adoption of the Plan by the CWCB Board at the September Board meeting. (*Stephanie DiBetitto*)

CWCB STAFF RESPONDING TO POST-WILDFIRE CONCERNS— CWCB Staff have been meeting with local communities affected by fires in 2018. Several communities are seeking or have been awarded federal recovery funds through the Natural Resources Conservation Service's Emergency Watershed Protection (EWP) program. CWCB staff is intimately familiar with the EWP program having just completed a nearly $60 million flood recovery program funded by the NRCS, the State, and local sponsors. Staff feels well equipped to provide technical and administrative guidance to local communities affected by fire and subsequent flooding. The communities are struggling to identify match funding sources for the EWP funds, which require a 25% match. The CWCB has identified the Colorado Watershed Restoration Program as a potential source of match, however it is unlikely that the program can support full match funding. Applications will be accepted on a rolling basis between September and the formal application deadline of November 2, 2018. Applications submitted for fire recovery should adhere to the program guidance in order to be considered for funding.

In addition to technical assistance in regards to the EWP program, staff has also been assisting with other technical issues. These include planning for and installation of rain gauges and other elements of warning systems. Staff has also been assisting in post-wildfire hydrologic assessments. Lidar that has been prepared throughout the state is also being provided to local communities to add in their recovery and planning efforts. (*Chris Sturm*)

~AGENCY UPDATES~

JOE BUSTO TO RETIRE AFTER 20 YEARS OF SERVICE— As announced at the July board meeting, Joe Busto was recently diagnosed with Stage 4 cancer. Joe is currently battling this through chemotherapy. In order to take time to continue his fight with cancer, Joe has elected to take early retirement, and his last day was August 31st. His plan is to take the month of September off, and then return to work part-time sometime in October in accordance with labor rules. He will then continue to work as his circumstances allow.

Joe leaves behind a distinguished career of 20 years at the CWCB. From humble beginnings, he has worked his way up to a respected position as the recognized State expert in both weather modification and snow science. Due to Joe's work, Colorado has become a national leader in both of these fields.

He has also been in charge of maintaining the CWCB-owned right of way along the South Platte River from the outlet of Chatfield Reservoir to the confluence with Bear Creek.

Joe is already missed, but he is excited to return to work. He describes his career as his passion, and while he will be working fewer hours, he will continue to move Colorado forward.

~INSTREAM FLOW ATTACHMENTS~

- 01 Instream Flow and Natural Lake Level Program – Summary of Resolved Opposition Cases
- 02 Stream and Lake Protection Section De Minimis Cases
- 03 Requests for Administration of Instream Flow Water Rights

~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 Loan Repayment Delinquency Report

September 19-20, 2018 Board Meeting
Instream Flow and Natural Lake Level Program
Summary of Resolved Opposition Cases

The Board's Instream flow ("ISF") Rule 8i(1) 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).

A. STATEMENTS OF OPPOSITION

(1) Case No. 08CW0268 (Water Division 1) - Application of Park County Board of County Commissioners, Upper South Platte WCD

The Board ratified this Statement of Opposition at its March 2009 meeting. Applicant sought surface and ground water rights, exchange, change of water rights, and approval of a plan for augmentation in Park County. 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 has been set for trial on Division 1's October 2018 trailing docket.

The CWCB holds instream flow water rights, including the following, in Water Division 1 in the South Platte Headwaters and Upper South Platte watersheds that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
76W8230	Michigan Creek	headwaters in vicinity	confl Tarryall Creek	7 (1/1 - 12/31)	01/14/1976
80CW0066	Middle Fork South Platte River	outlet Montgomery Res	confl Buckskin Creek	4 (1/1 - 12/31)	01/30/1980
80CW0064	Middle Fork South Platte River	confl Buckskin Creek	confl Sacramento Creek	6 (10/1 - 4/30) 12 (5/1 - 9/30)	01/30/1980
80CW0067	Middle Fork South Platte River	confl Sacramento Creek	confl SF South Platte River	8 (10/1 - 4/30) 16 (5/1 - 9/30)	01/30/1980
76W8222	Mosquito Creek	headwaters in vicinity	confl MF South Platte River	4 (1/1 - 12/31)	01/14/1976
75W8016	Sacramento	headwaters in	confl MF South	3 (10/1 - 4/30)	07/09/1975

	Creek	vicinity	Platte River	8 (5/1 - 9/30)	
02CW0373	South Fork South Platte River	US Highway 285	S section line S13 T12S R77W 6PM	10 (4/15 - 10/31) 4.4 (11/1 - 4/14)	01/23/2002
76W8229	Tarryall Creek	headwaters in vicinity	confl Michigan Creek	7 (1/1 - 12/31)	01/14/1976
77W8729	Tarryall Creek	confl Michigan Creek	confl Tarryall Res	14 (1/1 - 12/31)	11/15/1977
77W8730	Tarryall Creek	Tarryall Res outlet	confl South Platte River	20 (1/1 - 12/31)	11/15/1977

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 clarified priority dates, rates of fill, a volume for exchange, and dropped a new junior storage claim.
- Applicant agreed to drop its claim to add sources of water to an existing exchange.
- The decree includes a notice procedure to add augmentation sources.

(2) Case No. 17CW3168 (Water Division 1) - Application of Mountain Water and Sanitation District

The Board ratified this Statement of Opposition at its January 2018 meeting. Applicant requested an amendment of decrees approving water rights, change of water rights, a plan for augmentation, including exchange and plan of substitution. The Applicant filed a Motion to withdraw its Application from the Court's docket. The Court granted Applicant's Motion on August 2, 2018. The case is now closed.

The CWCB holds instream flow water rights, including the following, in Water Division 1 in the Upper South Platte watershed that could have been injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
84CW0646	Elk Creek	headwaters in vicinity	confl NF South Platte River	5 (1/1 - 12/31)	01/06/1984

(3) Case No. 15CW3119 (Water Division 5) - Application of City of Aspen, Colorado

The Board ratified this Statement of Opposition at its March 2016 meeting. Applicant sought groundwater rights, surface water rights, storage rights and a plan for augmentation with substitution and exchange. The place of use for the well includes the Aspen service area or extraterritorially by contract with Aspen. 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. Two opposing parties remain in the case at this point. A four day trial has been reset to begin on December 3, 2018

The CWCB holds instream flow water rights, including the following, in Water Division 5 in the Roaring Fork watershed that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
76W2947	Castle Creek	headwaters	confl Roaring Fork River	12 (1/1 - 12/31)	01/14/1976
76W2948	Roaring Fork River	confl Difficult Creek	confl Maroon Creek	32 (1/1 - 12/31)	01/14/1976
85CW0646	Roaring Fork River	confl Maroon Creek	confl Fryingpan River	30 (10/1 - 3/31) 55 (4/1 - 9/30)	11/08/1985
85CW0639	Roaring Fork River	confl Fryingpan River	confl Crystal River	75 (10/1 - 3/31) 145 (4/1 - 9/30)	11/08/1985

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 dropped its groundwater claim and related extraterritorial use claim.
- The 100% depletive reaches that occur below junior diversion points and above accrual of future return flows are clearly defined in the decree and decree maps.
- CWCB and Applicant agreed on details regarding existing uses at the time of the instream flow appropriation pursuant to C.R.S. 37-92-102(3)(b).

(4) Case No. 16CW3055 (Water Division 7) - Application of Charles L. Mooney

The Board ratified this Statement of Opposition at its March 2017 meeting. Applicant sought diligence on a 1976 conditional water right, which includes a direct flow fish propagation use. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure non-interference with its exclusive authority to hold an instream flow and that the CWCB's instream flow water rights will not be injured.

The CWCB holds instream flow water rights, including the following, in Water Division 7 in the Animas watershed that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
77W1764	Florida River	confl Salt Creek	confl Animas River	20 (10/15 - /30) 12 (7/1 - 10/14)	01/19/1977

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 withdrew the direct flow fish propagation use.

- Applicant agreed to limit its claimed acreage to its pro rata share of the ditch and to put to use its 1976 conditional water right within two diligence cycles or dismiss the water right.

Director's Report Attachment – September 18-20, 2018 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 Name/ ISF Case No.	ISF Amount	Individual Injury (%)	Cumulative Injury (%)	Count
18CW3073	Bangert Holdings LLC and Rudolf Neumayr	Colorado River 11CW0161	650 (9/16 - 5/14) 900 (5/15 - 6/15) 800 (6/16 - 9/15)	0.00120 0.00090	0.01312 0.00645	9

Requests for Administration of Instream Flow Water Rights

From July through August 2018, staff investigated low flow alerts from the satellite monitoring system and placed twelve formal requests for administration, identified in the table below. The Division Engineers have worked to enforce the calls through curtailment of junior water rights or undecreed uses, limiting water rights to decreed rates, and through implementation of augmentation plans. In some cases, staff coordinated alternative solutions in order to improve flow conditions. The call letters and detailed information on the Board's rights that were administered can be found on the CWCB's web page at: http://cwcb.state.co.us/public-information/instream-flow-administrative-calls/Pages/main.aspx

Stream Name	Case Number	Date of Formal Written Call	Amount (dates)	Terminus
Eagle River	5-80CW0124	8/9/2018	50 (10/1 - 4/30) 130 (5/1 - 9/30)	UT: confl Brush Creek LT: confl Colorado River
Eagle River	5-80CW0126	8/9/2018	45 (10/1 - 4/30) 110 (5/1 - 9/30)	UT: confl Lake Creek LT: confl Brush Creek
Beaver Creek	5-75W2719	8/9/2018	4 (10/1 - 4/30) 12 (5/1 - 9/30)	UT: outlet Beaver Lake LT: confl Eagle River
Roaring Fork River	5-76W2948	8/9/2018	32 (1/1 - 12/31)	UT: confl Difficult Creek LT: confl Maroon Creek
Eagle River	5-78W3811	8/8/2018	7 (10/1 - 4/30) 15 (5/1 - 9/30)	UT: confl Resolution Creek LT: confl Homestake Creek
Elk River	6-77W1279	8/8/2018	65 (1/1 - 12/31)	UT: confl NF Elk River LT: confl Rock Creek
Elk River	6-77W1331	8/8/2018	65 (1/1 - 12/31)	UT: confl Rock Creek LT: confl Yampa River
Crystal River	5-75W2720	8/3/2018	60 (10/1 - 4/30) 100 (5/1 - 9/30)	UT: confl Avalanche Creek LT: confl Roaring Fork River
San Juan River	7-80CW0040	8/2/2018	50 (3/1 - 8/31) 30 (9/1 - 2/29)	UT: confl EF and WF San Juan River LT: confl McCabe Creek
Slate River	4-80CW0092	7/19/2018	12 (12/1 - 3/31) 23 (4/1 - 11/30)	UT: headwaters in vicinity LT: confl Poverty Gulch
Hunter Creek	Various	7/19/2018	Various	UT: hdgt Fry-Ark Project div LT: confl Roaring Fork River
Cottonwood Creek	2-79CW0115	7/5/2018	20 (1/1 - 12/31)	UT: confl M&S Cottonwood Creeks LT: confl Arkansas River

Summary of select requests for administration

San Juan River
In response to CWCB's request for administration of its instream flow water right on the mainstem of the San Juan River, DWR extended administration upstream on both the East Fork and West Fork of the San Juan River, where the CWCB has additional decreed ISF water rights. As a result, DWR curtailed twelve active structures and several undecreed structures, primarily small pumps used for lawn irrigation and several small off-channel ponds. In addition, several augmentation plans were activated to replace depletions associated with small off-channel storage structures. Some water users have been diverting, and continue to divert less than their decreed amounts due to low water conditions. The Water Commissioner worked closely with water users that were curtailed due to the ISF call to allow them to divert water during times when stream flows rose above the decreed ISF rate following precipitation events. Staff coordinated with DWR to understand the impact of the ISF call, and the net result of administration will be evaluated in detail once diversion records are tabulated by DWR after the end of the irrigation season.

Crystal River
Staff requested administration of the Board's instream flow water right when flows at the Crystal River at the DOW Fish Hatchery gage fell below the ISF rate. DWR identified several wells with active augmentation plans that were junior to the ISF. However, the augmentation plans were ineffective for a local call on the Crystal River. In lieu of curtailing domestic water supplies, DWR sent a written notification to these water users addressing the issue. DWR also regulated waste on several ditches that were returning an excess amount of water to the river. Most water users were already diverting less than their decreed amounts due to low flows and difficulty in getting sufficient water to their headgates. Flows at the Crystal River at the DOW Fish Hatchery gage reached critically low levels during the months of July and August. Flows were less than 10 cfs for extended periods of time and have been below the ISF rate since July 8th, 2018.

Elk River
Staff requested administration on both reaches of its decreed instream flow water rights on the Elk River, which extends approximately 30.5 miles. Pumps and diversions junior to the ISF were curtailed and several structures were adjusted as a result of the call. An example was the Asher Ditch, which was curtailed from 10.4 cfs to its decreed amount of 2 cfs. Below are pictures from DWR Water Commissioner Glen Light showing the beneficial effects of this curtailment on the river.


Elk River Before Asher Ditch Curtailment


Elk River After Asher Ditch Curtailment

Other actions to improve instream flow conditions

Cimarron River
Flows on the Cimarron River dropped below the instream flow rate in early July, triggering communications between staff and DWR. The Water Commissioner identified several wells with augmentation plans that are junior to the ISF, but also stated that curtailment of these wells would likely not have an appreciable impact on improving flows. The low flow conditions also triggered communication between staff and CPW about using water stored in Silverjack Reservoir to improve conditions in the Cimarron River. CPW can request release of 1,500 acre-feet of water stored in Silverjack Reservoir that is intended to maintain flows of 25 cfs in the Cimarron River downstream of the Cimarron Canal. CPW worked with Bostwick Park Water Conservancy District and the Bureau of Reclamation to implement use of this water for instream flow for the first time since the construction of the reservoir. DWR shepherded the CPW release past the Cimarron Canal headgate through the instream flow reach, which resulted in a greater positive impact on flow conditions than an ISF call alone.

Lake Fork of the Gunnison River

In 2011, CWCB acquired 200 acre-feet of storage in Lake San Cristobal for instream flow use on the Lake Fork of the Gunnison as part of an agreement between CWCB and Upper Gunnison River Water Conservancy District. The agreement is intended to mitigate injury to the natural lake level water right on Lake San Cristobal through operation of the Lake San Cristobal dam. Flows at the Lake Fork below Lake San Cristobal gage were below the ISF rate beginning in early August. Staff coordinated with CPW to determine the amount and timing of water to be released from the Lake to benefit the instream flow water right on the Lake Fork. CPW's primary concern was high water temperatures impacting the fishery due to low flows. Staff requested a release of 200 acre-feet over a period of 20 days beginning on August 15, with the intention of increasing flows and decreasing water temperatures in the Lake Fork. Staff continues to work with Upper Gunnison River Water Conservancy District to adjust the release as stream conditions change. Since the start of the ISF release, flows have generally been above the decreed ISF rate and water temperatures have stayed below 70 degrees Fahrenheit.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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John Hickenlooper, Governor

Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

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

Board Meeting: September 19-20, 2018 Board Meeting

Directors Report: Water Project Loans
Interest Rates

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

The current rates for a 30-year term are as follows:
1.75% - Agricultural
2.45% - Low-income Municipal
2.80% - Middle-income Municipal
3.15% - High-income Municipal
6.00% - Commercial
2.00% - Hydroelectric

The standard loan term is 30 years. Rates are reduced by 0.25% for 20-year loans, and by 0.60% for 10-year loans. Rates are increased by 0.25% for 40-year loans.

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

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John Hickenlooper, Governor

Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

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

DATE: September 19-20, 2018 Board Meeting

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

The Finance Section compiles a list of prequalified projects for the Water Project Loan Program. In order to be included on this list, potential borrowers must submit a Loan Application and 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					
Bullseye Holdings, LLC	Water Rights Purchase	May 1, 2018	South Platte	Bullseye Holding plans to purchase augmentation credits from the Town of Wiggins to offset well depletions.	$517,500
Fire Mountain Canal & Reservoir Company	Fire Mountain Canal Phase II Salinity	Jan 1, 2018	Gunnison	The Company is applying for a Bureau of Rec. salinity control grant to replace a siphon and pipe approximately 4,000 feet of canal. The total project cost is estimated to be $1.9M.	$185,000
Webber Ditch Company	Webber Ditch Pipeline Project	Jan 1, 2018	Southwest	The Company is applying for a Bureau of Rec. salinity control grant to pipe approximately 26,000 feet of canal. The total project cost is estimated to be $3.9M.	$500,000
Total					$1,202,500

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
Central CO WCD	Pipeline Project	$4,000,000
Parker Water & Sanitation District	Water Meter Project	$5,000,000
Henrylyn Irrigation District	Reservoir Rehabilitation	$6,000,000
Bijou Irrigation District	Reservoir Rehabilitation	$600,000
Upper Platte & Beaver Irrigating Co.	Diversion Structure	$7,000,000
Woods Lake Mutual Ditch Co.	Culvert Replacement	$150,000
Town of Kersey	Raw Water Line	$TBD
Tunnel Water Company	Ditch Rehabilitation	$5,000,000
Riverside Reservoir and Land Co.	Ditch Rehabilitation	$250,000
Town of Bennett	Raw Water Tank	$500,000
Town of Empire	Water Rights Purchase	$100,000
Subtotal		**$139,600,000**

Arkansas River Basin

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
Fort Lyon Canal Company	Adobe Creek Enlargement	$8,000,000
Amity Mutual Irrigating Co.	Reservoir Rehabilitation	$TBD
Arkansas Groundwater Users Assoc.	Gravel Pit Purchase	$3,000,000
Deweese Ditch and Reservoir Co.	Reservoir Enlargement	$TBD
Holbrook Ditch Company	Reservoir Enlargement	$TBD
Lake County	New Reservoir	$TBD
Subtotal		**$16,800,000**

San Miguel/San Juan River Basin

Town of Bayfield	Ditch Piping	$500,000
Redmesa Reservoir and Ditch Co.	Reservoir Enlargement	$5,000,000
Subtotal		**$5,500,000**

Colorado River Basin

Town of Breckenridge	Goose Pasture Tarn Dam	$18,000,000
Orchard Mesa Irr. Dist.	Lateral Piping	$300,000
Silt Water Conservancy District	Harvey Gap Reservoir	$300,000
Subtotal		**$18,600,000**

Gunnison River Basin

Gunnison County Electric	Hydroelectric Project	**$1,000,000**

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
•Trinchera Water Conservancy District	Water Rights	$2,000,000
•Town of Center	Water Meter Project	$200,000
•Town of South Fork	Regional Water Projects	$TBD
•**Subtotal**		**$18,200,000**

Yampa River Basin

•Town of Oak Creek	Reservoir Rehabilitation	**$500,000**

North Platte Basin

•No projects at this time

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John Hickenlooper, Governor

Robert Randall, DNR Executive Director

Rebecca Mitchell, Director

TO: Colorado Water Conservation Board Members

FROM: Kirk Russell, P.E., Finance Section Chief
Jessica Halvorsen, Program Assistant

Board Meeting: September 19-20, 2018 Board Meeting

Directors Report: Water Project Loan Program
Design & Construction Status Report

The CWCB Loan Program has Substantially Completed eleven (11) projects in Calendar Year 2018 as shown in Table 1. There are currently fifty one (51) projects authorized to receive loan funding totaling $384 million. There are thirty nine (39) projects currently under contract and in the Design and Construction phase totaling $217 million.
The attached spreadsheet summarizes the status of the projects. A detailed description about each project is provided in the digital version of the Director's Report.

TABLE 1

	Borrower	Project	County	Loan Amount	Complete
1	Riverside Ditch and Allen Extension Company	Phased Canal Improvements	Chafee	$186,345	1/1/2018
2	Lookout Mountain Water District	Upper Beaver Brook Dam Spillway	Clear Creek	$3,099,690	1/1/2018 (a)
3	Supply Irrigating Ditch Company	Emergency Supply Irrigating Ditch Repair Project	Boulder	$324,210	3/1/2018
4	Georgetown, Town of	Outlet Works Modification Project	Clear Creek	$2,976,975	4/1/2018(b)
5	Lake McIntosh Reservoir Company	Lake McIntosh Outlet Works Repair	Boulder	$1,727,100	5/1/2018 (c)
6	Dixon Canon Ditch & Reservoir Company	Dixon Reservoir Dam Improvements	Larimer	$278,100	7/1/2018 (d)
7	Bennett, Town of	Wells #3 and #6 Replacement Project	Adams/Arapahoe	$1,454,000	7/1/2018
8	North Poudre Irrigation Company	Mountain Supply Reservoir No. 10 Repairs	Larimer	$802,950	7/1/2018 (e)
9	Corsentino Dairy Farms, Inc.	Holita Dam Rehabilitation	Walsenburg	$112,716	9/1/2018 (f)
10	Grand Valley Water Users Association	Government Highline Canal Lining	Mesa	$151,500	9/1/2018
11	Sanchez Ditch and Reservoir Company	Sanchez Reservoir Outlet Rehabilitation Project	Costilla	$1,502,476	9/1/2018 (g)
12			Total	$12,616,062	

Calendar Year 2018 has added or preserved 59,149 acre-feet of reservoir storage (a) 257; (b) 386; (c) 2,476; (d) 412; (e) 344; (f) 274; (g) 55,000

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Colorado Water Conservation Board
Department of Natural Resources

Phased Canal Improvements Project

Riverside Ditch and Allen Extension Company

Substantially Complete January 1, 2018

Project Description

The Riverside Ditch and Allen Extension Company (Company), located near Buena Vista, owns and operates the Riverside Ditch that provides irrigation water to a 450 acre service area within Chaffee County. Through this loan the Company completed a number of phased improvements to the canal, including: repairs to the river diversion and lining of portions of the canal to reduce seepage.

P R O J E C T D A T A		
Sponsor: Riverside Ditch & Allen Extension Company	*County:* Chaffee	*Water Source:* Arkansas River
Type of Project: Ditch Rehabilitation	*Board Approval Date:* November 2009	
Terms of Loan: 2.75% for 30 years *(Original)* $186,345.00 *(Final)* $159,574.01		
Design Engineer: NRCS and Tessara Water, LLC		
Contractor: Custom Linings, Inc. , Bugling Bulls, and K&S Inc.		

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Colorado Water Conservation Board
Department of Natural Resources

Upper Beaver Brook Dam Spillway

Lookout Mountain Water District

Substantially Complete January 1, 2018

Project Description

The Lookout Mountain Water District came to the CWCB for a loan to perform repairs and improvements to its Upper Beaver Brook Dam spillway in November of 2015, receiving approval for a loan of $ 3,099,690 in support of anticipated construction costs of $3,410, 000. The project included improvements to the existing rock-cut spillway with a new concrete labyrinth weir spillway, constructed to a level such that reservoir volume will increase by 134 acre-feet for a total storage of 391 acre-feet. Additional components included relocation of the access road due to the higher water level, installation of a new measurement flume, removal of trees in the inundation zone, replacement of the outlet works gate valve stem and staff gauge, and associated grading, monumentation, armoring, and record documentation.

These improvements will help the District provide a reliable supply of drinking water to current customers, with increased reliability for future demand and during times of drought.

P R O J E C T D A T A		
Sponsor: The Lookout Mountain Water District	*County:* Clear Creek	*Water Source:* South Fork Beaver Brook
Type of Loan: Reservoir Enlargement	*Board Approval Date:* November 2015	
Terms of Loan: at 3.25% for 30 years *(Original)* $3,099,690 *(Final)* $2,746,062.16		
Design Engineer: GEI Consultants		
Contractor: SEMA Construction		

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Colorado Water Conservation Board
Department of Natural Resources

Emergency Supply Irrigating Ditch Repair Project

Supply Irrigating Ditch Company

Project Closeout March 1, 2018

Project Description

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's ditch 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. This loan provided construction funds for the permanent repairs to the diversion dam. The historic at-grade concrete dam washed out by the flood was replaced with a grouted rock ramp structure that in addition to ensure the Company could divert its full water right, provided added benefits to fish and recreational users. The structure was designed to facilitate fish passage at a variety of flows, including a fish passage notch for low flow fish passage. The design also created hydraulic conditions across the grouted rock ramp and in the tail water pool allowing for recreational use. The Company worked with FEMA to fund a portion of the permanent repairs. Construction occurred from fall 2014 to spring 2015. The final FEMA Project Closeout meeting is pending.

P R O J E C T D A T A		
Sponsor: Supply Irrigating Ditch Repair Project	*County:* Boulder	*Water Source:* Saint Vrain Creek
Type of Loan: Ditch Rehabilitation	*Board Approval Date:* November 2014	
Terms of Loan: $324,210 at 2.25% for 30 years		
Design Engineer: S_2O Design		
Contractor: Environmental Excavation, LLC		

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Outlet Works Modification Project

Town of Georgetown

Substantially Complete April 1, 2018

Project Description

The Town of Georgetown owns and operates Georgetown Lake, located on Clear Creek, along the I70 corridor, east of the continental divide. The Town was required, per a water court mandate related to its augmentation plan, to increase the outlet works capacity. The outlet works could originally release up to 260 cfs. This project was the construction of a new spillway crest gate. As a result, the Town now has the ability to release of up to 500 cfs.

P R O J E C T D A T A		
Sponsor: Town of Georgetown (Water and Sewer Enterprise)	*County:* Clear Creek	*Water Source:* Clear Creek
Type of Loan: Dam Rehabilitation	*Board Approval Date:* July 2011	
Terms of Loan: *(Original)* $2,976,975.00 at 4.5% for 30 years *(Final)* $966,021.96		
Design Engineer: NV5, Inc.		
Contractor: Lillard & Clark Construction		

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Department of Natural Resources

Lake McIntosh Outlet Works Repair

Lake McIntosh Reservoir Company

Substantially Complete May 1, 2018

Project Description

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, rendering the reservoir's outlet works unusable. This Project restored the reservoir's outlet functionality by repairing the damaged outlet works. Phase 1 construction consisted of installing a new pipe from the sinkhole downstream to its outlet. Phase 2 construction consisted of installing a new pipe from the sinkhole upstream, under the roadway and under Platte River Power Authority switch yard to the outlet structure. Phase 1 was completed by April 2017 and Phase 2 was substantially completed in March 2018.

P R O J E C T D A T A		
Sponsor: Lake McIntosh Reservoir Company	*County:* Boulder	*Water Source:* St. Vrain Creek
Type of Project: Reservoir Rehabilitation	*Board Approval Date:* January 2016	
Loan Terms: 2.70% for 30 years *(Original)* $1,727,100 *(Final)* $1,727,100		
Design Engineer: Deere & Ault Consultants, Inc		
Contractor: America West Construction, LLC		

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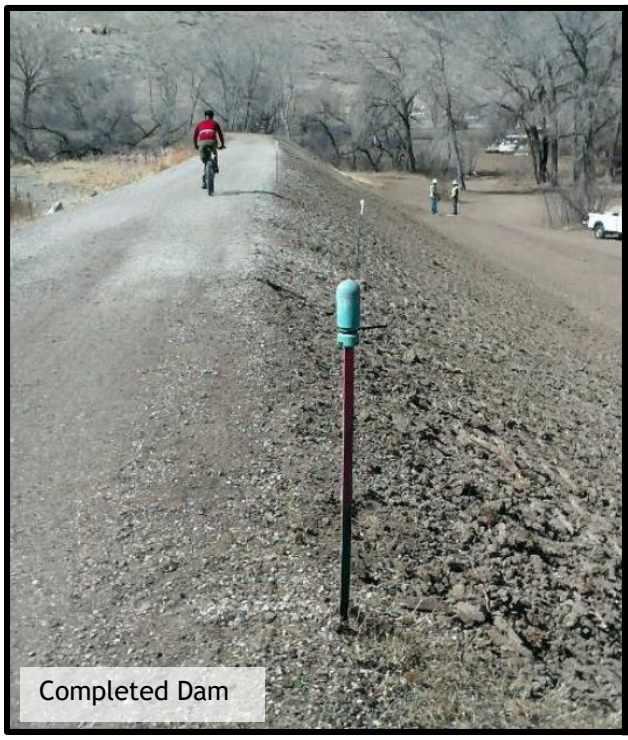
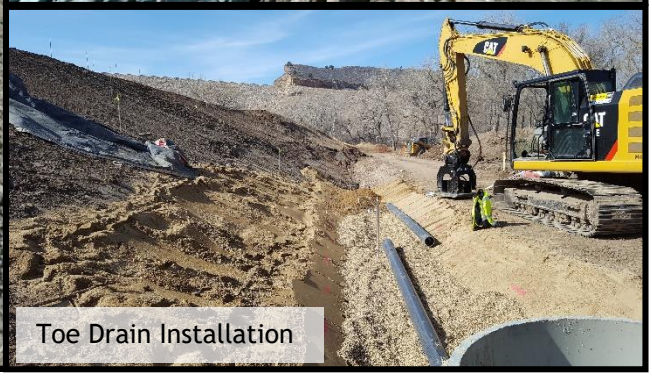
Colorado Water Conservation Board
Department of Natural Resources

Dixon Reservoir Dam Improvements

Dixon Canon Ditch and Reservoir Company

Substantially Complete July 1, 2018





Project Description

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. 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 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. To address the SEO concerns, this Project installed a seepage filtration and collection system including a sand and gravel filter with a toe drain, cleanouts, and flow monitoring weirs. Construction occurred from January 2018 through April 2018.

P R O J E C T D A T A		
Sponsor: Dixon Canon Ditch and Reservoir Company	*County:* Larimer	*Water Source:* Dixon Creek
Type of Project: Reservoir Rehabilitation	*Board Approval Date:* May 2016	
Loan Terms: 2.55% for 30 years *(Original)* $280,881 *(Final)* $280,881		
Design Engineer: Gauthiere Engineering, Inc.		
Contractor: Zak Dirt, Inc.		

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Well #3 and #6 Replacement Project

Town of Bennett

Substantially Complete August 1, 2018

The Town of Bennett pr[illegible]per Arapahoe and Lower Arapahoe, and Laramie-Fox Hills aquifers. A 2014 study revealed the need to address operational reliability, efficiency, and safety of the Town of Bennett's well #3 and well #6. The replacement of the wells provided the Town with additional supply to meet demands and needed redundancy in its water supply system. Construction activity included drilling the wells, electrical work, testing, and bringing the wells online.

P R O J E C T D A T A		
Sponsor: Town of Bennett	*County:* Adams & Arapahoe	*Water Source:* Non-Tributary Groundwater
Type of Loan: Well Drilling	*Board Approval Date:* November 2014	
Terms of Loan: $1,454,400 at 3.25% for 30 years		
Design Engineer: Jehn Water Consultants and Pure Cycle Corporation		
Contractor: Hydro Resources – Rocky Mountain, Inc. (Fort Lupton, CO)		

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Mountain Supply Reservoir No. 10 Repairs

North Poudre Irrigation Company

Substantially Complete August 1, 2018

Project Description

The North Poudre Irrigation Company is a mutual ditch company established in 1901. The Company's service area encompasses approximately 28,000 irrigated acres in Larimer County north of Fort Collins near Wellington, and includes service to 14 communities and municipal water providers.

The Mountain Supply Reservoir No. 10 is owned and operated by the Company and was constructed in 1905. Major rehabilitation of the reservoir's dam was completed in 1973. In August 2015, the reservoir experienced a failure in its corrugated metal pipe (CMP) outlet, prompting the Company to drain the reservoir and the State Engineer's Office to impose a full storage restriction. Temporary emergency repairs were made in 2016 which permitted the Company to store 80 AF. This project made permanent repairs which resulted in the State Engineer's Office removing all storage restrictions. Repairs to the reservoirs outlet structure included construction of a new gate tower and walkway and lining the length of the outlet pipe using a cured-in-place pipe (CIPP) liner. Additionally, the Company made repairs to the reservoir's inlet structure off the No. 10 ditch, and installed a new spillway cutoff wall. Construction occurred from November 2017 to April 2018.

P R O J E C T D A T A		
Sponsor: North Poudre Irrigation Company	*County:* Larimer	*Water Source:* Cache la Poudre River
Type of Project: Reservoir Rehabilitation	*Board Approval Date:* March 2017	
Loan Terms: 2.50% for 30 years *(Original)* $802,950 *(Final)* $726,213.77		
Design Engineer: Tessara Water, Inc		
Contractor: Zak Dirt, Inc.		

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Holita Dam Rehabilitation

Corsentino Dairy Farms, Inc.

Substantially Complete September 1, 2018

Figure 1 – Reservoir before construction

Figure 2 – Downstream view of dam before construction

Figure 3 – Construction – Dam core

Figure 4 – Embankment reconstruction

Figure 5 – Finished dam

Project Description

Corsentino Dairy Farms, Inc. is located on 1,019 acres located approximately three miles east of the City of Walsenburg, along the north and south sides of State Highway 10. The Dairy has been in the Corsentino family since 1936 and is currently operated as an organic dairy. The primary water for the dairy operation comes from a well. The well is operated in accordance with the Corsentino Dairy plan for augmentation. The replacement water comes from the Holita Reservoir.

Holita reservoir has a storage capacity of 498 acre-feet and was built in 1889. In September of 2014 the Dairy received a letter from the Office of the State Engineer (SEO) that identified the Holita dam as unsatisfactory and restricted the storage level to five feet below the low point of the west dam crest.

Through this loan, the Dairy addressed seepage issues by reconstructing the embankment and permanently lowered the spillway to allow a storage volume of 274 acre-feet.

PROJECT DATA		
Borrower: Corsentino Dairy Farms, Inc.	*County:* Huerfano	*Water Source:* Cucharas River
Type of Loan: Reservoir Rehabilitation		*Board Approval Date:* July 2017
Loan Terms: 0.5% for 10 years (Original) ***$112,716.00*** *(Final)* ***$99,263.32***		
Design Engineer: Nicholas Kock, P.E.		
Contractor: Double M Excavating, Inc., La Veta, CO		

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Government Highline Canal Lining

Grand Valley Water Users Association

Substantially Complete September 1, 2018

Project Description

The Grand Valley Water Users Association (Association), obtained loan and grant funding for the Government Highline Canal Lining Project. The Association is the managing entity of the Bureau of Reclamation's Grand Valley Project. The Grand Valley Project facilities includes the Grand Valley Diversion Dam (also known as the Roller Dam) on the Colorado River in De Beque Canyon and the 55-mile-long Government Highline Canal. The embankment immediately below the Roller Dam is relatively narrow and separates the Government Highline Canal from the Colorado River. This section of canal was constructed around 1915. Over the last 100 years the embankment settled and degraded. Erosion within the embankment led to material loss and sinkholes. As a result of canal degradation, water flow was restricted and the canal cross section was reduced, causing a reduction in capacity of the canal channel. Through this loan the Association lined the upper section of the canal to increase the conveyance capacity.

P R O J E C T D A T A		
Sponsor: Grand Valley Water Users Association	*County:* Mesa	*Water Source:* Colorado River
Type of Project: Ditch Rehabilitation	*Board Approval Date:* September 2016	
Loan Terms: 1.55% for 30 years *(Original)* $151,500 *(Final)* $151,500		
Design Engineer: SGM, Inc.		
Contractor: Mountain Valley Contracting, Inc.		

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Sanchez Reservoir Outlet Rehabilitation Project

Sanchez Ditch and Reservoir Company

Substantially Complete September 1, 2018

Figure 1 –Before construction - original outlet tower

Figure 2 – New staff gage construction

Figure 3 – After construction – new outlet controls

Figure 4 – After construction – new intake

Figure 5 – After construction – new staff gage

Project Description

The Sanchez Ditch and Reservoir 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 original outlet included a 135-foot tall concrete gate tower. In order to operate the dam, a tramway/gondola ran along a cable and was powered by a portable gasoline generator. Because daily operation of the gate is required during irrigation season, the reliability and safety of the gondola system was a concern of the Company. Using loan and grant funds, the Company demolished the gate tower; the installed new control gates and operators; lined the outlet conduit with shotcrete; repaired the downstream outlet structure; and, installed a new perimeter drain and weir along the right side of the outlet structure to control seepage. Additional seepage monitoring was also funded through the project.

P R O J E C T D A T A		
Sponsor: Sanchez Ditch and Reservoir Company	*County:* Costilla	*Water Source:* Ventero Creek
Type of Loan: Reservoir Rehabilitation	*Board Approval Date:* September 2012	
Loan Terms: 2.0% for 40 years (Original) *$1,502,476.00 (Final)* *$1,502.465.51*	***WSRF Funding**: $914,400*	
Design Engineer: Smith Geotech & AECOM		
Contractor: Moltz Construction, Inc.		

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
1	Bessemer Irrigation Ditch Company >Landslide Stabilization and Dirtch Lining CT2018-2829	Pueblo	$909,000	100%	March 2018 - Dec 2019	50%	RP	Ditch stabilization phase complete. Backfill complete along wall. Winter 2018/2019 design/bid ditch lining.
2	Big Elk Meadows Association > Emergency Raw Water Storage Repair C150391	Boulder/ Larimer	$2,020,000	80%	July 2014 - Sept 2018	60%	JH	Project will rebuild 5 dams damaged in 2013 flood. 3 dams completed: Mirror Dam (2015), Rainbow Dam (2016), Willow Dam (2017). Meadow Dam construction pending Notice of Award. Sunset Dam design pending. Loan increased at March 2017 Board meeting, 0% interest thru 2020.
3	Bonus Ditch Company > St. Vrain Diversion Replacement CT2018-2081	Longmont & Boulder	$1,309,970	95%	Fall 2018 - Spring 2019	0%	JH	City of Longmont will perform project management for this project. Design is complete for bid purposes. Bidding should occur Summer 2018 with construction starting Fall 2018
4 - CHATFIELD Reallocation Project - First Cost of Storage								6
a	Castle Pines North Metropolitan District >(C150404A) CT2018-1617	Arapahoe Douglas Park Weld	$723,160	N/A	N/A	0%	JH	This contract is to provide reimbursement for the Chatfield Reallocation Project, specific to the "first cost of storage." Payment will be due once storage in the new reservoir pool is allowed (after Phase 1 Mitigation contract is complete).
b	Centennial Water & Sanitation District >(C150405A) CT2016-2053	Arapahoe Douglas Park Weld	$4,978,290	N/A	N/A	0%	JH	
c	Center of Colorado Water Conservancy District >(C150406A) CT2016-2047	Arapahoe Douglas Park Weld	$94,637	N/A	N/A	0%	JH	
d	Central Colorado Water Conservancy District >(C150407A) CT2016-2057	Arapahoe Douglas Park Weld	$3,187,560	N/A	N/A	0%	JH	
5 - CHATFIELD Reallocation Project - Phase 1 Mitigation								$39,334,349
a	Castle Pines North Metropolitan District >(C150404B) CT2018-1616 *$	Arapahoe Douglas Park Weld	$5,462,484	99%	Sept 2017 - Spring 2020	40%	JH	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 before storage is allowed. There are 12 identified individual projects for recreation modification and environmental mitigation with various schedules. The first projects began construction in September 2017. It is currently anticipated that Phase 1 could be completed by spring 2020. Several of the modified recreation areas within the park are already completed and are now open to the public including the North Boat Ramp and the perimeter road.
b	Centennial Water & Sanitation District >(C150405B) CT2016-2055	Arapahoe Douglas Park Weld	$37,573,717	99%	Sept 2017 - Spring 2020	40%	JH	
c	Center of Colorado Water Conservancy District >(C150406B) CT2016-2048	Arapahoe Douglas Park Weld	$511,363	99%	Sept 2017 - Spring 2020	40%	JH	
d	Central Colorado Water Conservancy District >(C150407B) CT2016-2058	Arapahoe Douglas Park Weld	$19,812,059	99%	Sept 2017 - Spring 2020	40%	JH	
6 - CHATFIELD Reallocation Project - Phase 2 Mitigation								$7,000,310

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
a	Castle Pines North Metropolitan District >(C150404C) CT2018-1619	Arapahoe Douglas Park Weld	$1,587,720	0%	Fall 2019 - Summer 2020	0%	JH	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 covers the work remaining after storage is allowed. It was originally estimated Phase 2 work could last until 2028. However, the on-site mitigation in Phase 1 is proving more effective than planned, lessoning the amount of off-site mitigation in Phase 2. It is currently ancitipated that Phase 2 could be completed by summer 2020.
b	Centennial Water & Sanitation District >(C150405C) CT2016-2056	Arapahoe Douglas Park Weld	$10,934,260	0%	Fall 2019 - Summer 2020	0%	JH	
c	Central Colorado Water Conservancy District >(C150407C) CT2016-2060	Arapahoe)ouglas Weld	$7,000,310	0%	Fall 2019 - Summer 2020	0%	JH	
7	Centenial Irrigating Ditch Company >Centenial Diversion Replacement CT2108-1999	Rio Grande	$232,300	100%	Jan 2018 - Oct 2018	95%	JH	This project is part of the Rio Grand Five Ditches WSRF Project and consisted of replacing the existing diversion dam. Contractor mobilized to site in January 2018 and construction was substantially completed by the end of March 2018. Miscellaneous site clean up will occur fall 2018 and then final billing will occur.
8	Central Colorado Water Conservancy District >Shores Lakes Pond C Infrastructure Improvement CT2018-2851	Weld	$2,367,440	80%	Fall 2018 - Spring 2019	0%	JH	This project will increase the efficiency by which the Shores Lakes can capture and release water for augmentation use by making infrastructure improvements at the site of an old gravel pit. Final design should be completed by Summer 2018.
9	Church Ditch Water Authority >Ditch System Improvements CT2018-1335	Jefferson	$3,615,000	75%	Dec 2017 - Oct 2019	50%	RP	Loan covers 5 individual projects within the Church Ditch system. The Leyden Flushing Structure and Headgate 53 Retaining Wall projects near completion, Engineer preparing As-Builts and Completion Letter. The Area 15 Ditch Lining, Ford Street Siphon, and Legacy Farms Culvert will be completed after the 2018 irrigation season.
10	Consolidated Ditch and Headgate Co >Consolidated Diversion and Headgate Replacement CT2018-1017	Rio Grande	$1,010,000	100%	Jan 2018 - Mar 2019	50%	JH	This project is part of the Rio Grand Five Ditches WSRF Project and will consist of replacing the existing diversion dam and headgate. Contractor mobilized to site in January 2018 finished the headgates and trash rack structures by the end of March 2018. Dam scheduled for construction Fall 2018 thru Spring 2019.
11	Duke Ditch Company >Piping the Duke Ditch CT2017-915 CTGG1 2017-212 (WSRF)	Delta	$90,000	100%	Fall 2018 - Spring 2019	0%	AM	NRCS finalized the design in August 2018. Construction will begin in fall 2018.
12	Fort Lyon Canal Company >Adobe Creek Dam Rehabiliatation CT2018-1960 CTGG1 2018-806 (WSRF)	Bent	$8,181,000	100%	Fall 2017 - Spring 2020	0%	RP	Waiting Dam Safety conditional approval 8/31/2018. Out for bid 7/31/2018. Award 9/5/2018.
13	Fowler, Town of >Augmentation Pipeline Project C150359 (CT2015-054)	Otero	$277,245	100%	Fall 2018 - Spring 2019	0%	RP	Engineering completed. Easement and appraisal processes causing delay; might result in litigation per disc with Town 5/23/17. Bid process on hold. tt Kelly (Town Clerk) - no updates, project on hold until Fall 2018.
14	Grand Mesa Water Conservancy District >Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	$227,250	100%	Mar 2013 - Jul 2019	50%	JH	Construction on Peak Reservoir began in the 2013 season and was completed in Oct 2014. Blanche Park construction was delayed due to Forest Service permit issues. Construction began August 2018 with completion planned by summer 2019.

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
15	Grand Valley Water Users Association >Grand Valley Power Plant Rehabilitation CT2017-2875 - SCTF	Mesa	$1,717,000	100%	Fall 2018 - Spring 2019	0%	JH	Project was delayed due to a Dept of the Interior review of pending projects nationwide. Design is 100% complete but has not had final approval from Bureau of Reclamation. Approval is anticipated by end of summer with construction beginning Fall 2018.
16	Huerfano County Water Conservancy District >Regional Augmentation Project C150364 (CT2015-047) CTGG1 2015-528 (WSRF)	Huerfano	$2,222,000	100%	Jan 2014 - Jun 2019	60%	RP	Land and water rights purchase occurred in January 2014. Camp Ranch augmentation site construction is complete. Phase I of III at Sheep Mountain Ranch augmentation site was completed in Oct 2017. Sheep Mtn. Ph2 bid award HCWCD approval by 8/31/2018. Consider ext. loan only from 6/2019 to 6/2020.
17	Lake Durango Water Authority >Source Water Supply Project C150317 (CT2015-013) CTGG1 2015-370	LaPlata	$2,525,000	100%	Oct 2016 - July 2018	98%	KR	All project components are completed. Final testing and warranty monitoring is underway. Project substantial completion is expected Fall 2018
18	Lamar, City of >Repurposing of Wells 12 and 13 CT2017-917 CTGG1 2017-211 (WSRF)	Prowers	$101,000	100%	Jun 2017 - Jul 2019	70%	RP	Precon mtg held 5/23/17. City staff is doing construction. Work has been postponed due to staffing/workload issues. Staffing changes. JVA providing additional scope and associated costs - taking to CWCB Board Sept2018.
19	Larimer & Weld Irrigation Company >Headgate Structure Replacement CT2017-2253	Larimer & Weld	$681,750	100%	Nov 2017 - Apr 2018	98%	JH	Constructin began in November 2017 and was substantially completed in April 2018. Final billing remains.
20	Left Hand Water District >Participation in Southern Water Supply Project II CT2018-2028	Broomfield & Weld	$10,000,000	100%	July 2018 - March 2020	5%	JH	Project is managed by Northern Water with Left Hand Water District paying for its prorata share based on pipeline capacity. Contractor mobilized July 2018 and began laying pipe at the end of August.
21	Lupton Bottom Ditch Company >Diversion Structure Repair CT2018-2829	Weld	$606,000	100%	Jan 2018 - July 2018	99%	RP	Northern portion diversion structure near completion, next step, southern portion. Final walk-through April 2018. Received as-builts June 29, 2018. 10/1/18 substan. completion
22	Missouri Heights >Mountain Meadow Irrigation Company CT2019-2241	Garfield	$303,000	50%	Fall 2018 - Spring 2020	0%	JH	Phase B1 lining to begin fall 2018. Phase B2 lining to begin Fall 2019 if NRCS approves grant funds for Phase B2.
23	Monte Vista, City of >Augmentation Water Rights Acquisition C150309 (CT2015-011)	Rio Grande	$1,693,770	N/A	N/A	50%	AM	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.
24	North Poudre Irrigation Company >Fossil Creek Res. Diversion Structure Repair C150368 (CT2015-024)	Larimer	$876,680	100%	Nov 2015 - March 2016	99%	JH	The was an emergency loan due to the September 2013 flood. Construction began in November 2015 and was completed in March 2016. FEMA funding is pending. Per terms of the emergency loan contract, the loan will be closed out, and interest will begin accruing, on November 1, 2018.
25	Orchard Mesa Irrigation District >Grand Valley Power Plant Rehabilitation CT2017-2878 - SCTF	Mesa	$1,717,000	100%	Fall 2018 - Spring 2019	0%	JH	Project was delayed due to a Dept of the Interior review of pending projects nationwide. Design is 100% complete but has not had final approval from Bureau of Reclamation. Approval is anticipated by end of summer with construction beginning Fall 2018.

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
26	Orchard Ranch Ditch Company >Orchard Ranch Ditch Pipe Project CT2016-2795 POGG1 2017-493	Delta	$151,500	75%	Fall 2018 - Mid 2020	0%	RP	Design and permitting work is underway. Construction is expected to begin in Fall 2018. PreBid 7/23/18. Material supply issue - JUB redesign and rebid 10/2018.
27	Overland Ditch and Reservoir Company >Overland Reservoir Rehabilitation C150206 (CT2015-034)	Delta	$1,141,300	50%	No Est Permitting	0%	KR	Permitting issues are being addressed to enlarge reservoir. Company is concerned about the impact of increased costs to the project. Staff reviewing project with Borrower to determine feasibility.
28	Riverside Reservoir and Land Company >Emergency Spillway Project C150291 (CT2015-026)	Weld	$2,838,100	100%	July 2018 - Jun 2019	20%	RP	Plans SEO approved, preparing bid package. Construction timing non-irrigation season. Contract extension approved through 12/31/2018. Awarded Connell Resources April 2018. June pre-con. Riverside working with Dam Safety and then construction begins Jul 2018.
29	San Luis Valley Irrigation District >Rio Grande Reservoir Rehabilitation CT-2018-3303, CTGG1-2018-1805	Hinsdale, Rio Grande	$15,000,000	100%	Fall 2018 - Spring 2020	2%	KR	Moltz Constructors has mobilized to the site. Reservoir is being lowered beneath the coffer dam for work on the inlet side of the outlet structure
30	St. Vrain & Left Hand Water Conservation District >Lake No. 4 Outlet Pipeline Repair CT2017-3213	Boulder	$619,130	95%	Fall 2018 - Spring 2019	0%	JH	Project is being done in partnership wtih Emergency Rock'n WP Ranch Lake No. 4 Repair, as well as repairs to Boulder County's West Lake and A-Frame Lake. County is lead agency for all projects and plans to bid all projects under one contract in Summer 2018 for a construction start of fall 2018.
31	St. Vrain & Left Hand Water Conservancy District > Emergency Rock'n WP Ranch Lake No. 4 Repair CT2016-2452	Boulder	$4,545,000	95%	Fall 2018 - Spring 2019	0%	JH	Project is being done in partnership wtih Lake 4 Outlet Pipeline Repair, as well as repairs to Boulder County's West Lake and A-Frame Lake. County is lead agency for all projects and plans to bid all projects under one contract in Summer 2018 for a construction start of fall 2018.
32	Southeastern CO Water Conserv. District >Pueblo Dam Hydroelectric Project CT2018-833	Pueblo	$16,725,600	100%	June 2017 - Fall 2019	75%	RP	Construction beginning fall 2017. District anticipates power production by fall of 2018. Tie-in to SDS complete April 2018. Turbines delivered. Waiting on transformer approval from Black Hills. Siding powerhouse in Aug 2018.
33	Town of Firestone >Storage Development and Water Rights Purchase CT2017-2880	Weld	$10,000,000	50%	May 2018 - Dec 2019	0%	RP	LG Everist to complete mining and reclamation of future reservoir in Fall 2017/Winter 2018. Lower Boulder water rights purchased in July 2017. Final design pending - engineer looking at filling reservoir via wells/pipelines instead of diversion off river. Change case application to be filed 2nd half of 2017 for reservoir water rights. Want to look at addtl water supply.
34	Trinchera Irrigation Company >Mountain Home Dam Outlet Rehibilitation Phase III CT2018-3122 CTGG1 2018-1773 (WSRF)	Costilla	$440,360	90%	Fall 2018 - Spring 2019	0%	JH	This is a loan/grant project to replace outlet valves at Trinchera Reservoir. Design is pending SEO review. Construciton is scheduled to occur between 2018 and 2019 irrigation seasons. Company seeking a loan increase to add outlet lining into the construction scope of work.
35	Tunnel Water Company >Laramie-Poudre Tunnel Rehabilitation CT2016-2001	Larimer	$1,717,000	100%	Sept 2015 - Spring 2019	50%	JH	Phase 1 (Inlet) complete in 2016. Phase 2 (outlet) construction was dealyed due to need to reroute access road. Construction of Phase 2 is planned for fall 2018. Company received a loan increase at March 2018 meeting to fully cover expected Phase 2 costs.
36	Wiggins, Town of >Wiggins Recharge Facility at Glassey Farms CT2018-892	Morgan	$2,408,850	90%	Fall 2018 - Spring 2019	0%	JH	Town purcahsed Galssey Farms in 2017. Final design of the project should be complete by September 2018, with site operational by December 2018. Town is finishing agreement with Morgan Community College to allow land to be used for an experimental precision agricultural program.
37-WISE Project - Phase 1 Infrastructure								$16,802,501

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
a	Cottonwood W&S Dist - C150408B (CT2015-106)	Douglas/ Arapahoe	$2,636,100	100%	Spring 2015 - Dec 2018	80%	RP	Infrastructure to treatment plant completed. 42-inch Pipeline construction on Ridgeway line continues. E470 bore complete. All lines in ground and connections in place. Next step, testing. Waiting on water treatment piece before startup testing in May 2018. Ridgegate pipeline complete - punchlist items. WISE system has been delivering water since August of 2017 as connection come online. All but 2 members connected to the pipeline and those connections have been tested. Centennial Water and Sanitation has built their connection and is working on finalizing the controls programing. Anticipate CWSD start up by end of summer2018. Pinery working on physical connection and anticipate accepting water fall 2018.
b	Inverness W&S Dist - C150409B (CT2015-118)	Douglas/ Arapahoe	$1,181,700	100%	Spring 2015 - Dec 2018	40%	RP	
c	Parker W&S Dist - C150410B (CT2015-108)	Douglas/ Arapahoe	$6,785,321	90%	Spring 2015 - Dec 2018	60%	RP	
d	Pinery (Den SE WSD)C150411B (CT2015-085)	Douglas/ Arapahoe	$6,199,380	90%	Spring 2015 - Dec 2018	60%	RP	
38- WISE Project - Phase 2 Infrastructure								$7,400,078
a	Cottonwood W&S Dist - C150408C (CT2015-105)	Douglas/ Arapahoe	$1,127,160	0%	Spring 2018 - Fall 2021	0%	RP	
b	Inverness W&S Dist - C150409C (CT2015-119)	Douglas/ Arapahoe	$1,427,130	0%	Spring 2018 - Fall 2021	0%	RP	
c	Parker W&S Dist - C150410C (CT2015-109)	Douglas/ Arapahoe	$3,418,658	0%	Spring 2018 - Fall 2021	0%	RP	
d	Pinery (Den SE WSD)C150411B (CT2015-086)	Douglas/ Arapahoe	$1,427,130	0%	Spring 2018 - Fall 2021	0%	RP	
39- WISE Project - DIA Connection								
a	Cottonwood W&S Dist - C150408D (CT2015-104)	Douglas/ Arapahoe	$363,600	35%	N/A	35%	RP	Annual disbursment to be made on this loan through 2021.Design Status indicates percent of funds disbursed to date.
b	Inverness W&S Dist - C150409D (CT2015-120)	Douglas/ Arapahoe	$454,500	35%	N/A	35%	RP	
c	Parker W&S Dist - C150410D (CT2015-110)	Douglas/ Arapahoe	$1,099,890	46%	N/A	46%	RP	

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
d	Pinery (Den SE WSD)C150411B (CT2015-087)	Douglas/ Arapahoe	$454,500	46%	N/A	46%	RP	
	Projects Under Contract		$216,709,874	100%				
	Approved Projects - Not Under Contract							
a	Florida Consolidated Ditch Company >Hess Lateral Improvement CT2019-2034 CTGG1 2016-1316 (WSRF)	La Plata	$1,085,750	0%	Spring 201x - Fall 202x	0%	AM	Contract need by - unknown (Waiting on CDOT contract)
b	San Juan Water Conservancy District >Dry Gultch Reservior Land Acquistion CT2018-839	Archuleta	$2,000,000	0%	Spring 201x - Fall 202x	0%	JH	Contract needed by - Postponed Indefinitely CWCB approval is conditioned on voters approving debt. Debt approval failed at November 2017 election. District is regathering to determine if/how/when to move the project forward.
c	Southeastern CO Water Conserv. District > Arkansas Valley Conduit C150238	Crowley	$40,000,000	0%	Spring 201x - Fall 202x	0%	KR	Contract needed by - > 12months Pending Federal Appropriation. Southeastern's Pueblo Dam Hydro project was taken out of these loan funds.
d	City of Walsenburg > City Lake Dam Rehabilitation & Enlargement CT2019-648 Grant CTGG1 2019-094	Huerfano	$6,889,210	0%	Spring 201x - Fall 202x	0%	AM	Contract needed by - Sept 2018 (Construction contract should be awarded that month)
e	Fruitland Irrigation Company >Tunnel and Canal Renvation CT2019- XXXX CTGG1 2019--XXXX	Delta & Montrose	$1,746,290	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - unknown Sept 2018 letter from Bureau of Reclamation. Require letter prior to CWCB contract.
f	Pueblo Consevancy District > Arkansas River and Wildhorse Creek Levees CT2019-366	Pueblo	$17,170,000	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - unknown Funds approved June 2018. July 2018 meeting with PCD.
g	Municipal Subdistrict >Windy Gap Project CT2019-XXXX	Larimer	$90,000,000	0%	Spring 201x - Fall 202x	0%	JH	Contract needed by - November 2018? Contracts waiting on participant water storage agreements with Northern.
h	Julesburg Irrigation District >Diversion Structure Rehabilitation CT2019-2073	Sedgwick	$3,341,080	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - unknown Per Rachel-there is a delay before Julesburg is ready to execute a loan contract. The District seeking additional funding. They plan to gather additional funding sources prior to holding special election. This project is not a rush in any way at this point./no BOL needed just AOL
i	Ogilvy Irrigating and Land Comapny >Seely Reservoir Dredging CT2019-2099 CTGG1 2019-2018 (WPG)	Weld	$2,274,520	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - unknown (permitting considerations being made) Permitting/Eval Jul 2018 and Construction Aug 2018

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
j	San Luis Valley Canal Company >San Luis Canal Headgate Construction CT2019-2046	Rio Grande	$303,000	0%	Fall 2018 - Spring 2020	0%	JH	Contract needed by - Late Summer/Early Fall 2018 Construction to begin by Fall 2018
k	Roxborough Water and Sanitaion District >Ravena Development Interconnect CT2019-2250	Douglas	$1,584,690		Fall 2018 - Spring 2019		JH	Contract needed by late summer/fall 2018
l	Chilcott Ditch Comapny >Chilcott Augmentation Station CT2019-XXXX	El Paso	$505,000	80%	Fall 2018 - Spring 2019	0%	RP	Contract needed by - 8/30/2018. Construction to begin in August 2018
	Not Under Contract SubTotal =		$166,899,540					
	Grand Total =		$383,609,414					

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Landslide Stabilization and Ditch Lining Project

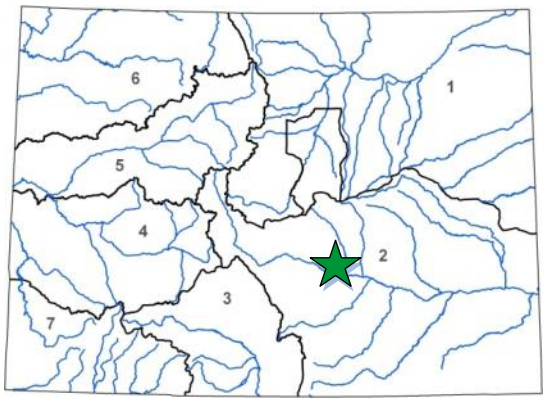
Bessemer Irrigation Ditch Company

January 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$900,000
CWCB Loan (with Service Fee):	$909,000
Loan Term and Interest Rate:	20 years @ 1.65%
Funding Source:	Construction Fund

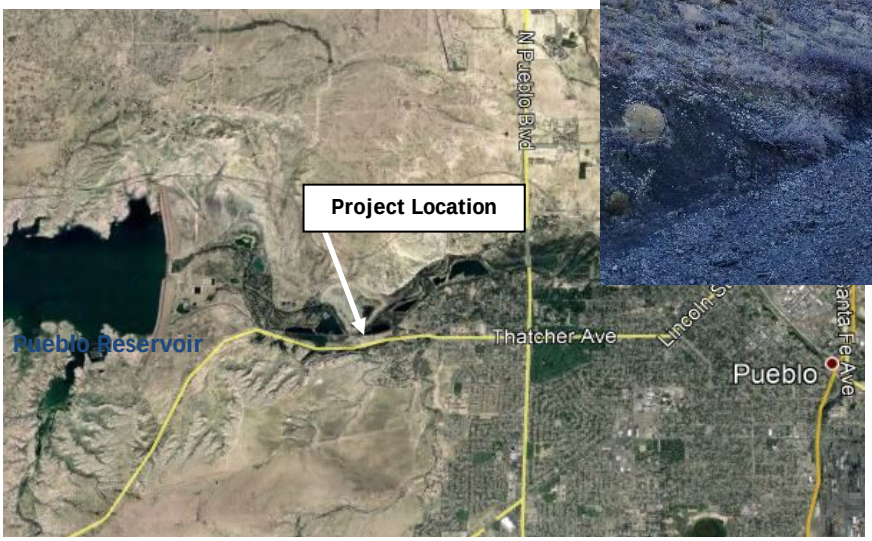
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
62%	38% Low - 0% Mid -0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	71,600 AF



LOCATION			
County:			Pueblo
Water Source:			Arkansas River
Drainage Basin:			Arkansas
Division:	2	*District:*	14

The Bessemer Ditch Company was incorporated in 1888 and construction of the ditch began in 1889. It serves nearly 20,000 irrigated acres in Pueblo County and provides water for municipal use. In the summer of 2017, land along limestone bluffs, approximately 2 miles east of Pueblo Dam, started sliding away from the Bessemer Ditch canal. The landslide area is approximately 200 feet wide. Stabilization and corrective work will occur in two stages; mechanical stabilization and ditch lining. Mechanical stabilization of the slide area will protect the canal and provide width for access and maintenance. The second stage of work includes synthetic liner installation, extending upstream and downstream from the slide area 1200 lineal feet to control canal seepage. Construction is expected to begin in January 2018.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Emergency Raw Water Storage Repair

Big Elk Meadows Association

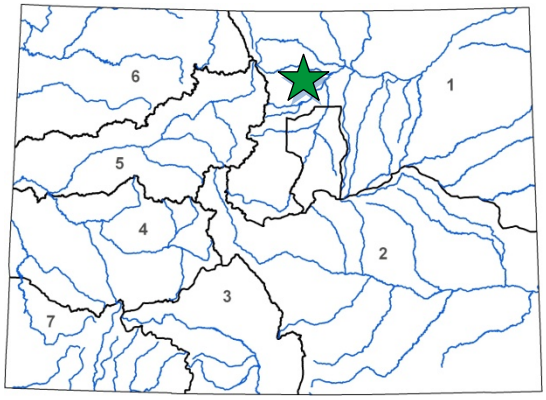
March 2017 Board Meeting

(Loan Increase)

LOAN DETAILS	
Project Cost:	$4,162,453
CWCB Loan:	$2,020,000
Loan Term and Interest Rate:	6-Yrs @ 0%, 30-Yrs @ 2.75%
Funding Source:	Severance Tax PBF

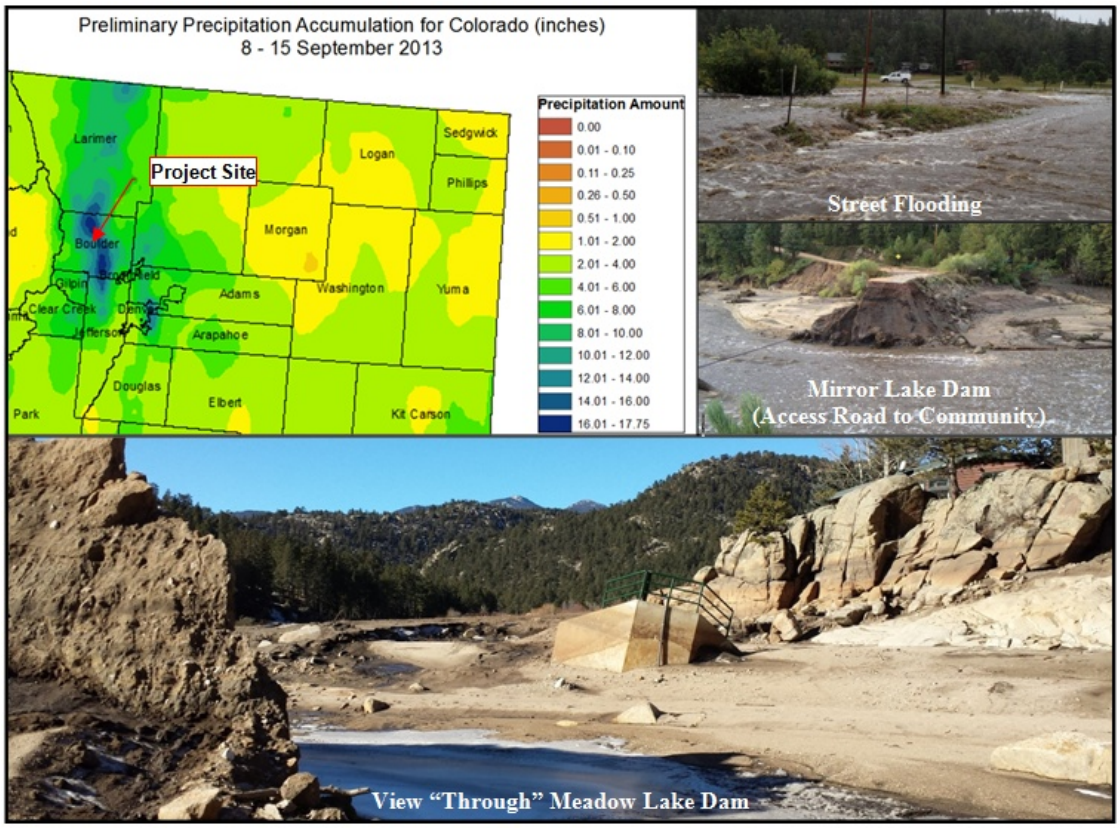
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 100% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Water Storage Preserved:	108 AF



LOCATION			
County:	Boulder/Larimer		
Water Source:	W. Fork Little Thompson R.		
Drainage Basin:	South Platte River		
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. 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. Two of the five dams have been rebuilt and the Association is seeking an increase to the emergency loan to help with its cash flow during construction and through the FEMA grant reimbursement period.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

St. Vrain Diversion Replacement

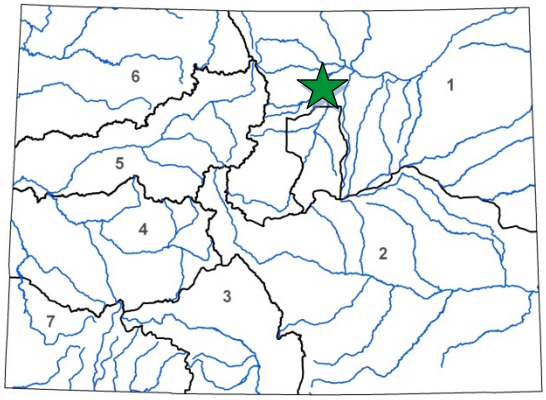
Bonus Ditch Company

September 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$1,297,000
CWCB Loan (with Service Fee):	$1,309,970
Loan Term and Interest Rate:	30 Years @ 2.90 %
Funding Source:	Severance Tax PBF

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
2%	0% Low - 52% Mid -46% High	0%

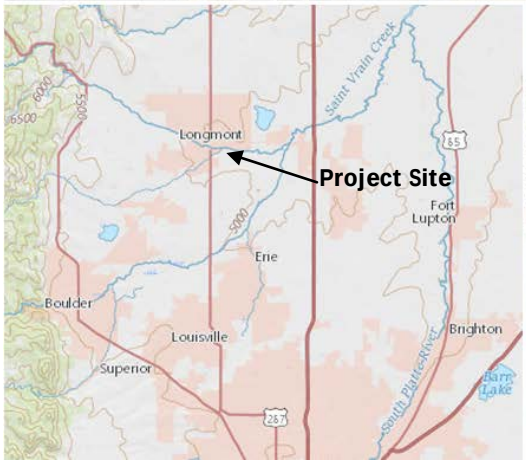
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,221 AF

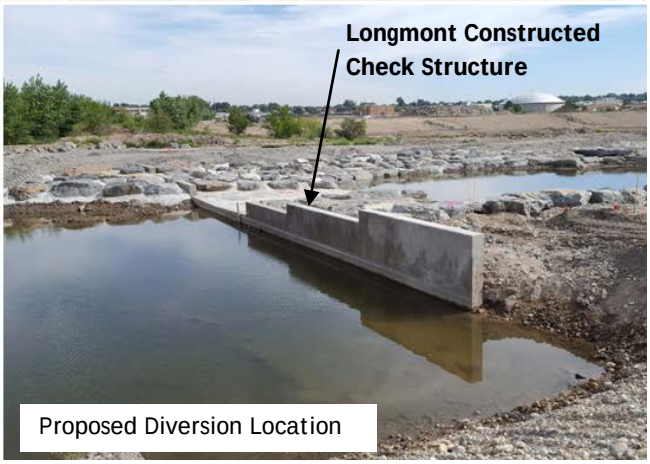


LOCATION			
County:			Boulder
Water Source:			St Vrain Creek
Drainage Basin:			South Platte
Division:	1	*District:*	5

The Bonus Ditch irrigates open space property leased to farmers in Boulder County and Weld County. Its diversion structure on St. Vrain Creek was destroyed during the September 2013 flood in the South Platte Basin.

The Company is working with Longmont under the Resilient St. Vrain (RSV) project, a multi-year project to fully restore the St. Vrain Greenway trails and improve the St. Vrain Creek channel to protect people and property from future flooding. The Company's diversion structure is located with the "City Reach" of the RSV project. The selected alternative for repairing the diversion structure fits with the goals of the RSV project. The Company has an approved Project Worksheet with FEMA to cover the "like for like" replacement cost of the project. Construction of the repair project is on hold until FEMA acts on a funding request to instead fund an "improved project" as replacing the diversion like for like is no longer feasible due to the post flood channel condition, and does not fit with the goals of the RSV project.





COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Castle Pines North Metropolitan District

Chatfield Reallocation Project

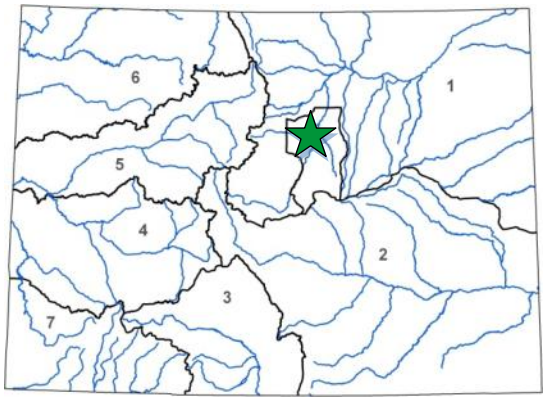
January 2018 Board Meeting

(Loan Increase)

LOAN DETAILS	
Project Cost:	$8,350,776
CWCB Loan (with Service Fee):	$7,773,364
Loan Term and Interest Rate:	30 years @ 3%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0 % Low - 0% Mid -100% High	0%

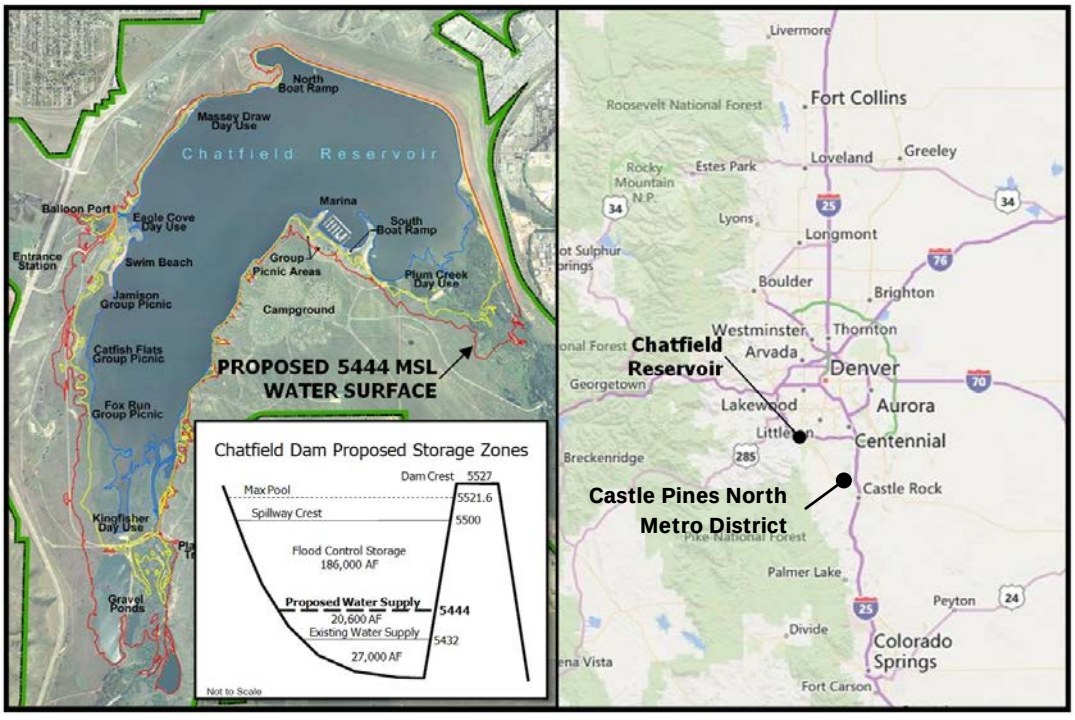
PROJECT DETAILS	
Project Type:	Reservoir Storage
New Storage:	1,006 AF



LOCATION			
County:			Douglas
Water Source:	S. Platte River & Plum Creek		
Drainage Basin:			South Platte
Division:	1	*District:*	2

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 1006 AF 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 final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the 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. Construction cost in October 2015 estimated the overall Reallocation Project to cost to $134 million. An October 2017 cost estimate revised this cost to be $171 million. The District is seeking an increase to its Chatfield loan to cover its share of the cost difference.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Centennial Water and Sanitation District

Chatfield Reallocation Project

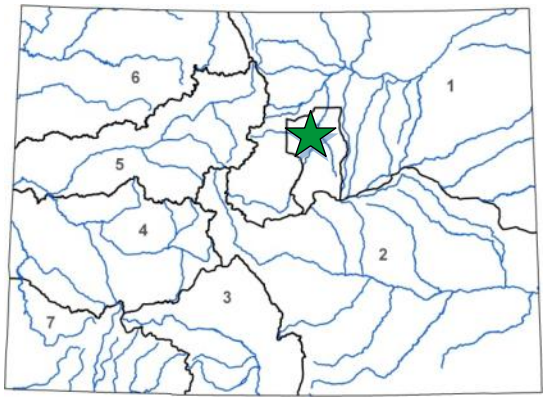
January 2018 Board Meeting

(Loan Increase)

LOAN DETAILS	
Project Cost:	$57,459,314
CWCB Loan (with Service Fee):	$53,486,267
Loan Term and Interest Rate:	30 years @ 3%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0 % Low - 0% Mid -100% High	0%

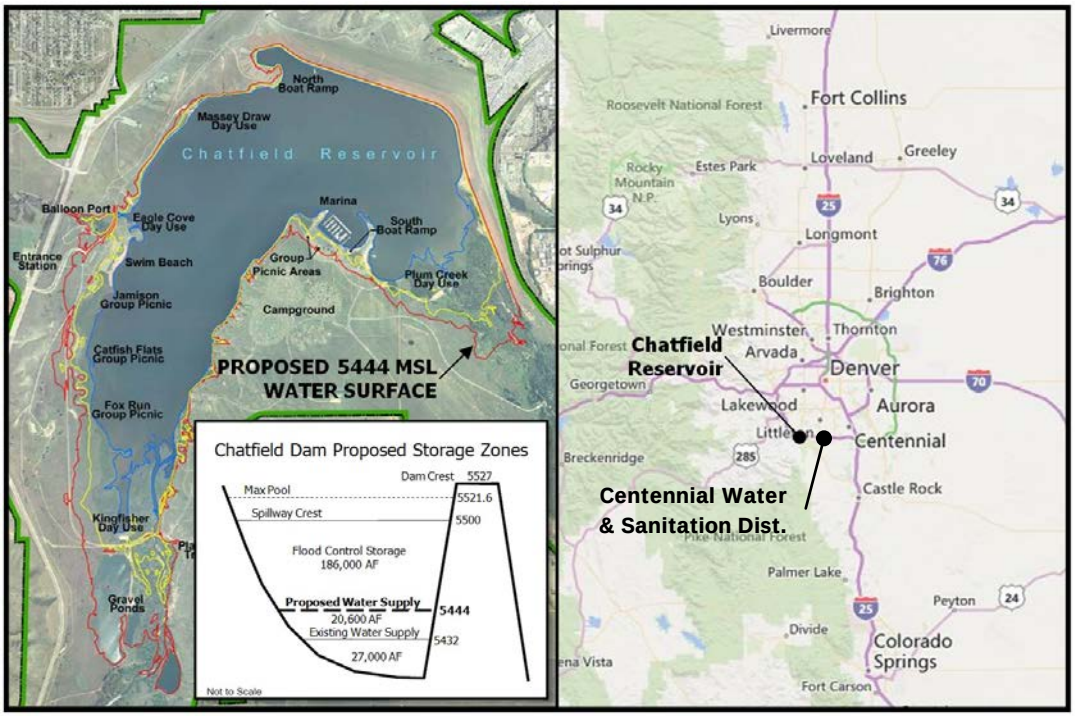
PROJECT DETAILS	
Project Type:	Reservoir Storage
New Storage:	6,922 AF



LOCATION			
County:			Douglas
Water Source:	S. Platte River & Plum Creek		
Drainage Basin:			South Platte
Division:	1	*District:*	2

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 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 final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the 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. Construction cost in October 2015 estimated the overall Reallocation Project to cost to $134 million. An October 2017 cost estimate revised this cost to be $171 million. The District is seeking an increase to its Chatfield loan to cover its share of the cost difference.



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

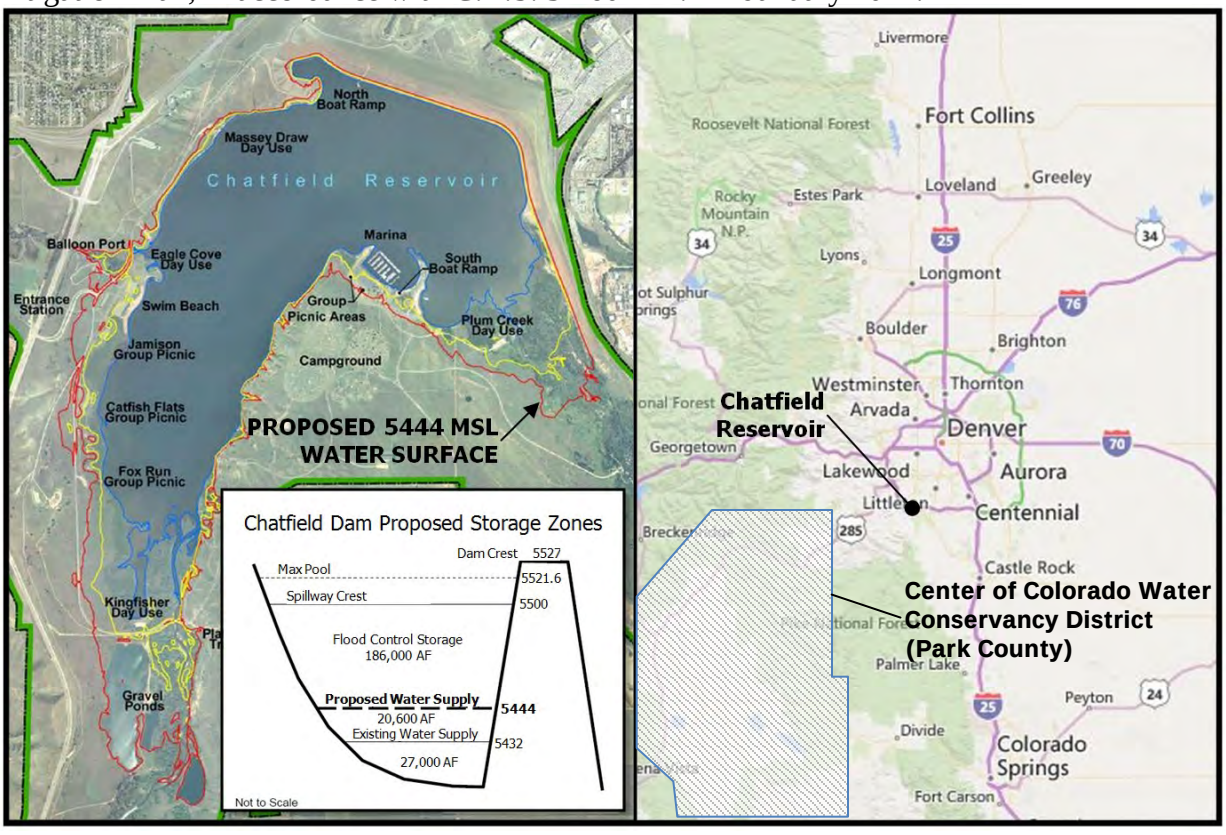
Average Annual Diversion: 700 AF

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.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Central Colorado Water Conservancy District

Chatfield Reallocation Project

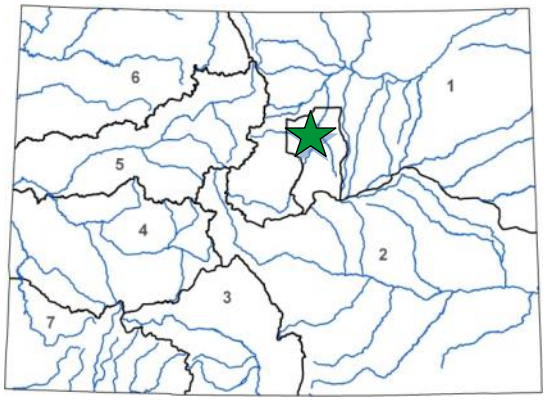
January 2018 Board Meeting

(Loan Increase)

LOAN DETAILS	
Project Cost:	$35,478,346
CWCB Loan (with Service Fee):	$29,999,929
Loan Term and Interest Rate:	30 years @ 1.75%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0 % Low - 0% Mid - 0% High	0%

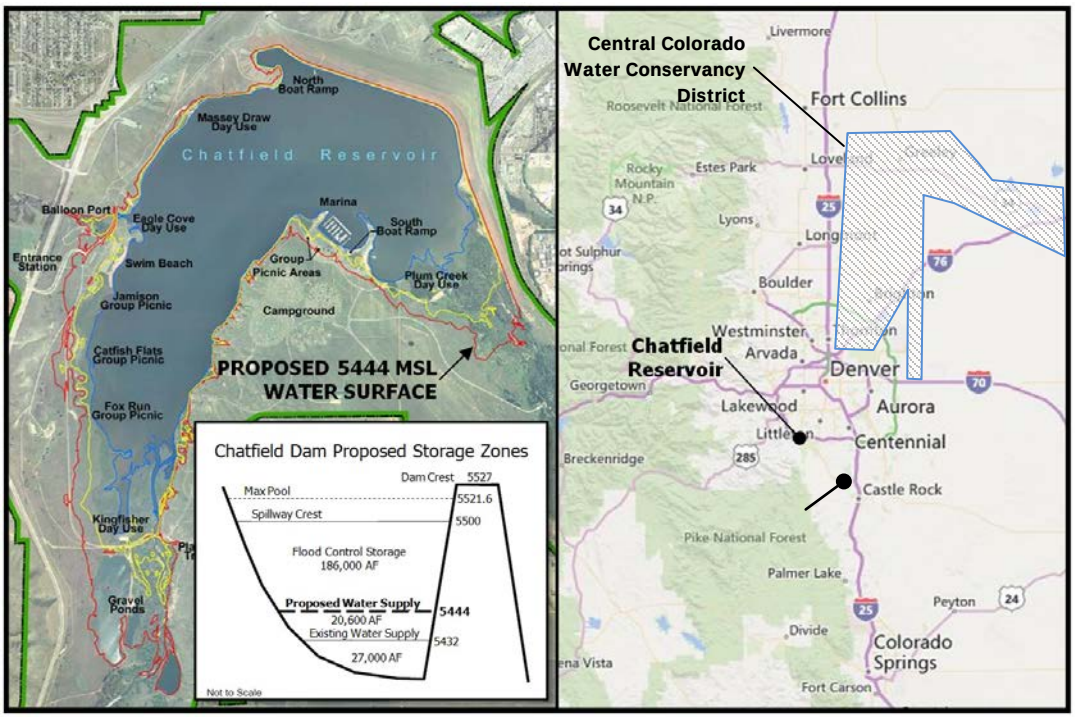
PROJECT DETAILS	
Project Type:	Reservoir Storage
New Storage:	4,274 AF



LOCATION			
County:			Douglas
Water Source:	S. Platte River & Plum Creek		
Drainage Basin:			South Platte
Division:	1	*District:*	2

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 final Feasibility Report and Environmental Impact Statement (FR/EIS) and the Record of Decision on May 29, 2014. The Selected Alternative recommended in the 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. Construction cost in October 2015 estimated the overall Reallocation Project to cost to $134 million. An October 2017 cost estimate revised this cost to be $171 million. The District is seeking an increase to its Chatfield loan to cover its share of the cost difference.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Centenial Diversion Replacement

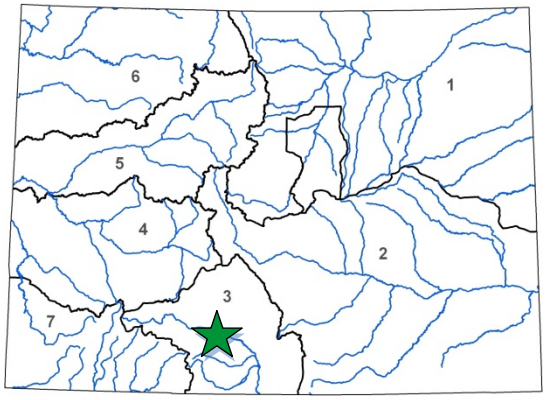
Centenial Irrigating Ditch Company

September 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$512,000
CWCB Loan (with Service Fee):	$232,300
Loan Term and Interest Rate:	20 Years @ 1.50%
Funding Source:	Severance Tax PBF and WSRF Grant

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid - 0% High	0%

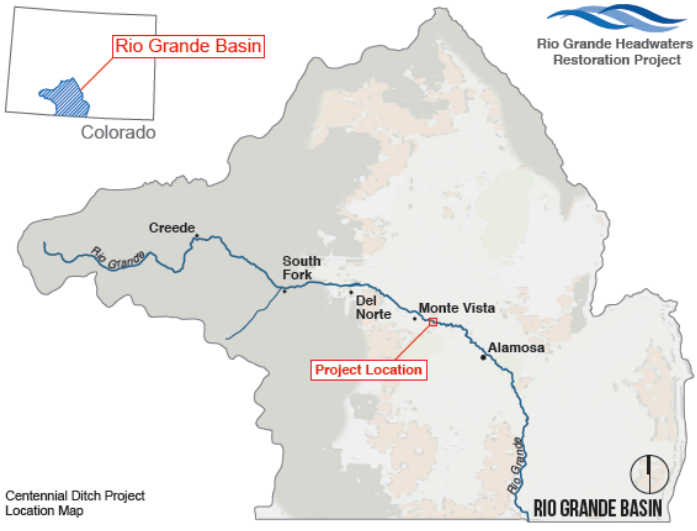
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	21,700 AF



LOCATION			
County:			Rio Grande
Water Source:			Rio Grande
Drainage Basin:			Rio Grande
Division:	3	*District:*	20

The Company's diversion and headgate structures are located four miles east of Monte Vista on the Rio Grande. 8,500 acres are irrigated under the system. The diversion was highlighted as a river rehabilitation priority in a 2001 study titled "Rio Grande Headwater Restoration Project." That 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 was sponsored by the San Luis Valley Water Conservancy District and funded with a grant from the CWCB. A 2007 Rio Grande Watershed Restoration Strategic Plan highlighted the importance of continued efforts to implement the 2001 study recommendations.

The Company partnered with the Colorado Rio Grande Restoration Foundation, the fiscal agent for the Rio Grande Headwater Restoration Project, to organize and raise funds for the Project. The Foundation similarly worked with four other ditch companies and consolidated those needs into one WSRF grant request ("Five Ditches: Rio Grande Diversion and Headgate Improvement"). That grant request will also be heard at the September 2017 Board Meeting. The existing diversion dam will be replaced with a grouted rock diversion dam spanning the width of the river. The dam will include a low flow channel to allow for sediment transport. Project stakeholders worked with Colorado Parks and Wildlife, and at CPW's request, final design will incorporate a partial fish barrier to protect native fish upstream from downstream non-native predators such as the pike.



Centennial Ditch Project Location Map


Diversion Structure

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Shores Lakes Ponds C Infrastructure Improvement

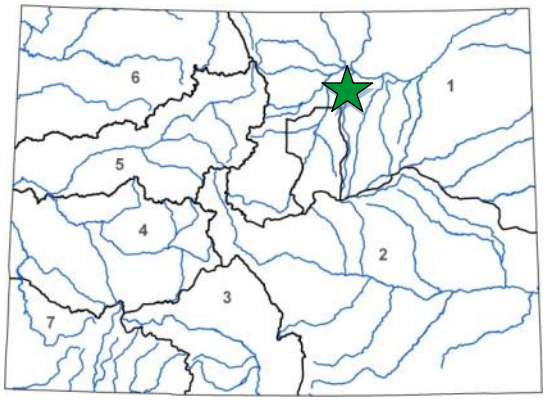
Central Colorado Water Conservancy District

January 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$3,430,000
CWCB Loan (with Service Fee):	$2,367,440
Loan Term and Interest Rate:	30 years @ 1.65%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0 % Low - 0% Mid -0% High	0%

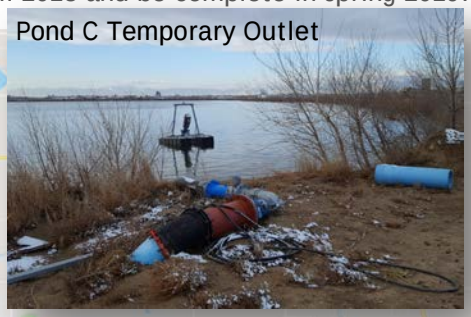
PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Storage Maintained:	4,500 AF



LOCATION			
County:			Weld
Water Source:			South Platte River
Drainage Basin:			South Platte
Division:	1	*District:*	2

The Well Augmentation Subdistrict (WAS) was formed in 2004 to develop a permanent augmentation plan for well owners who were previously members of the Groundwater Appropriators of the South Platte (GASP), and covers land in Adams, Weld, and Morgan counties. There are currently 275 wells contracted for coverage in the WAS Augmentation Plan, covering 78 square miles, for a total of 15,250 AF. WAS issues an annual pumping quota to its member wells based on WAS overall augmentation supplies. The first seven years the quota was set to 0%, but in recent years the quota has ranged from 35%-60%.

The Shores Lakes is a gravel pit complex located near Firestone in Weld County and consists of four lined cells (Ponds A, B, C, D), which are interconnected via pipelines. Shores Lakes has all planned infrastructure installed except Pond C's inlet and outlet structures. This Project will install the inlet and outlet infrastructure for Pond C, thereby allowing WAS to efficiently store and release water under its augmentation plan. Construction is anticipated to being in fall 2018 and be complete in spring 2019.


Pond C Temporary Outlet

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Ditch System Improvements

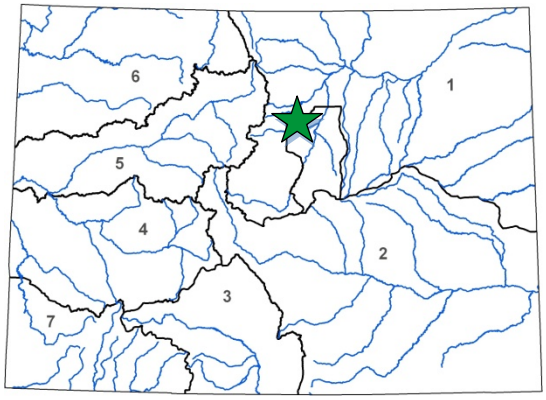
Church Ditch Water Authority

July 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$3,580,000
CWCB Loan (with Service Fee):	$3,615,800
Loan Term and Interest Rate:	30 Years @ 3.0%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 33% Mid - 67% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	10,500 AF

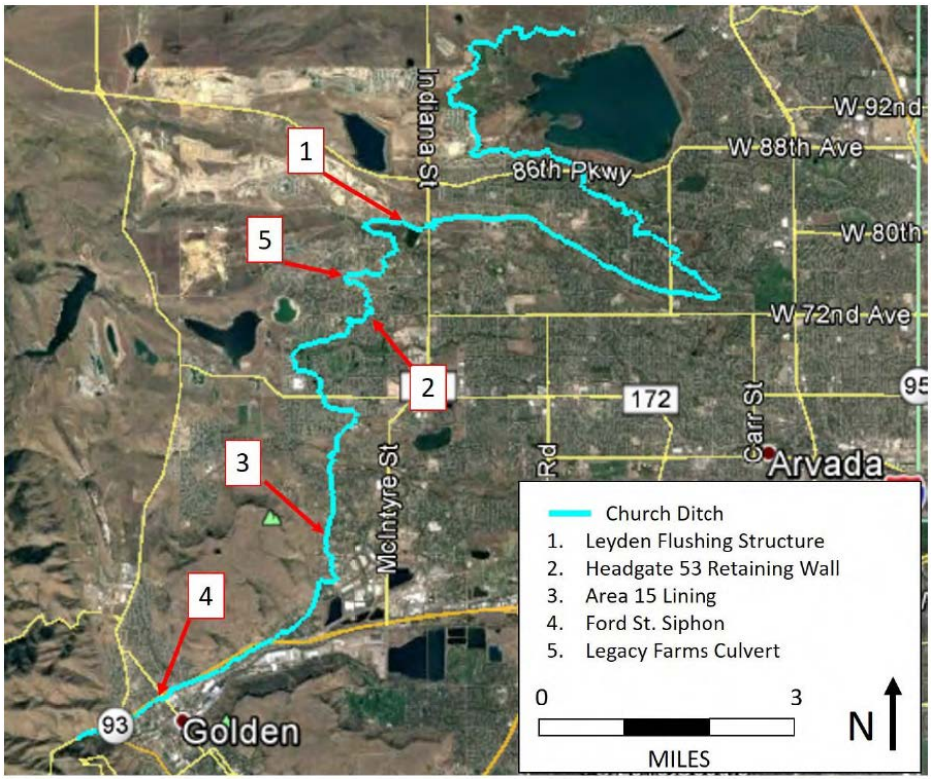


LOCATION			
County:	Jefferson		
Water Source:	Clear Creek		
Drainage Basin:	South Platte		
Division:	1	*District:*	7

The Authority was formed in 2004 by the cities of Northglenn and Westminster to operate the Church Ditch. The ditch is 26-miles long and carries water from its headgate in Clear Creek, near Golden, through Jefferson County until it ends near the intersection of 100th Ave and Simms St at the Wilson Flume. There are 97 Contractual Users who receive water from the ditch.

The Authority and Ecological Resource Consultants (ERC) created a Master Plan in 2009 to identify areas in need of maintenance, modification, or replacement. Since 2009, the Authority has been completing identified projects as time and budgets have allowed. Currently, the following five projects have been identified as the highest priority for the Authority over the next two years. (1) The Leyden Creek Flushing Structure will replace the aging structure and improve efficiency, safety, and maintenance. (2) The Headgate 53 Retaining Wall project will repair a concrete block wall which was installed as an emergency fix due to the 2013 flood. (3) The Area 15 Ditch Lining will line a section of ditch where the dewatering by new homes and businesses adjacent to the ditch are causing increased water loss in the ditch. (4) The Ford Street Siphon will address a 75 year old culvert that is at or near the end of its expected lifespan. Finally (5) the Legacy Farms Culvert will replace an undersized culvert which is currently creating a bottleneck.

All projects will be constructed during the non-irrigation season and are planned to be complete by spring of 2019.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Consolidated Diversion and Headgate Replacement

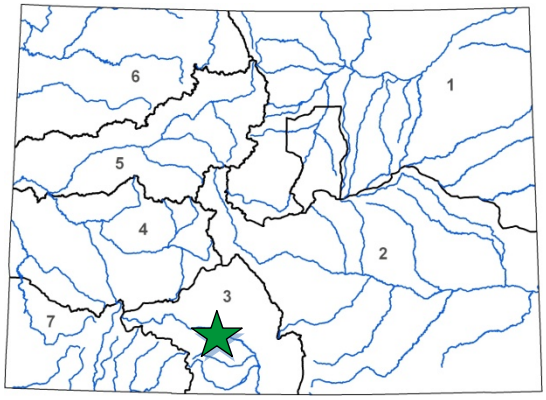
Consolidated Ditch and Headgate Company

July 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$1,862,000
CWCB Loan (with Service Fee):	$1,010,000
Loan Term and Interest Rate:	30 Years @ 1.8%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid - 0% High	0%

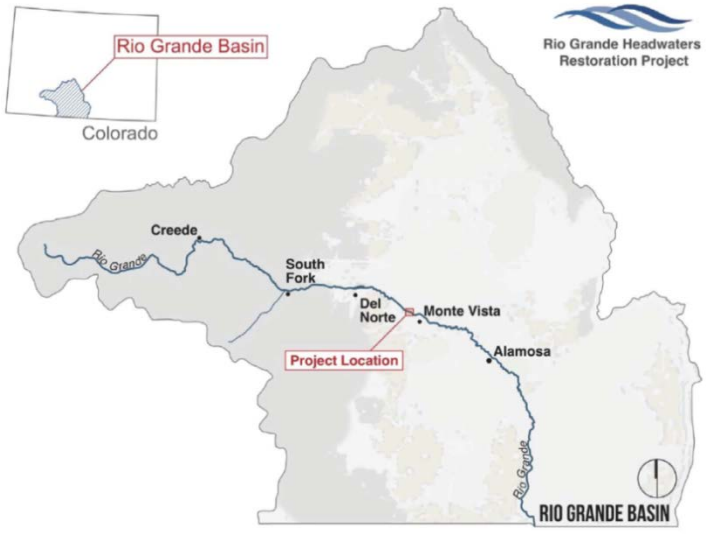
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	33,500 AF



LOCATION			
County:			Rio Grande
Water Source:			Rio Grande
Drainage Basin:			Rio Grande
Division:	3	*District:*	20

The Company is a Mutual Ditch Company formed in 1910. Its diversion and headgate structures are located five miles northwest of Monte Vista on the Rio Grande. The company serves 38 shareholders made up of water right owners who use the ditch as a carrier ditch. The diversion dam and headgate structures are at the end of its service life and are no longer effective at low or high river flows. These structures were highlighted as river rehabilitation priorities in 2001 study titled "Rio Grande Headwater Restoration Project." That 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.

The Company has partnered with the Colorado Rio Grande Restoration Foundation, the fiscal agent for the Rio Grande Headwater Restoration Project, to organize and raise funds for the Project. The Natural Resources Conservation Service is providing design and construction oversight for the project, as well as a $750,000 grant from its Environmental Quality Incentive Program (EQIP). The Foundation will be including this Project as part of a WSRF grant request that, if approved by the Rio Grande Roundtable, will be heard at the CWCB September 2017 Board Meeting. The EQIP grant funds are subject to forfeiture if the Project does not begin construction in Fall 2017. Therefore, to ensure construction can begin as soon as river conditions allow, the Company is seeking this CWCB loan to cover its full cost share. Any WSRF grant funds obtained for this Project will reduce the final loan amount.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Piping the Duke Ditch

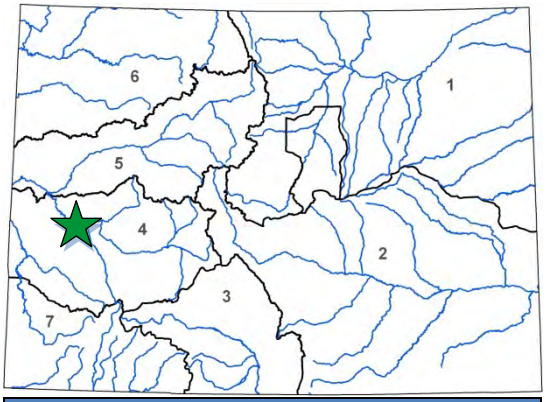
Duke Ditch Company

March 2016 Board Meeting

LOAN DETAILS	
Project Cost:	$749,374
CWCB Loan (with Service Fee):	$90,900
Loan Term and Interest Rate:	30 years @ 2.0%
Funding Source:	Construction Fund, WSRA, Salinity Control

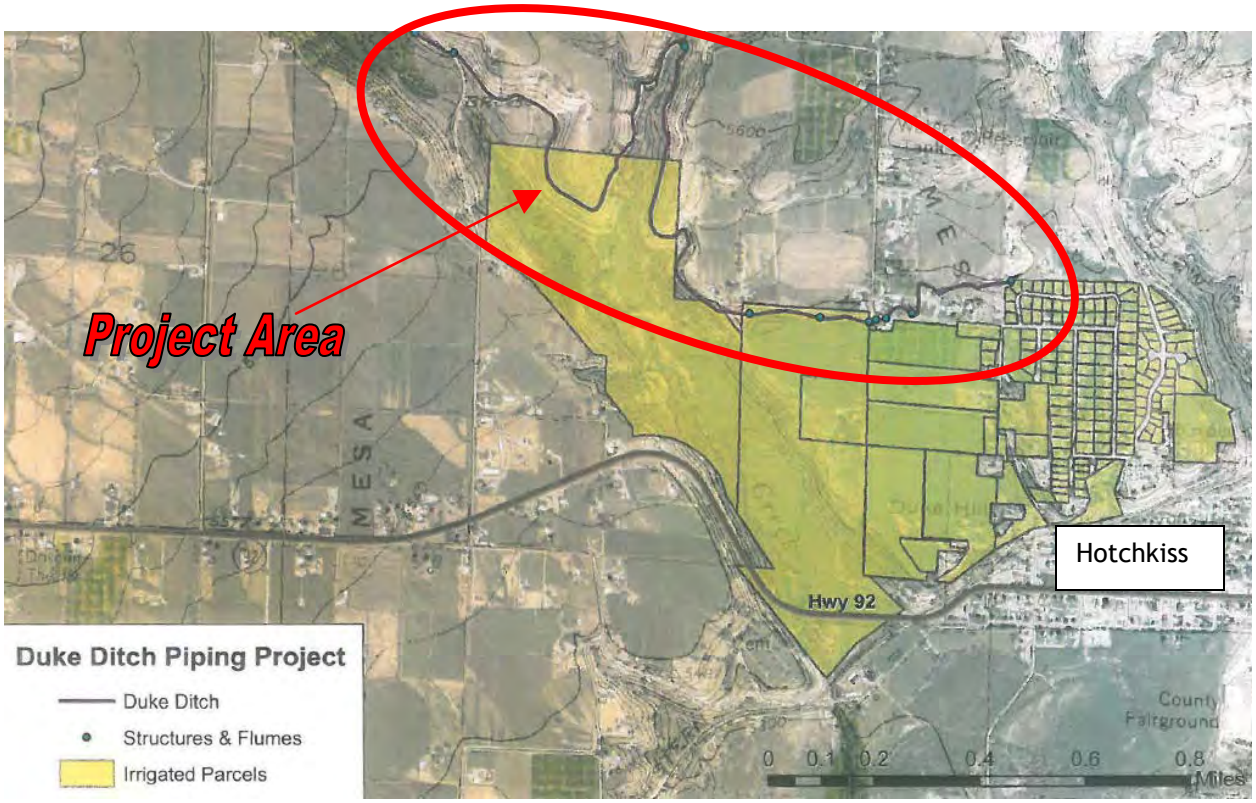
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
68%	32% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,424 AF



LOCATION			
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.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Adobe Creek Dam Rehabilitation

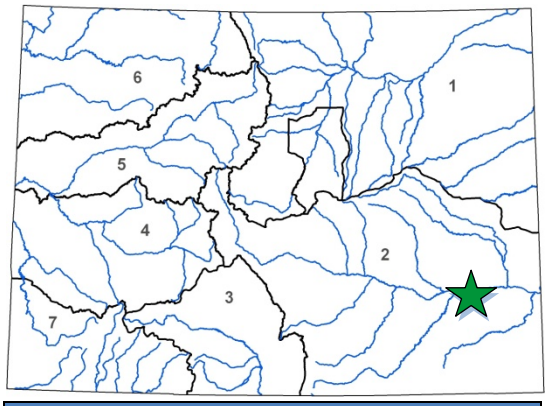
Fort Lyon Canal Company

September 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$9,200,000
CWCB Loan (with Service Fee):	$8,181,000
Loan Term and Interest Rate:	40 years @ 1.50%
Funding Source:	WSRF & Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
99.1%	<1% Low - TBD% Mid -0% High	<1%

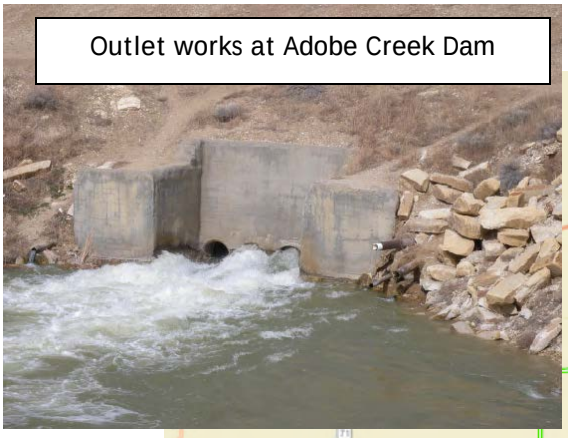
PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average Annual Diversions:	221,000 AF
Recovered Storage:	32,560 AF
Preserved Storage:	81,692 AF



LOCATION			
County:			Bent
Water Source:			Arkansas River
Drainage Basin:			Arkansas
Division:	2	*District:*	17

Adobe Creek Reservoir (also known as Blue Lake) is owned by the Fort Lyon Canal Company. The dam is a 32-foot-high, high hazard dam that impounds approximately 77,400 acre-feet of active storage and 4,292 acre feet of dead storage. The water is used to irrigate approximately 93,000 acres of land in Bent, Otero, and Prowers County.

A storage restriction was issued by the Dam Safety Branch of the Office of the State Engineer on May 5, 2017 due to adverse seepage conditions in the dam's foundation and deteriorated conditions in the 112-year-old, vitrified clay outlet works. Through this loan, the Company intends to design and construct new outlet works and seepage control systems in Adobe Creek Dam to regain the approximately 32,560 acre-feet of storage that was lost due to the storage restriction. The project will also be funded by a $100,000 Water Supply Reserve Fund (WSRF) Arkansas Basin grant and a $1,000,000 Statewide WSRF grant. Construction is expected to being in late 2018.



Outlet works at Adobe Creek Dam

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: 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

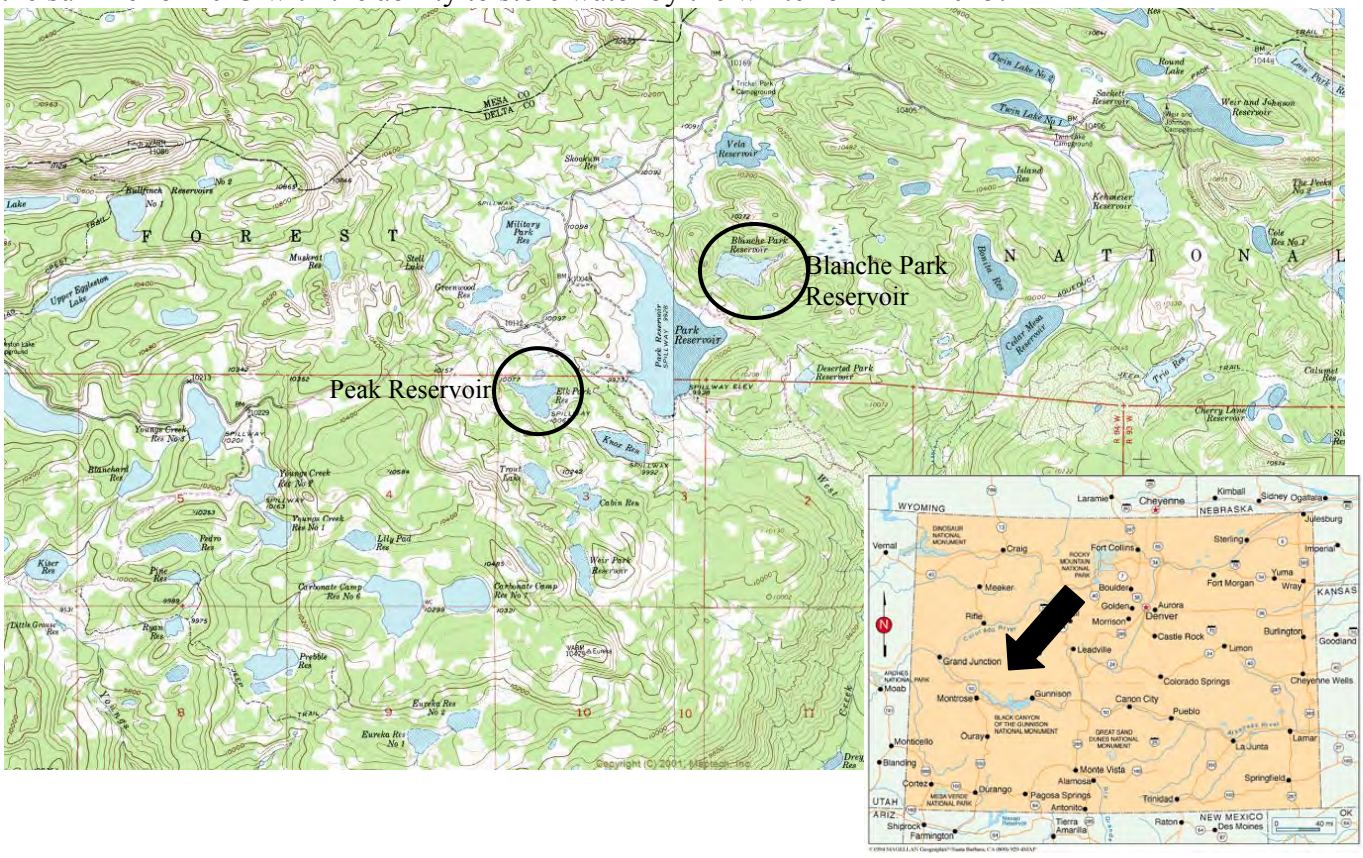
Type of Borrower: Municipal/Agricultural

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.



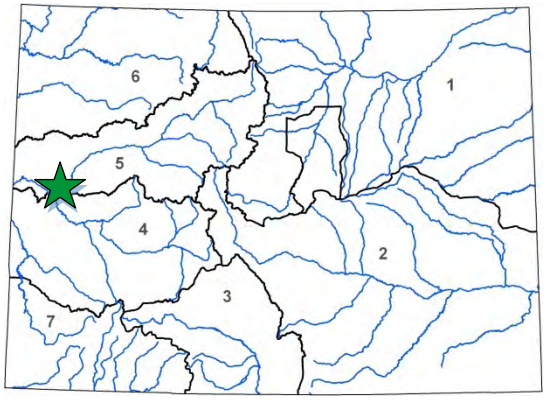
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Grand Valley Power Plant Rehabilitation

Grand Valley Water Users Association

November 2016 Board Meeting

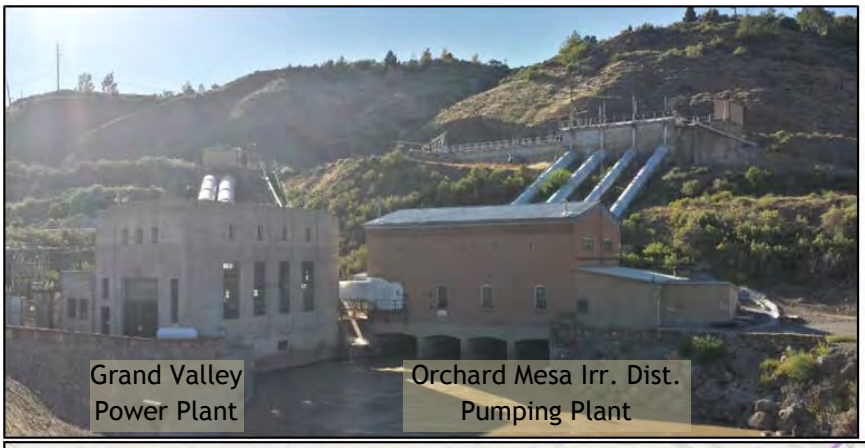
LOAN DETAILS	
Project Cost:	$5,200,000
CWCB Loan (with Service Fee):	$1,717,000
Loan Term and Interest Rate:	30 Years @ 2.0%
Funding Source:	Construction Fund
BORROWER TYPE	
Hydropower	
PROJECT DETAILS	
Project Type:	Hydroelectric
Average Annual Power Production:	17M kWh



LOCATION			
County:			Mesa
Water Source:			Colorado River
Drainage Basin:			Colorado
Division:	5	*District:*	72

The Grand Valley Water Users Association (Association) and Orchard Mesa Irrigation District (District) are each seeking a loan to cover its cost share for the Grand Valley Power Plant (GVPP) Rehabilitation Project. The GVPP is owned by the Bureau of Reclamation and originally operated by Public Service Company of Colorado (Xcel Engergy) in conjunction with the Cameo coal fired power plant. The Association and District took operational control of the plant when Xcel decided to cease its operations. The Association and District equally split costs and revenues from the GVPP under a Lease of Power Privilage with Reclamation and a Power Purchase Agreement with Xcel. In addition to being a revenue source, the GVPP serves an importnant role in providing water to the "15-Mile Reach" which has been designated by the Upper Colorado River Endangered Fish Recovery Program as critical habitat. The non-consumptive hydropower water right ensures continued flows for this important stretch of river.

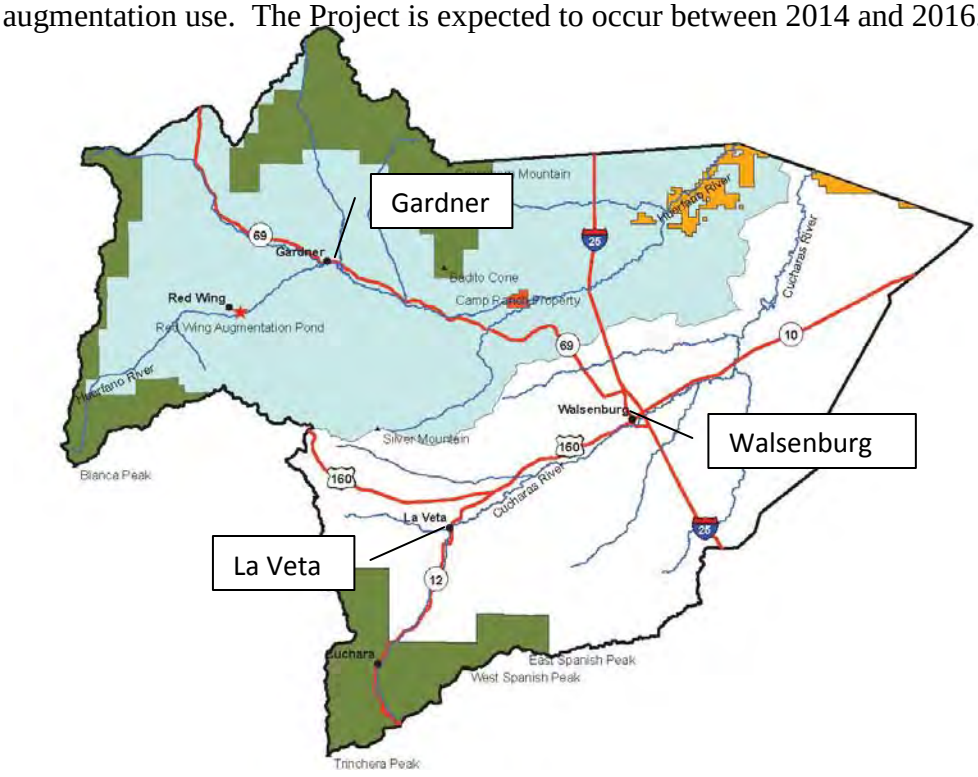
The goal of the Project is to bring the GVPP up to a sustainable operating condition and meet current electric and safety standards. The GVPP was built in the early 1930s and has seen no major upgrades or modernization to date. Under current operations, the "water-to-wire" efficiency is approximately 54% with a maximum generation output of 2.5 MW. Calculations show as much as 4.1MW production should be feasible based on flow rate and available head.



Water Project Loan Program
Project Data Sheet

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

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



CWCB 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).

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Repurposing of Wells 12 and 13

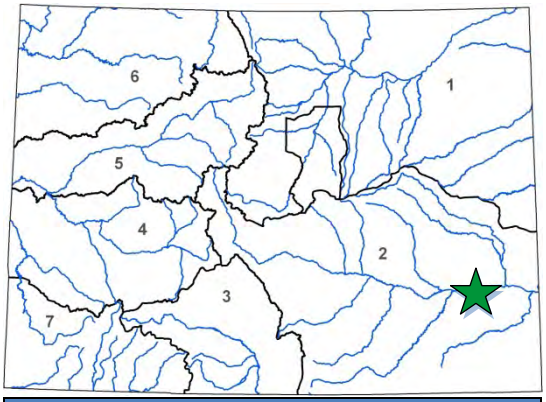
City of Lamar

September 2015 Board Meeting

LOAN DETAILS	
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

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Municipal & Industrial
Average Annual Delivery:	2,005 AF



LOCATION			
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.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Headgate Structure Replacement

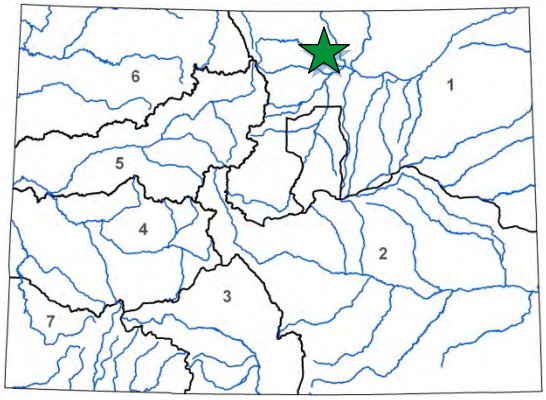
Larimer and Weld Irrigation Company

September 2016 Board Meeting

LOAN DETAILS	
Project Cost:	$750,000
CWCB Loan (with Service Fee):	$681,750
Loan Term and Interest Rate:	30 Years @ 1.5%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
96%	0% Low - 4% Mid - <1% High	0%

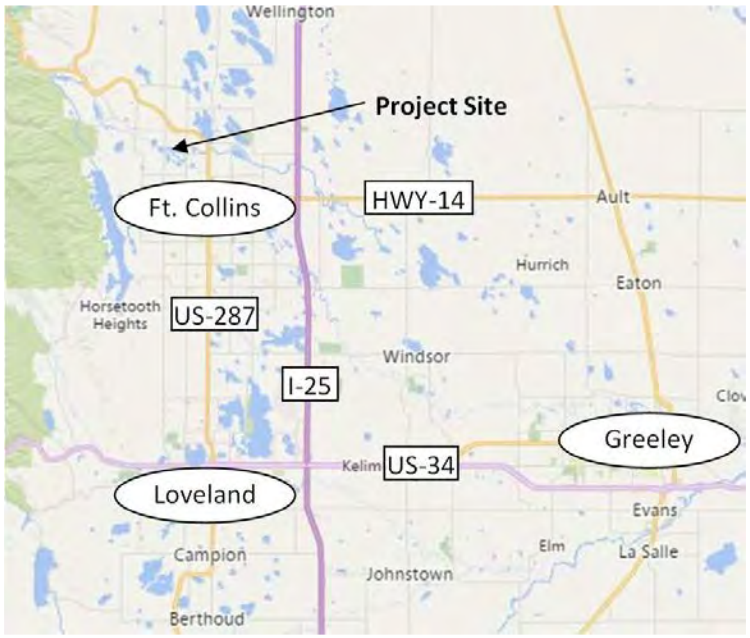
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	85,000 AF

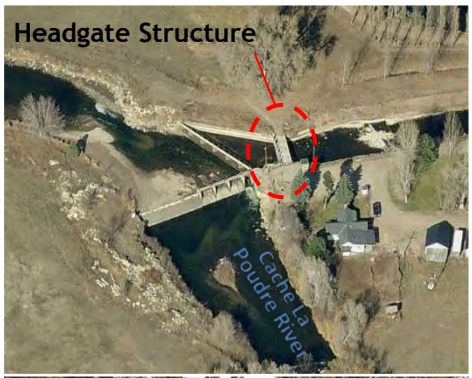


LOCATION			
County:			Larimer & Weld
Water Source:			Cache la Poudre River
Drainage Basin:			South Platte
Division:	1	*District:*	3

The Larimer and Weld Irrigation Company is a Colorado Mutual Ditch Company and a nonprofit corporation. The Company's service area extends from the Cache la Poudre River diversion north of Fort Collins, east to near the town of Galeton, encompassing approximately 61,000 acres of irrigated land in Larimer and Weld Counties. The Company's diversion off the Cache la Poudre River is aging and in need of repair. This Project will focus on replacing the headgate structure, including the concrete structure, gates, and gate operators. The replacement of the trash rack and forebay structure, and repairs to the diversion structure, are planned to take place within the next few years and are not a part of this Project.

The City of Fort Collins has developed a flood control plan for the Dry Creek Basin, which in part uses the Larimer & Weld Ditch as a conveyance for flood flows in Dry Creek. Therefore, should a flood occur in the Dry Creek Basin, it is of great importance for life, safety, and prevention of property damage, that the ditch's upstream headgate off the Poudre River be able to close so there is capacity available in the ditch to handle flood flows. Construction activities will include the replacement of the concrete structure, new gates and operators, and a new control building. Construction is expected to occur between the 2016 and 2017 irrigation seasons.





COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Participation in Southern Water Supply Project II

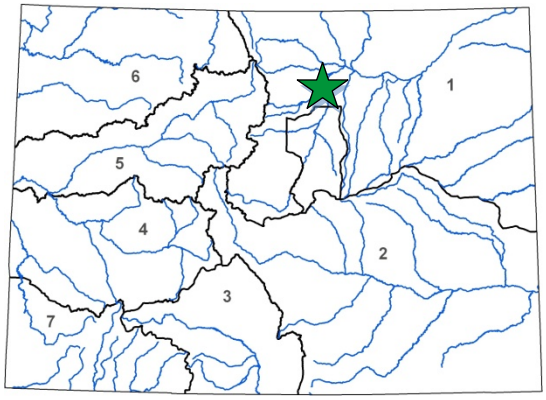
Left Hand Water District

September 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$10,735,300
CWCB Loan (with Service Fee):	$10,000,000
Loan Term and Interest Rate:	20 Years @ 2.75%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 30% Mid -70% High	0%

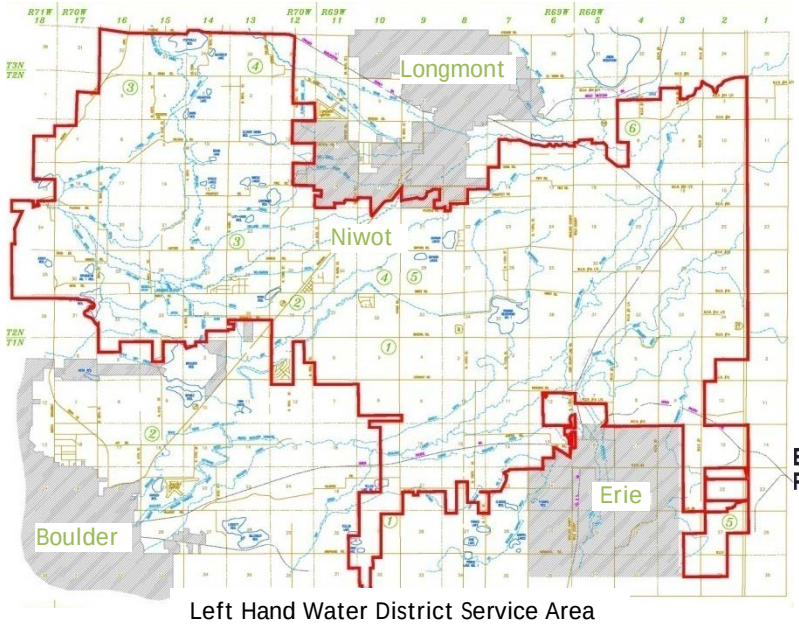
PROJECT DETAILS	
Project Type:	Municipal Water Supply System New
Average Annual Delivery:	4,400 AF



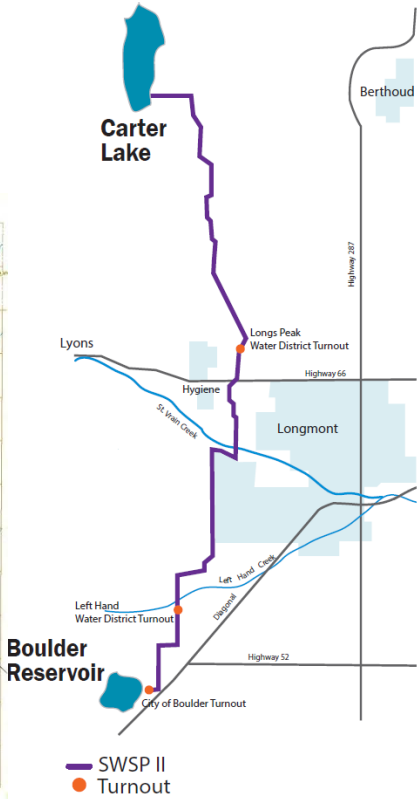
LOCATION			
County:			Broomfield, Weld
Water Source:			
Drainage Basin:			South Platte
Division:	1	*District:*	5

The District provides potable water service within a 108 square mile service area within unincorporated areas of Boulder and Larimer Counties; serving approximately 20,000 people through 7,154 individually metered taps. Water is treated at the Spurgeon Water Treatment Plant (WTP) and Dodd WTP. Spurgeon WTP is operated year-round while Dodd WTP is operated only during the irrigation season. By participating in the Southern Water Supply Project (SWSP) II, the District will be able to supply Dodd WTP with a year-round water supply, significantly reducing the risk associated with having only one water supply during the non-irrigation season, as well as reducing the maintenance associated with an open canal supplying water for treatment.

The SWSP II, proposed by Northern Colorado Water Conservancy District, is a 20-mile pipeline from Carter Lake to the Boulder Reservoir. The pipeline will deliver raw water for municipal use to Left Hand Water District (Borrower), Longs Peak Water District, and the City of Boulder. The full cost of the project is estimated to be $43,890,000. The Districts participation cost is estimated to be $10,735,000.The $10,000,000 CWCB loan will cover a majority of the District's participation cost. The District will use its cash reserves for any cost exceeding that exceeds the CWCB loan.



Left Hand Water District Service Area



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Diversion Structure Repair

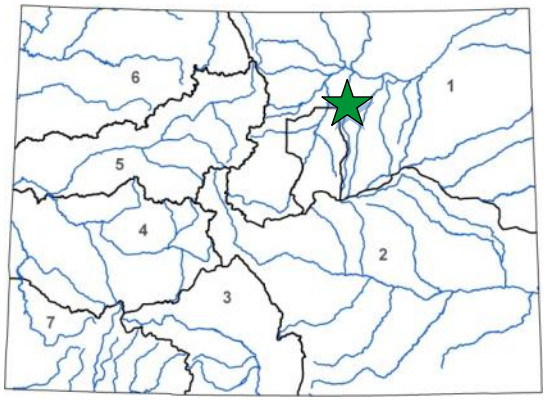
Lupton Bottom Ditch Company

January 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$676,000
CWCB Loan (with Service Fee):	$606,000
Loan Term and Interest Rate:	10 years @ 1.6%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
47.2%	0 % Low – 46.4% Mid -0% High	6.4%

PROJECT DETAILS	
Project Type:	Diversion Structure Rehabilitation
Average Annual Diversions:	19,097 AF



LOCATION			
County:			Weld
Water Source:			South Platte River
Drainage Basin:			South Platte
Division:	1	*District:*	2

The Lupton Bottom Ditch Company diverts water from the South Platte River near Wattenberg in Weld County. The existing check dam was built in 1949 and the gates were replaced in 2001. Damage to the structure began when high river flows overtopped the rock dam and scoured a large hole on the downstream side and subsequently extended that scour into the structure. The structure was initially damaged during the September 2013 flooding and further damaged in subsequent high river flows. The proposed repair work will be completed in a two-stage process due to the requirement for construction to occur during low flow conditions within the river. During the first stage, stabilization and installation of upstream sheet piling followed by construction of a concrete apron is planned. The downstream side of the structure will be stabilized with grouted boulders. The second stage includes rebuilding the rock dam. Construction is scheduled for Winter/Spring of 2018.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Ditch Piping Phase B

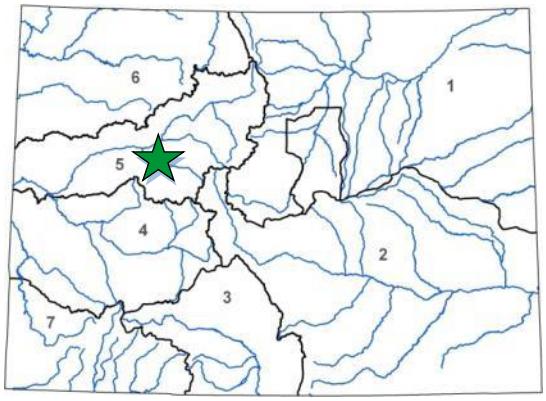
Missouri Heights Mountain Meadow Irrigation Company

July 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$400,000
CWCB Loan (with Service Fee):	$404,000
Loan Term and Interest Rate:	30 Years @ 2.05%
Funding Source:	Construction Fund

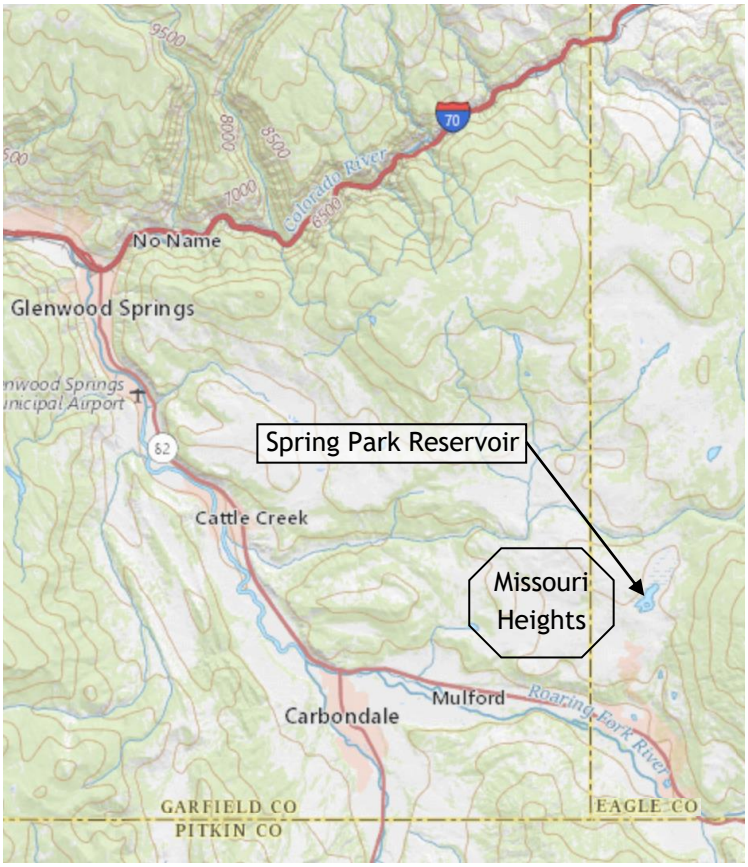
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
78%	0% Low - 0% Mid -22% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	5,500 AF



LOCATION			
County:			Garfield
Water Source:			Cattle Creek
Drainage Basin:			Colorado
Division:	5	*District:*	38

The Company operates the Missouri Heights Mountain Meadow Irrigation Ditch to provide irrigation water from the Spring Park Reservoir to approximately 2,000 acres of ranch land located 12 miles northeast of Carbondale. The Company worked with the Natural Resources Conservatio service (NRCS) to evaluate water losses within its ditch. Previous construction activity lined 3,500 LF of ditch and piped 5,750 LF of ditch. This Project will pipe 9,120 LF of ditch, a section where water losses are estimated to be as high as 20%. Construction for Phase B-1 is scheduled for fall of 2018. Construction for Phase B-2 is planned to occur in fall 2019.




Existing Lined Ditch Section


Existing Piped Ditch Section


Ditch Section To Be Piped

Water Project Loan Program - Project Data

Borrower: City of Monte Vista (Water Activity Enterprise)

County: Rio Grande

Project Name: Augmentation Water Rights Acquisition

Project Type: Water Rights Purchase

Drainage Basin: Rio Grande

Water Source: Rio Grande River

Total Project Cost: $1,863,500

Funding Source: Construction Fund

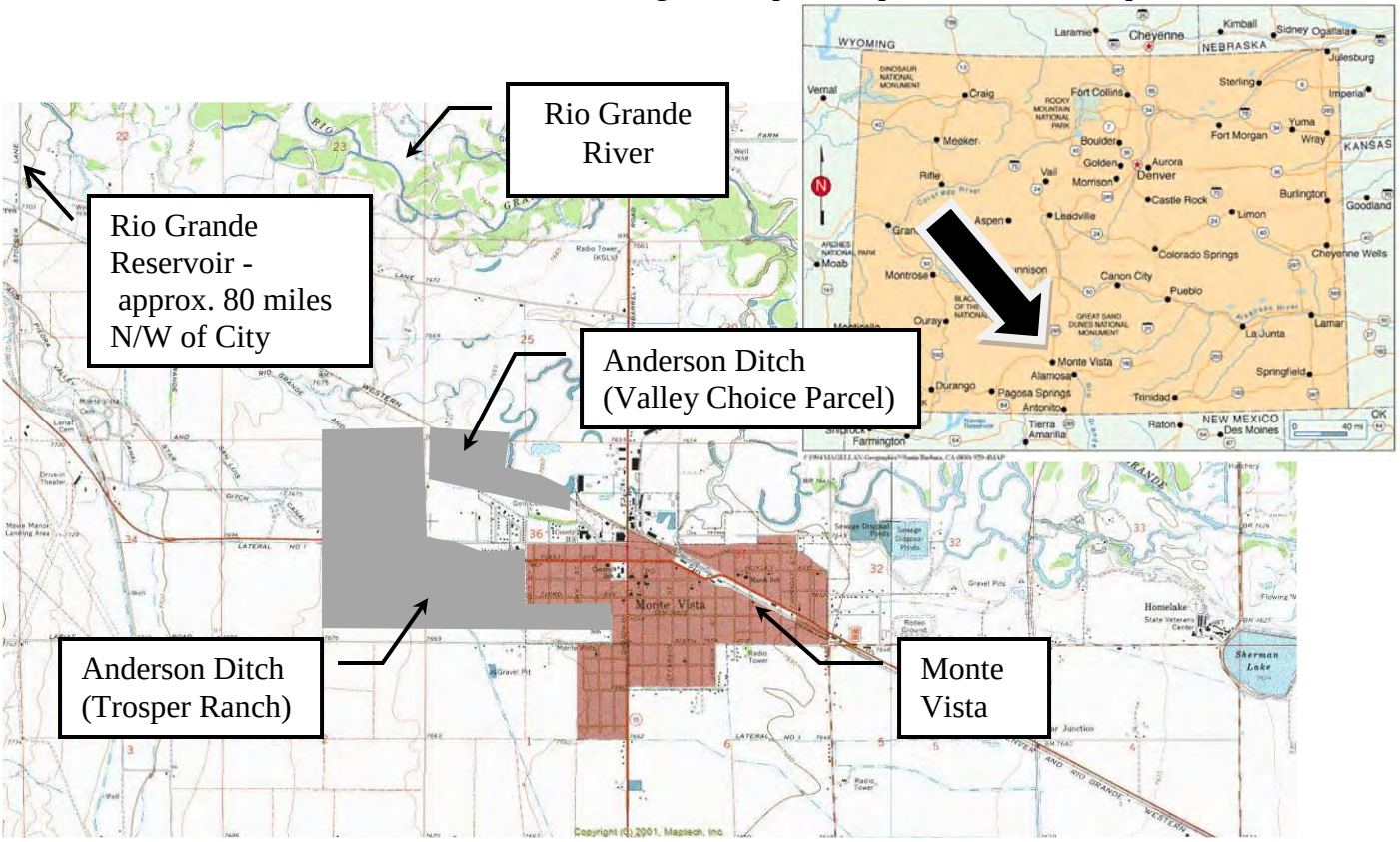
Type of Borrower: Low-Income Municipal

Aver. Demand: 1,212 AF/year

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

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

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Fossil Creek Reservoir Diversion Structure Repair

North Poudre Irrigation Company

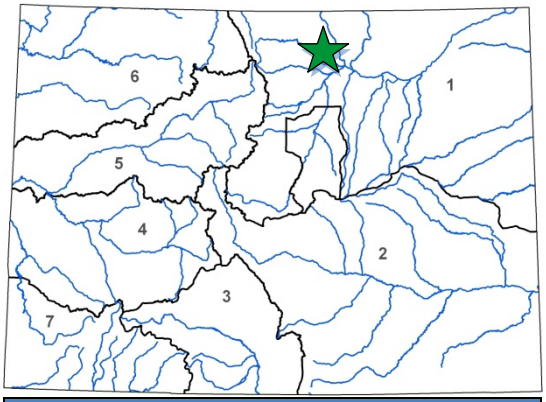
September 2015 Board Meeting

(Loan Increase)

LOAN DETAILS	
Project Cost:	$868,000
CWCB Loan (with Service Fee):	$876,680
Loan Term and Interest Rate:	27 Years @ 2.35%
Funding Source:	Severence Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
37%	1% Low - 57% Mid – 4% High	<1%

PROJECT DETAILS	
Project Type:	Diversion Rehabilitation
Average Annual Delivery:	44,400 AF



LOCATION			
County:			Larimer
Water Source:			Cache la Poudre River
Drainage Basin:			South Platte
Division:	1	*District:*	3

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 North Poudre Irrigation 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.

Construction cost increased as a result of final design and the new requirement to route river flows through the construction site. Bids were received on August 4, 2015 and construction will be completed prior to the 2016 irrigation season.

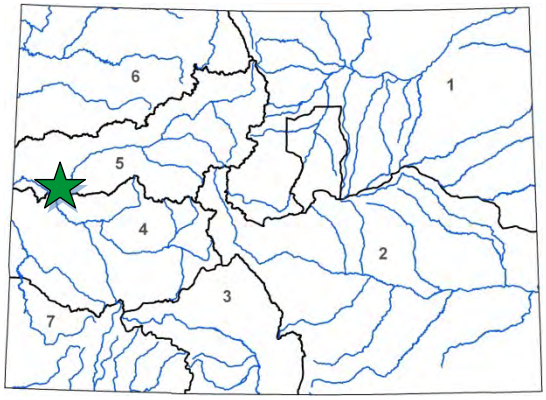
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Grand Valley Power Plant Rehabilitation

Orchard Mesa Irrigation District

November 2016 Board Meeting

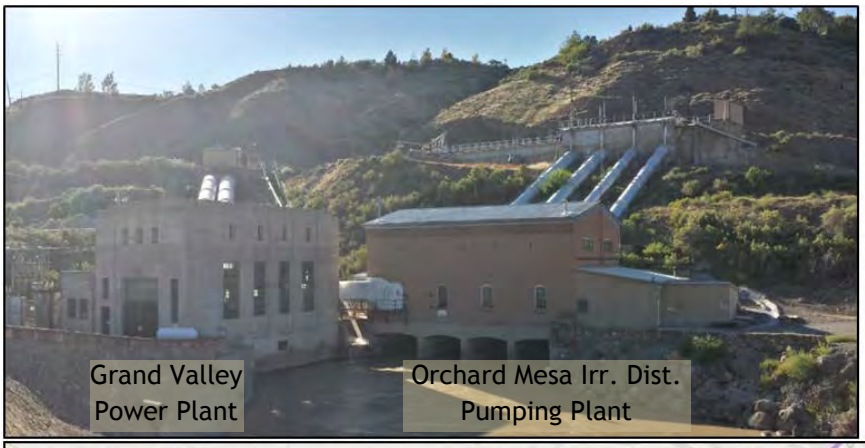
LOAN DETAILS	
Project Cost:	$5,200,000
CWCB Loan (with Service Fee):	$1,717,000
Loan Term and Interest Rate:	30 Years @ 2.0%
Funding Source:	Construction Fund
BORROWER TYPE	
Hydropower	
PROJECT DETAILS	
Project Type:	Hydroelectric
Average Annual Power Production:	17M kWh



LOCATION			
County:			Mesa
Water Source:			Colorado River
Drainage Basin:			Colorado
Division:	5	*District:*	72

The Orchard Mesa Irrigation District (District) and Grand Valley Water Users Association (Association) are each seeking a loan to cover its cost share for the Grand Valley Power Plant (GVPP) Rehabilitation Project. The GVPP is owned by the Bureau of Reclamation and originally operated by Public Service Company of Colorado (Xcel Engergy) in conjunction with the Cameo coal fired power plant. The District and Association took operational control of the plant when Xcel decided to cease its operations. The District and Association equally split costs and revenues from the GVPP under a Lease of Power Privilage with Reclamation and a Power Purchase Agreement with Xcel. In addition to being a revenue source, the GVPP serves an importnant role in providing water to the "15-Mile Reach" which has been designated by the Upper Colorado River Endangered Fish Recovery Program as critical habitat. The non-consumptive hydropower water right ensures continued flows for this important stretch of river.

The goal of the Project is to bring the GVPP up to a sustainable operating condition and meet current electric and safety standards. The GVPP was built in the early 1930s and has seen no major upgrades or modernization to date. Under current operations, the "water-to-wire" efficiency is approximately 54% with a maximum generation output of 2.5 MW. Calculations show as much as 4.1MW production should be feasible based on flow rate and available head.


Grand Valley Power Plant


Orchard Mesa Irr. Dist. Pumping Plant

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Orchard Ranch Ditch Pipe Project

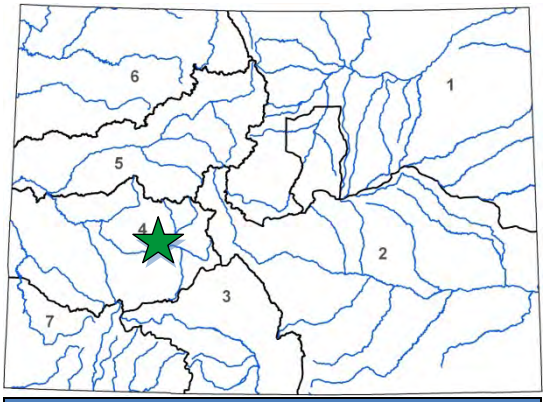
Orchard Ranch Ditch Company

January 2016 Board Meeting

LOAN DETAILS	
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

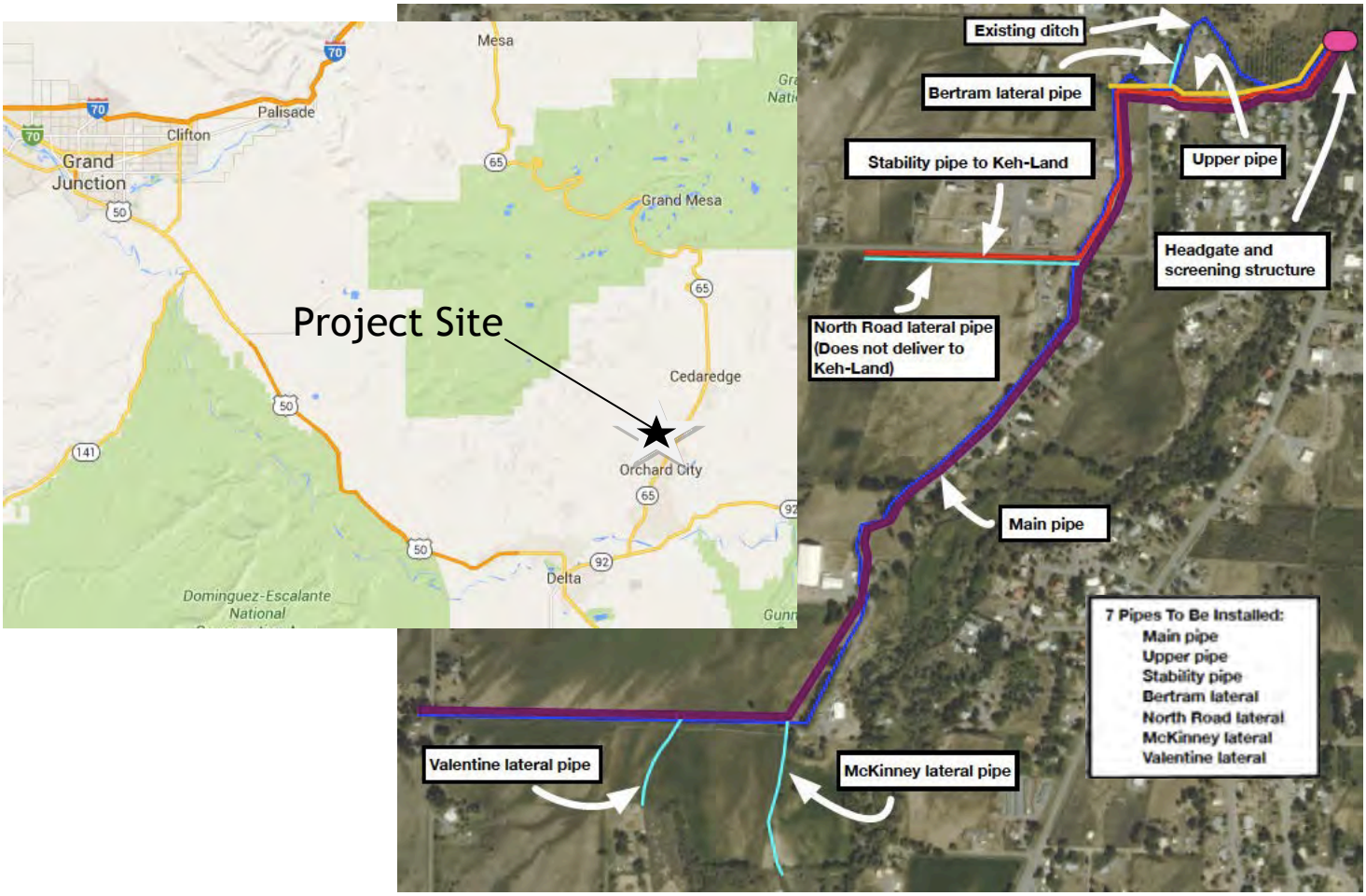
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
86%	14% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,750 AF



LOCATION			
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.



CWCB Construction Loan Program
Project Data Sheet

Borrower: Overland Ditch and Reservoir Co. **County**: Delta

Project Name: Overland Reservoir Enlargement **Project Type:** Reservoir Enlargement

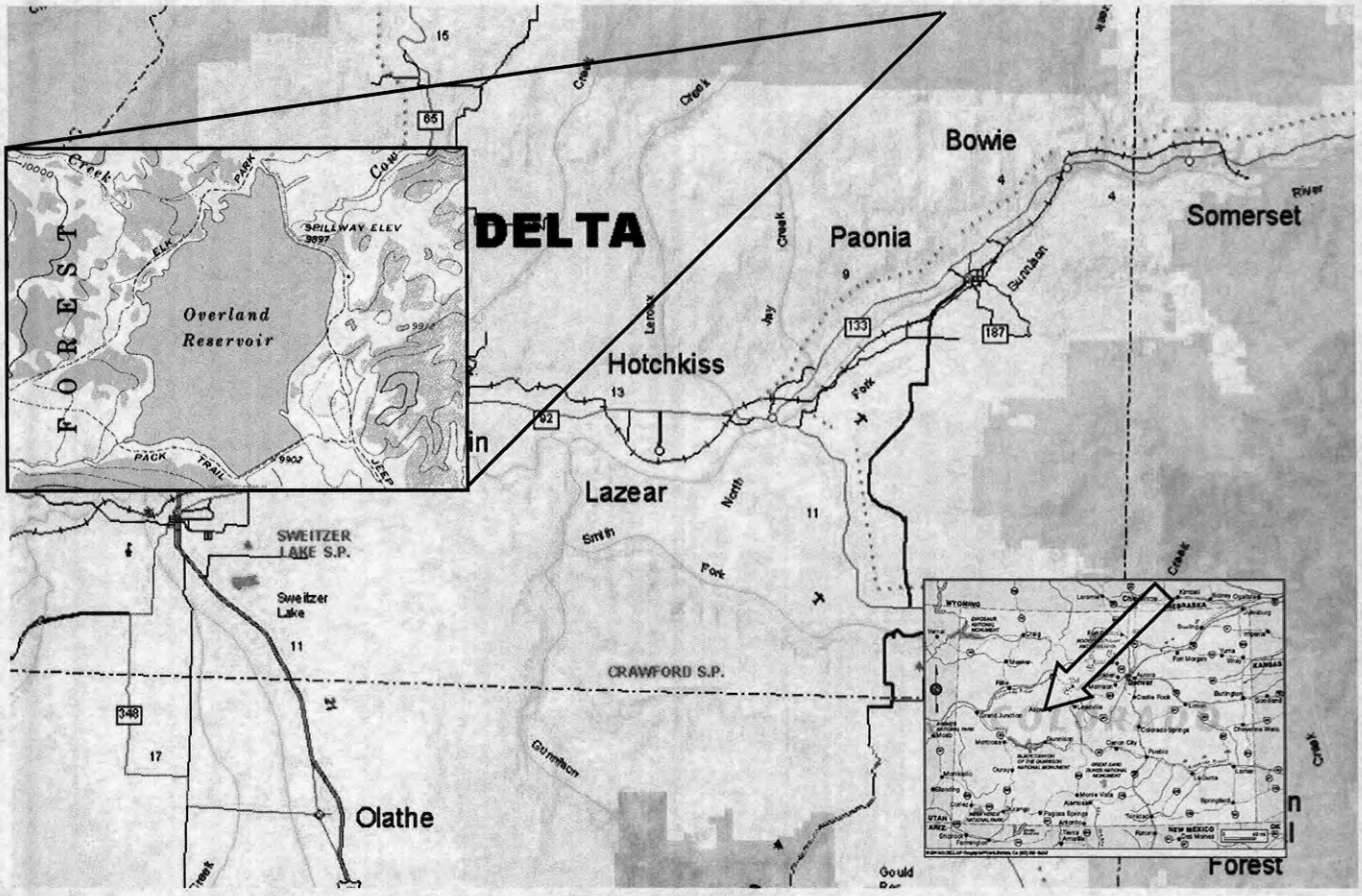
Drainage Basin: Gunnison River Basin **Water Source**: Cow Creek

Total Project Cost: $1,255,555 **Funding Sources:** CWCB & Local Bank

Type of Borrower: Agricultural **Average Delivery:** 17,000 acre-feet

Loan Amount: $1,130,000 **Interest Rate:** 2.5% **Term:** 30 years

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



LOCATION MAP

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

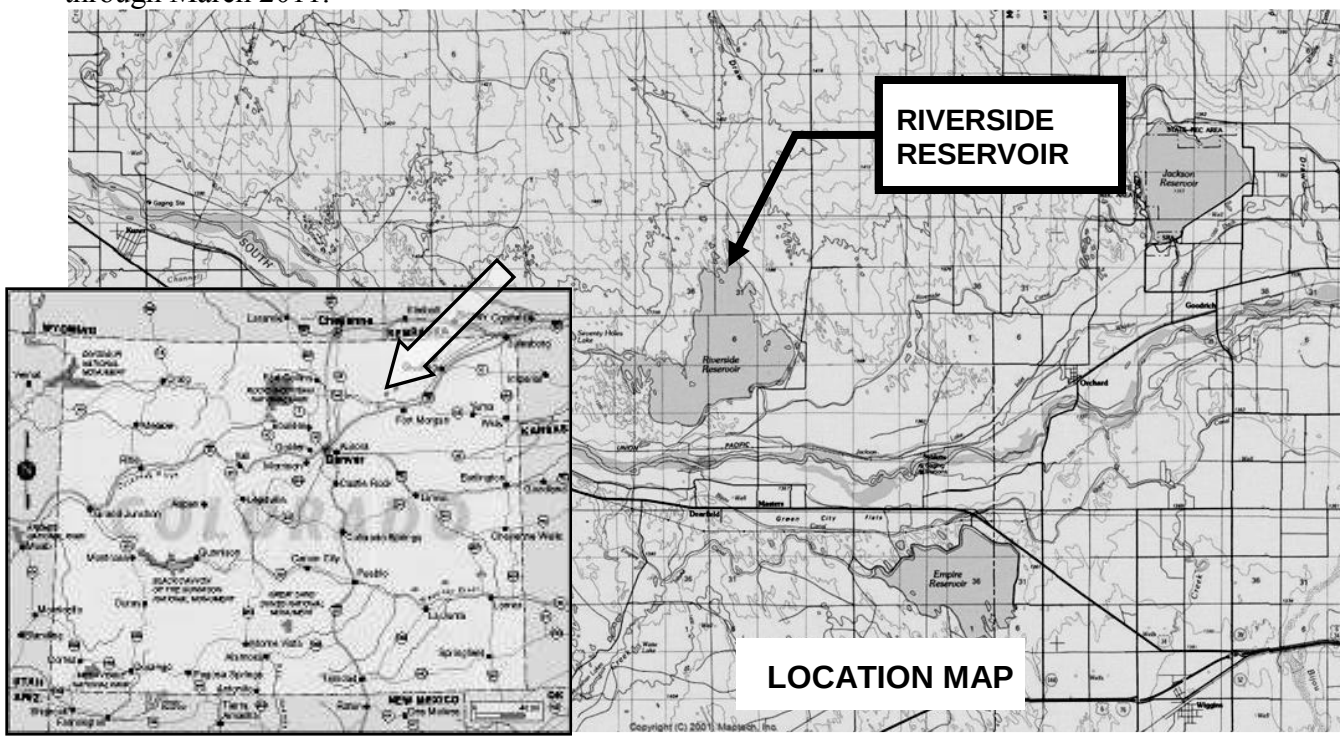
Average Delivery: 39,000 AF (from Reservoir storage) (105,000 Total AF for Company)

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.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Rio Grande Reservoir Rehabilitation Project

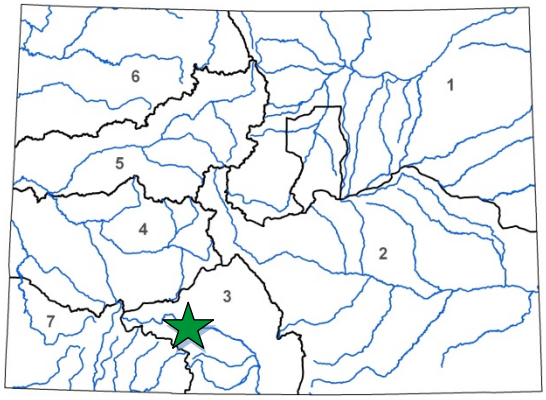
San Luis Valley Irrigation District

March 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$25M
Funding Package:	$10M Grant & $15M Loan
Loan Term and Interest Rate:	30 years @1.65%
Funding Source:	Const Fund & NonReimbursable

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Preserved Storage:	51,113 AF



LOCATION			
County:	*Hinsdale,* Rio Grande		
Water Source:	Beaver Creek & Rio Grande		
Drainage Basin:	Rio Grande		
Division:	3	*District:*	20

The San Luis Valley Irrigation District is applying for a loan and grant for the Rio Grande Reservoir Rehabilitation – Phase 2 (Project). The purpose of the Project is to rehabilitate the outlet works of the on-channel Rio Grande Reservoir Dam. The Reservoir has a capacity of 51,113 acre-feet and delivers water to nearly 62,000 acres of agricultural land in the San Luis Valley. The Reservoir's outlet has long been a limiting factor in the administration of the Rio Grande.

This Project is vital to the basin and region as it will provide operational efficiencies by better managing the timing of water stored and released from the Reservoir. This will result in improved stream health and utilization of Rio Grande water by the District, the State of Colorado, and the many other water users in the basin.

The total Project cost estimate (Phase 1 & 2) is $30,000,000. The District received a $5,000,000 grant in Projects Bill SB12S-002 for Phase 1, which included seepage control improvements, a U.S. Forest service land exchange, and final design of the outlet works. SB12S-002 also included an appropriation for a loan and grant funding package of $15,000,000. A subsequent Projects Bill in 2017 (HB17-1248) increased this loan/grant funding package to $25,000,000.

The District, is requesting a loan from the CWCB for 60% of the Phase 2 Project costs and a grant for 40% of the Phase 2 Project costs.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Lake 4 Outlet Pipeline Repair

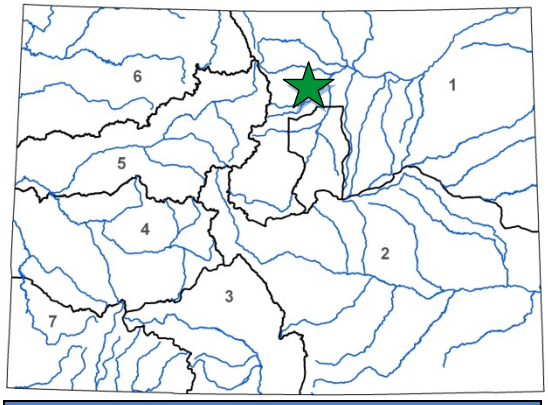
St. Vrain and Left Hand Water Conservancy District

January 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$912,000
CWCB Loan (with Service Fee):	$619,130
Loan Term and Interest Rate:	30 Years @ 2.85%
Funding Source:	Construction Fund

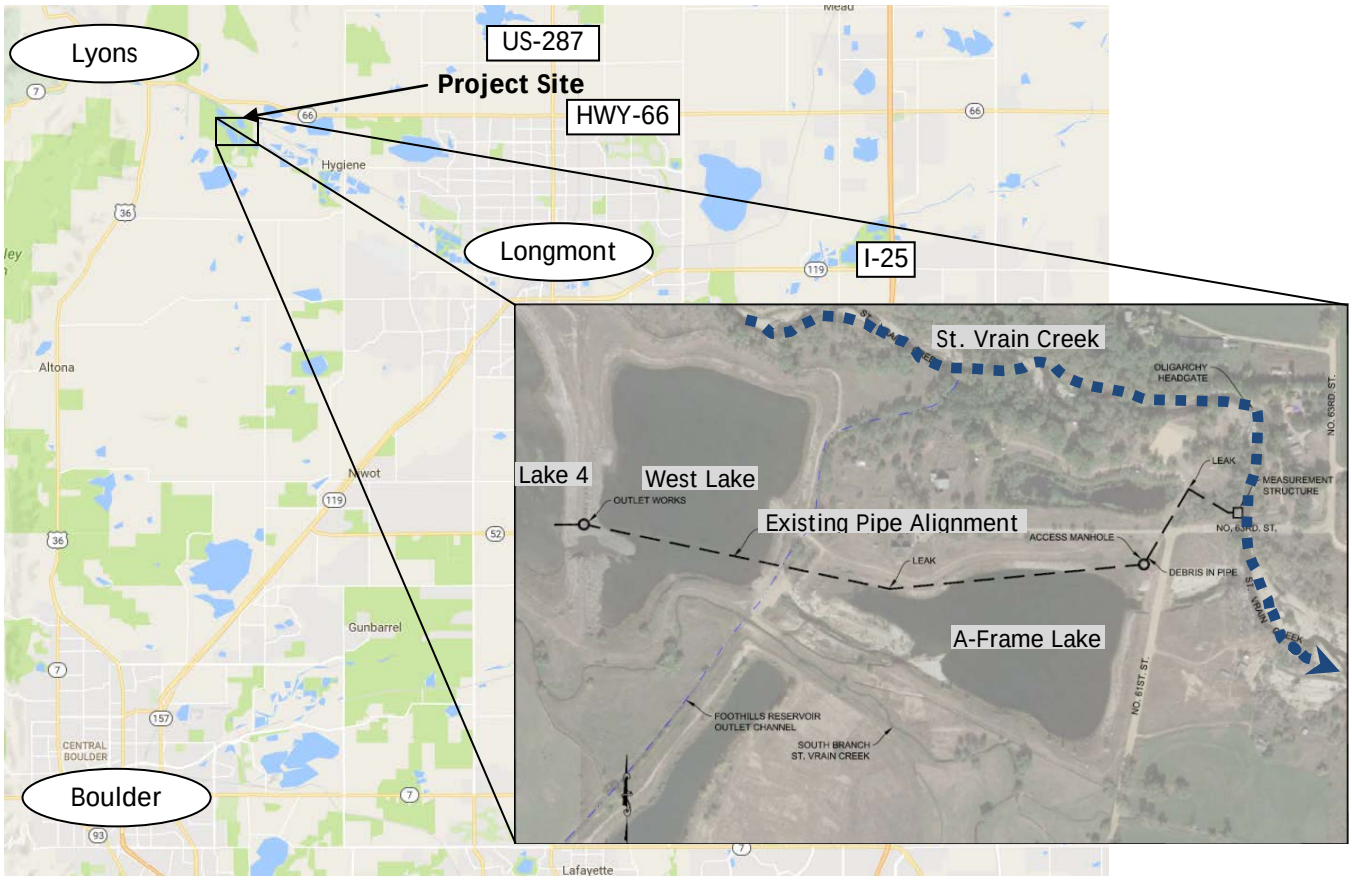
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 0% Mid - 97% High	3%

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	182 AF
Storage Preserved:	600 AF



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

The St. Vrain and Left Hand Water Conservancy District and Boulder County Parks and Open Space jointly own a lined reservoir known as Rock'n WP Ranch Lake No. 4 (Lake 4). Lake 4 was created by reclaiming mined slopes, installing a slurry wall liner around the former gravel pit, and installing inlet and outlet structures. The outlet works included a half-mile-long 18-inch reinforced concrete pipe approximately extending from the dam to the St. Vrain Creek. The District and County County recently inspected the outletworks pipeline and determined that it is leaking in several locations. It is critical for reservoir accounting and water rights administration purposes that the water delivered through the pipeline be water from Lake 4 and not groundwater leaking into the pipe between the dam and the river. Therefore the District and Boulder County desire to repair the pipe to resolve the leakage and to extend the service life of the structure.



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

Total Project Cost: $9,000,000

Type of Borrower: Blended

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

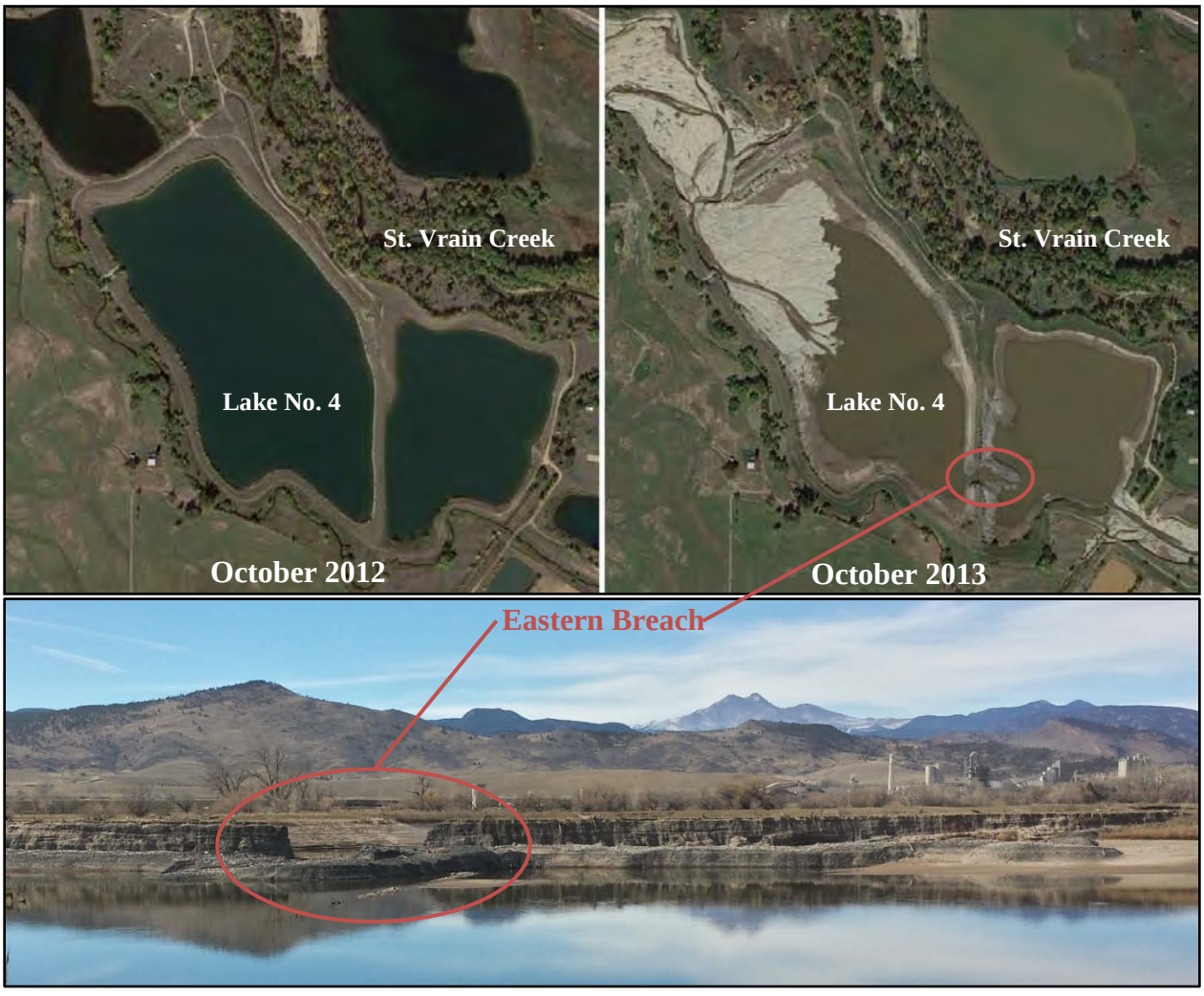
County: Boulder

Project Type: Reservoir Rehabilitation

Water Source: St. Vrain Creek

Funding Source: Severance Tax Perpetual Base Fund
Average Annual Augmentation: 200 AF
Preserved Water Supply Storage: 600 AF
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.



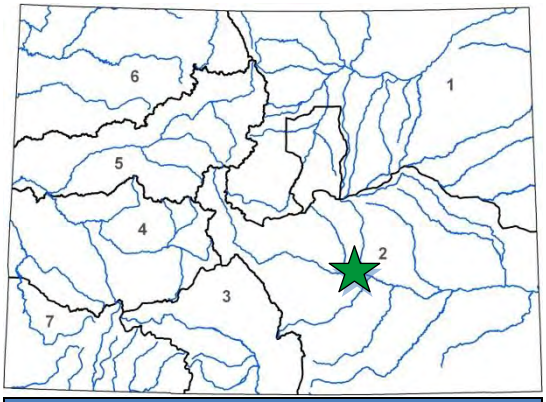
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Arkansas Valley Conduit Phase One
Pueblo Dam Hydroelectric Project

Southeastern Colorado Water Conservancy District

July 2016 Board Meeting

LOAN DETAILS	
Project Cost:	$19,060,000
CWCB Loan (with Service Fee):	$17,392,200
Loan Term and Interest Rate:	30 Years @ 2.0%
Funding Source:	Severance Tax PBF
BORROWER TYPE	
Hydropower	
PROJECT DETAILS	
Project Type:	Hydroelectric
Average Annual Power Production:	28M KWh



LOCATION			
County:			Pueblo
Water Source:			Arkansas River
Drainage Basin:			Arkansas River
Division:	2	*District:*	10

Southeastern Colorado Water Conservancy District, acting by and through its water activity enterprise, is applying for a loan for the construction of the Pueblo Dam Hydroelectric Project. The Project is located at the existing Pueblo Dam and will utilize the existing releases to the Arkansas River without changing the flow regime. This Project is being constructed as Phase One of the overall Arkansas Valley Conduit project, authorized in the 2007 and 2009 Projects Bill (SB07-122, SB09-125). The purpose of the Project is to develop a revenue source to offset the operational and maintenance cost of the Arkansas Valley Conduit.

The proposed 7.5 megawatt facility will be located on the North Outlet of Pueblo Dam. A powerhouse would be located at the downstream end of the existing outlet works that supplies water to the Arkansas River and would allow the Dam's authorized releases to generate an annual average 28 million kWh (enough to power approximately 3,300 homes) and $1,500,000 in average revenue per year. 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 Colorado Springs Utilities via transmission through the local Black Hills Energy power delivery system. Construction is planned to start in October 2016 for commissioning in May 2018.


Powerhouse Rendering

SOUTHEASTERN COLORADO
Water Conservancy District
"Your investment in water"

Colorado Springs Utilities
It's how we're all connected

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Storage Development and Water Rights Purchase

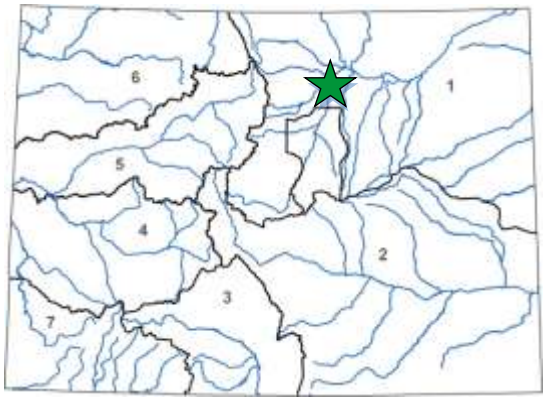
Town of Firestone

November 2016 Board Meeting

LOAN DETAILS	
Project Cost:	$10,043,150
CWCB Loan (with Service Fee):	$10,000,000
Loan Term and Interest Rate:	*20 Years @ 2.35%*
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 0% Mid - 100% High	0%

PROJECT DETAILS	
Project Type:	Storage and Water Rights Purchase
Average Annual Delivery:	2442 AF
Storage Created:	1092 AF



LOCATION			
County:			Weld
Water Source:			*St. Vrain River / Boulder Creek*
Drainage Basin:			South Platte River
Division:	*1*	*District:*	*2*

The Town of Firestone's boundary encompasses approximately 9,089 acres and is generally located east of Interstate 25 between Highway 66 and Highway 52. The Town of Firestone provides water and wastewater services to approximately 12,110 residents and operates a water distribution network of approximately 58.5 miles of pipeline and associated facilities. The purpose of this project is to provide a water storage project to help meet the Town's current and future non-potable water needs. For planning purposes, the Town is pursuing a little over two times the demand, or 2,000 acre-feet of non-potable storage for the Town. As a short-term water supply goal, the Town is requesting funds to Purchase the Carbon Valley Resource Pit and acquire 1,092 acre-feet as part of this project.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Mountain Home Dam Outlet Rehabilitation Phase III

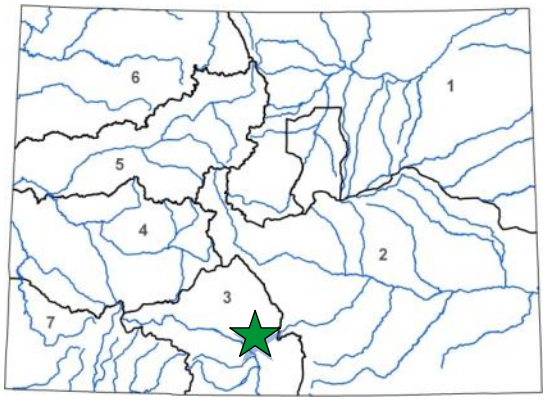
Trinchera Irrigation Company

March 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$987,000
CWCB Loan (with Service Fee):	$440,360
Loan Term and Interest Rate:	30 years @ 1.65%
Funding Source:	Severance Tax PBF & WRSF

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average Annual Diversions:	9,000 AF

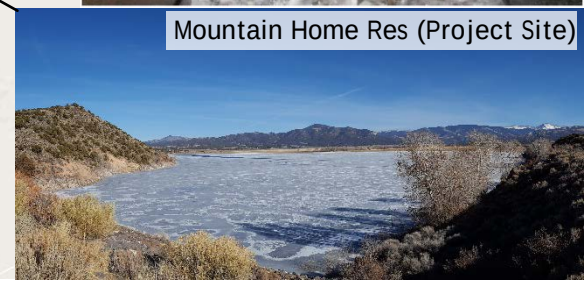


LOCATION			
County:			Costilla
Water Source:			Trinchera Creek
Drainage Basin:			Rio Grande
Division:	2	*District:*	14

Trinchera Irrigation Company is located in Costilla County and owns and operates Mountain Home Reservoir, Smith Reservoir, and approximately 26 miles of canals and 45 miles of laterals. Mountain Home Reservoir (Reservoir) was built in 1908 and has a capacity of 17,964 AF. The Reservoir's primary function is for irrigation but Colorado Parks and Wildlife operates a State Wildlife Area around the Reservoir and maintains a conservation pool of 653 AF in the Reservoir.

The Reservoir's existing outlet works experience significant leakage and since only one of the three valves is operable, does not meet the State Engineer's Office, Dam Safety Branch's emergency drawdown requirements. This Project will replace the original valves with new valves and make other minor repairs to the outlet including a new trash rack, line the outlet tunnel and tower, and replace the gate house. Successful repair of the dam outlet works will prevent a storage restriction, recover approximately 2,000 AF currently lost to leakage, and ensure the long-term integrity and protection of 11,800 acres of irrigated land, as well as the environment, wildlife, and recreation at the State Wildlife Area. Funding for the project will come from the CWCB loan and $513,000 in WSRF grant funds.


Leakage from Outlet Valves


Mountain Home Res (Project Site)

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Laramie-Poudre Tunnel Rehabilitation

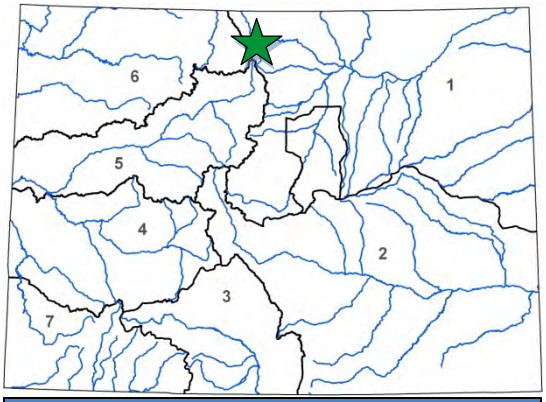
The Tunnel Water Company

September 2015 Board Meeting

LOAN DETAILS	
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

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
24%	20% Low - 24% Mid - 32% High	0%

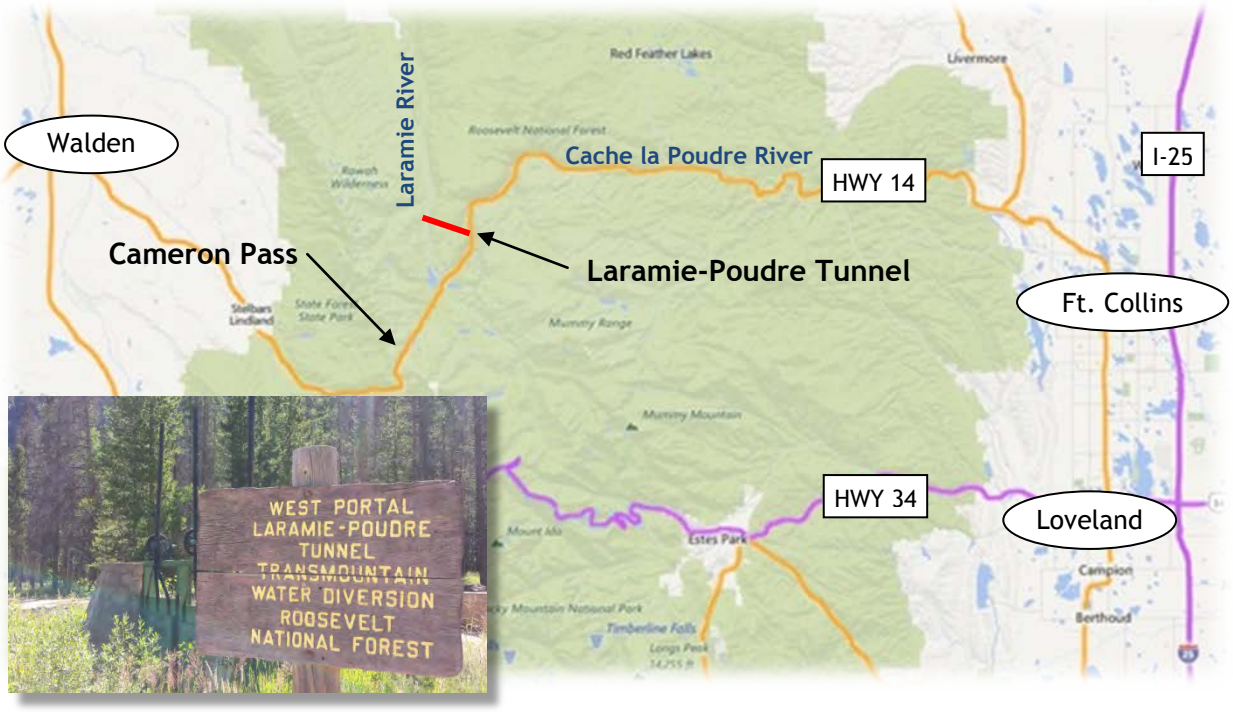
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	6,875 AF



LOCATION			
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.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Wiggins Recharge Facility at Glassey Farms

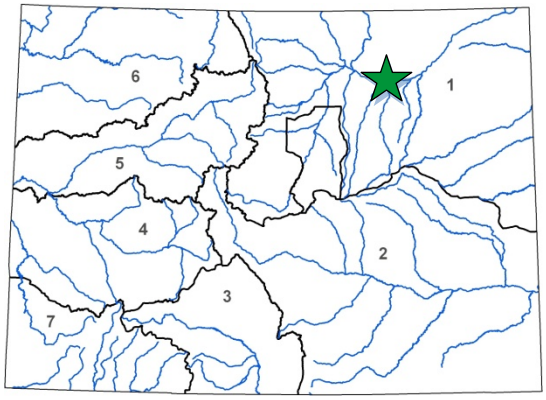
Town of Wiggins

March 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$2,385,000
CWCB Loan:	$2,408,850
Loan Term and Interest Rate:	30 Years @ 2.40%
Funding Source:	Severance Tax PBF

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - 0% Mid - 0% High	0%

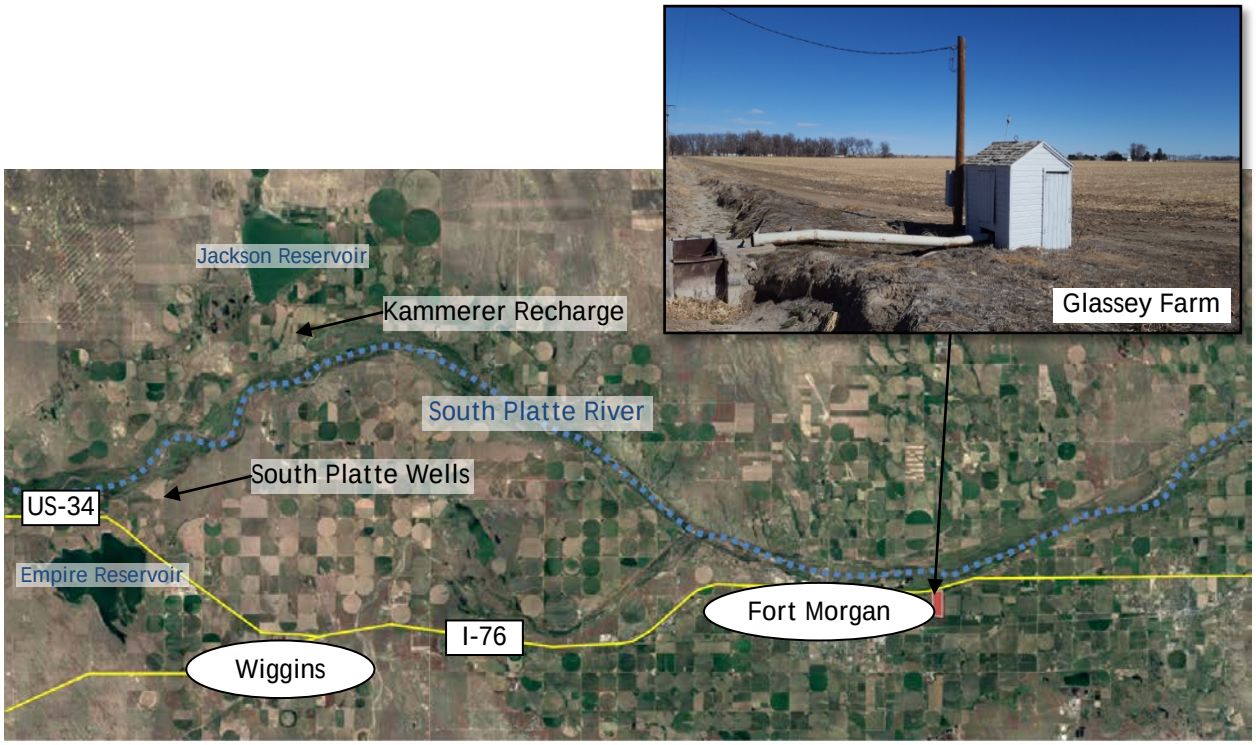
PROJECT DETAILS	
Project Type:	Augmentation
Average Annual Delivery:	140 AF



LOCATION			
County:			Morgan
Water Source:			South Platte River
Drainage Basin:			South Platte River
Division:	1	*District:*	1

The Town of Wiggins, through a water activity enterprise, provides service to approximately 900 residents. The Town anticipates considerable growth over the next 10 years due to four new developments recently annexed into the Town limits. Those developments are projected to bring up to 310 jobs into Wiggins over the next 5 years and approximately 500 new single family units and 150 multi-family units.

Historically the Town has relied on non-tributary wells drilled into the Kiowa Bijou Designated Ground Water Basin. Due to water quality issues and dropping aquifer levels, the Town drilled two wells into the South Platte Alluvial Aquifer. Those wells are augmented through the Kammerer Recharge site and augmentation water leases. In order to develop a reliable and long-term augmentation water supply, the Town will purchase the Glassey Farm and associated water rights. Recharge ponds will take approximately 40 acres and the Town is in negotiations with Morgan County Community College to share the remaining farmland for an agricultural education program focused on low watering farming techniques. Construction is planned to begin summer 2017 and be complete by fall 2017.



CWCB Water Project Loan Program
Project Data Sheet

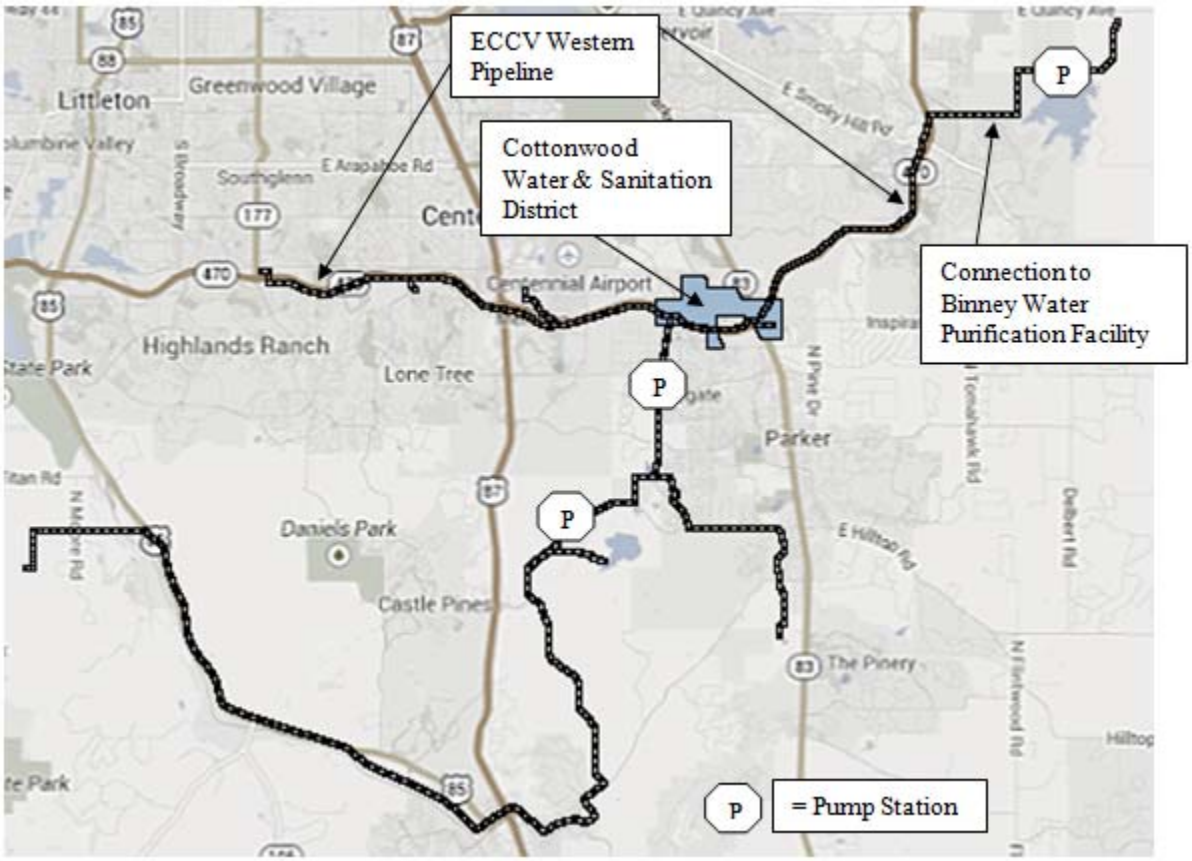
C150408

Borrower: Cottonwood Water & Sanitation District
County: Douglas & Arapahoe
Project Name: Water Infrastructure and Supply (WISE) Efficiency Project
Project Type: New Water Supply
Drainage Basin/ District: South Platte / 8
Water Source: South Platte
Total Project Cost: $4,960,000
Funding Source: Construction Fund
Type of Borrower: High-Income Municipal
Average Annual Delivery: 789 AF
CWCB Loan: $4,508,640 (with 1% service fee)
Interest Rate: 3.00% **Term:** 30 years

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

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

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



CWCB Water Project Loan Program
Project Data Sheet

C150409

Borrower: Inverness Water & Sanitation District

County: Douglas & Arapahoe

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

Project Type: New Water Supply

Drainage Basin/ District: South Platte / 8

Water Source: South Platte

Total Project Cost: $5,400,000

Funding Source: Construction Fund

Type of Borrower: High-Income Municipal

Average Annual Delivery: 1,100 AF

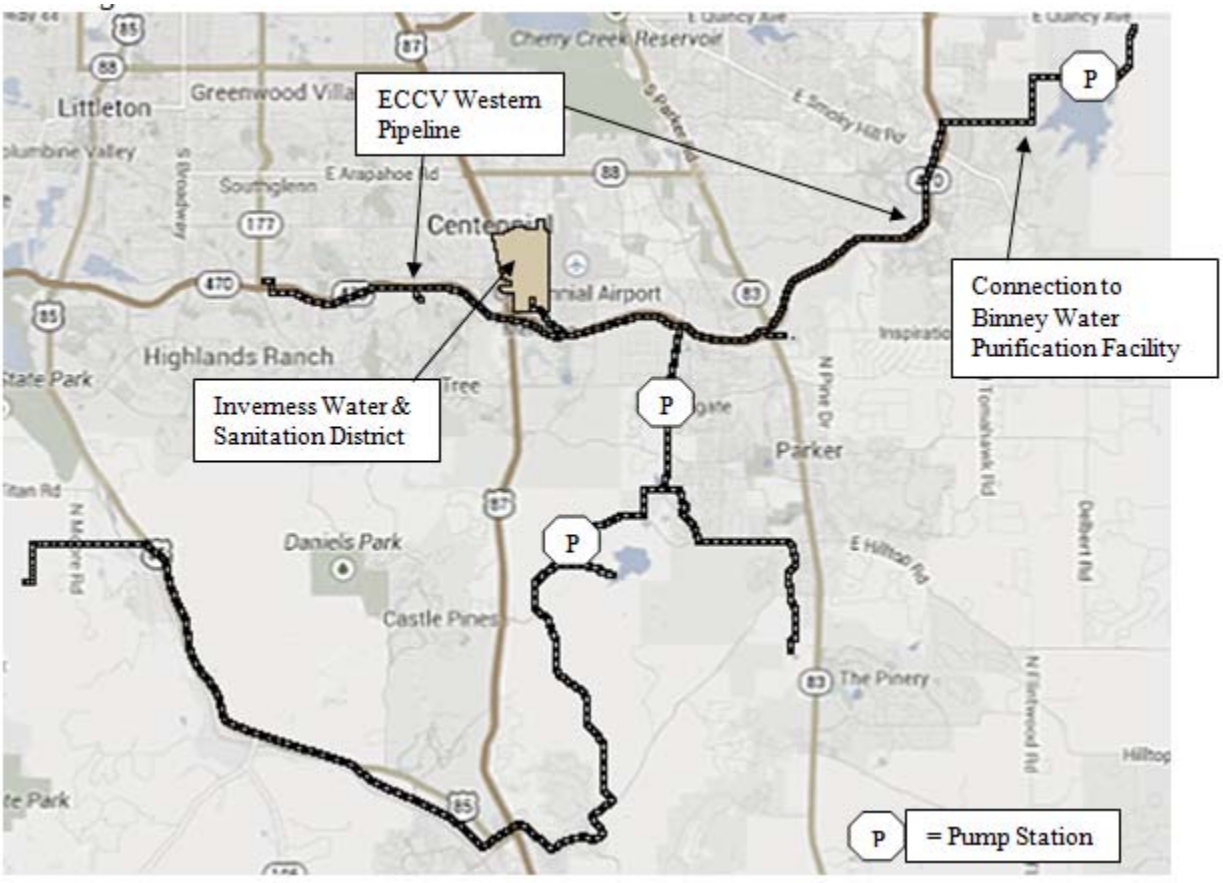
CWCB Loan: $4,908,600 (with 1% service fee)

Interest Rate: 2.75% **Term:** 20 years

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

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

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



CWCB Water Project Loan Program
Project Data Sheet

C150410

Borrower: Parker Water & Sanitation District

County: Douglas & Arapahoe

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

Project Type: New Water Supply

Drainage Basin/ District: South Platte / 8

Water Source: South Platte

Total Project Cost: $17,305,500

Funding Source: Construction Fund

Type of Borrower: High-income Municipal

Average Annual Delivery: 5,000 AF

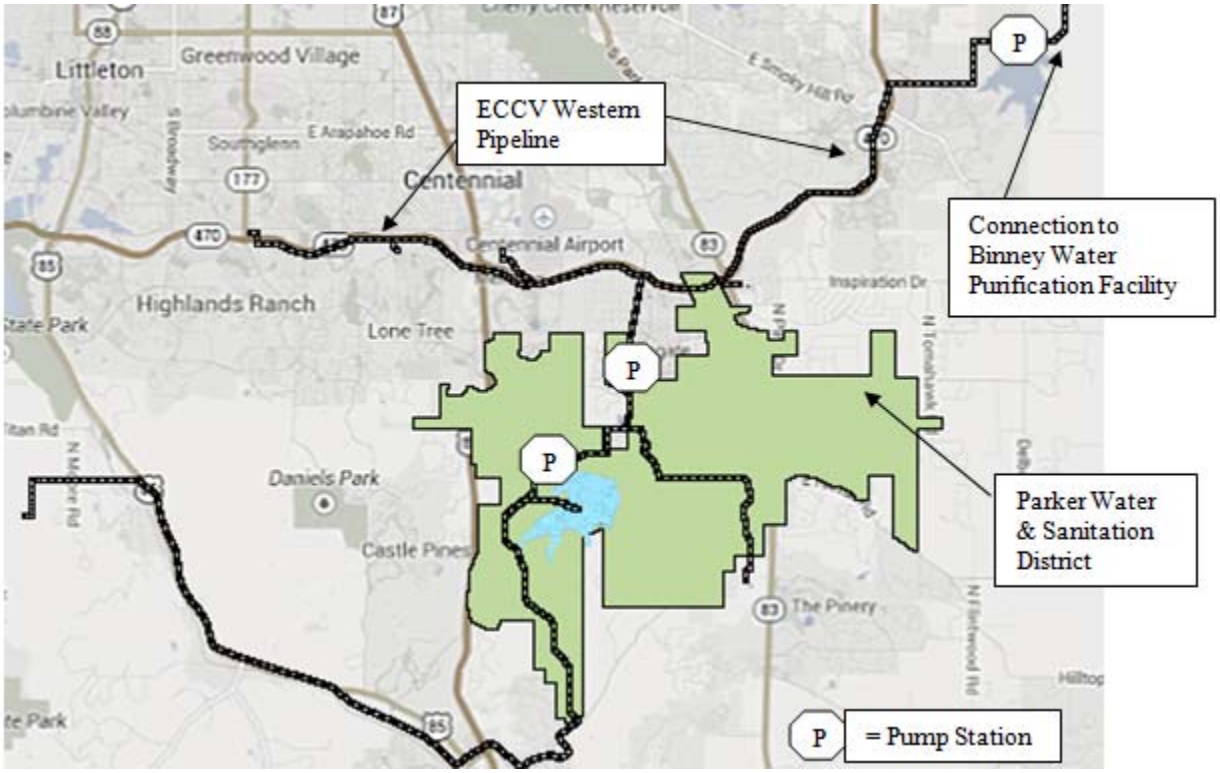
CWCB Loan: $15,734,790 (with 1% service fee)

Interest Rate: 2.75% **Term:** 20 years

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

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

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



CWCB Water Project Loan Program
Project Data Sheet

C150411

Borrower: Denver Southeast Suburban Water and Sanitation District (dba Pinery Water and Wastewater District)

County: Douglas

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

Project Type: New Water Supply

Drainage Basin/ District: South Platte / 8

Water Source: South Platte

Total Project Cost: $10,920,000

Funding Source: Construction Fund

Type of Borrower: High-income Municipal

Average Annual Delivery: 2,837 AF

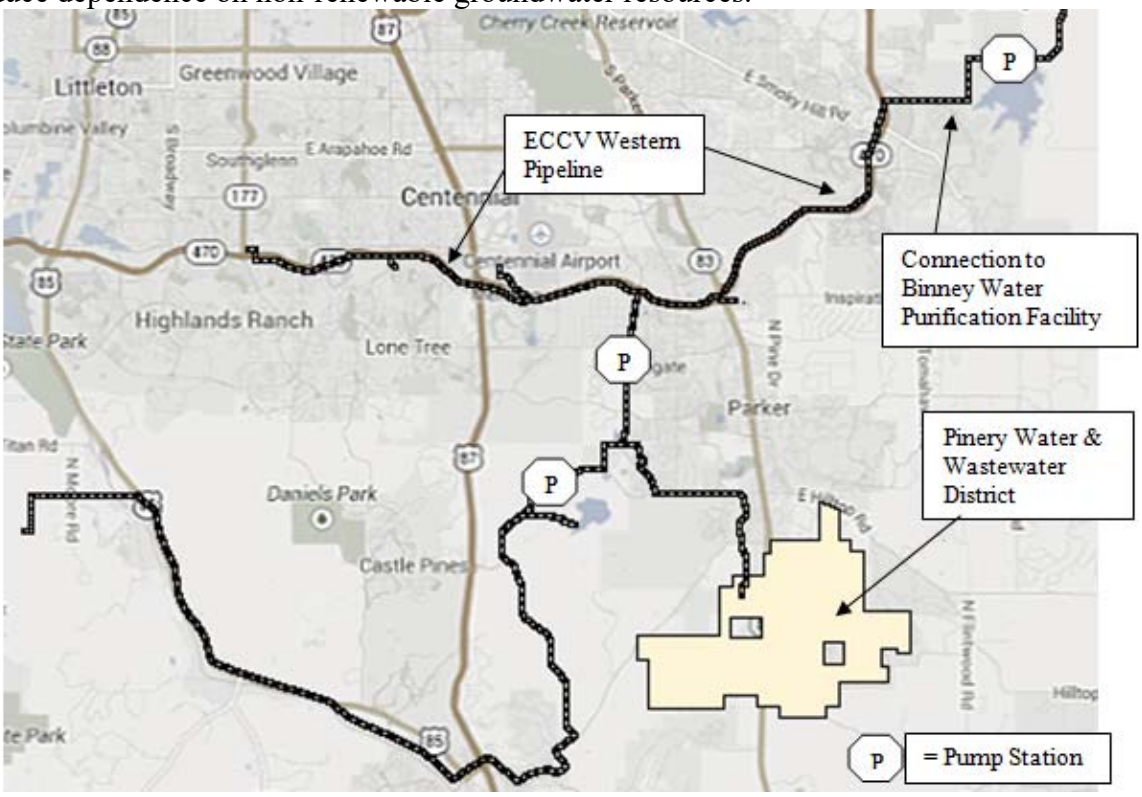
CWCB Loan: $9,926,280 (with 1% service fee)

Interest Rate: 3.00% **Term:** 30 years

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

The District will participate in Parker's WISE infrastructure components including 20,300 feet of new 42-inch pipeline from near the intersection of Chambers Road and E-470 to the Parker Water Treatment Plant located just south of Rueter-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

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Hess Lateral Improvement

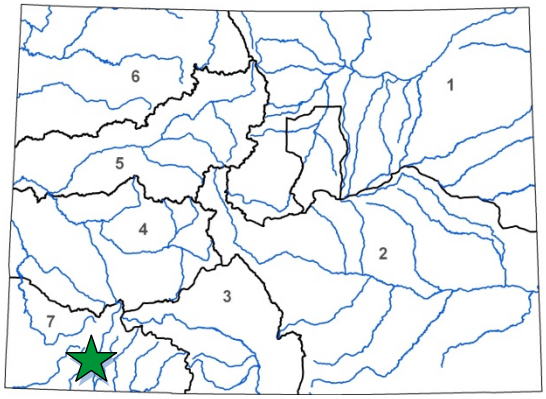
Florida Consolidated Ditch Company

May 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$2,800,000
CWCB Loan:	$1,085,750
Loan Term and Interest Rate:	30-years @ 1.80%
Funding Source:	Severance Tax Perpetual Base Fund

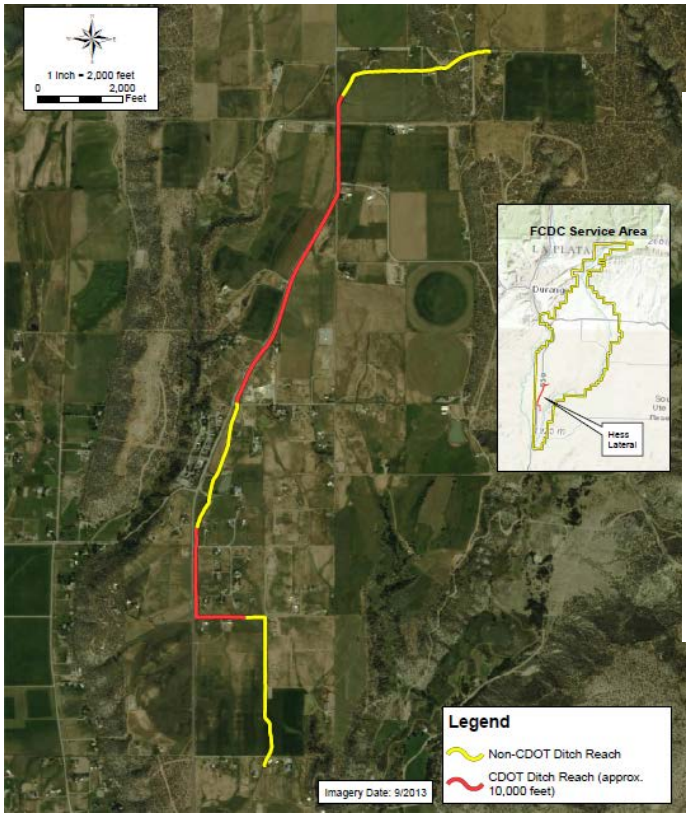
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0%	0%

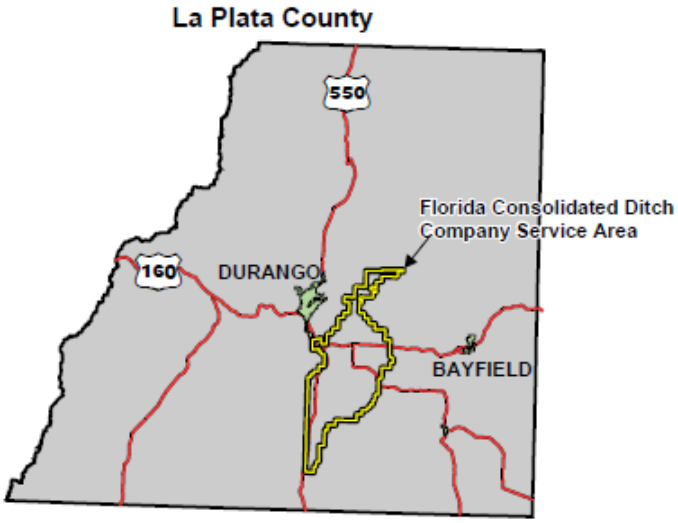
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	43,000 AF



LOCATION			
County:			La Plata
Water Source:			Animas River
Drainage Basin:			San Juan/Dolores River
Division:	7	*District:*	30

The Hess Lateral, part of the Florida Consolidated Ditch Company water conveyance system, is located 7 miles south of Durango, CO on the Florida Mesa. The lateral serves approximately 67 users irrigating over 1,500 acres of hay and pasture land. The project will replace the open ditch with buried gravity-pressurized pipeline and relocate approx. 21,100 feet of the Hess Lateral due to expansion of HWY 550. CDOT has committed $950,000 to the project. The company also received approval of a $775,000 WSRF grant at the September 2015 meeting. Final design of the project is expected to begin in the fall of 2017 and construction will likely follow one year later.





COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Dry Gulch Reservoir Land Acquisition

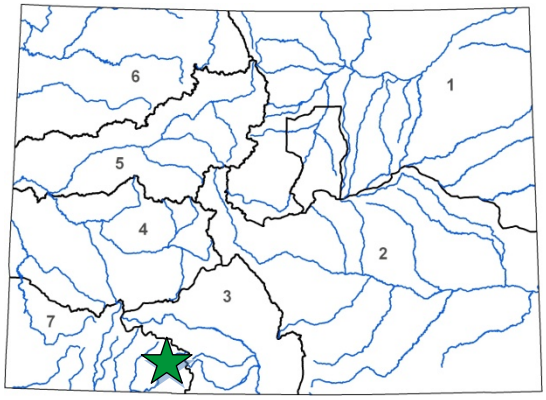
San Juan Water Conservancy District

May 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$2,000,000
CWCB Loan (with Service Fee):	$2,000,000
Loan Term and Interest Rate:	30 Years @ 2.55%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - 0% Mid - 0% High	0%

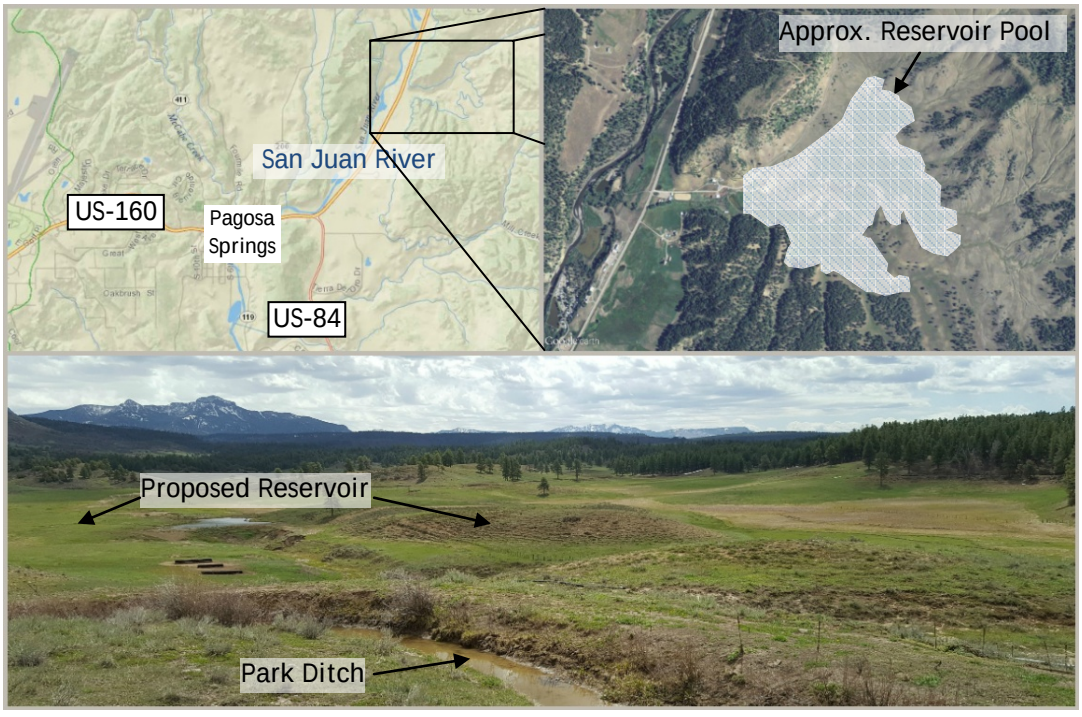
PROJECT DETAILS	
Project Type:	Water Storage Land Acquisition
Average Annual Delivery:	NA



LOCATION			
County:			Archuleta
Water Source:			San Juan River
Drainage Basin:			Southwest
Division:	29	*District:*	7

The District was created in 1987 with a purpose to conserve, maximize, and utilize the water resources of the San Juan River and its tributaries, with the primary function to address future water supply needs within its boundaries. Population projections predict an increase of 25,400 county-wide by 2070, an increase that could produce a water supply gap of 4,300 AF per year.

The District has identified the development of Dry Gulch Reservoir as a top priority project for the region's long-term water supply solution. This reservoir site has been under consideration since the 1960s and has been identified in 1989 and 2003 as a preferred water storage location for diversions from the San Juan River. A previous CWCB loan to the Pagosa Area Water and Sanitation District and a WSRF grant to the San Juan Water Conservancy District provided funding for the purchase of a large portion of the land needed for the proposed Dry Gulch Reservoir. This loan will acquire the remaining land needed for the proposed reservoir. The overall Dry Gulch Reservoir project will be planned in keeping with the objectives outlined in the Colorado Water Plan for new water storage, by not only off-setting the projected water supply gap, but also providing water resources for non-consumptive uses to enhance environmental and recreational opportunities of state and local economic benefit. Planning and permitting for the reservoir is expected to take up to 10 years. This loan will not provide funds for reservoir construction.



Water Project Construction Loan Program - Project Data

Borrower: SECWCD - Enterprise

County: Pueblo, Crowley, Otero, Bent, Prowers

Project Name: Arkansas Valley Conduit

Project Type: Water Supply Pipeline

Drainage Basin: Arkansas

Water Source: Arkansas – Fry-Ark Project

Total Project Cost: $300,000,000

Funding Sources: CWCB, Federal

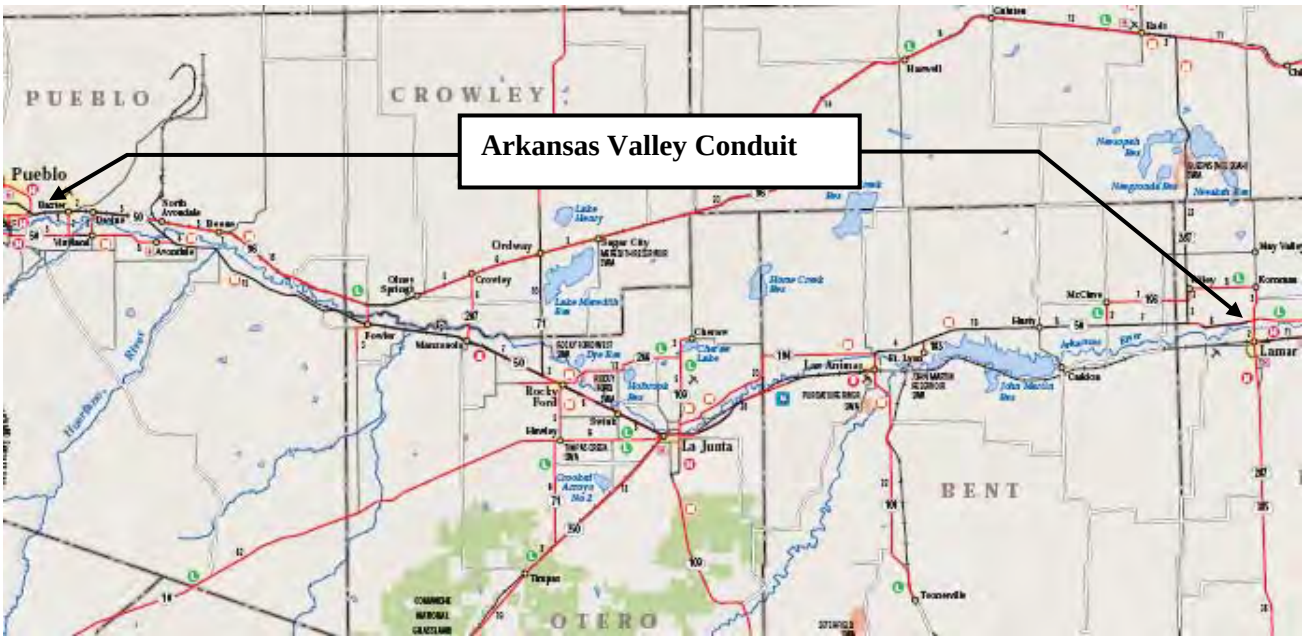
Type of Borrower: Municipal/Low

Aver. Delivery: 6,555 AF (2005 demand)

CWCB Construction Fund Loan: $60,600,000 (incl. 1% loan fee)

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

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



Location Map

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

City Lake Dam Rehabilitation & Enlargement

City of Walsenburg

July 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$6,821,000
CWCB Loan (with Service Fee):	$6,889,210
Loan Term and Interest Rate:	30 years @ 2.0%
Funding Source:	Severance Tax

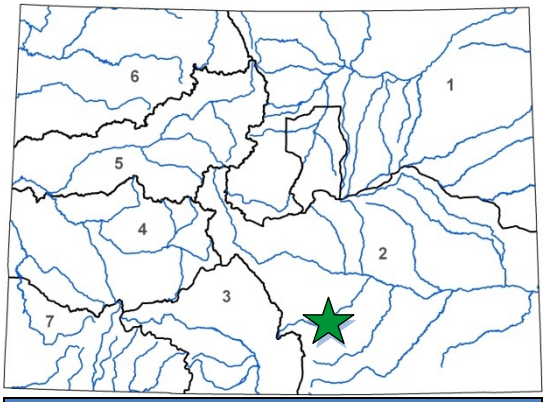
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	730 AF
Total Reservoir Storage:	531 AF
Water Storage Developed:	120 AF

The City of Walsenburg's City Lake dam and reservoir provides the primary water supply and storage for the City's water treatment plant located downstream of the dam. This dam has been subject to a State Engineer's Office (SEO) safety compliance plan since September of 2014, and a formal storage restriction since April 2017 as a result of dam safety deficiencies including seepage, stability, and spillway capacity. The dam safety imposes a 1-foot storage restriction on April 1, 2017, a 2-foot storage restriction on November 15, 2017, and a 3-foot storage restriction on May 1, 2019.

The City needs the full storage capacity of City Lake to adequately supply their water treatment plant and to ensure future water supplies.

Elements of the Project include dam embankment reconstruction, new outlet works, new spillway construction, riprap channel lining, and a temporary bypass conduit to route water to the water treatment plant. The project will increase storage by 120 acre-feet by raising the dam embankment three feet. Construction is planned for 2017/2018.



LOCATION			
County:			Huerfano
Water Source:			Cucharas River
Drainage Basin:			Arkansas River
Division:	2	*District:*	*16*

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Tunnel and Canal Renovation

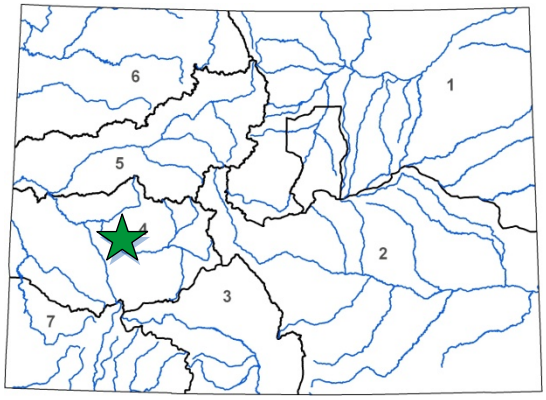
Fruitland Irrigation Company

September 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$10,509,000
CWCB Loan (with Service Fee):	$1,746,290
Loan Term and Interest Rate:	40 Years @ 2.0%
Funding Source:	Severance Tax PBF and WSRF Grant

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid -0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	10,103 AF



LOCATION			
County:			Delta & Montrose
Water Source:			Crystal Creek
Drainage Basin:			Gunnison
Division:	4	*District:*	40

The Company owns and operates the 17.7 mile-long earthen Fruitland Highline Canal, the 22 mile-long earthen Gould Canal including 0.8 miles through two rock tunnels, and the 10,168 AF Gould Reservoir. The Fruitland Highline Canal diverts from Crystal Creek, 13 miles south of the Town of Crawford and provides irrigation water to approximately 5,900 acres in Delta and Montrose Counties.

The Company is seeking a CWCB Loan and a WSRF Grant as part of an overall funding package for the Tunnel and Canal Renovation Project. The two tunnels in the Gould Canal are over 100 years old and have eroded to the point that its structural integrity is threatened. A collapse would eliminate the ability to deliver irrigation water after the junior direct flow rights are out of priority, typically in mid-June. Additionally, the Fruitland Highline and Gould Canals are located within the Colorado River salinity control area. The seepage losses are estimated to be 12.5 cfs, or 1856 AF annually which equates to approximately 6,053 tons of salt to the Colorado River system.

CWCB funding will be used to pipe the Gould Canal from Gould Reservoir through the two tunnels, a distance of approximately 2.1 miles and line the earthen canal for approximately 10.3 miles.


Canal to be piped


Canal to be lined

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Arkansas River and Wildhorse Creek Levee Rehabilitation

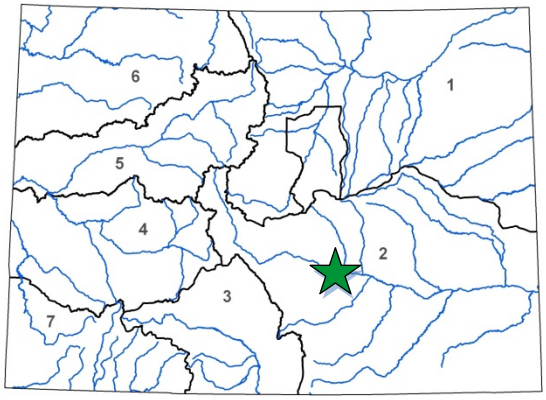
Pueblo Conservancy District

September 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$23,000,000
CWCB Loan (with Service Fee):	$17,170,000
Loan Term and Interest Rate:	30 years at 2.45%
Funding Source:	Severance Tax Perpetual Base Fund

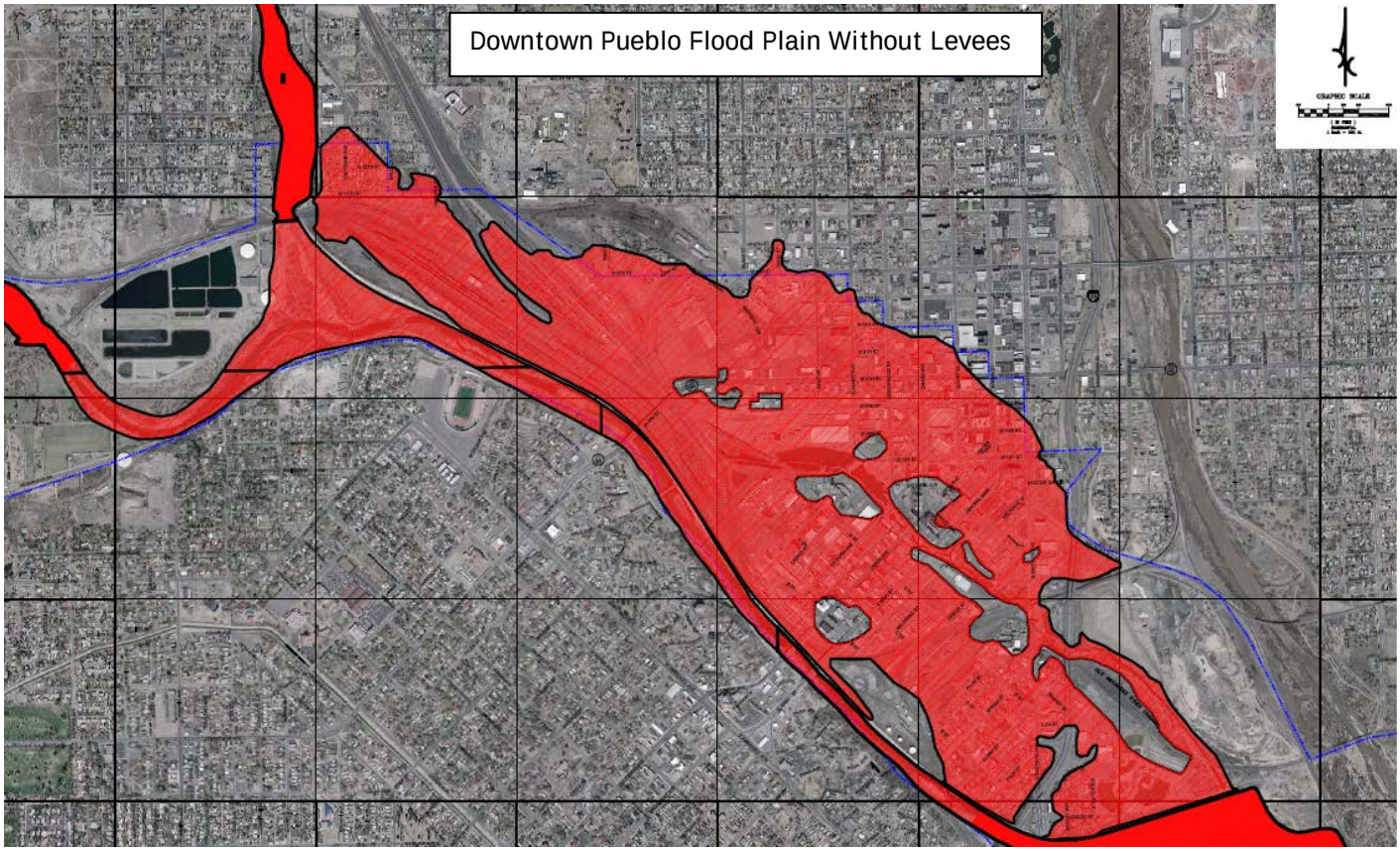
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - TBD% Mid -0% High	0%

PROJECT DETAILS	
Project Type:	Flood Control
Average Annual Diversions:	N/A



LOCATION			
County:			Pueblo
Water Source:			Arkansas River
Drainage Basin:			Arkansas
Division:	2	*District:*	14

The District was formed in response to the 1921 flood in Pueblo. Its primary function is flood protection within its designated boundaries. In 2006, the District was advised that unless the Arkansas and Wildlhorse Creek levees were accredited by the Federal Emergency Management Agency (FEMA), the City would lose it protected status which ensures that flood insurance can be provided at affordable rates. To date, the District has completed the reconstruction and stabilization of 6,600 feet of the Arkansas River Levee, the top 12-feet of an additional 4,400 feet of the Arkansas Levee embankment has been removed, and 2,800 feet of Wildhorse Creek Levee has been constructed. The next phase of work is scheduled to begin in late 2017. Construction is limited to November to March when river flows are the lowest. The entire project is expected to be complete in 2022.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

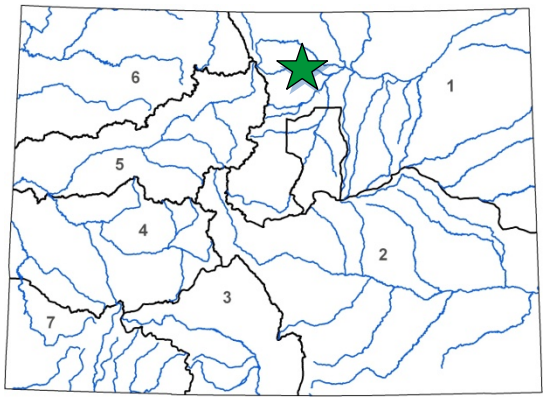
Windy Gap Firming Project

Municipal Subdistrict, Northern Colorado Water Conservancy District

Windy Gap Firming Project Water Activity Enterprise

November 2017 Board Meeting

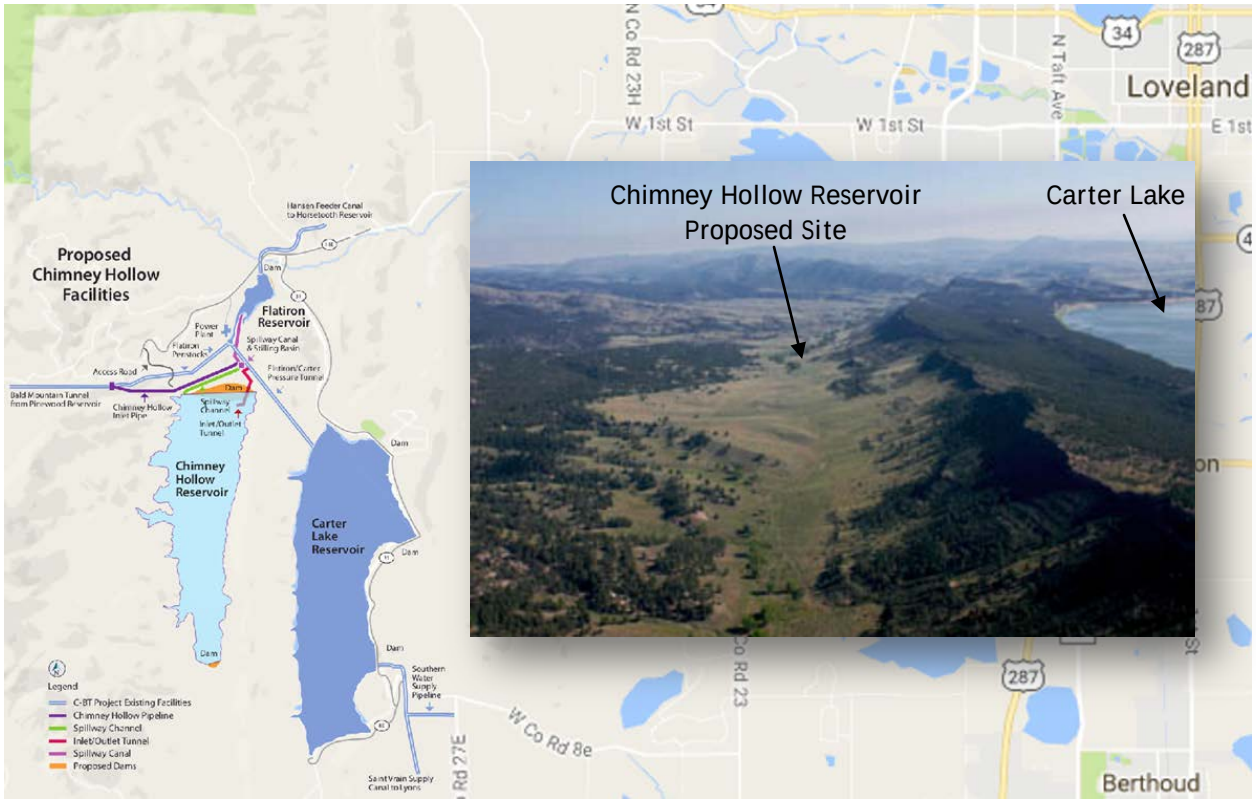
LOAN DETAILS	
Project Cost:	$440,000,000
CWCB Loan (with Service Fee):	$90,000,000
Loan Term and Interest Rate:	30 years @ 3.10%
Funding Source:	Revenue Bonds & Construction Fund Loan
BORROWER TYPE	
Municipal	
PROJECT DETAILS	
Project Type:	New Reservoir
New Storage Capacity:	90,000 AF



LOCATION			
County:	Larimer, Boulder, Broomfield, Weld		
Water Source:			Colorado River
Drainage Basin:			South Platte
Division:	1	*District:*	2,3,4,5,6

In 1970, six Northern Colorado cities formed the Municipal Subdistrict to plan, finance, and build the Windy Gap project. That project was completed in 1985. The annual delivery of Windy Gap water is not reliable because in dry years the junior water rights may not come into priority, and in wet years, there may not be room in Lake Granby to store Windy Gap water.

In 1999, The Subdistrict formed the Windy Gap Firming Water Activity Enterprise with the purpose of pursuing activities that would lead to firming the yield of Windy Gap water. Participants identified 30,000 AF as a goal for total firm yield. After a review of over 170 alternatives, the Bureau of Reclamation and project participants identified the construction of a 90,000 AF Chimney Hollow Reservoir as the preferred alternative. This Project will consist of the construction of Chimney Hollow Reservoir and associated pipelines to deliver water from the existing C-BT infrastructure, as well as environmental mitigation and enhancements. Construction is anticipated to begin in fall of 2018 and be complete in 2022.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Diversion Structure Rehabilitation

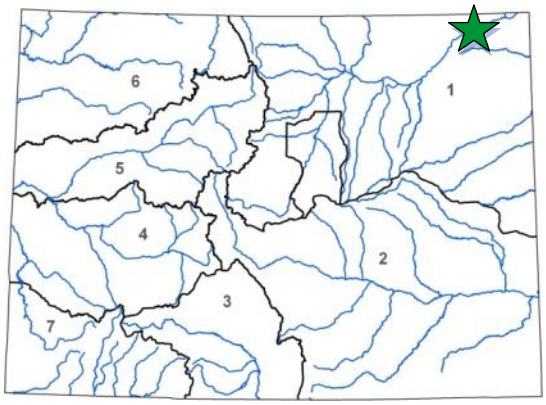
Julesburg Irrigation District

May 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$3,308,000
CWCB Loan (with Service Fee):	$3,341,080
Loan Term and Interest Rate:	30 Years @ 1.70%
Funding Source:	Severance Tax PBF

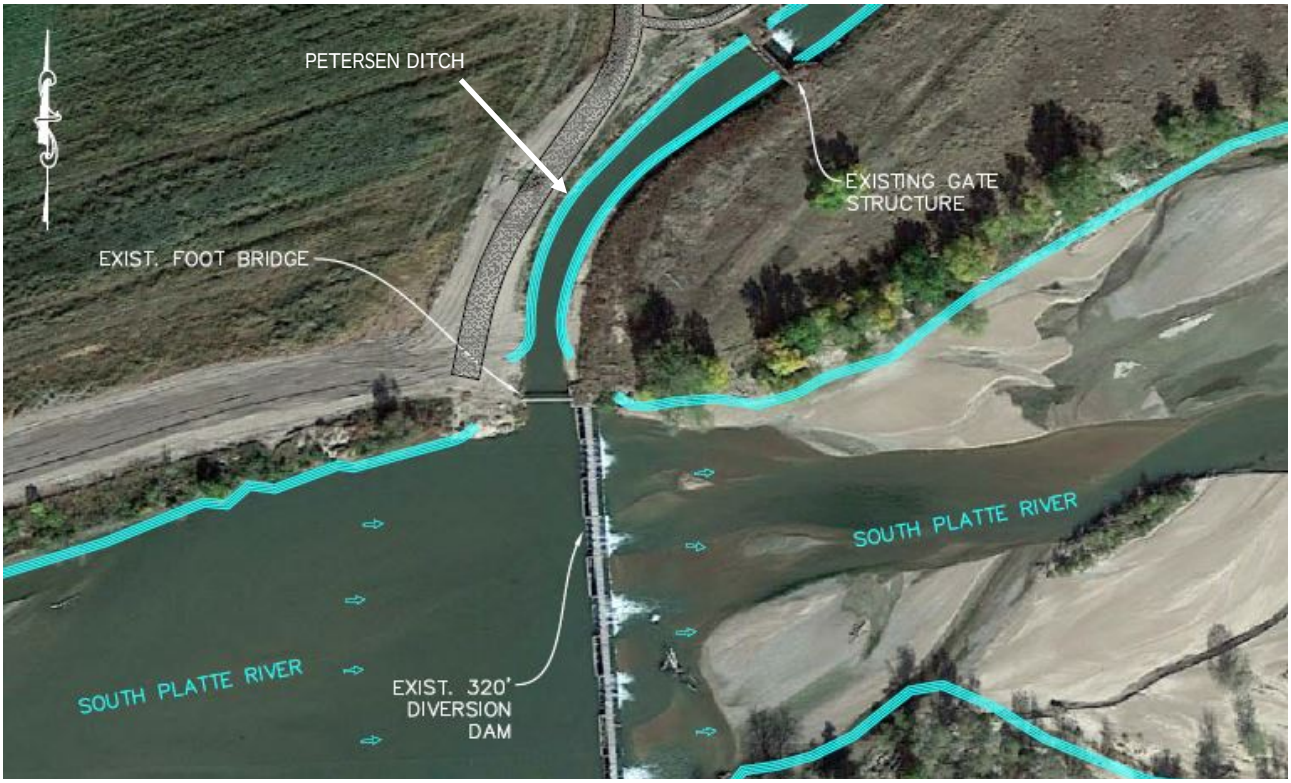
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
98%	1% Low - 0% Mid -0% High	1%

PROJECT DETAILS	
Project Type:	Diversion Structure Rehabilitation
Average Annual Diversions:	54,421 AF



LOCATION			
County:			Sedgwick
Water Source:			South Platte
Drainage Basin:			South Platte
Division:	1	*District:*	64

The Julesburg Irrigation District (District) operates a South Platte River diversion structure and the Petersen Ditch headgate as well as other ditches and reservoirs for the benefit of the shareholders by providing direct flow irrigation water. The District service area is comprised of approximately 19,129 acres. The District's diversions from the South Platte River through the Petersen Ditch are normally 164 cubic feet per second from the South Platte River providing water to 8,925 acres. The diversion of water is accomplished with a concrete diversion dam across the South Platte and a ditch regulating head gate structure. The 1956 river diversion dam is approximately 320 feet wide and the ditch head gate structure is approximately 30 feet wide. The District wants to rebuild the diversion dam and ditch head gate in order to continue water deliveries to the shareholders and provide and improve the structures' operational safety. Construction is anticipated during the 2018-2019 winter months prior to the 2019 irrigation season.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Seeley Reservoir Dredging

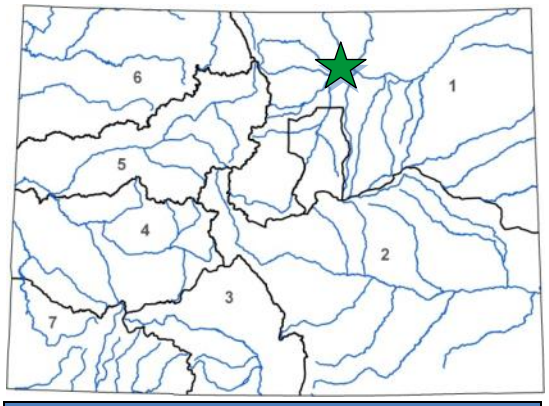
Ogilvy Irrigating and Land Company

May 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$3,667,740
CWCB Loan (with Service Fee):	$2,274,520
Loan Term and Interest Rate:	30 Years @ 1.70%
Funding Source:	Severance Tax PBF & Water Plan Grant

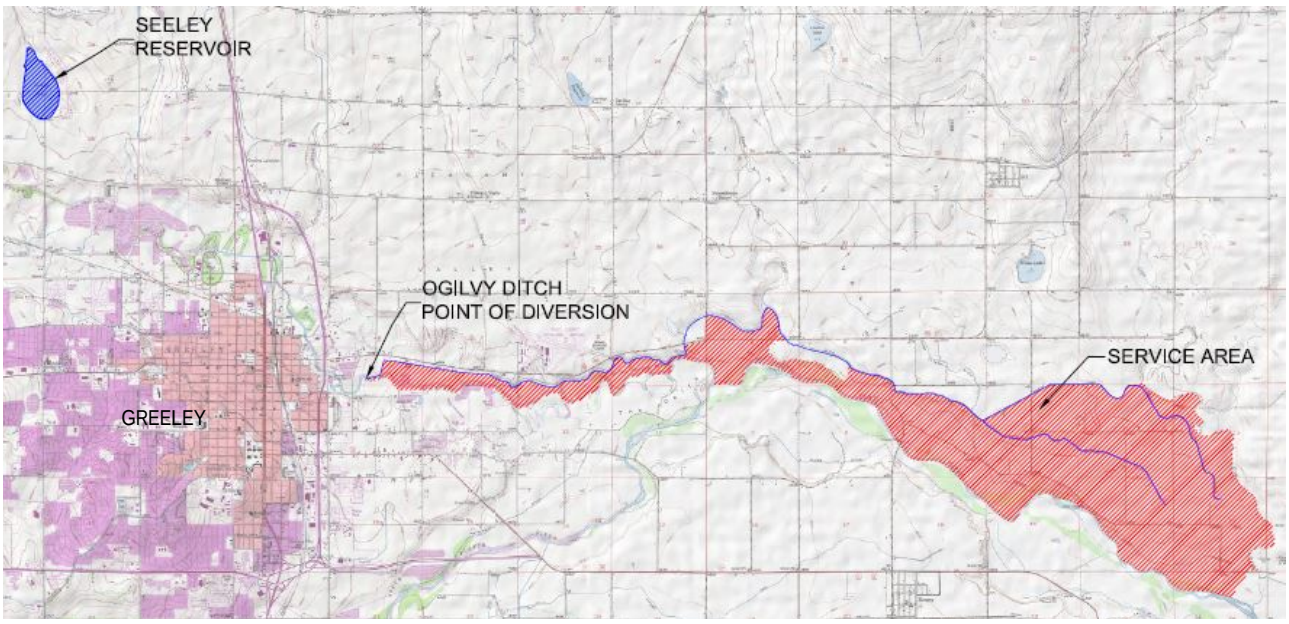
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
95%	5% Mid	0%

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Average Annual Diversions:	14,778 AF
Recovered Storage:	356 AF



LOCATION			
County:			Weld
Water Source:			Cache La Poudre
Drainage Basin:			South Platte
Division:	1	*District:*	3

The Ogilvy Irrigating and Land Company is a Colorado Mutual Ditch that owns and operates Seeley Reservoir and the Ogilvy Ditch. The Ogilvy Ditch system encompasses 3,600 acres from a Cache la Poudre River diversion, located on the east edge of Greeley to farms east of Kersey. Seeley Reservoir has a decreed capacity of 1,543 acre-feet. The proposed project will re-establish the physical capacity to this decreed volume. The water stored in the reservoir is used to provide supplemental irrigation supplies to the Ogilvy Ditch service area. Stored water is also used to provide augmentation water for the Ogilvy Augmentation Company, whose members own wells that provide irrigation water within the same service area. This project will recover 356 acre-feet of reservoir storage space that has been lost to sedimentation deposition over many years. New water storage sites have been considered, but would be limited to about 100 acre-feet of capacity. Sedimentation of Seeley Reservoir resulted largely because of the high inflows running through the steep inlet channel above the reservoir. The Colorado Department of Transportation completed major improvements to the Seeley Reservoir inlet channel at State Highway 392 in 2011 that substantially mitigated the conditions causing the erosion within the inlet ditch generating sediment at Seeley Reservoir. It is expected that the recurrence of sedimentation will be limited. Construction is scheduled for the fall of 2018. Funding will come from a Water Plan Grant for $1,415,740 and a CWCB loan.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

San Luis Valley Canal Headgate Construction

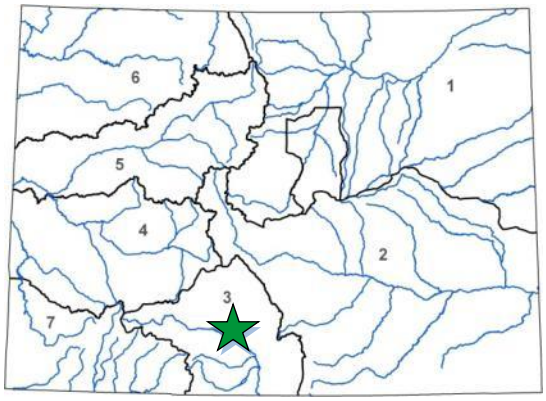
San Luis Valley Canal Company

May 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$569,000
CWCB Loan (with service fee):	$303,000
Loan Term and Interest Rate:	20 Years @ 1.45%
Funding Source:	Severance Tax PBF and WSRF Grant

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0%	0%

PROJECT DETAILS	
Project Type:	Headgate Replacement
Average Annual Diversions:	24,000 AF



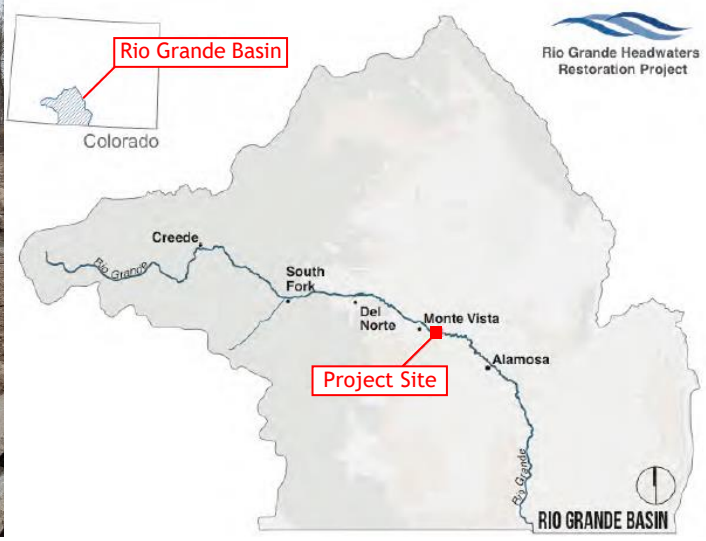
LOCATION			
County:			Rio Grande
Water Source:			Rio Grande
Drainage Basin:			Rio Grande
Division:	3	*District:*	20

The San Luis Valley Canal Company (Company) was incorporated as a mutual ditch company in 1923. It diverts water from the Rio Grande into the San Luis Valley Canal 4 miles east of the town of Monte Vista. The irrigation system serves 78 shareholders covering 20,200 irrigated acres. The Project is a structural and riparian improvement project that will improve the Company's ability to divert its water right as well as meet non-consumptive needs of the area by replacing a poorly functioning headgate and stabilizing streambanks.

The Colorado Rio Grande Restoration Foundation (Foundation) is the fiscal agent for the RGHRP and partnered with the Company, as well as four other ditch companies, to organize and raise funds for diversion and headgate improvement projects that also incorporate streambank stabilization and riparian restoration. The Foundation consolidated the individual ditch projects into a single WSRF Grant request known as "Five Ditches: Rio Grande Diversion and Headgate Improvement Project" (Five Ditches). The Foundation received a WSRF Grant to help cover the implementation cost of Five Ditches at the CWCB September 2017 Board Meeting. Additionally, the Foundation, at the CWCB May 2017 Board Meeting, received a WSRF Grant to cover the cost of engineering design for three headgate improvement projects around the Rio Grande State Wildlife Area, which included this Project. In total, $263,000 in WSRF grant funding is allocated to the San Luis Valley Headgate Construction Project.

Final Design is expected to be completed in spring 2018 with construction occurring between the 2018 and 2019 irrigation seasons.


San Luis Valley Canal Headgate



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Ravenna Development Interconnect

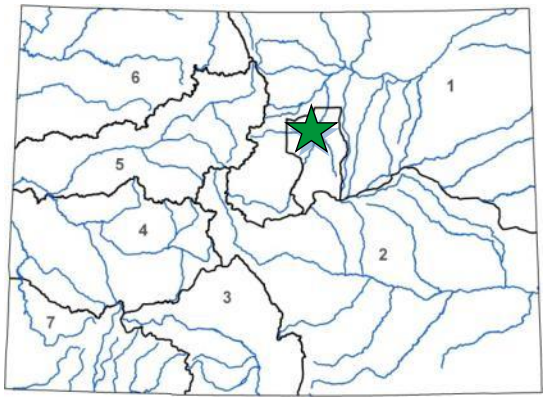
Roxborough Water and Sanitation District

July 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$1,763,750
CWCB Loan (with Service Fee):	$1,584,690
Loan Term and Interest Rate:	30 Years @ 3.15%
Funding Source:	TBD

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 0% Mid -100% High	0%

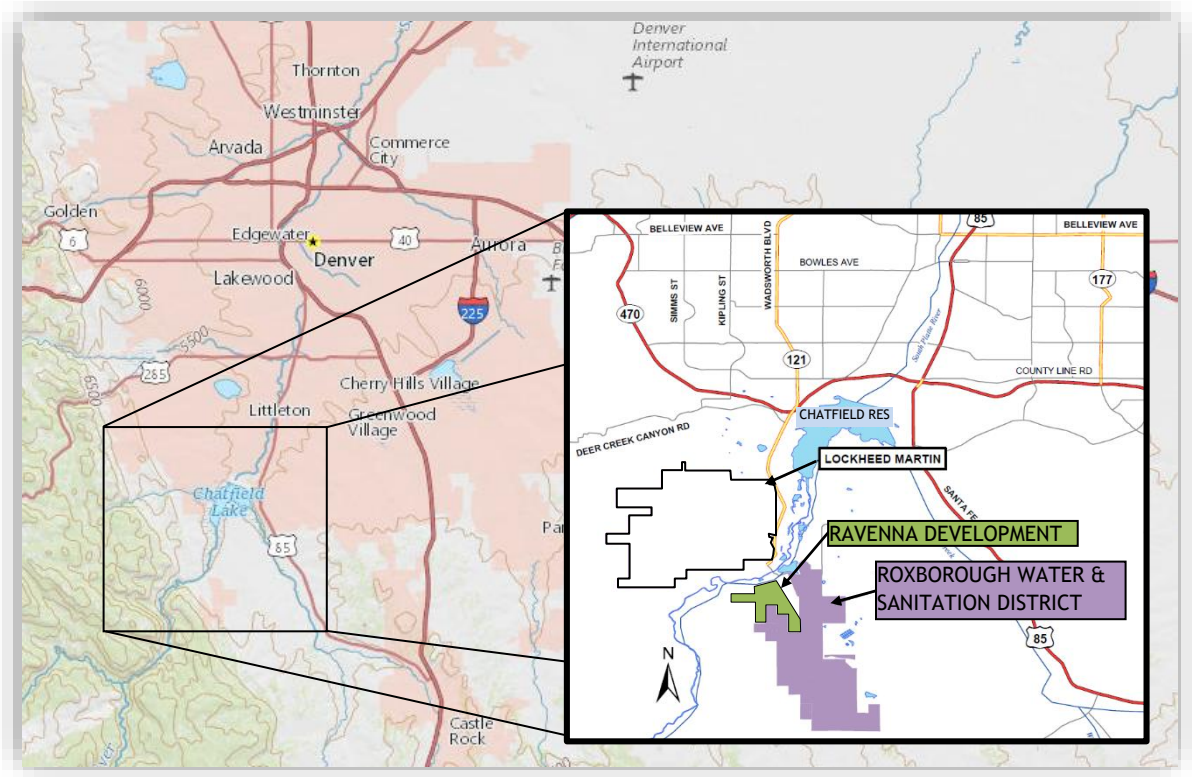
PROJECT DETAILS	
Project Type:	Municipal Water Supply System New
Average Annual Diversions:	1,200 AF



LOCATION			
County:			Douglas
Water Source:			South Platte River
Drainage Basin:			South Platte
Division:	1	*District:*	8

The Roxborough Water and Sanitation District was established in 1971 and provides water and sewer service within its service area in northwest Douglas County. In 2017 the District included the Ravenna Development (Ravenna) into its water service area. Ravenna sought inclusion into the District as a means to replace its non-renewable water supply (non-tributary groundwater wells) with a renewable water supply and as a means to efficiently provide potable water to the residents of Ravenna.

In summer of 2017, the District installed a single emergency interconnect with Ravenna and has been the sole source of potable water for Ravenna since. The inclusion agreement requires that in addition to the emergency interconnect, two additional interconnects between the District and Ravenna be constructed in order to provide a permanent and reliable water supply to Ravenna. Construction will include two new interconnections, a new pipeline, and the relocation of a pressure reducing valve. Final design, right-of-way acquisition, and county approvals is scheduled to be completed by fall 2018. Construction is expected to begin late 2018 and continue into the early part of 2019.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Chilcott Augmentation Station

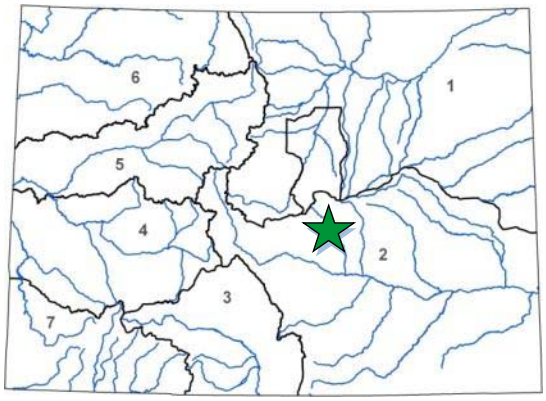
Chilcott Ditch Company

July 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$500,000
CWCB Loan (with Service Fee):	$505,000
Loan Term and Interest Rate:	20 Years @ 2.55%
Funding Source:	Construction Fund

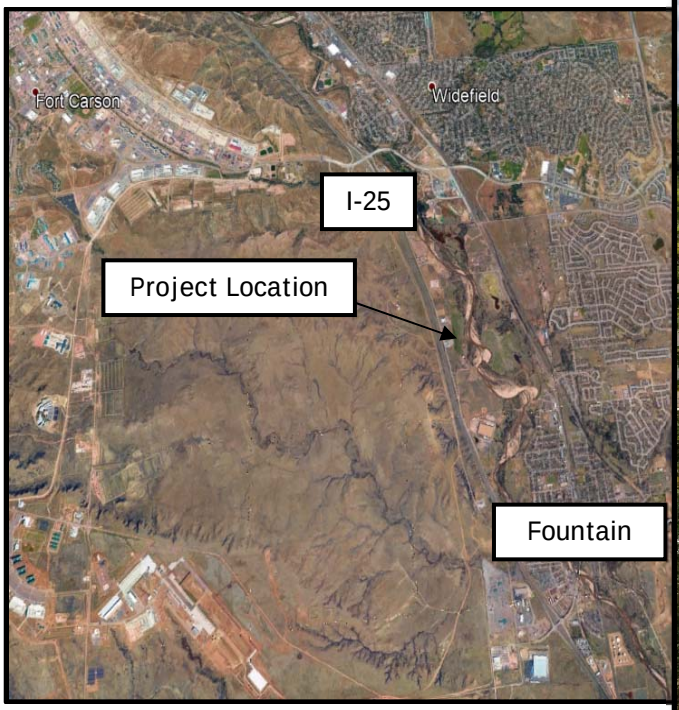
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 100% Mid -0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	4,961 AF



LOCATION			
County:			El Paso
Water Source:			Fountain Creek
Drainage Basin:			Arkansas
Division:	2	*District:*	10

The Chilcott Ditch Company operates the Chilcott Ditch for the benefit of its shareholders by providing direct flow irrigation water. The ditch diverts from Fountain Creek, just north of the Town of Fountain, and water travels through the Company's eight-mile-long ditch to land under the ditch as well as to an augmentation station that measures return flow to Fountain Creek on behalf of shareholders taking delivery of their pro-rata share through the augmentation station. Over time the streambank near the augmentation station has eroded and undercut the augmentation station flume. This has caused concern about the structural stability and discharge functionality and operation of the augmentation station. The Company has concluded that the protection of the augmentation station is needed. The Company desires to stabilize the embankment and reconstruct the outfall and sand discharge line considering a 100-yr flood recurrence interval and associated streamflow and water surface profile. Construction is scheduled for the fall of 2018/winter of 2019.



Current streambank and outfall conditions

Colorado Water Conservation Board

Construction Fund, Special Funds and Severance Tax Funds
Non-Reimbursable Investments Status Report
Fiscal Year 2017-2018

Construction Fund – Non-Reimbursable Investments

The Colorado Water Conservation Board (CWCB) Non-Reimbursable Investments Status Report has two sections. This section includes the non-reimbursable investment projects from the Construction Fund, Special Funds and Severance Tax Perpetual Base Fund. The following table summarizes the non-reimbursable investment projects in progress from July 2017 thru June 2018. This table provides the beginning balances, contracted, disbursed and funds available for each project during the fiscal year. Following this table, are project summaries provided by each project manager that detail the implementation and status of each project. Following this section is the Severance Tax Operational Fund Grant Program status for the same period.

No.	Staff	Project	July 1 Balance	Amount Contracted	Disbursed	Amount Not Contracted
1	Bassi	Acquisitions-Wtr for Instream Flow	$1,000,000	$88,879	$136,318	$774,803
2	Bassi	CWCB Stream Gaging	$18,080	$0	$18,000	$80
3	Bassi	ISF Engineering Support Services	$56,757	$15,434	$6,391	$34,932
4	Bassi	Satellite Monitoring – SEO	$487,124	$0	$487,075	$49
5	Bassi	Stream Gage Fund	$250,000	$0	$58,480	$191,520
6	Houck	Chatfield Channel Improvement	$131,014	$0	$93,000	$38,014
7	Houck	Co Floodplain Map Modernization	$1,694,445	$121,620	$230,322	$1,342,503
8	Houck	Fish and Wildlife Resources Fund	$2,275,634	$427,742	$1,352,610	$495,282
9	Houck	Flood and Drought Response Fund	$784,302	$87,123	$366,445	$330,734
10	Houck	Rio Grande Forecasting Develop	$10,202	$0	$22	$10,180
11	Houck	Tamarisk Control Cost-Sharing Prg	$1,357,125	$161,264	$1,157,862	$37,999
12	Houck	Water Forecasting Partnership	$915,836	$297,169	$446,575	$172,092
13	Houck	Watershed Restoration	$14,354,719	$1,108,296	$5,391,434	$7,854,989
14	Houck	Weather Modification Program	$630,796	$77,414	$538,382	$15,000
15	Finnessey	Climate Change Effects on Water	$27,048	$0	$26,928	$120
16	Finnessey	Colorado Mesonet	$154,759	$57,109	$96,895	$755
17	Finnessey	Drought Mitigation Strategies	$124,091	$59,329	$59,590	$5,172
18	Finnessey	Water Adaptation Partnership Prg	$20,056	$0	$0	$20,056
19	Johnson	Statewide Water Supply Initiative	$810,332	$311,233	$294,026	$205,073
20	Johnson	Water Conservation Data Tracking	$29,919	$2,694	$27,225	$0
21	Johnson	Water Con Public Awareness Study	$29,062	$0	$0	$29,062
22	Johnson	Water Loss Control Initiative	$1,100,000	$0	$0	$1,100,000
23	Johnson	Water Planning Studies	$100,000	$0	$0	$100,000
24	Newman	Alt Ag Water Transfer Sustain Prg	$884,978	$376,329	$257,749	$250,900
25	Newman	Arkansas River Decision Support	$2,213,527	$1,289,004	$761,203	$163,320
26	Newman	Bear Creek Reservoir Reallocation	$2,500,000	$0	$0	$2,500,000
27	Newman	Co Decision Support Systems O & M	$250,853	$87,315	$163,538	$0
28	Newman	Co Flood Decision Support System	$69,239	$0	$0	$69,239
29	Newman	Co River Augmentation Project	$62,500	$0	$0	$62,500
30	Newman	Co River Delta in Mexico Consult	$3,056	$0	$70	$2,986
31	Newman	Co Water Needs & Alternatives	$781,014	$12,037	$20,960	$748,017
32	Newman	Emergency Dewatering Grant Prg	$94,311	$13,869	$80,442	$0

No.	Staff	Project	July 1 Balance	Amount Contracted	Disbursed	Amount Not Contracted
34	Newman	Litigation Fund	$3,682,607	$0	$505,512	$3,177,095
35	Newman	L. So Platte Water Mgmt & Storage	$500,000	$0	$0	$500,000
36	Newman	SP Groundwater Level Data Collect	$432,933	$13,460	$142,936	$276,537
37	Newman	South Platte Storage Study	$59,161	$24	$59,137	$0
38	Newman	UDSA Regional Con Partnership	$493,501	$251,986	$209,382	$32,133
39	Newman	Underground Storage Pilot Project	$200,000	$100,000	$100,000	$0
40	Newman	Water Resource Info Center	$412,742	$6,070	$4,930	$401,742
41	Newman	Wild and Scenic Rivers Fund	$526,357	$88,779	$137,387	$300,191
42	Ris	Co Water Plan Implementation	$15,000,000	$3,606,806	$730,706	$10,662,488
43	Ris	Water Education Foundation	$150,000	$0	$150,000	$0
44	Russell	Chatfield Res Reallocation Project	$962,216	$0	$275,249	$686,967
45	Russell	Chatfield Res Reallocation Imp.	$56,058,579	$40,154,822	$14,297,650	$1,606,107
46	Russell	Chatfield Res Reallocation Study	$17,015	$0	$0	$17,015
47	Russell	Feasibility Study Grant Fund	$357,641	$0	$141,292	$216,349
48	Russell	Max Precipitation for Rainfall Spill	$751,569	$8,689	$633,058	$109,822
49	Russell	Reservoir Dredging Project	$1,000,000	$969,994	$24,378	$5,628
50	Russell	Rio Grande Cooperative Project	$1,000,237	$365,260	$634,977	$0
51	Russell	Rocky Mt. Fen Demonstration	$100,000	$0	$0	$100,000
52	Russell	Non Potable Water Use Reg Update	$260,000	$0	$260,000	$0
53	Russell	Windy Gap Res Bypass Channel	$2,200,000	$0	$0	$2,200,000
		Total Balances for Non-Reimbursable Investments	$117,522,337	$50,174,268	$30,499,320	$36,848,749

Details of the Status of the above Projects are as follows:

1. Acquisitions of Water for Instream Flow
   Authorization: HB 08-1346
   Water Source: Statewide Streams
   Location: Statewide
   Sponsor: CWCB
   Project Type: Water Acquisitions
   Project Manager: Linda Bassi
   Beneficiary: Statewide Water Users

   In Fiscal Year 2013-2014, CWCB and the Colorado Water Trust (CWT) executed a Master Task Order Contract under which the Trust will perform tasks related to the instream flow water acquisition program, including, but not limited to, preliminary evaluation of whether water rights offered for instream flow use will provide benefits to the ISF Program; hydrologic, engineering, and other technical analyses required to change acquired water rights to instream flow use; and economic valuation of water rights. The contract is for a term of up to 5 years and for an amount not to exceed $500,000.

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

   In Fiscal Year 2015-16, an amount of $70,213 was disbursed to the CWT pursuant to the Master Task Order contract. The funding was used for different aspects of the same projects that were identified in 2014-2015. In addition to the CWT contract, $12,006 was utilized for operation and maintenance of the Skyland Metropolitan District Breem Ditch ISF gage; and $12,666 was used in the development of an online accounting system to track acquired water rights.

In Fiscal Year 2016-17, an amount of $85,723 was disbursed pursuant to the Master Task Order contract. The funding was used for the McKinley Ditch acquisition project, as well as the Yampa River and Twin Lakes projects. In addition, a new task order to develop a monitoring plan for previously acquired rights was initiated and funded.

In Fiscal Year 2017-18, an amount of $136,318 of was disbursed pursuant to the Master Task Order contract. The funding was used for the McKinley Ditch acquisition project, Yampa Project, monitoring of existing acquisitions, Jasper Reservoir Project, and the Request for Water Acquisitions Pilot Program. In addition, several new task orders were approved for the following projects: San Miguel Project, St. Vrain Project, and the Poudre River Instream Flow Augmentation Plan.

2. CWCB Stream Gaging

Authorization: SB 01-157 to HB 06-1313
Water Source: Statewide Streams
Location: Statewide
Sponsor: CWCB
Project Type: Stream Gaging
Project Manager: Linda Bassi
Beneficiary: CWCB Staff, and Statewide Water Users

As the state's water planning agency, CWCB relies upon gages operated by the Division of Water Resources (DWR), United States Geological Survey (USGS) and private entities in order to meet the needs of its mission critical program areas, including Water Supply Planning, Compact Protection, Decision Support System Development, Floodplain Management and Stream and Lake Protection. However, CWCB gaging needs are often different from those of the DWR and USGS. Although many existing gages provide needed data, the DWR's mission is to administer the state's water rights, while the USGS collects data for cooperating entities as well as for long-term scientific record purposes. As a result, stream gages are not always located where CWCB needs them, nor are they necessarily designed to fit CWCB data collection parameters. Implementation of this project enables CWCB to strengthen its cooperative efforts with the DWR and USGS to expand, refurbish, redesign and install new gages as well as develop new cost effective strategies to obtain data that will benefit both CWCB and statewide stakeholder interests. This fund is nearly depleted and the primary source for CWCB stream gage funding transitioned to item 5 below. As a result, staff has requested to de-authorize the remaining balance of $80.

In Fiscal Year2017-2018, the CWCB:

- provided funding for operation and maintenance of the instream flow bypass and diversion structure for administration of the Breem Ditch water right acquisition, in cooperation with Skyland Metropolitan District.

3. Instream Flow Engineering and Technical Support Services

Authorization: SB 05-084 to HB 10-1250
Water Source: N/A
Location: Statewide
Sponsor: CWCB
Project Type: Technical Services
Project Manager: Brandy Logan
Beneficiary: Statewide

This project entails the continued implementation of a statewide engineering and technical support services program to help address consulting engineering and other professional service needs of the Colorado Water Conservation Board's Instream flow and Natural Lake Level Program. In 2018, the CWCB utilized these funds to hire an expert to support instream flow appropriations.

4. Satellite Monitoring System – State Engineer's Office

Authorization: HB 93-1273 to HB 17-1248
Water Source: Statewide Streams
Location: Statewide
Sponsor: State Engineer's Office
Project Type: Stream Gaging
Managers: B. Logan / M. Hardesty
Beneficiary: Statewide Water Users

The Satellite Monitoring System includes funding for maintenance and refurbishment of the State Engineer's Satellite Monitoring System. The State Engineer is continuing to make progress in its replacement of out-dated data collection platforms and satellite telemetry transmission components and refurbishment/renovation of gaging stations. The funds support the continued operation of over 600 stream gages throughout the state.

5. Stream Gage Fund
Authorization: SB 07-122
Water Source: Statewide Streams
Location: Statewide
Sponsor: CWCB
Project Type: Stream Gaging
Project Manager: Linda Bassi
Beneficiary: Statewide Water Users

This is the CWCB's primary fund used for stream gaging activities, as the original fund authorized under CWCB's Projects Bills in 2001 through 2006, was nearly fully disbursed in March 2018 (item 2 above). Staff has identified and is working on scoping equipment needs and collaborative efforts with USGS and DWR on multiple gaging projects throughout the state. In addition, staff continues to work with various stakeholders to identify and plan for future stream gage installations that will aid Board programs with an objective of prioritizing gages that benefit multiple CWCB sections and stakeholders. When possible, matching funds or in-kind services will be requested from participating stakeholders.

In Fiscal Year 2017-2018, the CWCB:

- purchased integrated pressure sensor data logging equipment;
- provided funding for operation and maintenance of the Dolores River near Slick Rock, CO stream gage, in cooperation with the USGS and San Miguel County;
- purchased a new handheld acoustic doppler velocimeter to improve accuracy of stream discharge measurements for ISF recommendations and CWCB stream gage calibrations;
- purchased electronic tablets used for field data collection and analysis;
- installed and maintained temporary stream gages on Spring Creek, Milk Creek, Stinking Gulch, North Fork Little Thompson River, Monitor Creek, Deep Creek, and Little Cimarron River; and
- provided funding for ISF recommendation field work and investigations

6. Chatfield Channel Improvement
Authorization: SB 79-537 – SB 90-41
Water Source: South Platte River
Location: Downstream of Chatfield Reservoir
Sponsor: CWCB
Project Type: Flood Control
Project Manager: Joe Busto
Beneficiary: Denver Metro Area

Since inception, these funds assisted in constructing a flood control project to accommodate flood releases out of Chatfield which is owned and operated by CWCB. Each year the project is inspected by the Omaha Army Corps of Engineers. This funding has been used for maintenance and repair activities. Some Funding should be replenished in there every year in order to continue with vegetation removal and maintenance and repair activities as prescribed by the Corps of Engineers. Due to the relationship with the Reservoir Reallocation Study and implications to floodplain maps in Sheridan, Englewood, and Littleton additional funding would continue activities that will help the CWCB maintain a minimally satisfactory rating through the Corps Public Works Inspection Program. $50,000 was spent in May 2018 on vegetation removal on banks and sand bars near Union Avenue, Bellevue Avenue, and at the project start where South Platte Park meets the CWCB owned flood control project projects. Another $50,000 will be spent in late fall 2018 to continue to chip away at vegetation on sand bars and in the rip rap which is the max CFS release level or 5,000 cfs out of Chatfield. Related to this Project the third and final phase of "South Platte River Run" is nearing completion adding five new recreation friendly drop structures to the two that were previously constructed in 2016. In addition to being a flood control project this reach is also a new recreation draw that brought river surfing to Denver.

7. Colorado Floodplain Map Modernization
Authorization: SB 03-110 to HB 17-1248
Water Source: N/A
Location: Statewide
Sponsor: CWCB
Project Type: Floodplain Delineation
Project Manager: Thuy Patton
Beneficiary: Statewide

This program is a federally funded but state-managed floodplain mapping program, with matching funding from state and local governments. Floodplain maps originally prepared as part of the Federal Emergency Management Agency's (FEMA's) National Flood Insurance Program (NFIP) are being updated and revised. The new maps are digital and are prepared in a countywide format. Beginning in Fiscal Year 2004, CWCB worked directly with FEMA and the affected local governments to start the process of updating and revising old Flood Insurance Rate Maps into the new digital format. Counties, which include the county and its

incorporated communities, that have been completed or are in progress are: Boulder, Garfield, Pitkin, Fremont, Clear Creek, Pueblo, Weld, Summit, El Paso, Rio Grande, Montrose, Morgan, Prowers, Logan, Chaffee, Prowers, La Plata, Montezuma, Mesa, Delta, Elbert, Fremont, Las Animas, Larimer, Teller, Clear Creek, Park, Rio Blanco, and Gunnison Counties and the City of Boulder.

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

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

The CWCB Map Modernization program has been instrumental for leveraging local and state funds to maximize federal grants to the program. Typically the local funding is contributed to CWCB at some point during the project duration. The local contribution is reflected as a donation as listed above. Colorado is seen as a floodplain mapping leader within FEMA Region VIII and within the country as a whole.

8. Fish and Wildlife Resources Fund

Authorization: SB 01-157, HB 02-1152
Water Source: Various
Location: Various
Sponsor: CWCB
Project Type: Grant Program
Managers: Chris Sturm / Carlee Brown
Beneficiary: Statewide

In 1987, HB 87-1158 created the Fish and Wildlife Resources Account, also known as the "Mitigation" Account, in the Construction Fund. Procedures for obtaining mitigation grant approvals are found under section 37-60-122.2, CRS. SB 01-157 transferred the account into a special fund. Expenditures from the fund in Fiscal Year 2017 were to support travel associated with the Platte River Recovery Implementation Program via a Long Bill appropriation.

Three grants are currently active with funding from the Fish and Wildlife Resources Fund. The Chatfield Reservoir Mitigation Company was awarded $814,270 for channel stabilization and restoration on Plum Creek, and the Urban Drainage and Flood Control District was awarded $439,000 for flood mitigation and habitat improvement on the South Platte River below Chatfield. Both grants were awarded funding in FY 2017, and are actively implementing projects. The Buckhorn Valley Metro District was awarded $549,700 in FY 2018 for the Abrams Creek Project. It is nearing completion.

9. Flood and Drought Response Fund

Authorization: SB 01-157 to HB 17-1248
Water Source: All Colorado Streams
Location: Statewide
Sponsor: CWCB
Project Type: Response to Flood & Drought
Managers: Kevin Houck / Taryn Finnessey
Beneficiary: Statewide

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

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

Monies from this account continued to be used for post-wildfire flood mitigation purposes as well as the damaging floods from September 2013.

Specific tasks accomplished using funds from this account during FY 2018 included the daily Flood Threat Bulletin during the flood season from May through September, and seasonal climate forecasts from the University

of Colorado for the purpose of flood and drought forecasting. In addition, numerous projects associated with general flood prediction, mitigation and recovery were funded. These included a cost share for analysis and designs of two flood mitigation projects in Canon City, a reevaluation of flood hydrology for both the Colorado and Arkansas River mainstems for the purposes of updating floodplain maps and flood risk data, a cost share for the Fluvial Hazard Mapping Pilot Program, and an update to the Colorado Flood Hazard Mitigation Plan, a component of the update to the Colorado All-Hazard Mitigation Plan.

10. Rio Grande Forecasting Development Project Implementation

Authorization: SB 13-181
Water Source: Rio Grande & Conejos Rivers
Location: Rio Grande
Sponsor: CWCB, USBR, Rio Grande BRT
Project Type: Demonstration Project
Project Manager: Kevin Houck
Beneficiary: Rio Grande Water Users, West Gulf River Forecast Center, DWR

A NOAA mobile weather radar was rented and used from October 2016 through March 2017 to scan all winter precipitation events and create radar precipitation estimates for the national water model, NASA ASO was hired for the third time to conduct one spring snowpack mapping flight of the Conejos and Rio Grande Basins on June 8, 2017. The National Center for Atmospheric Research was hired to help permit and deploy snow data stations in the Rio Grande and also provide non official forecast modeling for comparison to the official water supply forecast modeling provided by both the NRCS Snow Survey Program and the West Gulf River Basin Forecast Center in Fort Worth, TX.

11. Tamarisk Control Cost-Sharing Program

Authorization: HB 08-1346, SB 12S-002, HB15-1006
Water Source: Various
Location: Various
Sponsor: CWCB
Project Type: Phreatophyte Control
Managers: Chris Sturm / Erik Skeie
Beneficiary: Statewide Water Users

This activity combines two distinct $1 million authorizations from the Construction Fund. HB08-1346 created what is now called the Phase 1 TRO Grant Program. Grants ranging from $10,000 to $100,000 were awarded to the entities in 2009 and all work completed by December 2013. The remaining funds from the 2008 authorization have been rolled into the 2012 program described below. Staff will be posting the final reports from each project on the Board's website.

Pursuant to SB14-195, the Board is conducting a study of the effects of the 2013 flood event on phreatophyte recruitment and water use in the S. Platte basin. SB195 instructed the Board to use funds available within the IPCP grant authorization to conduct the study, and approximately $125,000 has been budgeted for that purpose. Several researchers from Colorado State University, the Colorado Water Institute, and the Tamarisk Coalition have been hired to conduct the study. An interim report was reviewed by the Board and provided to the General Assembly as required in May 2016, with a final report due in December 2016.

Senate Bill 12S-002 authorized an additional $1 million grant program, the Invasive Phreatophyte Control Program, which is now managed by the Watershed and Flood Protection Section. In January 2014, five applications to the Invasive Phreatophyte Control Program (IPCP) were awarded funding totaling $238,090. Grants were awarded to the Ute Mountain Ute Tribe (Mancos River), Denver Parks and Rec (Bear Creek), Yuma County Pest Control District (Republican River), Weld County Weed Division (St. Vrain River), and Larimer County Weed District (Swift Ponds). CWCB also entered into two one-year agreements, each for $50,000, with the Colorado Youth Corps Association wherein the CYCA awarded mini-grants to regional Youth Corps units working with local governments and landowners to do control projects.

In Fiscal Year 2014-2015, four projects were completed. The total grant amount for those projects was $133,530. Eight projects that were awarded funding in the 2014 remain active. Total funding for these projects is $482,802. In addition, $80,000 was awarded to the Colorado Youth Corps Association to fund 6 Youth Corps projects across the state. $50,000 was awarded in February, 2015, with the additional $30,000 awarded in July, 2015.

In Fiscal Year 2015-2016, HB 15-1006 authorized $2 Million for Fiscal Year 2015-2016 and Fiscal Year 2016-2017 (totaling $4 Million) for the grant program. Due to its Tier 2 nature, only $1.8 Million was provided in FY 15/16, and there were no additional funds in FY16/17. A total of 20 projects received funding ($1,884,900), all of which were completed by June 30th, 2018.

12. Water Forecasting Partnership Project

Authorization: SB 16-174
Water Source: Rio Grande & Conejos Rivers
Location: Rio Grande & Gunnison Basins
Sponsor: CWCB
Project Type: Forecasting
Project Manager: Joe Busto
Beneficiary: Statewide

The Water forecasting partnership project is a continuation of work that originated in the Rio Grande where the NASA Aerial Snow Observatory, mobile radars, implementation of the national water model and gap filling data were all showed utility and were used to increase the accuracy of official water supply forecasts for the Rio Grande. Planned expenditures for this project are mapping the Gunnison Basin above the Aspinall Unit with the NASA ASO, new gap filling snowpack data in the Taylor River Basin, and matching funding for the purchase of a weather radar in partnership with a large coalition in the Rio Grande. Funding from this program is slated to match other grants and funding to purchase and deploy a permanent weather radar for the Alamosa airport in partnership with Alamosa County, all the Counties in the Rio Grande, and several water districts. We lso funded a small siting new SNOTEL sites study with Jeff Deems of the Snow and Ice Data Center in Boulder to prepare for future ground data sites in the Gunnison Basin. We also plan to provide on peak SWE flight with the NASA ASO in the Gunnison Basin in April 2019.

13. Watershed Restoration
Authorization: HB 06-1313 to HB 17-1248
Water Source: Various
Location: Statewide
Sponsor: CWCB
Project Type: Watershed Restoration
Project Manager: Chris Sturm
Beneficiary: Watershed Interests

The grant funding has been allocated to projects through the CWCB Colorado Watershed Restoration Program January 2015 - 2018 competitive grant cycles. Complete projects from the October 2015 grant cycle include wetland restoration in the upper Animas watershed, riparian re-vegetation in gullies formed by the Waldo Canyon fire in the Fountain Creek watershed, post fire restoration design in the Poudre River watershed, education and outreach for the fledgling Purgatoire Watershed Partnership, and riparian re-vegetation on James Creek in Jamestown. The October 2015 grant cycle approved stream management planning grants for the San Miguel River, North Fork Gunnison River, and Yampa River in Steamboat. Of these, the latter two are complete. The Colorado River Roundtable received a grant to work on a stream management plan framework in 2015, and it is complete. The Colorado Water Trust's funding to develop a stream management plan workshop is complete as well. Several 2013 flood affected watershed coalitions were awarded grants to support capacity. These grants continued into 2018. They include the Big Thompson, Little Thompson, Estes Valley, Coal Creek, Left Hand, and St. Vrain Creek coalitions. The Little Thompson capacity grant is complete. The others remain active and continue leverage large federal capacity grants. Complete grants from the Nov 2016 grant cycle include gully re-vegetation in the Waldo Canyon burn area and riparian re-vegetation on the Swan River. Active projects from the 2016 grant cycle include channel restoration in the High Park Fire (Poudre Basin) and river restoration on the Colorado River in Grand Junction. In 2016, Stream Management Planning grants were awarded for the South Platte below Chatfield, Roaring Fork, and the Upper Gunnison Watershed. These planning efforts remain active. The 2016 River Network grant to help local watershed groups and districts develop Stream Management Plan grant applications is complete. They are presently working on a 2017 grant to continue to support the development of Stream Management Plans.

Other November 2017 grant cycle Stream Management Plan awards were given to the Mancos Conservation District, Mountain Studies Institute (SW Basin – Pagosa area), St. Vrain and Lefthand Water Conservancy District, Eagle River Watershed Council, Middle Colorado Watershed Council, Republican River Water Conservation District, Coalition for the Poudre River Watershed, and the Colorado Rio Grande Restoration Foundation. The Colorado Water Trust was awarded a grant in 2017 to implement parts of the Crystal River Stream Management Plan. Other 2017 grant awards include riparian plant development for the CSU Nursery (complete), continued re-vegetation of the Waldo Burn Area scar, capacity support for RiversEdge West (formally Tamarisk Coalition), stream restoration in South Park, 2013 flood recovery project monitoring, adaptive management of 2013 flood recovery projects, invasive plant removal on the Dolores, Gunnison, and Colorado Rivers, stream restoration on Cherry Creek in Denver, stream restoration on the Crystal River, forest health education and outreach in the Dolores River Watershed, fish passage construction and monitoring on the Poudre River in Fort Collins, habitat enhancement on the Slate River, watershed and stream restoration in the Upper Gunnison tributaries, monitoring on the Swan River, flood mitigation on Willow Creek in Creede, and stream restoration design on Fountain Creek.

14. Weather Modification Program
Authorization: HB 04-1221 to HB 17-1248

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

Project Type: Cost Share Grants
Project Manager: Joe Busto
Beneficiary: Statewide

CWCB funds of $175,000 were matched with $255,000 in Lower Basin Funds and $15,000 from the New Mexico Interstate Stream Commission. In partnership with WSRF, two Idaho Power remote seeders were purchased for the Central Colorado Mountains Program managed by the Colorado River District that will be deployed in September 2018. Funding was used to continue a lease with an option to purchase a radiometer; which was deployed all winter in Cortez, Colorado, for winter 2017-18. Funding was also provided to operational grants for the permitted programs: Central Mountains, Grand Mesa, Gunnison, Telluride/Dolores, Western San Juan Mountains, and Eastern San Juan Mountains Programs. The successful partnership at a regional level continues and a new nine-year agreement signed by all seven states will continue to provide up to $500,000 each winter to each upper Basin State to support local cloud seeding in Colorado as part of the drought contingency planning of the Seven States. As of September 2018 for winter 2018-19 the seven state group now called the Colorado River Basin Weather Modification Technical Advisory Committee approved $345,000 that the CWCB will contract for seeding operations and fabricate a new remote generator for the San Juan Mountains.

15. Climate Change Effects on Colorado Water Resources Study
Authorization: HB 08-1346
Water Source: N/A
Location: Statewide
Sponsor: CWCB

Project Type: Study
Project Manager: Taryn Finnessey
Beneficiary: Statewide

Climate change has the potential to greatly impact Colorado's natural resources, especially water resources. In support of local government efforts to prepare for and adapt to the effects of climate change CWCB is working to implement the Governors Executive Order on climate change and in 2018 held the Colorado Communities Symposium; which included a track on water as well as facilitated discussions intended to develop a roadmap for addressing climate change in the coming years, implementation of this is already underway.

16. Colorado Mesonet
Authorization: SB 15-253 to HB 17-1248
Water Source: N/A
Location: Statewide
Sponsor: CWCB/CSU

Project Type: Weather Monitoring
Project Manager: Taryn Finnessey
Beneficiary: Statewide

These funds were used for improving and expanding the Colorado Agricultural Meteorological Network (CoAgMet) towards a multipurpose state "Mesonet" focusing both on agricultural and water resources as well as long-term climate monitoring and short term real-time weather tracking to aid weather prediction, emergency management and long term water planning. This year the funds were used to: improve data access and analysis and mapping; Develop and display new drought tracking tools to indicate plant water stress; develop and implement an effective access and display web portal based on input and guidance from data users and the Colorado Mesonet advisory committee; begin upgrading selected Colorado Regional Climate Reference Network (CO-RCRN) stations to measure and report all variables needed for reference ET calculation and include these in the CoAgMET Ref ET data flow; complete data comparison of CO Regional Climate Reference Network stations with co-located CoAgMET stations (Center, Rocky Ford, Sand Creek Massacre, Kirk) and determine bias corrections. Do 13-year trend analysis of temperature data from the Climate Reference Stations and compare to 100-year records at nearest NWS COOP stations; and work with National Weather Service "National Mesonet" contractor to showcase CWCB support for CoAgMET to leverage federal funds.

17. Colorado Drought Mitigation Strategies Implementation
Authorization: HB 14-1333
Water Source: N/A
Location: Statewide
Sponsor: CWCB

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

In compliance with the Federal Emergency Management Agency (FEMA) requirements, CWCB in nearly complete with a third comprehensive revision to the State Drought Mitigation Response Plan, to be approved by the CWCB Board in September 2018, Governor Hickenlooper and FEMA in will receive the plan for review

after DSHEM has integrated it into the broader all hazards state mitigation plan. CWCB has contracted with AMEC Foster Wheeler for the project and has remained on budget and within scope.

18. Water Adaptation Partnership Program

Authorization: SB 09-125
Water Source: N/A
Location: Various
Sponsor: CWCB
Project Type: Planning
Managers: T. Finnessey/B. Macpherson/ M. Garrison/J. Busto
Beneficiary: Statewide

One of the goals of Gov. Hickenlooper 2017 Executive Order on Climate Change, as well as the Colorado Climate Plan, released in January 2018, is to prepare the state to adapt to unavoidable climate changes. To help meet that goal, CWCB has partnered with multiple state agencies and stakeholders to undertake Water Adaptation Projects to increase understanding of climate change; communicate the information to those who need to plan and implement adaptation strategies and build partnerships that will produce the models and data upon which actions are based. CWCB is working to implement its strategy in the following areas: enhance our climate observation systems with the goal of identifying long-term trends; scrutinize and detect bias in climate change models; fund partnerships to ensure new data is useful at a local planning level; adapt information for use in the Colorado Decision Support System; utilize information to meet federal drought planning requirements; and to improve forecasting and projections.

With 2018 a significant dry year in Colorado- we have a number of project about to kick off that will help to further these objectives and expect this fund to be fully encumbered in FY2019.

19. Statewide Water Supply Initiative Continuation

Authorization: SB 13-181, SB 16-174
Water Source: N/A
Location: N/A
Sponsor: CWCB
Project Type: Study
Project Manager: Russ Sands
Beneficiary: Statewide Water Users

The ongoing SWSI update will serve two primary purposes: Provide a consistent statewide framework for examining future water supply and demand under different scenarios, and provide tools and data for Basin Roundtables to use in updating their Basin Implementation Plans (BIPs) and developing detailed local solutions to identified gaps.

Since this is the first time that SWSI is completed in the context of Colorado's Water Plan (CWP) and the Basin Implementation Plans (BIP), this SWSI update will be different from previous versions. SWSI 2010 was a relatively straightforward update of the original SWSI 2004 analysis, and did not focus on methodology refinement. In addition to complementing CWP and the BIPS, this SWSI update will also include a number of new approaches and additions, such as quantifying a scenario planning approach, providing a more detailed and scientifically rigorous hydrologic modeling approach, and addressing agricultural, environmental, and recreational gaps. As a result, the first step in this SWSI update involves reviewing and refining the methodologies with stakeholder input from Technical Advisory Groups (TAGs), designed to ensure that the new methodologies are scientifically sound, effective, and appropriate.

20. Water Conservation Data Tracking Project

Authorization: HB 11-1274
Water Source: N/A
Location: Various
Sponsor: CWCB
Project Type: Research Study
Project Manager: Kevin Reidy
Beneficiary: Statewide Water Users

To better understand Colorado's future water supply needs and options, more local information must be incorporated into demand forecasts. During the last 5 years, water providers have been submitting water use and water efficiency data into the Water Efficiency Data Portal which now houses 5 years of data. The data collected from the portal is informing planning work and is being mined for the current SWSI update. CWCB staff is also working with Leonard Rice Engineers on additional output tools and reports as needed and has set up a multi-year maintenance (out to 2020) and customer support plan to spend down the remaining balance.

21. Water Conservation Public Awareness Research Study

Authorization: SB 07-122
Water Source: N/A
Location: Statewide
Project Type: Research Study
Project Manager: Russ Sands

Sponsor: CWCB Beneficiary: Statewide Water Users

A statewide water awareness survey and report (formerly referred to as the value of water study) were completed several years ago. This report is available on-line, and provided some insights to public perceptions that fed into portions of Colorado's Water Plan.

22. Colorado Water Loss Initiative
Authorization: HB 17-1248
Water Source: N/A Project Type: Technical Assistance
Location: Various Project Manager: Kevin Reidy
Sponsor: CWCB Beneficiary: Statewide

The Colorado Water Loss Initiative is a comprehensive program of training, technical review and assistance for approximately 165 urban water systems across Colorado to attain an effective level of competency with the American Water Works Association (AWWA) water balance and audit concepts, and the free AWWA Water Audit Software. The AWWA methodology is considered the industry standard for water loss control and management. This 24 to 30-month program includes multiple "touch points" for establishing principles & practice and reinforced understanding. The goal for participating water utilities to learn how to apply the methodology to their water system and to achieve a complete and transparent water loss audit. Recruitment of water providers began in mid-August 2018 with the first training to take place in Spring 2019.

23. Water Planning Studies
Authorization: SB 99-173, SB 09-125
Water Source: N/A Project Type: Water Planning
Location: N/A Project Manager: Russ Sands
Sponsor: CWCB Beneficiary: Statewide

Funding has been used for various water planning studies as needed. Fiscal Year 2018 efforts have been devoted to the implementation of Colorado's Water Plan and funds for these studies were not utilized. As needs arise, these funds will be available for new water planning studies.

24. South Platte River and Arkansas River Basins Alternative Agriculture Water Transfer Sustainability Grant Program
Authorization: SB 07-122 to HB 17-1248
Water Source: Statewide Project Type: Alternative Methodologies
Location: Statewide Project Manager: Alex Funk
Sponsor: CWCB Beneficiary: Statewide Water Users

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

Through FY 2017-2018, the Board approved thirty-one grant applications that totaled approximately $45,720,948. The most recent amount awarded in May 2018 was $150,000 for an ATM/Conservation Easement in Colorado's San Luis Valley with the Rio Grande Headwaters Land Trust as fiscal agent.

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

25. Arkansas River Decision Support System (ArkDSS)

Authorization: SB 07-122, HB 11-1274, SB 13-181, HB 14-1333, SB 15-253
Water Source: N/A
Location: Arkansas Basin
Sponsor: CWCB
Project Type: Decision Support System
Project Manager: Brian Macpherson
Beneficiary: Statewide Water Users

With $200,000 authorized in SB 07-122, the ArkDSS feasibility study began in February 2010, and the final report was completed in December 2011. At the July 2011 Board Meeting, the feasibility study results were presented, and the plan for implementation of the ArkDSS was approved by the Board. In the subsequent above-mentioned authorizations, $2,250,000 has been allocated for the development of ArkDSS. Previously, work had been completed on several aspects of ArkDSS, including coordination on several Roundtable projects and DWR Division 2 work, and installation of a gage on Fountain Creek.

A Request for Proposals (RFP) for three major components of ArkDSS was released in late 2016. These components include (a) spatial system integration (GIS); (b) consumptive use analysis and surface water data and modeling; and (c) administration and accounting tool development. Contractors were selected early in 2017 and are now under contract with work underway; the total of the three contracts is approximately $2,100,000. This first phase of ArkDSS is expected to be completed in approximately two years.
Each of the three components is roughly half way through their budgets and are estimated to remain on budget. The $500,000 appropriated in 2018 is expected to expand the existing scopes in closely related areas that were identified to have remaining needs, including a study of the ASCE Standardized Evapotranspiration methodology and data review, expanded remotely sensed crop typing, and additional enhancements to the Arkansas River Transit Loss Accounting Program.

26. Bear Creek Reservoir Reallocation Study
Authorization: SB 16-174
Water Source: Bear Creek and Turkey Creek
Location: South Platte River Basin
Sponsor: CWCB/ US Army Corp of Engineers
Project Type: Reallocation Study
Project Manager: Erik Skeie
Beneficiary: Local Water Users

The Bear Creek Dam and Reservoir Project (aka "Bear Creek Lake") was completed in 1977. The project's active capacity is roughly 57,680 AF (at the spillway crest) and is currently operated at a maximum priority storage volume of roughly 1,930 AF. In May 2015, the U.S. Army Corps of Engineers ("the Corps") completed a reconnaissance study that concluded that 20,000 AF of storage may be available in Bear Creek Lake for reallocation while maintaining the structure's flood control and other purposes. In 2016, Senate Bill 174 was signed by Governor John Hickenlooper authorizing appropriation of $2,500,000 to work with the Corps to study the potential for reallocation of storage. In the fall of 2017, the Corps anticipates submitting an exception request package to the Corps' Dam Safety Officer to allow the reallocation study process to move forward. The exception was approved on May 23rd, 2018. The CWCB will pursue a contract with the Corps to investigate the reallocation of up to 20,000 AF of existing storage space.

27. Colorado's Decision Support Systems (CDSS) Operations and Maintenance (O & M)
Authorization: SB 13-181, HB 14-1333
Water Source: N/A
Location: N/A
Sponsor: CWCB
Project Type: O&M
Project Manager: Brian Macpherson
Beneficiary: Statewide

The primary use of these funds is to support the movement of the CDSS technical software to an Open Source format. The future support and enhancement of CDSS software tools will be facilitated in this project. The project has been underway for two years; this contract will continue for another three years.

The CDSS software is well underway to an open source platform and contributions to the software, including under the ArkDSS project, are being performed under the open source framework. Significant work has been done in the area of intellectual property, copyright, and licensing. Ongoing maintenance of software has included operating system computability, re-writing of documentation to a web-based format, and the standardization of developer environments to encourage a broader development community.

28. Colorado Flood Decision Support System
Authorization: SB 07-122 to HB 08-1346
Water Source: Statewide Streams
Location: Statewide
Sponsor: CWCB
Project Type: Decision Support System
Managers: Carolyn Kemp / Kevin Houck
Beneficiary: Statewide Water Users

The work on the FloodDSS was completed in 2011 and the website went public in May 2011. The remaining funds will be used to further enhance the Colorado Hazard Mapping & Risk Map Portal site, which has taken over many of the objectives of the FloodDSS website.

29. Colorado River Augmentation Project Development

Authorization: HB 08-1346
Water Source: Colorado River
Location: Colorado River Basin
Sponsor: CWCB/ Seven Basin States
Project Type: Study
Project Manager: Michelle Garrison
Beneficiary: Colorado River Compact

The seven Colorado River Basin States (States) have been investigating potential ways to augment and increase the water supply of the Colorado River for several years. In January 2010, the Bureau of Reclamation awarded the States a $1 million grant through the Basin Study Program, under the auspices of the Water Smart Program. The States provided a $1 million match under that application. This study's focus was on identifying the current and projected water supply and demand throughout the entire Colorado River Basin and adjacent areas of the seven States that receive Colorado River water up to the year 2060. The general focus of the Study included a comprehensive review, evaluation and characterization of current and long-term water supply and demands, and identification and quantification of future augmentation needs and recommended options to address these needs. Both consumptive and non-consumptive uses associated with Colorado River water were examined. A review and analysis of the known and potential effects of drought, and climate change on the Colorado River and their implications on current and future water supplies and associated uses in the Basin were completed. Strategies were developed and refined as needed to move forward on any needed augmentation project for the Basin. The estimated total cost of the Study originally was between $2 and $3 million depending on the final scope, but the total final cost was closer to $5 million. The seven basin states and the U.S Bureau of Reclamation (Reclamation) shared the costs of the study. Colorado has spent $87,500, and there remains $62,500 in funds that will be disbursed, as needed, within the next year or two, as we commence with implementation phases.

30. Colorado River Delta in Mexico Consultation

Authorization: HB 02-1152, HB 08-1346
Water Source: Colorado River and Tributaries
Location: Seven Colorado River Basin States and the Republic of Mexico
Sponsor: CWCB
Project Type: Compact Consultation
Managers: Brent Newman/ Michelle Garrison
Beneficiary: State of Colorado, Colorado River Basin States, and the Republic of Mexico

These funds were initially authorized for the CWCB staff and Colorado's Upper Colorado River Compact Commissioner to participate in the investigation of issues pursuant to Minute 306 of the *1944 Treaty between the United States and Mexico Concerning the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande* to assure that such investigations and any solutions that might be offered to comply with Minute 306 do not interfere with or otherwise jeopardize the terms of the Colorado River and Upper Colorado River Compacts. In addition, these funds were authorized to support the work between the United States and Mexico, who initiated a bi-national conversation about opportunities for bi-national cooperation on water projects that will have bi-national benefits. This effort resulted in the adoption of Minutes 316, 317, 318, and 319 over the last several years. In September of 2017, the United States and Mexico signed Minute 323, which commits both parties to future efforts; working together on potential Colorado River shortages, as well as future conservation and storage initiatives. These funds are being used for assistance associated with this bi-national process, and for travel and other incidental costs associated with implementation of this work.

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

Authorization: SB 07-122 to SB 12S-002
Water Source: Colorado River and its Tributaries
Location: Statewide
Sponsor: CWCB
Project Type: Water Availability Analysis
Project Manager: Brian Macpherson
Beneficiary: Statewide Water Users

Since the completion of Phase 1 of the study the Board approved the allocation of an additional $2 million for the next phase. Approximately $1,019,000 has been expended to date on Phase 2 activities including:

- Examination of the new global climate model data, CMIP 5, with comparison to the CMIP3 data used in Phase I;
- Updates to the CDSS models and tools;
- Updates to the StateMod datasets for the Yampa, White, Colorado, Gunnison, and San Juan basins, including irrigated acreage and diversion structure data, consumptive use estimates and documentation; and
- Simulations of western-slope StateMod models incorporating new global climate model data.

Work was completed for Phase II in 2017 and funds have been secured in a FY 2018-2019 Severance Tax Operational Fund project to finish documentation.

32. Emergency Dewatering Grant Program

Authorization: HB15-1178
Water Source: N/A
Location: South Platte Basin
Sponsor: CWCB
Project Type: Grant Program
Project Manager: Erik Skeie
Beneficiary: Statewide Water Users

HB15-1178 authorized CWCB to administer an emergency dewatering grant fund for areas of damaging high groundwater around Gilcrest and Sterling. On July 1, 2016, $165,000 was transferred from the General Fund to the Construction Fund for the grant program. An additional $290,000 was transferred from the General Fund for FY16-17. The Board approved a grant request for $90,000 from the Town of Gilcrest in July 2016. The dewatering plan to be operated by this grant failed due to an uncooperative Farmers Independent Ditch Company, and the funds were returned to the grant fund. A second grant to Gilcrest was approved by the Board in March 2016. This grant for $139,800 is being used to develop a long-term dewatering plan for the Town. Another grant request for the Gilcrest area (West Greeley Conservation District: $140,329.50 in year one, $107,355.60 in year two) for a Pilot Project was approved by the Board in May 2016, and the second year of the Pilot was approved in May 2017. This Pilot Project utilizes alternative water management with the goal of lowering the groundwater table. The Pawnee Ridge Homeowner's Association was awarded a grant for $128,407 in September 2016 to construct a permanent dewatering system. The Town of Gilcrest was awarded $57,986.30 to construct a permanent dewatering well near its wastewater treatment plant, which was one of the recommendations of the Dewatering Improvements Study previously completed with this funding.

33. Gunnison Basin Irrigation System Planning and Optimization

Authorization: HB 14-1333
Water Source: Gunnison River
Location: Gunnison River Basin
Sponsor: CWCB
Project Type: Salinity Control Planning
Project Manager: Brent Newman
Beneficiary: Local Water Users

Approximately 20 small grants were made to ditch companies in the Gunnison River Basin at a cost of about $125,000 enabling to obtain engineering assistance to prepare for an irrigation system improvement funding competition from the Colorado River Basin Salinity Control Program (CRBSP) in 2015. Six of these companies received awards totaling over $7 million. The balance of the funds will be used to do follow up work with the unsuccessful applicants in preparation for the 2018 CRBSP funding opportunity.

34. Litigation Fund

Authorization: HB 95-1155 to HB 17-1248
Water Source: N/A
Location: Statewide
Sponsor: CWCB
Project Type: Legal Services
Project Manager: Carlee Brown
Beneficiary: CWCB Staff, and Statewide Water Users

Each year, CWCB staff reports to the Board and the General Assembly about the status of the fund, including all expenditures from the fund. For more information, please refer to the litigation account agenda item from the May 2018 Board meeting (Item 24-b). In addition, the Board has authorized additional amounts that are not reflected in the ending balance but will be disbursed in the current fiscal year. This fund is typically refreshed each fiscal year to be restored to $2 million on July 1, from the Construction Fund.

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

Authorization: HB 00-1419, SB 01-157
Water Source: South Platte River
Location: N/A
Project Type: Multi-Use Water Planning
Project Manager: Brian Macpherson

Sponsor: CWCB Beneficiary: Potential Statewide

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

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

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

Significant changes to the State Engineers authority to administer ground water diversion (Senate Bill 73) have dramatically changed water management in the South Platte River. While GASP was successful in acquiring land for one of the physical storage sites ("Ovid Reservoir"), they have experienced significant impacts from S.B. 73. As a result, GASP is no longer a viable entity. Former members of GASP and other water management interests have formed the District 64 Reservoir Company, but it is uncertain whether the new company will be able to complete the project. A feasibility study was completed for the Ovid Reservoir site in December of 2011. The results of this study show that the reservoir is technically feasible and that several potential benefits exist for the project that warrants Colorado being a participant in the development of the project. The location of the reservoir site continues to offer potential advantages to address water user and endangered species issues/needs. Additional study for the reservoir will be required, including groundwater modeling, easement and river access analysis, and conveyance options for delivery to the reservoir.

Staff will continue to coordinate with the CWCB's Board member from the South Platte Basin as to how best to proceed in the use of these funds. Given the complexity of the project, Staff recommends that the current authorization remain in place to allow coordination with the District 64 Reservoir Company for future work associated with the potential reservoir. Additionally, the South Platte storage study currently underway as per HB16-1256 may further inform how best to proceed with this funding.

36. South Platte Groundwater Data Collection and Analysis
Authorization: SB 12S-002 to HB 14-1333
Water Source: N/A Project Type: Data Collection/Planning
Location: South Platte Basin Project Manager: Erik Skeie
Sponsor: CWCB Beneficiary: Local Water Users

This project is a cooperative effort with the Division of Water Resources in response to reported high groundwater levels in the Gilcrest-LaSalle and Sterling areas. It includes the collection of alluvial aquifer water level data at pilot projects at each of the areas. Continuous water level monitoring equipment has been installed in 20 new observation wells in the Sterling area, and groundwater level data are also being collected in 16 existing wells in the area. In the Gilcrest-LaSalle area, 47 existing wells are being monitored. Data from both areas are available online. This effort included an independent analysis and interpretation of the potential causal relationships of the high groundwater; the report was completed in July 2015. As part of this project, the SPDSS alluvial groundwater model has also been enhanced and extended to include more recent data; the updated model and report are now available. These funds were used in Fiscal Year 2017/2018 to support ongoing efforts related to high groundwater in the Gilcrest/La Salle Area. This includes funding for an electromagnetic survey around the town of Gilcrest, drainage ditch surveying work, and preliminary modeling for the Gilcrest Area Pilot Project funded under HB15-1178.

37. South Platte Storage Study
Authorization: HB 16-1256

Water Source: South Platte River
Location: South Platte Basin
Sponsor: General Assembly /CWCB

Project Type: Study
Project Manager: Brian Macpherson
Beneficiary: Local Water Users

In 2016, the Colorado Legislature passed HB 16-1256, which commissioned a study of storage sites in the South Platte Basin downstream of Greeley. As per the legislation, the funds were transferred to the Water Supply Reserve Fund, with a grant application from the Lower South Platte Water Conservancy District on behalf of the South Platte Basin and Metro Roundtables. The grant was approved by the Board in September 2016, and work was underway later that year. The study includes the evaluation of new storage sites, rehabilitation and enlargement of existing sites, and underground storage sites. The project was completed and a final report was released in 2017.

38. UDSA Regional Conservation Partnership Program (RCPP)
Authorization: SB15-253
Water Source: Gunnison River
Location: Gunnison Basin
Sponsor: CWCB

Project Type: Technical
Project Manager: Brent Newman
Beneficiary: Local Water Users

Funds are being used to support the first phase of the Gunnison Basin RCPP project sponsored by the Colorado River Water Conservation District (CRWCD). This will provide technical support to water users and ditch companies through local conservation districts and for advanced design work by the CRWCD. Construction on several features of the Phase 1 RCPP began during fiscal year 2017/2018. Further engineering and technical assistance will be provided in FY 2018/2019.

39. Underground Storage Pilot Projects
Authorization: SB16-174
Water Source: N/A
Location: South Platte and Arkansas Basins
Sponsor: CWCB

Project Type: Storage Study
Project Manager: Erik Skeie
Beneficiary: Local Water Users

Funds were authorized for underground storage pilot projects. In May 2017, the Board approved two grants for $100,000 each. The first grant was to the Upper Arkansas Water Conservancy District (District) for the Trout Creek Park Pilot Project. This project will install a recharge pond delivery system and metering equipment, monitor recharge rates and groundwater levels, and install and monitor additional test wells. The project will be complete in approximately two years. The second grant was to the City of Aurora for the Lost Creek Pilot Project. The objective of this project is to identify a suitable recharge site using site-specific data collection that builds on previous studies. This project is substantially completed, and a final report is anticipated by January, 2019.

40. Water Resource Information Center & Data Harvesting
Authorization: SB 09-125
Water Source: N/A
Location: Statewide
Sponsor: CWCB

Project Type: Water Information
Project Manager: Carolyn Kemp
Beneficiary: Statewide

Funds were provided to: (1) adopt and implement a standard for sharing/harvesting data among document management systems; (2) integrate the CWCB's and Colorado State University's (CSU) systems using the above standard; (3) join with other interested water entities who want to share their water-related information; and (4) provide funding for furthering CSU's digitization of documents, such as the Delph Carpenter collection.

The accomplishments of this initiative has concentrated on appropriating money to CSU's digitization efforts, which included scanning, indexing and making available (through the CSU Water Resources Archive) papers, maps and slides from the Littleworth collection (documenting *Kansas v. Colorado*), irrigation research papers, Delph E. Carpenter Papers, Royce Tipton Papers, North Poudre Irrigation Company records, and Wright Water Engineers records.

41. Wild and Scenic Rivers Fund
Authorization: SB 09-125
Water Source: Various
Location: Various

Project Type: Study
Project Manager: Carlee Brown

Sponsor: CWCB Beneficiary: Statewide

In 2009, the General Assembly passed legislation establishing a fund for this project that is automatically refreshed every July 1 up to $400,000 for work in this regard. Within Colorado, a number of river segments have been classified as eligible or suitable for "wild and scenic" designation by various federal agencies. In response, a number of stakeholder groups have formed to explore and implement alternatives for resource protection that may include wild and scenic designation as well as many other options. Over the past year, these groups were located in the San Juan River Basin, the Dolores River Basin, and the Upper Colorado River Basin. To date, funds have been used within each of these different basins for facilitators, informational studies, and other operating expenses. This Wild and Scenic Rivers Fund is needed to fund ongoing work, including the implementation of: 1) the Upper Colorado River Wild and Scenic Alternative Management Plan and 2) the Implementation, Monitoring and Evaluation Plan and other work by the Lower Dolores Plan Working Group in the Dolores River Basin.

42. Colorado Water Plan Implementation
Authorization: HB 02-1152
Water Source: Various Project Type: Implementation
Location: Various Managers: Lauren Ris / Kirk Russell
Sponsor: CWCB Beneficiary: Statewide

The 2017 Projects Bill (HB17-1248) included $10 million for the Board to begin implementation of Colorado's Water Plan (CWP). The Bill included $1 million for the Statewide Water Supply Initiative (SWSI) Update work, leaving $9 million for grants for projects or activities that specifically have the potential to achieve the measureable objectives identified in CWP. The Projects Bill disaggregated the $9 million into the following six grant categories: agricultural ($1 million), storage ($3 million), supply demand gap ($2 million), environment and recreation ($1 million), conservation ($1 million), and innovation and outreach ($1 million). Grant requests totaled $8.8 million and the total remaining balance is $170,000.

43. Water Education Colorado
Authorization: HB 02-1152
Water Source: N/A Project Type: Education
Location: Denver Project Manager: Lauren Ris
Sponsor: Co Foundation for Water Education Beneficiary: Statewide

Each year, CWCB staff executes a grant contract with Water Education Colorado (WECO) to provide funds for the on-going operation of the Foundation. The CWCB Board is provided with an annual presentation on WECO's work plan during the May Board meeting each year. The Board reviews, comments on, and approves the final work plan. More information is available at www.watereducationcolorado.org/ and www.cwcb.state.co.us.

44. Chatfield Reservoir Reallocation Project
Authorization: HB 08-1346
Water Source: South Platte River Project Type: Study
Location: 10 miles South of Denver Project Manager: Kirk Russell
Sponsor: CWCB, U.S. Army Corps of Engineers Beneficiary: South Plate Basin

Chatfield Reallocation is an important storage project, located along the Front Range, involving strong participation from the State as well as six other municipal and agricultural water providers. Construction is underway. This authorization provides facilitation cost associated with state-federal contracting, but project implementation costs. The remaining funds are available for the operational costs for the mitigation company to support CWCB and CPW involvement.

45. Chatfield Reservoir Reallocation Project Implementation
Authorization: SB 12S-002
Water Source: South Platte River Project Type: Construction
Location: 10 miles South of Denver Project Manager: Kirk Russell
Sponsor: CWCB, U.S. Army Corps of Engineers Beneficiary: South Platte Basin

Related to the item above, this piece of legislation focused on CWCB's role of owning storage shares in the Chatfield project. 6,883 AF out of the 20,600 AF of total project shares are owned by CWCB. CWCB will retain ownership of those shares until such time as they are used for: 1) the environmental pool or 2) sold to providers within the water community.

46. Chatfield Reservoir Reallocation Study
Authorization: SB 97-008 to SB 07-122
Water Source: South Platte River
Location: 10 miles South of Denver
Sponsor: CWCB, U.S. Army Corps of Engineers
Project Type: Reservoir Supply Study
Project Manager: Kirk Russell
Beneficiary: South Platte Basin

Funding from a series of authorizations allowed CWCB to act as the non-federal sponsor with the U.S. Army Corps of Engineers to develop a feasibility study and EIS for the Chatfield project. The contract was first signed in 1999 and was based on a 50/50 cost-share arrangement.

47. Feasibility Study Grant Fund
Authorization: SB 99-173 to HB 17-1248
Water Source: N/A
Location: Statewide
Sponsor: CWCB
Project Type: Feasibility Study
Project Manager: Anna Mauss
Beneficiary: Local Water Users

In 1999, the Legislature authorized the Board to establish a special fund reserved for feasibility studies for water resources infrastructure systems projects. Grants are awarded to water users to help pay for the costs of preparing feasibility studies in conformance with the CWCB Water Project Loan Program Guidelines. The fund is intended to encourage planning by local water supply entities and to evaluate technical feasibility and the financial aspects of projects if funded through Water Project Loan Program. In Fiscal Year 2018, five grants were awarded.

48. Maximum Precipitation for Rainfall Spillway Sizing Project
Authorization: SB 15-253
Water Source: N/A
Location: Various
Sponsor: CWCB
Project Type: Study
Project Manager: Anna Mauss
Beneficiary: Statewide

This project is funding the CO-NM Regional Extreme Precipitation Study. It is a peer reviewed project to use existing methodologies and science to create updated tools and procedures for estimating regional extreme precipitation depth, area, and duration relationships and regional precipitation frequency estimates for the regional area including Colorado and New Mexico. The project also desires to develop an accepted standard of practice for these studies to be used as a national model. Finally, the project will evaluate the uncertainty of the various components, and create a list of additional future research projects to reduce the uncertainty of the chosen methods.

49. Reservoir Dredging Project
Authorization: SB 16-174
Water Source: South Platte River
Location: Statewide
Sponsor: CWCB
Project Type: Dredging
Project Manager: Anna Mauss
Beneficiary: Local Water Users

Senate Bill 16-174 appropriated $1 Million for the purpose of funding reservoir dredging projects. Grants can fund feasibility studies, engineering, and to develop or restore reservoir storage capacity. In Fiscal Year 2018, one feasibility study grant was awarded to the Town of Georgetown for the dredging of Georgetown Lake. All funds from this program have been obligated.

50. Rio Grande Cooperative Project
Authorization: SB 12S-002 & HB17-1248
Water Source: Rio Grande River
Location: Rio Grande County
Sponsor: CWCB / SLVID
Project Type: Reservoir Rehabilitation
Project Manager: Kirk Russell
Beneficiary: Rio Grande Water Users

Seven contracts worth $15M have been executed towards this effort that includes project design, project management, federal land exchange, and construction. To-date, the San Luis Valley Irrigation District (District) has completed the: clay liner project, final design of the outlet works, the federal land exchange, access road construction. The District is under contract with Moltz Civil, LLC for the construction of the

rehabilitated outlet structure. The Project is expected to be complete in 2020. Funding includes a $15 million loan to the District.

51. Rocky Mountain Fen Demonstration Project
Authorization: SB 07-122
Water Source: N/A
Location: Leadville Area
Sponsor: Colorado Mountain College
Project Type: Demonstration Project
Managers: Kirk Russell / Jojo La
Beneficiary: Statewide

Funding was awarded to the Colorado Mountain College-Timberline Campus for a demonstration project designed to explore the extent to which the harvest and transplantation of slow-forming organic peat soils, from the specifically prepared receiver sites, can serve as mitigation of impacts to fens. UPDATE: The Fens have been relocated and the current funding is supporting 5 years of monitoring. Funding includes cost sharing from several municipalities.

52. Updating Regulation Related to Nonpotable Water Reuse
Authorization: HB 17-1248
Water Source: N/A
Location: Denver
Sponsor: Co Dept of Health & Environment
Project Type: Rule-making
Project Manager: Kirk Russell
Beneficiary: Statewide

Colorado Department of Public Health and Environment (CDPHE) needed funding to support expanding safe and environmentally friendly water reuse. CDPHE regulates non-potable reuse through Regulation #84 (Reclaimed Water Control Regulation) and Regulation #86 (Graywater Control Regulation). CDPHE used the $260,000 to complete the following activities: 1) Updating Regulation #84 to include new uses of non-potable water including toilet flushing, irrigation for edibles crops, and livestock wash down facilities. 2) Updating Regulation #86 to address potential legislation. 3) Funding for managerial and staff participation in the planning effort.

53. Windy Gap Reservoir Bypass Channel Project
Authorization: SB 13-181, SB 16-174
Water Source: Colorado River
Location: Windy Gap Reservoir
Sponsor: Northern Colorado WCD
Project Type: Diversion Structure
Project Manager: Kirk Russell
Beneficiary: Local Water Users

Funding was provided for the planning, design and construction of the Windy Gap Reservoir Bypass Project by CWCB and the Northern Colorado Water Conservancy District in an amount of $2 million each toward the project. However, the estimated cost of the project exceeds $10 million and the project is on hold while additional funding options are explored. Senate Bill 16-174 provided funding in the amount of $200,000 toward a feasibility study. Additional funding has been provided by the CWCB via the Colorado Water Plan Grant Program.

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

Severance Tax Operational Fund

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

No.	Manager	Project Name	FY 18 Amount
		Interstate, Federal, and Water Information Programs	
1	Skeie	Work related to Recreational Projects	$50,000
2	Brown	Colorado River Project Support	$42,030
3	Fritz	CSU Water Resources Archive	$25,000
4	Newman	John Martin Reservoir Storage Account, Phase II	$25,000
5	Newman	Purgatoire River Irrigation Diversion Telemetry Equipment	$12,620
6	Newman	Update CDSS Software for new HydroBase Web Services	$25,000
7	Newman	North La Junta Streamlined Flooding Mitigation / Flow Mgmt Cont Project	$80,000
8	Skeie	Bear Creek Reservoir Analysis	$74,325
9	Macpherson	Fountain Creek Transit Loss Model Upgrade – Phase II	$50,000
10	Macpherson	Rural Well-Level Monitoring in Douglas County	$49,750
11	Skeie	County Groundwater Resources Series, Year 6	$50,000
12	Skeie	Constructing and Testing a Refined Groundwater Flow Model	$60,725
13	Macpherson	Bark Beetle Impacts on Remotely Sensed Evapotranspiration	$50,000
14	Macpherson	Automated Non-Telemetered Snow Depth Monitoring for Forecasting	$39,782
15	Skeie	Water Yield Sensitivity to Snow Loss in Headwater Streams	$52,198
		Finance Programs	
16	Hernandez	Dam Safety Inundation Mapping Grant Program	$49,112
17	Mauss	Mountain Basin Hydrologic Response Study	$50,000
		Stream and Lake Protection Programs	
18	Bassi	Case Management and Litigation Support	$45,466
19	Viehl	Stream and Lake Protection Section Outreach and Education	$9,100
		Watershed and Flood Protection Programs	
20	Houck	Flood Mitigation and Project Compliance	$107,228
21	DiBetitto	FEMA Coordinator Matching Program	$33,752
22	Busto	Colorado Dust on Snow Program	$25,000
23	Patton	Hexagon Geospatial Software for OIT - GIS	$52,257
24	Patton	Online Flood Inundation Maps of the South Platte River	$45,000
25	Busto	Durango Fires	$31,962
26	Busto	Cloud Seeding	$35,000
		Water Supply Planning, Drought, and Conservation Programs	

27	MacKillop	Colorado's Water Plan – Education Asset Mapping	$40,000
28	MacKillop	CWP Outreach, Ed, and Public Engagement Baseline Survey	$19,950
		Total Severance Tax Expended for FY 18	**$1,230,255**

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

1. Work Related to Recreational Projects
   Water Source: Various
   Location: Various
   Sponsor: CWCB
   Project Type: Technical Assistance
   Project Manager: Erik Skeie
   Beneficiary: Local Water Users

   These funds are used for litigation regarding Recreational in Channel Diversions, and to assist communities with developing recreational amenities. In particular, these funds were granted to the Colorado Rio Grande Restoration Foundation for the Del Norte River Front Project. Funds will assist in the construction of a boat ramp, play wave, enhancement of aquatic habitat, and restoration of riparian habitat.

2. Colorado River Project Support
   Water Source: Colorado River Basin
   Location: Colorado River Basin
   Sponsor: CWCB
   Project Type: Technical
   Project Manager: Carlee Brown
   Beneficiary: Statewide

   These funds supported modeling of potential outcomes of drought contingency planning in the Upper Colorado River Basin. The four Upper Basin States have been working towards creating a strategic Colorado River Storage Project reservoir operations agreement in the event of severe drought in the Upper Basin. This funding supported modeling of the various scenarios. Modeling of the Lower Basin's draft drought contingency plan also was supported through these funds. This helped the Colorado – and the Upper Basin as a whole – understand the implications of proposed drought response plans.

3. CSU Water Resources Archive
   Water Source: N/A
   Location: N/A
   Sponsor: CSU
   Project Type: Digitizing
   Project Manager: Carolyn Fritz
   Beneficiary: Statewide

   CSU's Water Resource Archive digitized 59,138 pages/items from several collections, including but not limited to; Irrigation Research Papers, and the Delph E. Carpenter and Family Papers, Arthur L. Littleworth Papers, Royce J. Tipton Papers, Wright Water Engineers Records, and North Poudre Irrigation Company records. Material types selected include trial transcripts, data, drafts, administrative records, research notes, correspondence, meeting minutes, and safety negatives. Digitized materials can be found at: https://dspace.library.colostate.edu (home page; click through "Colorado State University, Fort Collins" and "CSU Archives and Special Collections" links to get to Water Resources Archive).

4. John Martin Reservoir Storage Account Phase 1
   Water Source: Arkansas River
   Location: Arkansas River Basin
   Sponsor: CWCB / LAVWCD
   Project Type: Study
   Project Manager: Brent Newman
   Beneficiary: Local Water Users

   These funds supported a study to establish a 40,000 acre-foot Colorado Water Users Account in John Martin Reservoir. The study provided basic information regarding the initial interested participants, the initial sources of water they have proposed for storage, and uses for that water. Account characteristics such as capacity and carryover, spill priority, evaporation loss, and operations and accounting were also discussed. The study also addressed potential benefits to Kansas, and identified a series of next steps in concert with local, state, and federal officials. Establishing the Colorado Water Users Account can provide benefits that would accrue to both Colorado water users and to Kansas, which would promote interstate comity. The fundamental concepts proposed are such that establishing the account would not cause injury to occur to any existing John Martin Reservoir storage account users, or to any Colorado or Kansas water users. The study will be a topic of conversation at this year's Arkansas River Compact Administration Annual Meeting in Garden City, KS.

5. Purgatoire River Irrigation Diversion Telemetry Equipment

Water Source: Purgatoire River
Location: Arkansas River Basin
Sponsor: CWCB
Project Type: Equipment
Project Manager: Brent Newman
Beneficiary: Local Water Users

These funds were used to purchase and install telemetry and related measuring equipment on two river diversion points within the boundaries of the Trinidad Dam and Reservoir Project. Operation of this Project affects water rights on the Purgatoire and Arkansas rivers, with potential implications to the Arkansas River Compact, including the administration of John Martin Reservoir for the benefits of Colorado and Kansas. The Purgatoire River Water Conservancy District administers Project water to its member ditches in coordination with the Division 2 Engineer's Office. This new capability with further the administrative objectives of both the State Engineer's Office and the District to both maximize existing Project supplies while also preventing injury to downstream Colorado water rights and impairment of Colorado's compact obligations on the Arkansas River.

6. Update CDSS Software for new HydroBase Web Services

Water Source: N/A
Location: N/A
Sponsor: OWF
Project Type: Technical
Project Manager: Brent Newman
Beneficiary: Statewide Water Users

These funds provided for the enhancement of the CDSS TSTool software to support the new HydroBase REST web services that were implemented by DWR. REST web services allow access to data products via a unique URL, and provides for the use of open data formats which can be used by other software. This enhancement to HydroBase web services will improve access to state data.

7. North La Junta Streamlined Flooding Mitigation and Flow Management Continuation Project

Water Source: Lower Arkansas River
Location: La Junta
Sponsor: LAVWCD
Project Type: Dike Rehabilitation
Managers: Brent Newman / Kirk Russell
Beneficiary: Local Water Users

This Project built up the dike to the original level and provided vegetation to help with stabilization. The Project removed sedimentation in the stream channel through the North La Junta corridor to restore channel capacity. The Project was successful for this phase; however, additional funding is needed for Phase 3.

8. Bear Creek Reservoir Analysis

Water Source: Bear Creek, Turkey Creek
Location: South Platte Basin
Sponsor: CWCB
Project Type: Study
Project Manager: Erik Skeie
Beneficiary: Local Water Users

In anticipation of the reallocation of Bear Creek Lake, the CWCB declared its intent to appropriate 20,000 ac-ft through a new storage water right for Bear Creek Lake on March 17, 2016 at its regular meeting. Expert engineering and planning work is required to support this pending water right application in water court. CWCB hired Brown and Caldwell to conduct this engineering work to examine storable inflows into Bear Creek Lake. The final technical memo was submitted to CWCB staff on June 29th, 2018.

9. Fountain Creek Transit Loss Model Upgrade – Phase II

Water Source: Fountain Creek
Location: Fountain Creek
Sponsor: PPRWA
Project Type: Technical
Project Manager: Brian Macpherson
Beneficiary: Local Water Users

The funds for this project were provided to the Pikes Peak Regional Water Authority (PPRWA) and were used to help upgrade and enhance an existing transit loss accounting model used to track and credit valuable consumptive use return flows on Fountain Creek, a major tributary in the Arkansas River Basin.

10. Rural Well-Level Monitoring in Douglas County

Water Source:
Location: Douglas County
Sponsor: RWADC
Project Type: Study
Project Manager: Brian Macpherson
Beneficiary: Local Water Users

The USGS performed groundwater monitoring on 33 Denver Basin Aquifer wells in rural Douglas County. This monitoring helped domestic well owners understand water level trends in their area. The USGS collected, performed quality control, and published the data.

11. County Groundwater Resource Assessment

Water Source: N/A
Location: Elbert County
Sponsor: CWCB
Project Type: Study
Project Manager: Erik Skeie
Beneficiary: Local Water Users

This is a multi-year Colorado Geologic Survey (CGS) research project that is focusing on providing a comprehensive assessment of groundwater in Counties where such county-wide assessments have not been completed. These funds were used for an assessment of Elbert County. Generalized maps of Elbert County Geology and Groundwater Resources have been completed, along with stratigraphic columns of the underlying geology.

12. Developing a Refined Groundwater Flow Model for the LasSalle/Gilcrest Area

Water Source: N/A
Location: South Platte Basin
Sponsor: CSU
Project Type: Study
Project Manager: Erik Skeie
Beneficiary: Local Water Users

This is a multi-year CSU research project that is focusing on the critical linkages between groundwater pumping for irrigation and the coupled groundwater/surface water regimes in the South Platte River Basin. The study will rely on the use of the South Platte Decision Support System (SPDSS) alluvial groundwater flow model. While the purpose of the first few years of this project were to review the SPDSS model, the long-term goal of this project is to provide a refined groundwater model for the LaSalle/Gilcrest area, in order to more fully evaluate the high groundwater conditions in the area. Preliminary modeling results have been submitted to the South Platte Groundwater Technical Committee.

13. Bark Beetle Impacts on Remotely Sensed Evapotranspiration

Water Source: N/A
Location: N/A
Sponsor: CSU
Project Type: Study
Project Manager: Brian Macpherson
Beneficiary: Local Water Users

The funds for this study were used to investigate the relationship between bark beetle-related forest mortality and evapotranspiration in the Colorado Rocky Mountains. The results of the study are useful to inform both hydrological forecast models as well as water managers who make planning decisions based on runoff and land coverage. Remotely sensed data was collected and analyzed and data processing and statistical modeling was applied to the data. A report was prepared and the investigators hope to publish the results in a peer-reviewed journal.

14. Automated Non-Telemetered Snow Depth Monitoring for Forecasting

Water Source: N/A
Location:
Sponsor: CSU
Project Type: Study
Project Manager: Brian Macpherson
Beneficiary: Local Water Users

The funds for this study were used to conduct a pilot project involving snow stakes and cameras as a possible alternative to or addition to existing SNOTEL and SNOLite snow measurement stations. The station, located in the Gunnison basin, collected a series of snow depths as opposed to a single point measurement collected by SNOTEL and SNOLite stations and used neighboring snow density measurements to estimate SWE. This was done for a fraction of the cost of SNOTEL and SNOLite stations and yielded additional measurements. A protocol was also developed for future stations.

15. Water Yield Sensitivity to Snow Loss in Headwater Streams

Water Source: N/A
Location: Colorado/South Platte Basins
Sponsor: CSU
Project Type: Study
Project Manager: Erik Skeie
Beneficiary: Local Water Users

The purpose of this research is to improve understanding of the relationship between snowpack and streamflow across Colorado. Streamflow, precipitation, temperature, snow persistence, and various other data was collected to determine if there is a relationship between snow persistence and streamflow. Understanding this relationship could help with streamflow forecasting. A final report was delivered on June 29th, 2018.

16. Dam Safety Inundation Mapping Grant Program

Water Source: Various
Location: Various
Sponsor: SEO
Project Type: Mapping Study
Project Manager: Jonathan Hernandez
Beneficiary: Local Water Users

These funds were for the preparation of flood inundation mapping for six different entities, totaling eleven dams. The effort included dam breach modeling to assess the extent of downstream impacts should the dam(s) fail. Deliverables included a letter report for the inundation mapping and inundation maps, prepared by a licensed professional engineer, and a copy of the project's Colorado Division of Water Resources, Dam Safety Branch, approval letter.

17. Mountain Basin Hydrologic Response Study

Water Source: N/A
Location: Statewide
Sponsor: CSU
Project Type: Study
Project Manager: Anna Mauss
Beneficiary: Local Water Users

These funds were used to study a long-standing problem for the Rocky Mountain region. Traditional meteorology and flood hydrology methods appear to significantly overestimate floods based on comparisons to paleoflood evidence and regional peak streamflow statistics. The objectives of this research project were: (1) to determine the importance of saturation-excess runoff production for large storms that affect the design and performance of dams and transportation infrastructure and (2) to develop a generalized model for runoff production in mountainous basins that can be used by consultants to perform hydrologic analysis of dams and transportation infrastructure.

18. Case Management and Litigation Support

Water Source: N/A
Location: Denver
Sponsor: CWCB
Project Type: Admin Support
Project Manager: Linda Bassi
Beneficiary: Statewide

These funds were used to retain three part-time temporary employees to assist the Section with instream flow case resolution and management, including database design and implementation, organizing and tracking case files, coordinating with the Attorney General's Office, drafting pleadings, memos, correspondence and other documents as appropriate, and performing research into legislative history and other discrete legal issues. The CWCB is a party in approximately 60 active water court cases. In these cases, the Stream and Lake Protection Section staff is responsible for: (1) protecting the CWCB's water rights, (2) obtaining decrees for new ISF water rights; or (3) obtaining decrees for changes of acquired water rights to ISF use. This project enables staff to focus on the substantive aspects of water court cases and to resolve more cases in a timely manner.

19. Stream and Lake Protection Section Outreach and Education

Water Source: N/A
Location: Denver
Sponsor: CWCB
Project Type: Operations
Project Manager: Rob Viehl
Beneficiary: CWCB

These funds were used to support outreach and education activities to inform the general public and stakeholders about new instream flow appropriations, the CWCB's water acquisition program, and the Colorado Water Trust's efforts to bring water into the Instream Flow Program.

20. Flood Mitigation and Project Compliance

Water Source: Various
Location: Various
Sponsor: CWCB
Project Type: Design/Study
Project Manager: Kevin Houck
Beneficiary: Statewide Water Users

Monies from this source were used for multiple uses relating to floodplain identification, flood mitigation, and related studies/designs. Specific projects funded from this source include a cost share with the City of Canon City for floodplain analyses and project designs, a floodplain restudy and request for a Letter of Map Revision to FEMA for Willow Creek through the City of Creede, and travel expenses related to flood section work.

21. FEMA Coordinator Matching Program

Water Source: N/A
Location: Various
Project Type: Matching Program
Project Manager: Stephanie DiBetitto

Sponsor: CWCB Beneficiary: NFIP Interests

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

22. Colorado Dust on Snow Program

Water Source: N/A
Location: Statewide
Sponsor: CSAS
Project Type: Planning and Study
Project Manager: Joe Busto
Beneficiary: Statewide Water Users

On behalf of the Colorado and Colorado River Basin water management community, the Center for Snow and Avalanche Studies (CSAS), based in Silverton, conducts the Colorado Dust-on-Snow program (CODOS) at its Senator Beck Basin Study Area at Red Mountain Pass and at ten additional sites located throughout the Colorado Mountains. Over the past year CODOS created site-specific web pages for all of those sites, and for the CODOS program, containing archived dust-on-snow, SNOTEL, hydrologic, snowpack, snowmelt, and spring weather datasets for your handy reference. CODOS also introduced a conceptual Dust Enhanced Snowmelt Space capturing the interactions of March 1 snowpack conditions, dust-on-snow, and March/April/May weather. The WY Summary report is at: http://www.codos.org/#codos. In high dust years the Colorado Basin River Forecast Center now uses this CODOS information to adjust peak timing of stream flows on the western slope of Colorado. There is a new marketing video on the home page that explains the utility of this work. Around March 1 each year CSAS offers snow school for water managers. Two half days in the field digging snow pits and seeing instrumentation. There are two half days of lecture about global weather circulations, snowpack hydrology, and other topics. Please contact Jeff Derry to sign up for this class it is an excellent education in snow science.

23. Hexagon Geospatial Software for OIT – GIS

Water Source: N/A
Location: Denver
Sponsor: CWCB
Project Type: Technical
Project Manager: Thuy Patton
Beneficiary: Statewide Water Users

Funds were used to acquire APOLLO Professional ONE software in order to train users for the FEMA Map Modification Program for GIS. (As provided by Steven Shull, CWCB Accountant).

24. Online Flood Inundation Maps of the South Platte River

Water Source: South Platte River
Location: Fort Morgan, CO
Sponsor: USGS
Project Type: Hydraulic & Online Mapping
Project Manager: Thuy Patton
Beneficiary: Local Water Users

The objective of this study is to build a flood inundation map library for areas adjacent to the South Platte River near Fort Morgan, CO, based on USGS Streamgage No. 06759500. During a flood event, emergency personnel can use the current gage height transmitted via the internet and the predicted gage height of the crest to make decisions regarding evacuation routes and areas-at-risk.

25. Durango Fires

Water Source: N/A
Location: Missionary Ridge, Durango, CO
Sponsor: University of Oklahoma
Project Type: Planning
Project Manager: Joe Busto
Beneficiary: Local Water Users

Funds were used to have the CWCB and Department of Homeland Security and Emergency Management partner with Oklahoma Universities' Advanced Radar Research Corporation on renting a mobile unmanned radar to be deployed on Missionary Ridge in Durango, Colorado to provide support to emergency managers and the National Weather Service in Grand Junction. The San Juan Mountains provide beam blockage for the NWS radar in Grand Junction and the four corners area is a well-documented radar black hole. The rental radar gives a great look at the 416 burn scars and incoming weather during the monsoon season. It is helping give very accurate close to the surface data on rainfall rates increasing the accuracy and timeliness of life saving flash flood warnings in and around Durango.

26. Cloud Seeding

Water Source: N/A
Location: Central Rockies
Sponsor: CWCB
Project Type: Cloud Seeding
Project Manager: Joe Busto
Beneficiary: Local Water Users

Funds were utilized to purchase for local ownerships an Idaho Power Company remote operated ice nucleus generator or cloud seeding machine. As part of the CWCB portfolio of activities with the Colorado River Basin one seeder was already going to be purchased. This funding allowed to purchase to seeders for the Central Colorado Mountains program managed by the Colorado River Water Conservation District. As of September 2018 the likely sites are upwind of Snowmass and on top of Vail Pass. Deployment of the two generators by the Idaho Power Company is scheduled for late September 2018.

27. Colorado's Water Plan – Education Asset Mapping

Water Source: N/A
Location: Denver
Sponsor: MSU
Project Type: Education
Project Manager: Mara MacKillop
Beneficiary: Local Water Users

The Water Asset mapping project was completed in June of 2018 and the final report was submitted to the CWCB fulfilling the One World, One Water (OWOW) Center's obligations. Final payouts have been made to OWOW. The project sought to identify outreach needs across Colorado and stakeholders in five of the eight basins were interviewed to provide input and develop common themes. The asset map organized qualitative, quantitative and anecdotal data to create an inventory of trends, strengths, gaps and potential solutions to basin outreach needs. While the lack of strategic plans, outreach funding, sufficient staffing and foreign language skills were common barriers, working with the business community, develop community partnerships, resource sharing and work with local schools were the most common pathways for effective water (quality and quantity) outreach and engagement. These efforts will also be used to inform Water Education Colorado's Statewide Water Education Action Plan.

28. CWP Outreach, Ed, and Public Engagement Baseline Survey

Water Source: N/A
Location: Denver
Sponsor: Omni Institute
Project Type: Education
Project Manager: Mara MacKillop
Beneficiary: Local Water Users

The CWCB worked with the OMNI Institute to draft a statewide water survey in partnership with the Division of Water Resources (DWR) and the Colorado Department of Public Health and Environment (CDPHE). While the draft was completed by June of 2018, additional work is needed to review, finalize, and issue the survey. However, the initial obligations under this effort have been met and funds have been expended. Additional funding will be sought from other sources and partnerships such as additional CDPHE funding and potential outreach dollars in the FY 2020 Projects Bill. The intent of the survey is to gage citizens' interest and awareness around various water issues (water quantity and quality) including CWCB's role in any number of water efforts. This survey, once issued, will be used to help inform Water Education Colorado's Statewide Water Education Action Plan efforts as well as future Public Education, Participation, and Outreach (PEPO) group initiatives.

WATER PROJECT CONSTRUCTION LOAN PROGRAM
LOAN REPAYMENT DELINQUENCY REPORT
LOAN FINANCIAL ACTIVITY REPORT
SEPTEMBER 2018

LOAN REPAYMENT DELINQUENCY

Loan Repayments received relative to the Water Project Construction Loan Program have been reviewed for the period covering July 2018 through August 2018. The effective due date of the payment is inclusive of the Board's current 60 day late policy. Hence, the date the payment was received was compared to the last day allowable prior to the payment being considered late.

Repayments due for the first two months of Fiscal Year 2019 totaled 59. No loan payments were late during this period. Two Rivers Water Company is on an adjusted approved loan payment plan and is scheduled to be compliant by the end of September 2019.

LOAN FINANCIAL ACTIVITY

Loan Financial Activity relative to the Water Project Construction Loan Program for Fiscal Year 2019 is summarized as follows: Funds received relative to loans in repayment totaled $6.3 M for this year. Funds disbursed relative to new project loans totaled $6.2 M for this year. Net activity resulted in $0.1 M received by the CWCB Construction Fund and the Severance Tax Perpetual Base Fund (STPBF) over the total disbursed.

Further breakdown is summarized as follows: The Construction Fund portion consists of $2.3 M in receivables and $0.2 M in disbursements for a total net activity of $2.1 M received over disbursed. The STPBF consists of $4 M in receivables and $6 M in disbursements for a total net activity of $2 M disbursed over received.

COLORADO WATER CONSERVATION BOARD

FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2019

CONSTRUCTION FUND

Period	Principal	Interest	Total	Disbursements	Net Activity
July 2018	$ 519,412	$ 91,022	$ 610,435	$ -	$ 610,435
August 2018	$ 1,381,465	$ 332,868	$ 1,714,333	$ 229,601	$ 1,484,732
September 2018	$ -	$ -	$	$ -	$
October 2018	$ -	$ -	$	$ -	$
November 2018	$ -	$ -	$	$ -	$
December 2018	$ -	$ -	$	$ -	$
January 2019	$ -	$ -	$	$ -	$
February 2019	$ -	$ -	$	$ -	$
March 2019	$ -	$ -	$	$ -	$
April 2019	$ -	$ -	$	$ -	$
May 2019	$ -	$ -	$	$ -	$
June 2019	$ -	$ -	$	$ -	$
FY 2019 Totals	**$ 1,900,878**	**$ 423,890**	**$ 2,324,768**	**$ 229,601**	**$ 2,095,167**

SEVERANCE TAX TRUST FUND PERPETUAL BASE ACCOUNT

Period	Principal	Interest	Total	Disbursements	Net Activity
July 2018	$ 14,077	$ 10,745	$ 24,822	$ 384,847	$ (360,025)
August 2018	$ 3,084,903	$ 883,026	$ 3,967,929	$ 5,601,106	$ (1,633,177)
September 2018	$ -	$ -	$	$ -	$
October 2018	$ -	$ -	$	$ -	$
November 2018	$ -	$ -	$	$ -	$
December 2018	$ -	$ -	$	$ -	$
January 2019	$ -	$ -	$	$ -	$
February 2019	$ -	$ -	$	$ -	$
March 2019	$ -	$ -	$	$ -	$
April 2019	$ -	$ -	$	$ -	$
May 2019	$ -	$ -	$	$ -	$
June 2019	$ -	$ -	$	$ -	$
FY 2019 Totals	**$ 3,098,979**	**$ 893,771**	**$ 3,992,751**	**$ 5,985,953**	**$ (1,993,203)**
GRAND TOTALS	**$ 4,999,857**	**$ 1,317,661**	**$ 6,317,519**	**$ 6,215,554**	**$ 101,964**