COLORADO

Colorado Water Conservation Board

Department of Natural Resources

DIRECTOR'S REPORT

July 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
Erik Skeie

DATE: July 18-19, 2018

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

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~STATEWIDE~

CWCB SMALL FEASIBILITY STUDY GRANT FUND UPDATE—

New grant applications approved:

1. Town of Empire - Guanella Storage Purchase ($2,910.50)

Previously approved grants in FY17/18:

1. Redmesa Reservoir and Ditch Company – Redmesa Reservoir Enlargement ($25,000)
2. Blue Lake Reservoir Comopany – Upper Black Creek Reservoir ($47,947)
3. Amity Mutual Ditch Company – Queens Reservoir Feasibility Study ($42,500.00)
4. Town of Georgetown – Georgetown Reservoir Dredging Feasibility Study ($32,395.50)
5. Central Colorado Water Conservancy District– Klug Lake Storage Feasibility Study ($16,500)

Total funds approved for feasibility study grants in FY17/18: $167,253.00 (*Anna Mauss*)

~COLORADO RIVER BASIN~

COLORADO RIVER BASIN SALINITY CONTROL FORUM— The Colorado River Basin Salinity Control Forum met in St. George, Utah on May 16-17, 2018. The Forum heard updates from partner Federal agencies on implementation of the salinity program throughout the basin. The Bureau of Reclamation provided updates on the Environmental Impact Statement process regarding the Paradox Valley Unit in southwestern Colorado, and the evaluation of new technologies which could be utilized for that project. The Forum also discussed and approved language regarding "strategic importance" of potential project funding under the Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP). The Forum also heard a series of updates regarding program funding, ongoing project implementation under the Bureau of Reclamation's Basinwide program, future opportunities for the Basin States' Program, and funding recommendations for a series of "Studies, Investigations, and Research" (SIR) projects. The Forum's Work Group will be meeting in Salt Lake City on July 18-19, and the Forum will meet again in Santa Fe in October. (*Brent Newman*)

UPPER COLORADO RIVER COMMISSION— The Upper Colorado River Commission held its summer meeting in Santa Fe, New Mexico on June 20th. The Commission heard an update on the 2018 System Conservation Pilot Program (SCPP), and a proposal for Colorado River augmentation from GEI Consultants and Michael Clinton Consulting. The UCRC adopted a resolution suspending the administration by the Commission of the Upper Basin System Conservation Pilot Program after CY 2018 to commence investigation of a potential large-scale, operational demand management program.More information about the UCRC's resolution is available here: https://www.aspenjournalism.org/2018/06/22/upper-colorado-river-pilot-program-paying-farmers-to-leave-water-for-lake-powell-will-end-after-2018/. The UCRC commissioners also took this opportunity to meet with principals of the Lower Basin states and Bureau of Reclamation leadership regarding ongoing Drought Contingency Planning (DCP) efforts. After recent encouragement from the Reclamation Commissioner, the Basin States are reaffirming their commitment to complete DCP efforts in both Lower and Upper Basins by the end of 2018. (*Brent Newman*)

UPPER COLORADO WILD AND SCENIC STAKEHOLDER GROUP UPDATE— The Upper Colorado Wild and Scenic Stakeholder Group held its quarterly meeting on June 7, 2018. Proposed indicators for Outstandingly Remarkable Values (ORVs) related to fishing and floatboating were presented for the group's consideration. There is insufficient data available to assign numerical values to the fishing and all water year-type floatboating ORV indicators. At this time, the parameters for those indicators have been proposed and the Stakeholder Group is determining what additional information is needed before finalizing those indicators. The proposed floatboating ORV indicator would be determined by surveys of river rafters in which respondents are asked if they are "not likely to return." The group is also taking steps to develop further scientific analysis regarding other resource guides, including temperature and water quality parameters, which serve as a source of information to inform Stakeholder Group discussions. These proposals are currently being deliberated by Stakeholder Group members in advance of the next meeting, scheduled for August 13. (*Carlee Brown*)

GLEN CANYON DAM ADAPTIVE MANAGEMENT WORK GROUP— The next meeting of the Glen Canyon Dam (GCD) Adaptive Management Work Group (AMWG) will be held on August 22-23 in Flagstaff, Arizona. Colorado remains actively engaged on several AMWG-related issues, including monitoring of experimental Macroinvertebrate Production Flows (Bug Flows) at Glen Canyon Dam. Bug Flows consist of steady weekend releases from GCD that provide favorable conditions for insects to lay eggs on rocks on the edge of the water. Normal hydropower operations subject insect eggs to drying out due to an artificial tide caused by dam releases that ramp up or down depending on power demand. The Bug Flow experiment is designed to "give the bugs the weekend off" to increase egg viability. Initial informal reports from scientists and river guides indicate that the Bug Flows are working – the canyon seems "buggier" than normal, and bug eggs are visible and pervasive in and around Lees Ferry. The experiment will continue through August 31, 2018. The first official scientific analysis of the Bug Flows will be presented at the next AMWG meeting.

Recent fish surveys have determined that the populations of Humpback Chub – the endangered species of primary focus to the GCD Adaptive Management Program – have increased over the past few years, particularly in the Western Grand Canyon. This is encouraging news, especially as the U.S. Fish and Wildlife Service is in the middle of a process considering whether or not to downlist the Humpback Chub to threatened. (*Carlee Brown*)

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM – ELKHEAD AND RIDGWAY FISHING TOURNAMENTS— The annual Colorado Parks and Wildlife fishing tournaments were held in June at Elkhead Reservoir and in July at Ridgway Reservoir. These fishing tournaments are jointly funded by Colorado Parks and Wildlife and the Colorado Water Conservation Board. Additionally, this year the Colorado Water Conservation Board hosted the awards ceremony at Elkhead Reservoir providing food and staff for the event. The objective of these tournaments is to have anglers assist in the harvest of non-native fish species, which are not compatible with recovery of the native endangered fish. This year, 322 northern pike and 540 small mouth bass were caught at the Elkhead fishing tournament. Colorado Parks and Wildlife is replacing these non-compatible species at Elkhead Reservoir with warmwater species that are compatible with native fish recovery and conservation efforts. (*Jojo La*)

COLORADO RIVER WATER USE—

2018 Colorado River Storage as of July 3rd, 2018			
	Elevation (feet above mean sea level)	Storage (MAF)	Percent of Capacity
Lake Mead	1,076.88	9.754	37%
Lake Powell	3,609.81	12.711	52%
Total System Active Storage		30.373	51%
2017 Total Active Storage		30.720	57%
		Flow (MAF)	Percent of Average
Forecasted Unregulated Inflow into Powell		5.113	47%

Forecasted CY 2018 Lower Basin Consumptive Use			
State		Use (MAF)	Total (MAF)
Arizona		**2.642**	
California			
California Agricultural	3.532	**4.086**	**7.006**
Metro. Water District	0.540		
Other	0.015		
Nevada		**0.278**	

***Note MAF = million acre-feet

~SAN JUAN/DOLORES RIVER BASIN~

HIMES CREEK INSTREAM FLOW RECOMMENDATION— At the January 2016 Instream Flow (ISF) workshop, the U.S. Forest Service (USFS) submitted a recommendation to the CWCB for ISF water rights on Himes Creek. This recommendation was part of a pilot process for the USFS to evaluate whether the ISF Program can meet the USFS' non-consumptive water right needs on the San Juan National Forest. Staff has spent the past two and a half years collecting, reviewing, and analyzing data while collaboratively working with the USFS, CPW, and other interested stakeholders to address issues related to the natural environment and flow quantification on this stream. Staff continues to work with interested stakeholders and requires additional time to address their concerns.

~YAMPA/WHITE RIVER BASIN~

IMPLEMENTATION OF TEMPORARY LOAN OF WATER FROM COLORADO PARKS AND WILDLIFE FOR INSTREAM FLOW USE (WATER DIVISION 6) — On July 23, 2012, Colorado Parks and Wildlife ("CPW") and the CWCB entered into an Intergovernmental Agreement ("IGA") for a temporary loan of a portion of CPW's storage right in Lake Avery Reservoir (a/k/a Big Beaver Creek Reservoir) for instream flow use on Big Beaver Creek and the White River in Water Division 6.The Division of Water Resources approved that loan of water on July 17, 2012, effective through July 12, 2022. CWCB and CPW may exercise the loan for up to 120 days in each year, not to exceed 3years during the 10-year period ending in 2022.

The ISF water rights that benefit from this loan of water are described below:

CWCB Case No.	Stream	Amount (cfs)	Approp. Date	Watershed	County
6-77W3752E	Big Beaver Ck	2.0 (1/1–12/31)	11/15/1977	Upper White	Rio Blanco
6-77W3752C	White River	200 (1/1–12/31)	11/15/1977	Upper White	Rio Blanco

Starting in late August 2012, CPW released approximately 1,250 acre-feet from storage for ISF use over a period of 34 days, addressing temperature issues and low flows. CWCB and CPW did not exercise this loan of water in 2013-2017. In mid-June 2018, CPW contacted CWCB staff about implementing this loan of water, based upon anticipated low flow conditions, high temperatures, and algae accumulation on the White River. On June 22, 2018, CWCB staff sent a written request to CPW, with a copy to the Division Engineer for Water Division 6, requesting releases of loaned water from Lake Avery for instream flow use on Big Beaver Creek and the White River. CPW has scheduled a public meeting in Meeker to discuss White River flows, temperatures, and the upcoming implementation of this loan of water. CWCB staff intends to participate in that meeting.

~ WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE—

Three 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

Four grants have been approved since the March 2018 Director's Report:

- Town of Wellington – Water Efficiency Plan ($30,000)
- City of Aspen – Professional Landscape Certification Program ($48,923)
- City of Thornton –Drought Management Plan ($30,000)
- San Juan County/Town of Silverton– Drought Management Plan ($19,940)

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

- Eagle River Water & Sanitation District –Regional Water Efficiency Plan –*75% Progress Report& Final Plan*
- City of Monte Vista– Water Efficiency Plan Update– *75% Progress Report*
- South Metro Water Supply Authority – Regional Landscape Certification Program – *Final Report*
- Town of Castle Rock – Drought Management Plan – *95% Progress Report*
- City of Thornton –Drought Management Plan – 2*5% Progress Report*
- East Cherry Creek Valley Water & Sanitation District – Water Efficiency Plan Update – *75% Progress Report* (*Ben Wade*)

WATER EFFICIENCY & DROUGHT PLANS UPDATE—

Colorado Drought Mitigation and Response Plan: Per FEMA requirements this plan is in the process of being updated. CWCB has worked with a stakeholder advisory committee to help guide this process and will hold a public comment period from July 16th through August 17th. All comment will be addressed prior to the final plan being presented to the CWCB Board in September.

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

DROUGHT MANAGEMENT PLANS:

Approved Plans

- No new plans approved since last board meeting

Drought Management Plans In Review:

- Town of Castle Rock

WATER EFFICIENCY PLANS:

Approved Plans:

- City of Brighton
- City of Fountain
- City of Longmont
- Morgan County Quality Water District

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

Water Efficiency Plans in Review:

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

(*Kevin Reidy & Ben Wade*)

GOVERNOR'S WATER AVAILABILITY TASK FORCE— There will be a Water Availability& FloodTask Forcemeeting will be on July24th from9:00am-11:30am at the Durango Recreational Center, 2700Main Avenue, Durango, CO. 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.

The month of May was, on average, the second warmest on record and the warmest since 1934. While daytime highs were above normal, night time highs were also well above normal, which may have contributed to early snowmelt across much of Colorado. June has continued to see well above average temperatures with most of the state experiencing temperatures 4-10 degrees above normal. Precipitation for both May and June to-date has largely been well below average statewide, these conditions contribute to fire danger.

The 416 fire north of Durango started on June 1st and is now 35K acres and 36% contained. The week of June 25th has hot and dry conditions forecast to continue throughout the week. The San Juan National forest has been closed due to high fire danger resulting from prolonged drought, a waiver has been granted to allow some grazing to continue but with strict rules for entry.

Some parts of SW Colorado received roughly 2 inches of rain in mid-June-- an uncommon occurrence for this area at this time of the year- however conditions still remain dry and large precipitation deficits still exist and while this will help alleviate drought and fire potential, it also introduces the potential for floods near burn scars.

As of June 26, exceptional drought, D4, continues to affect southwest Colorado and the Sangre de Cristo mountains, covering nine percent of the state. Extreme drought, D3, covers 28 percent of the state; severe drought 16 percent and 15 percent is classified as moderate drought. An additional 12 percent of the state is currently experiencing abnormally dry conditions.

Cattle sell off and failed and prevented planting of some acreage has been reported. High hay prices make purchasing adequate supplies to maintain livestock a challenge. Unless conditions improve we anticipate continued cattle sell off, and additional prevented and failed crop acres are likely.

Monsoon season is forecast to be strong this year, but doesn't typically begin until mid to late July. (*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*)

WATER AND GROWTH DIALOGUE— Through a Water Efficiency Grant, the Keystone Center is facilitating a dialogue to quantify water use through different land use patterns as well as bringing together land use and water managers to discuss where integration can occur. Staff is on the technical advisory group as well as the steering committee. The steering committee has released a final report for dissemination with all the results to date. At present, a larger meeting with the working group is scheduled for July 24 in Denver to go through the final report

and assess how best to disseminate the information. Kevin is also presenting on the Dialogue to the Metro Mayor's Caucus on August 1, 2018. (*Kevin Reidy*)

CO WATER LOSS INITIATIVE— CWCB Staff 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 contract was awarded to the Cavanaugh and Associates/Water Systems Optimization team in early June. As of now the contract is being worked out but the hope is that work will start in mid-July with a soft kick off meeting and an in person kick off meeting in mid-August. **(***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—

AAAS How We Respond Initiative: Staff has been asked to serve on an advisory committee for the American Association for the Advancement of Science initiative aimed at communicating how communities are responding to climate change. The "How We Respond" initiative builds on AAAS's 2014 What We Know project and will take that work further, providing tangible examples of how scientists and communities are working together to develop and implement responses to climate change. The ultimate goal is to help communities and decision-makers focus on solutions and take action on climate issues, grounded in both science and local needs. She will participate in a workshop in DC July 9-11.

Southwestern Colorado Drought Impacts Tour: A Drought Tour will be held in SW Colorado on July 23; A WATF meeting will be held in Durango on the 24th of July.

Water and Planning Connect Conference:
Staff 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 is in Kansas City on September 11-12.

~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 is on track. The preliminary map distribution is scheduled for the Fall 2017. St. Vrain Risk Map Phase III is also well under way. The hydraulic tasks and floodplain mapping tasks have been submitted to FEMA.

CWCB received $3.4 million FEMA grant for LiDAR acquisition in Colorado for future floodplain mapping projects. CWCB has selected the vendors and the first flight for data collection will occur in the Fall 2017. A State task order was recently approved to fund a regional hydrology study update on the Colorado River near Granby to the border with Utah. Preliminary results are now available. This data will be submitted to FEMA for review and approval.

FY15 Activities: The Cache La Poudre Phase III project will begin shortly after the hydraulic and floodplain mapping tasks are completed. The hydraulic analysis will be reviewed a second time by FEMA, but the project is delayed until the levee issues in Fort Collins is resolved. The purchase of the IFSAR data is in progress and the data should be delivered in May 2017. This purchase was delayed due to contracting language revisions and additional approval processes. The Middle South Platte Watershed delineation project will begin shortly after we receive the IFSAR data. Upper Gunnison Risk Map Project schedule was revised due to a slight delay in locating topographic data near Crested Butte.

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

A Flood Risk Review meeting was held in early April with the community officials to provide a sneak preview of the draft floodplain maps. This project will continue through post processing tasks with a new FEMA grant which was awarded in FY 16.

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.

Other non-mapping projects funded by FEMA this year included an inventory of the ongoing studies and other data in the post flood areas, developing a technical evaluation of flood forecasting methods using Risk Map products, and developing a model management system to store all available hydrologic and hydraulic models in the post-flood areas. All of these projects have been completed and approved by FEMA.

FY13 Activities: The El Paso County as a partial Countywide DFIRM project is now in the post appeal period and will be completed as a revised preliminary project due to the number of issues found in the mapping. Purgatoire Watershed Risk Map project has gone through the preliminary phase and the preliminary maps have been sent to communities for review. The next step will be to schedule a meeting with the local officials to review maps and obtain any comments from the community officials. This project includes Las Animas County and the City of Trinidad.

The Pueblo County DFIRM is now in the post-preliminary phase. The appeal period started on January 17, 2017. Thus far no appeals have been received by the communities.

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.

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. Documents are currently being finalized to request Federal Register and the next step will be the local newspaper publications and appeal period.

FY10 Activities: Chaffee and Pitkin Counties are now in the post preliminary phase. The appeal period has ended for both of these projects and there were several appeals that were received. The appeal resolution and community response letters are being finalized. Pitkin County may be extended into a revised preliminary project due to the number and scale of appeals that were received. Chaffee County DFIRM is moving forward toward effective and the Letter of Final Determination (LFD) will be determined in the next few weeks, depending on FEMA HQ approval.

FY09 Activities: The Morgan County DFIRM appeal period started on February 22, 2017. There has been some local questions and concerns about the updated mapping and CWCB and FEMA are working with the local constituents and community officials.

The Prowers County DFIRM appeal period has ended and the LFD letters were distributed on October 19, 2015. The maps became effective on April 19, 2016. (*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, a few communities have not completed the adoption or provided documentation to CWCB. There are 5 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 five 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 all five of the remaining communities are working with the CWCB to adopt the Rules. These communities are the Town of Dove Creek, Town of Hayden, Town of Minturn, Town of Holyoke, and City of Wray. All non-compliant communities have provided the CWCB with an update of their progress to date and have completed a first reading of their updated ordinances and are working towards final adoption at the local level, with the exception of the Town of Holyoke. (*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.

All streams studied under CHAMP were scoped for a regulatory update through the Physical Map Revisions (PMR) process. This regulatory update is awaiting FEMA's final approval of floodplain mapping. Preliminary Flood Insurance Rate Maps (FIRMs) are anticipated in 2019 with neweffective FIRMs by 2020 or 2021.The CHAMP team will work through FEMA's Floodplain Mapping comments for Y1 streams. Hydraulics for Y2 streams are also being reviewed by FEMA. After approval, FEMA will review Y2 Floodplain Mapping. The process of updating the regulatory FIRMs for CHAMP streams has been initiated and will be completed after FEMA approval of the Floodplain Mapping.

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 of 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 final draft is now complete and undergoing a 30-day public comment period. CWCB staff intends to bring the Plan to the CWCB Board at the September Board meeting for adoption. (*Stephanie DiBetitto*)

SHORT-TERM RECOVERY TASK FORCE FOR FIRE AFFECTED AREAS— A task force is being formed to address short-term needs associated with eventual fire recovery actions associated with the 2018 wildfires currently burning in Colorado. This Task Force is led by the Directors of the Colorado Office of Emergency Management (Department of Public Safety) and the Division of Local Government (Department of Local Affairs) and is facilitated by the Colorado Resiliency Office (Department of Local Affairs).

As currently drawn up, the Task Force will consist of five "Recovery Support Functions" (RSF). One of these functions is Natural Resources, which has been tasked to the CWCB Flood Section and its partners. The purview of the Natural Resource RSF is to address technical issues regarding post-wildfire debris flows, early warning, floodplain management, and flood insurance, watershed restoration, and agriculture impacts. (*Kevin Houck*)

WEATHER MODIFICATION UPDATE—

New Colorado cloud seeding interest --- The last dry winter has spurred interest in cloud seeding. There are three new partnerships developing. Jackson WCD is working with the state of Wyoming on an aerial seeding program that will be based out of Wyoming seeding the Medicine Bow/Sierra Madre ranges with additional flight time for the Never Summer range in Colorado. Wyoming has an RFP out for bid right now. The Winning contractor will need a Colorado weather modification permit. Another potential new program sponsor may be the Left Hand Water Conservation District based in Longmont. They have requested a proposal from the Desert Research Institute to get a state seeding permit and site one or two generators near Grand Lake that would seed both the Upper Colorado and South Platte Basins. A third new interested party is the City of Aspen and Aspen Ski area. Currently Aspen is just outside a permitted program called the Central Rocky Mountains Basin Program administered by the Colorado River Water Conservation District and operated by Western Weather Consultants of Durango. These three potential target areas and partners are in the formulation stages.

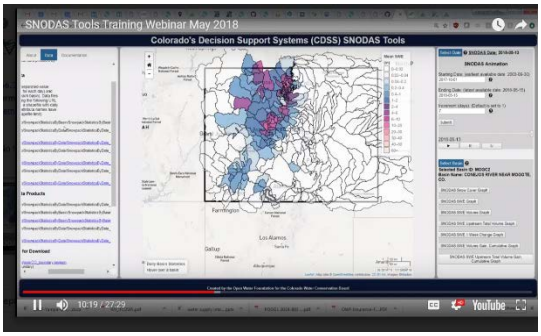
New Remote Operated Cloud Seeding Ice Nucleus Generators – Colorado River funding with CWCB agency Severance Tax funds funded the purchased of two satellite communication ice nucleus generators from the Idaho Power company by the Colorado River WCD. Installation will happen in fall of 2018 somewhere in the Summit County area. This is part of the ongoing effort of the CWCB to help Colorado's contractors and local sponsors used high elevation high output industry standard cloud seeding machines.

Colorado River Basin Weather Modification Technical Advisory Committee - A new nine-year agreement that budgets up to $500,000 per upper basin state (UT, CO, WY) from the Lower Basin was signed this summer by all the Seven Colorado River States. This is a continuation of an effort that started in 2007 and ended in 2018. The

collaboration in its previous form was individual contracts between each upper basin State and the Southern Nevada Water Authority, California Six Agency committee, and the Central Arizona Water Conservation District. The first meeting of this Colorado River Weather Modification Technical Committee was June 26th at Denver International Airport. It was a forum for Wyoming, Utah, and Colorado to present and defend their funding requests to the Lower Basin that will provide funding and assistance to Colorado's cloud seeding programs. (*Brent Newman and Joe Busto*)

WATER SUPPLY FORECASTING UPDATE—

Rio Grande Permanent Radar –The CWCB has been working with Alamosa County on the purchase and deployment of a permanent weather radar at the Alamosa airport funding comes from the Rio Grande Watershed Emergency Action Team (RWEACT) funded under a Governor's Disaster Recovery Executive Order, CWCB, CDOT, and a State Capitol Development Committee grant. Contracting, construction management, and tight time lines make this project complex so Kirk Russell has joined the team. Board member Heather Dutton has been instrumental in all the progress to date. All sources of funding will be available after July 1. The San Luis Valley is in a well-documented black hole for radar data with the NWS Pueblo radar being beam blocked by the Sangre de Cristo Mountains. Mobile radar data in winter was used to feed hydrologic models to demonstrate that a weather radar can provide valuable data for water supply forecasts. Radar has a multitude of uses and that is why a broad based coalition has gotten behind the project. Using rented radars for the winters for water supply forecast modeling help document the utility to get the water community behind this project. We will be pushing forward towards the deployment of a locally owned and operated weather radar with a goal of the end of 2018 or early 2019. (*Kirk Russell and Joe Busto*)



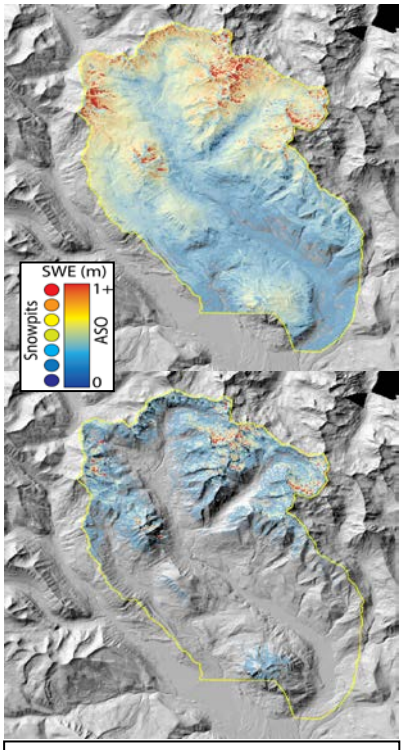
SNODAS training – The CWCB conducted webinars with forty total attendees in May to unveil a new snowpack monitoring tool developed by the Open Water Foundation. The Snow Data Assimilation System (SNODAS) is a national operational snowpack modeling system that went live in 2004. The Open Water Foundation was hired to organize the data and clip it by all of Colorado's smaller watersheds and provide online volumetric snowpack SWE data and graphing capability of the current and historical data now at 14 years. The Project lives on the Colorado DSS website and also on the Open Water Foundation website. This 1km gridded snowpack model provides 100,000 new data points to supplement Colorado's existing 120 SNOTEL sites. The NRCS Snow Survey Program in Portland was impressed with theColorado SNODAS project and has asked for help from the CWCB and Open Water Foundation in the form of follow on work to also make it useful to the NRCS in their decisions for water supply forecasting. The video demonstration of the snowpack monitoring project can be found on the CWCB youtube channel or by simply searching for SNODAS in youtube. (Carolyn Kemp and Joe Busto)

SNOlitestations installed in the Conejos Basin – As part of the ongoing R&D work in the Conejos to help out with water management the National Center for Atmospheric Research funded by the CWCB designed a five new robust low impact snow measurement stations similar to the

data from a NRCS SNOTEL site. This was helpful in USFS permitting as no forest clearing is needed. The goal is to better characterize snowpack, for water modeling, for water forecasting. This will lead to greater certainty and better water allocation. It will also help the Division 2 DWR with more data to meet in state and downstream river compact obligations. The new in progress permanent radar will help with precipitation estimates in wilderness areas. But where we can get more ground data stations we will. Five new SNOLite stations are slated to be installed and managed by the Conejos WCD. Three were installed in June and two more will be installed in late summer.

Red Mountain SNOTEL purchase – The CWCB teamed up with the Colorado River WCD, Ridgway Water Users Association, Upper Gunnison River WCD, and Southwestern WCD to purchase the 10 Acre plot that was private land but also housed Colorado's first and oldest SNOTEL site. The goal was to preserve the period of record and ensure there were two forecasts for Ridgway dam not just one. The Red Mountain SNOTEL is important for water forecasts in several watersheds. Most all of Colorado's SNOTEL sites are permitted and on USFS lands. Colorado's first one was not. Due to its long term record, strategic location, climate change predictions, and ongoing dry periods in the Southwest a coalition was built to preserve this data point. Thanks to former CWCB Member April Montgomery for introducing all the water districts to the Ouray Trust for Land Restoration. The Trust brought this project to fruition and completion.

NASA ASO Flights in Gunnison – The CWCB contracted with NASA Aerial Snow Observatory to conduct a peak snowpack and late in melt flights for the Gunnison, Crested Butte, and Taylor River Basin area to for the Upper Gunnison River Water Conservation District. This will give anunpresentedlook at Gunnison's snowpack. The NASA data will help assess the current snow data, compare its totals to official water supply forecasts and help us for smart expansion of the existing snow data network. The NASA data will be provided to the Colorado Basin River Forecast Center to provide a look back as last winter/spring and hopefully provide some additional understanding for their forecast processes. The CWCB spent around $360,000 in contracts with NASA for a snow off and two snow on flights (April and May) for the Gunnison in 2018.



NASA ASO data for April 1 and May 25, 2018 above Crested Butte

The US Department of Energy (DOE) announced funding for snow science and snow hydrology research in the upper Gunnison basin to complement the NASA ASO data collection project. These projects supplement ongoing research by Berkeley Lab's Watershed Function Science Focus Area project, which seeks to understand how mountainous systems retain and release water, nutrients, and metals as a function of drought and early snowmelt. According to Kenneth Hurst-Williams of Berkeley Lab, "the collective DOE funding for three projects exceeds $1M". The first DOE funded project will utilize multi-scale, seasonal snowpack observations and modeling to more accurately account for water and solute storage and fluxes within the upper Gunnison. The second project will better constrain our physical understanding of aerosol loading, biogeochemistry, and snowmelt hydrology from hillslope to watershed scale within the East River watershed. Both projects will rely heavily on NASA's ASO data. The third project will advance our ability to accurately predict the spatiotemporal distribution of snow cover and

water content across multiple scales by combining land-atmosphere models with operational multi-satellite remote sensing data. Collectively these three projects were designed to complement CWCB funded NASA ASO work that is primarily focused on better understanding our snowpack and improving seasonal water forecasting.

The CWCB, Upper Gunnison River WCD, National Center for Atmospheric Research and the NRCS Snow Survey program are working together to deploy four new SNOlites in the Taylor River basin where there are only two NRCS SNOTEL sites. This will triple the snow data in the Taylor River Basin. According to Frank Kugel, "The reason the Upper Gunnison WCD is interested in new snow data and NASA ASO is we need better data to improve the accuracy of the water supply forecasts. The current SNOTEL network does not adequately address high elevation snowpack. The Taylor River basin forecast early in the season dropped by 18% late in the season (18% less river run off volume than forecasted) providing severe challenges for water managers and river users. The rafting outfitters and irrigators were forced to dramatically adjust their operations. More accurate forecasts would help us better divide water among the competing interests."

Durango Mobile Radar Project – The CWCB Flood and Drought Response Fund and the Department of Homeland Security and Emergency Management will fund a proposal from Oklahoma University to deploy a mobile radar (likely on missionary ridge) from July 1 – October 1. In the past CWCB helped the Rio Grande Watershed Emergency Action Team finds radars so they could fund three mobile radar campaigns to help the Pueblo NWS have eyes on the area. This new mobile radar project will help the Grand Junction NWS better have eyes on the burn scar for the summer monsoon. The radar will also help give a quicker response time for emergency operations plans for public safety. Pictured is the Oklahoma University Advanced Radar Research Corporation's PX 1000 previously on Wolf Creek Pass after the West Fork Complex Fire in the Rio Grande. This radar will now be in Durango on Missionary Ridge from July 1 through October 1. It is an X-Band dual polarized research radar that is set up for real time communication and display of data. Real time displays of radar data will be helpful to help the NWS make more timely and accurate flash flood forecasts and local emergency managers more time to act when there is rain on the burn scars from the 416 fire above Durango. (*Kevin Houck and Joe Busto*)

COLORADO EMERGENCY WATERSHED PROTECTION PROGRAM UPDATE— As the Statewide sponsor for the Natural Resource Conservation Service 2013 Phase II Emergency Watershed Protection (EWP) Program, the Colorado Water Conservation Board (CWCB) was tasked with overseeing and implementing over $63 million in stream recovery work. Following the 2013 floods, CWCB executed its mission by developing comprehensive watershed and stream master plans to unify stakeholders around a common vision that emphasized natural stream function and ecosystem health along with property and infrastructure protection. The vision was not singularly flood mitigation, but also systemic stream resiliency. The EWP Program was a critical component in Colorado's flood recovery accomplishing extensive protection and restoration for Colorado's communities, economies, and river systems.

To deliver on the State's goals of overall stream resiliency while also meeting the EWP program goals of protecting life and safety, a comprehensive team of experts was assembled. This team was carefully crafted to directly support resilient stream design and also coordinated the needs of local sponsors, landowners, and construction contractors. Successful implementation of the EWP Program to deliver long-term stream resiliency and health was achieved by thoughtful, well-planned, and intentional interactions, team structure, comprehensive technical resources, innovative thinking, and design processes.

In total, 67 flood recovery projects were completed under the EWP program in nine flood-affected watersheds and 13 major streams and their associated tributaries. As a result of this program, more than 40 miles (>200,000 linear feet) of streams were improved, rehabilitated, and restored providing flood protection that reduce future flood damage by approximately $270 million.

(*Chris Sturm and Jeff Sickles, EWP Consulting Program Manager*)

Program Highlights

- Timeline: March 2015 - May 2018
- 67 projects completed in 9 flood-affected watersheds (13 major waterways)
- Over 40 miles of stream (211,200 linear feet) of river improvements implemented
- Total construction costs of nearly $50 million (program under budget and met NRCS schedule requirements)
- Worked with over 500 private property owners
- Near-term damage reduction as a result of implemented projects of $270 million (both public infrastructure and private property).
- Program coordinated the growing of native plants through the Colorado State Forest Service to fully meet the supply demands of all 67 EWP projects.
- In total, CWCB coordinated project implementation through 18 different project sponsors, including watershed coalitions and local governments.
- A total of 70 species are included. 66% woody; 6% herbaceous; 29% graminoid (grasses and grasslikes).
- Approximately 60,588 cuttings; 143,090 large containers (D40/D60); and 83,290 plugs were planted
- Approximately 986 lbs of native seed was used to reclaim and revegetate project sites.

~AGENCY UPDATES~

WEBSITE REVISION UPDATE— CWCB is planning to redesign its website in early 2019. This schedule has been pushed back from the original plan due to technical delays on the part of our web hosting provider. CWCB staff plan to prepare for the redesign this summer by soliciting user input and suggestions. A survey requesting user input will be postedon our website soon.

The website that houses Colorado's Decision Support System (CDSS) is currently in the middle of an upgrade.The look and feel of the site will be more modern and streamlined; the site functionality will remain the same. The new site will go live in early August. Feedback on the new site is welcome; Board Members and all site users are asked to contact Carolyn Kemp at carolyn.kemp@state.co.us to provide input. (*Carolyn Kemp*)

STAFFING— Erik Skeie receives promotion within the Interstate, Federal and Water Information Section
Erik Skeie has been promoted to the role of Special Projects Coordinator in the Interstate, Federal, and Water Information Section. Erik will continue his work on high groundwater issues in the South Platte Basin and overseeing tamarisk management grants. He has taken on additional roles and responsibilities in assisting with interstate programs including the Platte River Recovery Implementation Program and Glen Canyon Dam Adaptive Management Program; helping coordinate outreach and engagement of users of Colorado's Decision Support System; and monitoring Recreational In-Channel Diversion issues. Congratulations, Erik! (*Carlee Brown*)

RECENTLY DECREED ISF WATER RIGHTS— On June 2, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on a reach of North Fork ElkheadCreek in Case No. 17CW3029 for 1.8 cfs (12/01 - 03/31), 5.4 cfs (04/01 - 06/30), 1.2 cfs (07/01 - 07/31), 0.57 cfs (08/01 - 09/17), and 1.4 cfs (09/18 - 11/30), with an appropriation date of January 24, 2017. The headwaters of North Fork Elkhead Creek is the upstream terminus,and the lower terminus is the confluence with Elkhead Creek. This ISF reach is approximately 9.39miles long and it flows in a southerly direction through parts of Routt County. Colorado Parks and Wildlife recommended this reach of North Fork Elkhead Creek to help protect its Colorado River cutthroat trout and mountain sucker populations.

On June 2, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on a reach ofSlater Creek in Case No. 17CW3030 for 16 cfs (10/16 - 03/15), 25 cfs (03/16 - 04/15), 74 cfs (04/16 - 06/30), 25 cfs (07/01 - 07/15), 10 cfs (07/16 -07/31), 6.5 cfs (08/01 – 09/15), and 8.5 cfs (09/16- 10/15), with an appropriation date of January 24, 2017. The confluence with Beaver Creek is the upstream terminus, and the lower terminus is at the location of USGS gage # 09255000. This ISF reach is approximately 12.58 miles long and it flows in a northwesterly direction through parts of Moffat County. The Bureau of Land Management recommended this reach of Slater Creekto protect its bluehead sucker population.

On June 6, 2018, the Division 1 Water Court decreed natural lake level water rights to the CWCB Square Top Lake (Upper) and Square Top Lake (lower) in Case No. 17CW3189 for 113.14 acre-feet (Upper), and 26.79 acre-feet (Lower), both with an appropriation date of January 24, 2017. Colorado Parks and Wildlife recommended these lakes because they are ideal water bodies for conservation activities in the recovery of greenback cutthroat trout.

On June 13, 2018, the Division 7 Water Court decreed instream flow water rights to the CWCB on a reach of Little Sand Creek in Case No. 17CW3046 for 1.5 cfs (12/01 –02/29), 1.9 cfs (03/01 – 03/31), 3.6 cfs (04/01 – 04/15), 6.6 cfs (04/16 – 07/31), 3 cfs (08/01 – 09/15), 2.2 cfs (09/16 – 09/30), and 3 cfs (10/01 – 11/30), with an appropriation date of March 23, 2017. The headwaters of Little Sand Creek is the upstream terminus, and the lower terminus is the confluence with WeminucheCreek. This ISF reach is approximately 8.07 miles long and it flows in a

southeasterly direction through parts of Hinsdale County. The U.S. Forest Service recommended this reach of Little Sand Creek to protect its Colorado River cutthroat trout and brook trout populations.

On June 29, 2018, the Division 1 Water Court decreed instream flow water rights to the CWCB on a reach of Rock Creek in Case No. 17CW3180 for 0.9 cfs (09/01 - 04/30), and 3.8 cfs (05/01 - 08/31), with an appropriation date of January 24, 2017. The headwaters of Rock Creek is the upstream terminus, and the lower terminus is located at the natural falls just upstream of the U.S. Forest Service property boundary. This ISF reach is approximately 4.66 miles long and it flows in a southwesterly direction through parts of ParkCounty. Colorado Parks and Wildlife recommended this reach of Rock Creek to help protect its greenback cutthroat population.

On June 29, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on two reaches of Elkhead Creek in Case No. 17CW3031. Flow amounts for the upper reach are4.4 cfs (10/16 - 03/31), 14 cfs (04/01-07/15), 7 cfs (07/16 - 07/31), and 3 cfs (08/01- 10/15); for the lower reach the flow amounts are 6.4 cfs (10/01 – 02/29), 10 cfs (03/01 – 03/15), 24 cfs (03/16 – 06/30), 10 cfs (07/01 – 07/15) and 2.5 cfs (07/16 – 09/30), both having an appropriation date of January 24, 2017. The upstream terminus for the upper reach is the confluence with First Creek, and the lower terminus is the confluence with North Fork Elkhead Creek, being a distance of approximately 10.94 miles. The upstream terminus for the lower reach is the confluence with North Fork Elkhead Creek, and the lower terminus is the location of USGS gage # 09246200, being a distance of approximately 15.83 miles. Both reaches flow in a southwesterly direction through parts of Routt County. Colorado Parks and Wildlife recommended these reaches of Elkhead Creek to protect its Colorado River cutthroat trout and mountain sucker populations. (*Rob Viehl*)

~GENERAL ATTACHMENTS~

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

~LOAN PROGRAM ATTACHMENTS~

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

July 18-19, 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. 15CW3145 (Water Division 1) - Application of Winding River Ranch LLC

The Board ratified this Statement of Opposition at its January 2016 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed change of water rights and augmentation plan does not injure the Board's instream flow water right on South Fork South Platte River by expansion of use or not replacing depletions in the proper time, place and amount. In addition, Applicant's claim for piscatorial direct flow rights may not be valid given the recent ruling in St. Jude's Co. v. Roaring Fork Club, L.L.C., 2015CO51, 351 P.3d 442 (Colo. 2015). 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 the Division 1 Court's October 2018 trailing docket.

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

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
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

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

- Applicant agreed and clarified a few items in its decree describing the plan of augmentation, such as confirmation that piscatorial use will occur only in the reservoirs, and that irrigation use from stored water will not be augmented by this plan.
- Applicant assured CWCB that the reservoir inflow and outflow are via monitored and gauged pipelines.

- Applicant confirmed that return flows owed to the stream system from the previous change of water rights are owed by Aurora pursuant to the previous decree.
- Evaporation tables now reflect potential evaporation for each month. Frozen periods will be assessed as they occur.
- To address a downstream ISF call the following term is included in the decree:
    - "When the CWCB's instream flow right is calling and the applicant does not have adequate augmentation water to replace evaporation, especially including in those months in which applicant has no augmentation water in its plan decreed herein, applicant will curtail all consumptive diversions into Burlingame Reservoir No. 2 and Chapelle Reservoir. Because the non-consumptive portions are piped, however, and the only losses are evaporation in-reservoir, these non-consumptive diversions shall not be curtailed so long as they are, at all times, metered and released at the same rate that they are diverted into the reservoirs. During such instream flow right call, water levels in the reservoirs will drop commensurate with evaporation."

(2) Case No. 16CW3101 (Water Division 2) - Application of Town of Buena Vista

The Board ratified this Statement of Opposition at its March 2017 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the claimed appropriation date senior to the instream flow does not cause injury. The instream flow water right might be subject to the claimed water rights under C.R.S. 37-92-102(3)(b) if the new water rights are sufficiently documented and verified. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water right will not be injured. The case remains pending before the water court referee.

The CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
79CW0115	Cottonwood Creek	confl M&S Cottonwood Creeks	confl Arkansas River	20 (1/1 - 12/31)	03/14/1979

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

- "Municipal uses, including, without limitation, domestic, commercial, industrial, fire protection, and for augmentation within the Town's service area as it now exists and as it may exist in the future, or extraterritorially by contract with the Town." However, "[a]ny out-of-pond uses upstream of McPhelemy Pond, including augmentation of diversions that occur upstream, shall only be pursuant to a separate decree or administrative approval, subject to public notice on the SWSP notification list, authorizing such upstream use."

- Pursuant to C.R.S. § 37-92-102(3)(b), CWCB and Applicant recognize that:

- a. Applicant's in-pond municipal uses, specifically recreation, fishery, piscatorial, and aesthetic, were being made pursuant to appropriation or practices in existence at the time of the CWCB's appropriations of instream flow rights on Cottonwood Creek decreed in Case No. 79CW115. The instream flows decreed in 79CW115 are therefore subordinate to those in-pond uses, except for aesthetic uses. The subordination shall apply only to storage up to 6.1 acre-feet per year for purposes of the first fill of the pond (4.16 acre-feet) for in-pond uses and to replace out of priority evaporation associated therewith (1.94 acre-feet). The instream flows decreed in 79CW115 are not subordinated to any out-of-pond uses further described in [decree] paragraph 7.c.ii.

  b. The subordination of the instream flow water right to the Applicant's in-pond uses described in subparagraph 19.a. above and decreed herein pursuant to C.R.S. § 37-92-102(3)(b) in this case shall not interfere with the administration of the storage right in priority as against other water rights, and shall not result in general subordination of the CWCB's Cottonwood Creek instream flow rights decreed in Case No. 79CW115, to any other water rights junior to that instream flow water right, including Applicant's conditional municipal uses described in [decree] paragraph 7.c.ii.

  c. While the CWCB's decreed instream flow water rights described herein are subject to the Applicant's in-pond uses described in subparagraph 19.a. above, except for aesthetic uses, pursuant to C.R.S. § 37-92-102(3)(b), the water right decreed herein will be administered subject to the prior appropriation system in relation to all other water rights.

(3) Case No. 17CW3022 (Water Division 2) - Application of Town of Buena Vista

The Board ratified this Statement of Opposition at its July 2017 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed plan for augmentation and exchange does not injure the Board's instream flow water right on Cottonwood Creek by not replacing depletions in the proper time, place and amount. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. The case remains pending before the water court referee.

The CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
79CW0115	Cottonwood Creek	confl M&S Cottonwood Creeks	confl Arkansas River	20 (1/1 - 12/31)	03/14/1979

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

- Evaporation tables now reflect potential evaporation for each month. Frozen periods will be assessed as they occur.

- If the calling water right is on Cottonwood Creek, including a call by CWCB for its decreed instream flow rights on Cottonwood Creek, the Town will augment the depletions by releases of Project Water stored in Cottonwood Lake; except that, if CWCB's instream flow water right on Cottonwood Creek is the calling water right, then the Town is only required to augment out-of-priority depletions in excess of 6.1 acre-feet for the first fill of the pond for in-pond uses (but not aesthetic) and evaporation associated therewith, to which CWCB's instream flow right is subordinated pursuant to the terms of the 16CW3101 decree. If the Town's Project Water is unavailable to augment McPhelemy Pond out-of-priority depletions, the Town will release water previously stored in priority for augmentation purposes under the McPhelemy Pond storage right decreed herein or previously stored by the exchange described below in paragraphs 9-16. During the time period of May 1 – October 31, if the CWCB's instream flow right is the calling right and is not subordinated to the uses described above, depletions shall be replaced daily or as otherwise directed by the water commissioner. For all other calls during the time period of May 1 – October 31 and for all calls during the time period of November 1 – April 30, depletions may be aggregated and replaced as directed by the water commissioner.

- If and to the extent out-of-priority depletions cannot be augmented as provided above, on-channel impoundment at McPhelemy Pond will be curtailed and the Division Engineer shall require Applicant to install an outlet pipe at the bottom of the dam or some other mechanism capable of draining the reservoir completely as necessary to protect material injury to vested water rights.

(4) Case No. 16CW3076 (Water Division 2) - Application of Southeastern Colorado Water Conservancy District

The Board ratified this Statement of Opposition at its March 2017 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed change of water rights does not injure the Board's instream flow water right on Lake Creek and Lake Fork in Division 2 or any existing Division 5 water rights by expansion of use or altering the time, place and amount of the contemplated draft. 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 a 10-day trial beginning on July 22, 2018.

The CWCB holds instream flow water rights, including the following, in Water Division 2 in the Arkansas Headwaters watershed that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
75W4271	Lake Creek	Twin Lakes Res outlet	confl Arkansas River	15 (1/1 - 12/31)	05/01/1975
77W4654	Lake Fork	outlet Turquoise Res	confl Willow Creek	15 (1/1 - 12/31)	01/19/1977
77W4655	Lake Fork	confl Willow Creek	confl Arkansas River	20 (1/1 - 12/31)	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 listed not only its division 2 water rights, but also its division 5 water rights in the water court application. CWCB's opposition and negotiation was mainly to obtain decree clarification that the claims only pertained to the division 2 water rights.

(5) Case No. 16CW3079 (Water Division 2) - Application of Southeastern Colorado Water Conservancy District

The Board ratified this Statement of Opposition at its March 2017 meeting. The Board filed a Statement of Opposition to Applicant's Application for Finding Due Diligence. The CWCB holds numerous instream flow water rights in Water Divisions 2 and 5 that may be adversely affected if the application is granted without necessary protective terms and conditions. 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 consolidated with 16CW3076 and is set for a 10-day trial beginning on July 22, 2018.

- Applicant listed not only its division 2 water rights, but also its division 5 water rights in the water court application. CWCB's opposition and negotiation was mainly to obtain decree clarification that the claims only pertained to the division 2 water rights.

(6) Case No. 14CW3179 (Water Division 5) - Application of Maroon Creek Limited Liability Company

The Board ratified this Statement of Opposition at its March 2015 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's proposed plan for augmentation and exchange does not injure the CWCB's instream flow water rights by not replacing depletions in time, place, and amount that they occur. The proposed appropriative rights of exchange should be defined clearly with a reference to intervening instream flow water rights so that the CWCB's instream flow water rights are not injured. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured. This case was stayed pending resolution of 16CW3063. CWCB has settled both cases and the proposed decrees have been filed with the court. While the cases have been re-referred to the Judge, no trial has been set in either matter.

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

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
76W2945	Maroon Creek	confl E & W Maroon Creeks	confl Roaring Fork River	14 (1/1 - 12/31)	01/14/1976
10CW0184^	Maroon Creek	hdgt Stapleton Bros Ditch	confl Roaring Fork River	3.83 (5/1 - 10/31)	06/30/1904
85CW0646	Roaring Fork	confl Maroon	confl	30 (10/1 - 3/31)	11/08/1985

	River	Creek	Fryingpan River	55 (4/1 - 9/30)	
10CW0184^	Roaring Fork River	confl Maroon Creek	confl Owl Creek	3.54 (5/1 - 10/31)	06/30/1904
10CW0184^	Roaring Fork River	confl Owl Creek	confl Fryingpan River	0.89 (5/1 - 5/31) 0.59 (6/1 - 6/30) 0.64 (7/1 - 7/31) 0.5 (8/1 - 8/31) 0.4 (9/1 - 9/30) 0.15 (10/1 - 10/31)	06/30/1904
85CW0639	Roaring Fork River	confl Fryingpan River	confl Crystal River	75 (10/1 - 3/31) 145 (4/1 - 9/30)	11/08/1985

^ Donated/Acquired Water Right

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

- "The plan for augmentation operates directly and/or by exchange. When the plan operates by exchange, should the exchange be out-of-priority due to a valid call for water within the applicable exchange reach that: (i) is senior to the 2014 exchange priority decreed herein; (ii) is recognized and administered by the Division Engineer; and (iii) is not capable of augmentation under the plan (including a valid senior call placed by the CWCB and administered by the Division Engineer within the applicable exchange reach that is not capable of augmentation under the plan), then the Division Engineer shall curtail out-of-priority diversions made to replace evaporation from the reservoirs and administer the reservoirs so that the reservoir levels will be allowed to drop commensurate with the rate of evaporation during the period of the call."

(7) Case No. 16CW3063 (Water Division 5) - Application of Maroon Creek Limited Liability Company

The Board ratified this Statement of Opposition at its November 2016 meeting. The Board's main objective in filing the Statement of Opposition in this case was to ensure that the Applicant's apparent proposed change of water rights does not injure the Board's instream flow water right on Colorado River, Maroon Creek and Roaring Fork River by expansion of use or altering the time, place and amount of historical return flows. The Applicant seeks an order from the Court declaring that the Judgment and Decree entered in Case No. 89CW282 includes a right to refill four reservoirs (Maroon Creek Development Corporation Reservoir Nos. 1, 2, 3, and 4) under the decree's 1989 adjudication. The CWCB holds instream flow water rights in Water Division 5 on Maroon Creek, the Roaring Fork River, and the Colorado River, that are decreed in Case Nos. 76- W-2945, 85CW0639, 85CW0646, 10CW0184, 92CW286 and 94CW330. The CWCB is an opposing party in Applicant's pending application for an augmentation plan in Case No. 14CW3149, Water Division 5, where the CWCB has asserted that the Applicant's decree in Case No. 89CW282 did not include refill rights for the four reservoirs. The CWCB files this Statement of Opposition to ensure that its water rights are not injured by the Application, and to ensure that the relief granted by the Court in this case is in

accordance with the law concerning the adjudication and administration of decreed storage rights. 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. Case No. 14CW3179 was stayed pending resolution of this Case No. 16CW3063. CWCB has settled both cases and the proposed decrees have been filed with the court. While the cases have been re-referred to the Judge, no trial has been set in either matter.

The CWCB holds instream flow water rights, including the following, in Water Division 5 in the Colorado Headwaters-Plateau and Roaring Fork watersheds that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
92CW0286	Colorado River	tailrace Grand Valley Irr Co div	confl Gunnison River	581 (7/1 - 9/30)	03/05/1992
94CW0330*	Colorado River	27.5 Road Gage	confl Gunnison River	300 (7/1 - 9/30)	11/04/1994
76W2945	Maroon Creek	confl E & W Maroon Creeks	confl Roaring Fork River	14 (1/1 - 12/31)	01/14/1976
10CW0184^	Maroon Creek	hdgt Stapleton Bros Ditch	confl Roaring Fork River	3.83 (5/1 - 10/31)	06/30/1904
85CW0646	Roaring Fork River	confl Maroon Creek	confl Fryingpan River	30 (10/1 - 3/31) 55 (4/1 - 9/30)	11/08/1985
10CW0184^	Roaring Fork River	confl Maroon Creek	confl Owl Creek	3.54 (5/1 - 10/31)	06/30/1904
10CW0184^	Roaring Fork River	confl Owl Creek	confl Fryingpan River	0.89 (5/1 - 5/31) 0.59 (6/1 - 6/30) 0.64 (7/1 - 7/31) 0.5 (8/1 - 8/31) 0.4 (9/1 - 9/30) 0.15 (10/1 - 10/31)	06/30/1904
85CW0639	Roaring Fork River	confl Fryingpan River	confl Crystal River	75 (10/1 - 3/31) 145 (4/1 - 9/30)	11/08/1985

* Increased
^ Donated/Acquired Water Right

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

- "The parties hereto acknowledge and agree that the Application, Amended Application, and other court records in Case No. 89CW282 included a claim for refill of the Maroon Creek Development Corporation Reservoir Nos. 1, 2, 3, and 4 (collectively, the "Ponds") but, due to oversight, express language regarding refill was not mentioned in the decree in Case No. 89CW282."

- "In consideration of the CWCB's stipulation and agreement for entry of a decree confirming refill for the Ponds as claimed in this case, Applicant agrees as follows:
    - A. Applicant shall limit its volume of refill under the right and priority decreed in Case No. 89CW282 to only the amount needed to replace evaporative losses from the Ponds for recreation and fish and wildlife purposes, which amount equates to an annual average of 16.59up to 18.93 acre-feet per year. The foregoing refill limitation applies only to the rights adjudicated in Case No. 89CW282 and shall not apply to any other water rights that Applicant may own or use in conjunction with the Ponds.
    - B. At times when the bypass and/or release of augmentation water are not otherwise required by a senior calling right against Applicant's Pond refill and the CWCB places a valid call for water under the terms of the Colorado River instream flow decree in Case No. 92CW286 that is recognized and administered by the Division Engineer, then, notwithstanding the junior priority date of such instream flow call vis-à-vis Applicant's Pond refill, Applicant will provide replacement water in the form of bypass of Applicant's historical consumptive use credits in the Stapleton Brothers Ditch, supplemented by releases of reservoir storage water pursuant to Applicant's contract with the Colorado River Water Conservation District as needed, in an amount equivalent to Applicant's evaporative losses from the Ponds during the period of such instream flow call."

General Attachment 02 –July 18-19, 2018CWCB 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
18CW3027	Douglas L. Zook	Colorado River/ 90CW0300	40 (5/1 - 8/31) 20 (9/1 - 4/30)	0.00110 0.00050	0.37642 0.39162	26

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: July 18-19, 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: July 18-19, 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
•**Subtotal**		**$18,300,000**

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: July 18-19, 2018 Board Meeting

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

The CWCB Loan Program has Substantially Completed ten (10) projects in Fiscal Year 2017-2018 as shown in Table 1. There are currently fifty three (53) projects authorized to receive loan funding totaling $386 million. There are forty three (43) projects currently under contract and in the Design and Construction phase totaling $221 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	West Reservoir & Ditch Company	Repair of West Reservoir No. 1 Outlet Works	Delta	$313,018	7/1/2017 (a)
2	North Poudre Irrigation Co	Rehabilitation Livermore Irrigation Tunnel	Larimer	$1,451,673	7/1/2017
3	Upper Arkansas Water Conservancy District	North Fork Reservoir Rehabilitation	Chaffee/Custer	$902,642	10/1/2017 (b)
4	Thunderbird W&S Dist	Lambert Ranch Water Rights Purchase	Douglas	$318,150	11/1/2017
5	Chilcott Ditch Company	Jimmy Camp Creek Siphon Reconstruction	El Paso	$459,991	11/1/2017
6	Riverside Ditch and Allen Extension Company	Phased Canal Improvements	Chafee	$159,574	1/1/2018
7	Lookout Mountain Water District	Upper Beaver Brook Dam Spillway	Clear Creek	$2,746,062	1/1/2018 (c)
8	Supply Irrigating Ditch Company	Emergency Supply Irrigating Ditch Repair Project	Boulder	$324,210	3/1/2018
9	Georgetown, Town of	Outlet Works Modification Project	Clear Creek	$2,976,975	4/1/2018(d)
10	Lake McIntosh Reservoir Company	Lake McIntosh Outlet Works Repair	Boulder	$1,727,100	5/1/2018 (e)
			Total	$11,379,395	

Fiscal Year 2017-2018 has added or preserved 4669 acre-feet of reservoir storage (a) 455; (b) 1095; (c) 257; (d) 386; (e) 2,476

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Repair of West Reservoir No. 1 Outlet Works

West Reservoir and Ditch Company

Substantially Complete July 1, 2017

Project Description

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

P R O J E C T D A T A		
Sponsor: West Reservoir and Ditch Company	*County:* Delta	*Water Source:* Jay Creek
Type of Loan: Reservoir Rehabilitation	*Board Approval Date:* November 2014	
Terms of Loan: $248,378.00 *(Original)* $313,018.19 *(Final)* at 2.0% for 30 years		
Design Engineer: RJH Engineers		
Contractor: Rundle Construction		

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Colorado Water Conservation Board
Department of Natural Resources

Livermore Irrigation Tunnel Rehabilitation

North Poudre Irrigation Company

Substantially Complete July 1, 2017

Project Description

The North Poudre Irrigation Company service area encompasses approximately 300 square miles, including 160 square miles of service area under the North Poudre Canal (36 square miles of irrigated acreage), as well as additional service areas covering 14 communities and municipal water providers that own NPIC shares.

The Livermore Tunnel carries water diverted from the North Poudre Canal headgate, located on the north side of the North Fork Cache la Poudre River, for approximately 4, 900 feet before it is discharges into an earth-lined open canal and flows on toward the Buckeye Lateral, Park Creek Reservoir, and the Company's downstream delivery infrastructure. The Livermore Tunnel consists of two tunnels connected by a short section of open channel. The tunnels are approximately 8. 5 feet high and 8 feet wide with a concrete invert along the entire tunnel length. The tunnels are considered generally stable with the exception of six collapse zones where large piles of rock and debris had accumulated in the base of the tunnel, ponding up to three feet of water and restricting the overall flow capacity. Construction activities consisted of repairing those six collapse zones, and installing a concrete liner plate base, overhead and side liner plates, and filling in the voids between the wall and new liner plates.

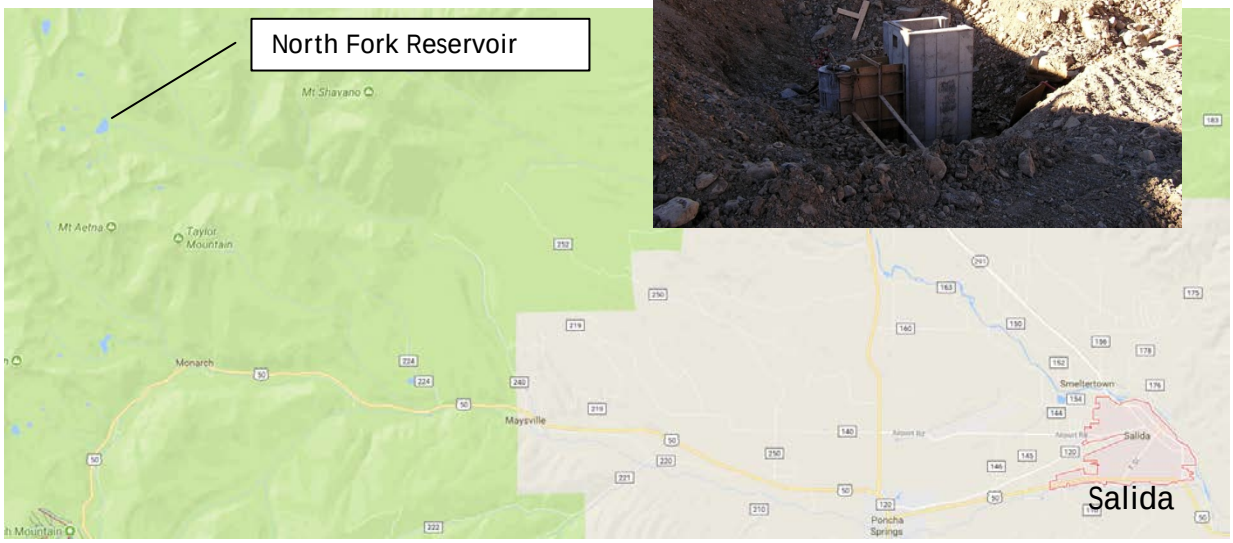
P R O J E C T D A T E		
Sponsor: North Poudre Irrigation Company	*County:* Larimer	*Water Source:* Cache La Poudre
Type of Project: Ditch Rehabilitation	*Board Approval Date:* July 2016	
Loan Terms: 2.25% for 30 years *(Original)* $1,451,673 *(Final)* $1,451,673		
Design Engineer: AECOM		
Contractor: Rock Solid Solutions		

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

North Fork Reservoir Rehabilitation/Expansion

Upper Arkansas Water Conservancy District

Substantially Complete October 1, 2017



Project Description

The Upper Arkansas Water Conservancy District is located in Salida, Colorado, and serves to protect and develop water supplies in Chaffee, Western Fremont and Custer Counties. The District has operated the North Fork Reservoir since 1979 for domestic, municipal, industrial, recreational and augmentation purposes. The reservoir is located in the San Isabel National Forest near the headwaters of the North Fork of the South Arkansas River at elevation 11,400 feet. The project repaired the outlet pipe/gate structure and improved the access for construction. After repairs were complete, access to an additional 67 acre-feet of storage was made available.

The enlargement phase of the loan was planned to increase the Reservoir capacity from 500 acre-feet to 1095 acre-feet. This required an increase in the dam height by 15 feet. After several years of permitting efforts the District decided not to continue the enlargement effort under this loan authorization.

P R O J E C T D A T A		
Sponsor: Upper Arkansas Water Conservancy District	*County:* Chaffee	*Water Source:* North Fork of the South Arkansas River
Type of Loan: Reservoir Rehabilitation	*Board Approval Date:* November 2004	
Terms of Loan: 3.0% for 30 years *(Original)* $3,009,800 *(Final)* $902,642.40		
Design Engineer: Colorado River Engineering		
Contractor: ASI Constructors, Inc.		

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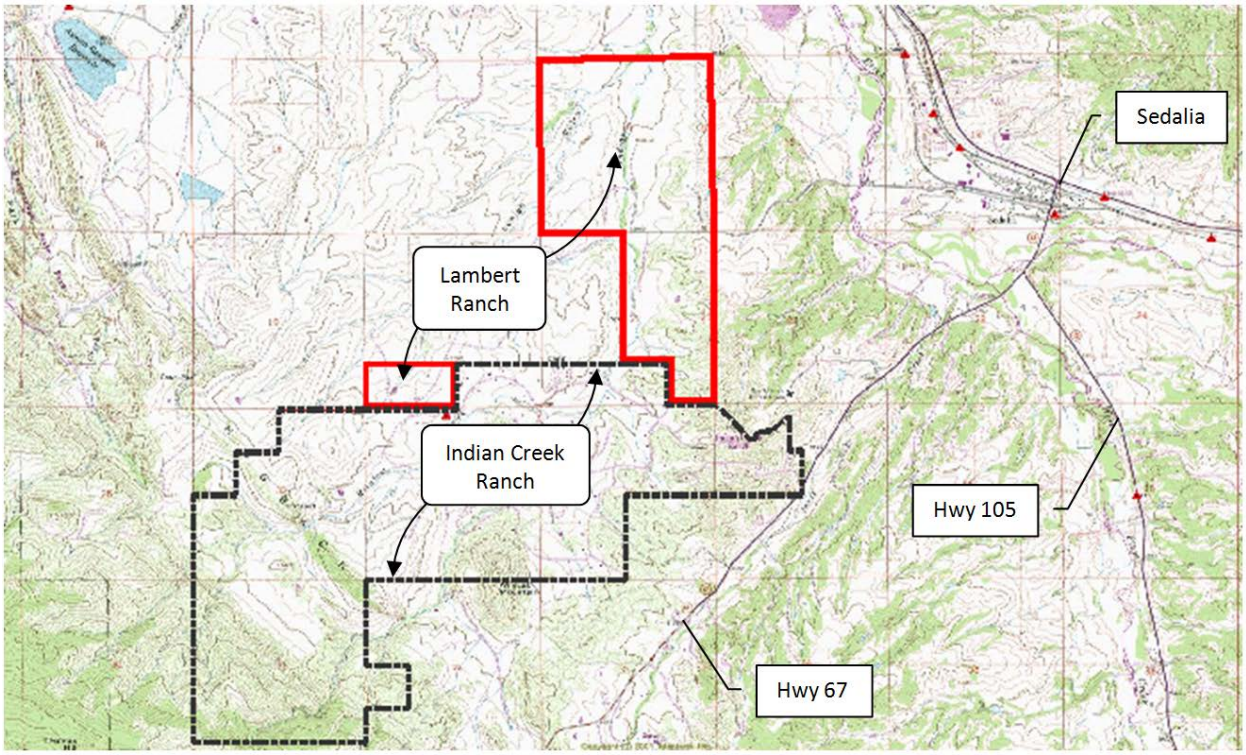
Colorado Water Conservation Board
Department of Natural Resources

Lambert Ranch Water Rights Purchase

Thunderbird Water & Sanitation District

Substantially Complete November 1, 2017



Project Description

The Thunderbird Water and Sanitation District (District) provides potable water service for the Indian Creek Ranch subdivision, consisting of 2,420 acres and 175 customers. On average, the District delivers approximately 55 AF annually. The District used loan funds to purchase Denver Basin decreed ground water rights with a total average annual acre-foot amount of 895.9 AF. This water right underlies the property known as Lambert Ranch. The easement acquisition for a well site is ongoing. The increase would enable the District to enlarge its available supply; thereby increasing system reliability, providing the redundancy necessary to allow for system maintenance and protect against aquifer depletions.

P R O J E C T D A T A		
Sponsor: Thunderbird Water and Sanitation District	*County:* Douglas	*Water Source:* Denver Basin Aquifer
Type of Loan: Water Rights Purchase	*Board Approval Date:* July 2011	
Terms of Loan: 4.25% for 20 years *(Original)* $318,150 *(Final)* $318,150		
Design Engineer: Leonard Rice Engineers, Inc.		
Contractor: NA		

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Jimmy Camp Creek Siphon Reconstruction

Chilcott Ditch Company

Substantially Complete November 1, 2017

Project Description

The Chilcott Ditch Company, located in El Paso County, operates 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 deliveries are made through the Company's eight mile ditch to service historically irrigated areas under the ditch, as well as to an augmentation station that measures direct flow water returning back to Fountain creek on behalf of shareholders. The original 42-inch diameter 1,300 foot long siphon conveyed ditch water flows under Jimmy Camp Creek to historically irrigated farmland to the south of the City of Fountain. During the 1940's the siphon was constructed from asphalt dipped corrugated steel pipe and served for nearly 76 years. In reviewing the siphon's age, maintenance history and number of failures, the Company rebuilt the siphon with new 42-inch PVC piping.

P R O J E C T D A T A		
Sponsor: The Chilcott Ditch Company	*County:* El Paso	*Water Source:* Fountain Creek
Type of Loan: Ditch Rehabilitation	*Board Approval Date:* January 2017	
Terms of Loan: (Original) $580,750 at 2.20% for 20 years *(Final)* $459,991.12 at 2.20% for 20 years		
Design Engineer: JPS Engineering		
Contractor: Backhoe Services, LLC		

COLORADO
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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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		

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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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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		

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
1	Bennett, Town of >Wells #3 and #6 Replacement Project CT2015-161	Adams Arapahoe	$1,454,000	100%	May 2015 - March 2018	99%	AM	The wells are online. Loan substantial completion is pending.
2	Bessemer Irrigation Ditch Company >Landslide Stabilization and Dirtch Lining CT2018-2829	Pueblo	$909,000	100%	March 2018 - March 2021	50%	RP	Ditch stabilization phase complete. Backfill complete along wall. Winter 2018/2019 begin ditch lining.
3	Big Elk Meadows Association > Emergency Raw Water Storage Repair C150391	Boulder/ Larimer	$2,020,000	60%	July 2014 - Sept 2018	60%	JH	Project will rebuild 5 dams damaged in 2013 flood. 3 dams have been completed: Mirror Dam (2015), Rainbow Dam (2016) and Willow Dam (2017). Sunset and Meadow Dams final design and construction pending. Loan increased at March 2017 Board meeting, 0% interest thru 2020.
4	Bonus Ditch Company > St. Vrain Diversion Replacement CT2018-2081	Longmont & Boulder	$1,309,970	60%	Fall 2018 - Spring 2019	0%	JH	City of Longmont will perform project management for this project. Final Design is near complete. Bidding should occur Summer 2018 with construction starting Fall 2018
5 - 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	
6 - 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 - Fall 2019	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. Preliminary Design of environmental and recreation activities, and Army Corps review of preliminary design has been completed. Final Design is nearing completion. 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 fall 2019
b	Centennial Water & Sanitation District >(C150405B) CT2016-2055	Arapahoe Douglas Park Weld	$37,573,717	99%	Sept 2017 - Fall 2019	40%	JH	
c	Center of Colorado Water Conservancy District >(C150406B) CT2016-2048	Arapahoe Douglas Park Weld	$511,363	99%	Sept 2017 - Fall 2019	40%	JH	

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
d	Central Colorado Water Conservancy District >(C150407B) CT2016-2058	Arapahoe Douglas Park Weld	$19,812,059	99%	Sept 2017 - Fall 2019	40%	JH	that Phase 1 could be completed by fall 2019.
7 - CHATFIELD Reallocation Project - Phase 2 Mitigation								$7,000,310
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 Douglas Weld	$7,000,310	0%	Fall 2019 - Summer 2020	0%	JH	
8	Centenial Irrigating Ditch Company >Centenial Diversion Replacement CT2108-1999	Rio Grande	$232,300	100%	Jan 2018 - Mar 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 and final billing remain.
9	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.
10	Church Ditch Water Authority >Ditch System Improvements CT2018-1335	Jefferson	$3,615,000	75%	Dec 2017 - Spring 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.
11	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.
12	Corsentino Dairy Farms, Inc. >Holita Dam Rehibilitation CT2018-980	Walsenburg	$112,716	100%	Jan 2018 - May 2018	99%	AM	The contractor is working on punchlist items. Construction is near completion.
13	Dixon Canon Ditch & Reservoir Company >Dixon Reservioir Dam Improvements CT2017-914	Larimer	$278,100	100%	Jan 2018 - Mar 2018	99%	JH	Contractor mobilized to site in January 2018 and construction was substantially completed by the end of March 2018. Loan to be Substantially Completed 7/1/18.
14	Duke Ditch Company >Piping the Duke Ditch CT2017-915 Loan-WSRFGrant	Delta	$90,000	90%	Fall 2018 - Spring 2019	0%	AM	NRCS began design work in August 2017. Construction will begin in fall 2018. Loan increase may be needed.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
15	Fort Lyon Canal Company >Adobe Creek Dam Rehabiliatation CT2018-1960 CTGG1 2018-806	Bent	$8,181,000	30%	Fall 2017 - Spring 2020	0%	RP	Waiting Dam Safety approval (anticipate June 2018). Out for bid in July 2018.
16	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. Will have project update Summer 2018.
17	Grand Mesa Water Conservancy District >Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	$227,250	100%	Mar 2013 - Sept 2018	50%	AM	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 is expected to begin in summer of 2018.
18	Grand Valley Water Users Association >Government Highline Canal Lining CT2017-2258 CTGG1 2017-770	Mesa	$151,500	100%	Nov 2017 - April 2018	99%	AM	Construction is complete. Staff is working with borrower on loan substantial completion.
19	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.
20	Huerfano County Water Conservancy District >Regional Augmentation Project C150364 (CT2015-047) CTGG1 2015-528	Huerfano	$2,222,000	100%	Jan 2014 - Mar 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.
21	Lake Durango Water Authority >Source Water Supply Project C150317 (CT2015-013) CTGG1 2015-370	LaPlata	$2,525,000	100%	Oct 2016 - Feb 2018	98%	KR	All project components are completed. Final testing and warranty monitoring is underway. Project substantial completion is expected midsummer.
22	Lamar, City of >Repurposing of Wells 12 and 13 CT2017-917 CTGG1 2017-211	Prowers	$101,000	100%	Jun 2017 - Sept 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 information and submitting a plan to move forward with project.
23	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.
24	Left Hand Water District >Participation in Southern Water Supply Project II CT2018-2028	Broomfield & Weld	$10,000,000	100%	June 2018 - March 2020	0%	JH	Final design and bidding is complete. Contractor to mobilize June 2018. Project is managed by Northern Water with Left Hand Water District paying for its prorata share based on pipeline capacity.
25	Lupton Bottom Ditch Company >Diversion Structure Repair CT2018-2829	Weld	$606,000	100%	April 2018	95%	RP	Northern portion diversion structure near completion, next step, southern portion. Final walk-through April 2018. Received as-builts June 29, 2018.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
26	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.
27	North Poudre Irrigation Company >Mountain Supply Reservior No. 10 Repairs CT2017-3641	Larimer	$802,950	100%	Nov 2017 - Mar 2018	95%	JH	Final design complete and SEO has approved for construction. Construction began in November 2017. Major elements are completed and contractor is working thru a punchlist. Company is waiting for final billing from Contractor.
28	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.
29	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.
30	Orchard Ranch Ditch Company >Orchard Ranch Ditch Pipe Project CT2016-2795 POGG1 2017-493	Delta	$151,500	75%	Fall 2018 - Mid 2019	0%	RP	Design and permitting work is underway. Construction is expected to begin in Fall 2018.
31	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. Meeting scheduled to review current loan and project advancement.
32	Riverside Reservoir and Land Company >Emergency Spillway Project C150291 (CT2015-026)	Weld	$2,838,100	95%	July 2018 - Fall 2018	0%	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.
32	Sanchez Ditch and Reservoir Company >Sanchez Reservoir Outlet Rehabilitation Project C150342 (CT2015-012)	Costilla	$1,502,476	100%	Oct 2014 - March 2018	99%	AM	Construction began in Oct 2014. Outlet works work was completed in Jan 2015. Seepage and monitoring work is currently ongoing.
33	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	0%	KR	Project includes a $10M CWCB Grant Contractor has been selected
34	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.
35	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.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
36	Southeastern CO Water Conserv. District >Pueblo Dam Hydroelectric Project CT2018-833	Pueblo	$16,725,600	100%	June 2017 - Fall 2019	50%	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. Anticpate siding powerhouse in Aug 2018.
37	Town of Firestone >Storage Development and Water Rights Purchase CT2017-2880	Weld	$10,000,000	50%	May 2018 - Mar 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.
38	Trinchera Irrigation Company >Mountain Home Dam Outlet Rehibilitation Phase III CT2018-3122	Costilla	$440,360	75%	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.
39	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.
40	Wiggins, Town of >Wiggins Recharge Facility at Glassey Farms CT2018-892	Morgan	$2,408,850	70%	Fall 2018 - Spring 2019	0%	JH	Town purcahsed Galssey Farms. Final design of the project began in December 2017 and is underway. Construction is still planned for Fall 2018.
41-WISE Project - Phase 1 Infrastructure								$16,802,501
a	Cottonwood W&S Dist - C150408B (CT2015-106)	Douglas/ Arapahoe	$2,636,100	100%	Spring 2015 - Jan 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 March 2018.
b	Inverness W&S Dist - C150409B (CT2015-118)	Douglas/ Arapahoe	$1,181,700	100%	Spring 2015 - Jan 2018	40%	RP	
c	Parker W&S Dist - C150410B (CT2015-108)	Douglas/ Arapahoe	$6,785,321	90%	Spring 2015 - Jan 2018	60%	RP	
d	Pinery (Den SE WSD)C150411B (CT2015-085)	Douglas/ Arapahoe	$6,199,380	90%	Spring 2015 - Jan 2018	60%	RP	
42- 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	

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
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	
43- 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	
d	Pinery (Den SE WSD)C150411B (CT2015-087)	Douglas/ Arapahoe	$454,500	46%	N/A	46%	RP	
	Projects Under Contract		$220,708,616	100%				
	Approved Projects - Not Under Contract							
a	Florida Consolidated Ditch Company >Hess Lateral Improvement CT2019-XXXX	La Plata	$1,085,750	0%	Spring 201x - Fall 202x	0%	AM	
b	San Juan Water Conservancy District >Dry Gultch Reservior Land Acquistion CT2018-839	Archuleta	$2,000,000	0%	Spring 201x - Fall 202x	0%	JH	Board approval is conditioned on voters approving debt. Debt approval failed at November 2017 election. Board regathering to determine 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	Pending Federal Appropriation. Southeastern's Pueblo Dam Hydro project was taken out of these loan funds.

	Contract Borrower	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
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%	RP	Waiting for IGA from City
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	July 2018 letter from Bureau of Reclamation.
f	Pueblo Consevancy District > Arkansas River and Wildhorse Creek Levees CT2019-XXXX	Pueblo	$17,170,000	0%	Spring 201x - Fall 202x	0%	RP	Funds approved June 2018. Planning a July 2018 meeting with PCD
g	Municipal Subdistrict >Windy Gap Project CT2019-XXXX	Larimer	$90,000,000	0%	Spring 201x - Fall 202x	0%	JH	
h	Julesburg Irrigation District >Diversion Structure Rehabilitation CT2019-XXXX	Sedgwick	$3,341,080	0%	Spring 201x - Fall 202x	0%	RP	Per Rachel-there will be somewhat of a delay before Julesburg is ready to execute a loan contract. The District is currently seeking additional funding for their project so they may decrease the additional assessments asked for approval in their special election. They plan to gather additional funding sources prior to holding the 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-XXXX	Weld	$2,274,520	0%	Spring 201x - Fall 202x	0%	RP	
j	San Luis Valley Canal Company >San Luis Canal Headgate Construction CT2019-XXXX	Rio Grande	$303,000	0%	Spring 201x - Fall 202x	0%	JH	
	Not Under Contract SubTotal =		$164,809,850					
	Grand Total =		$385,518,466					

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Wells #3 and #6 Replacement Project

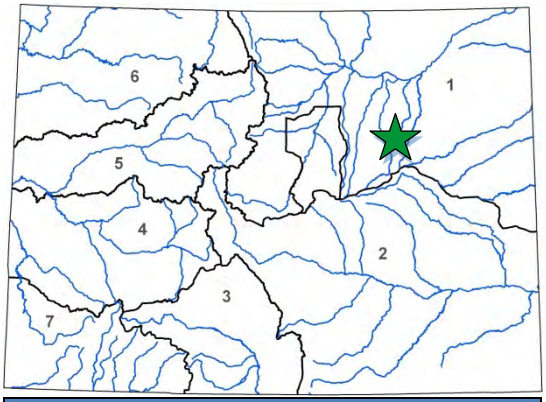
Town of Bennett

November 2014 Board Meeting

LOAN DETAILS	
Project Cost:	$1,600,000
CWCB Loan (with Service Fee):	$1,454,400
Loan Term and Interest Rate:	30 Years @ 3.25%
Funding Source:	Construction Fund

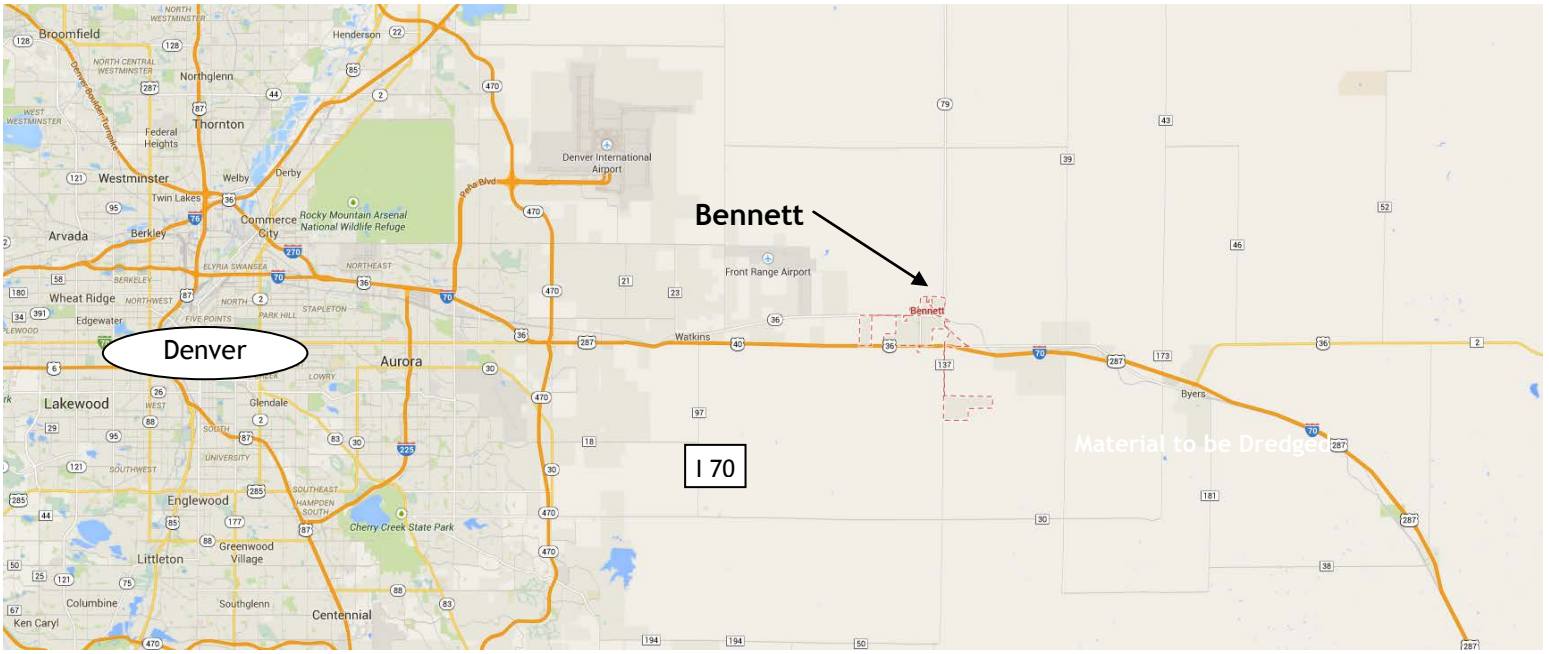
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 100% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Well Drilling
Average Annual Delivery:	261 AF



LOCATION			
County:	Adams & Arapahoe		
Water Source:	Non-Tributary Groundwater		
Drainage Basin:	South Platte		
Division:	1	*District:*	1

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



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Department of Natural Resources

Landslide Stabilization and Ditch Lining Project

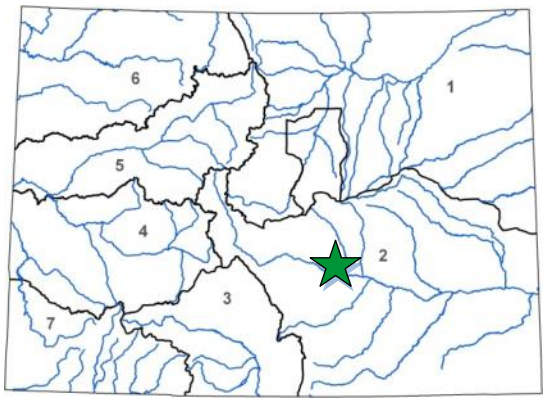
Bessemer Irrigation Ditch Company

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

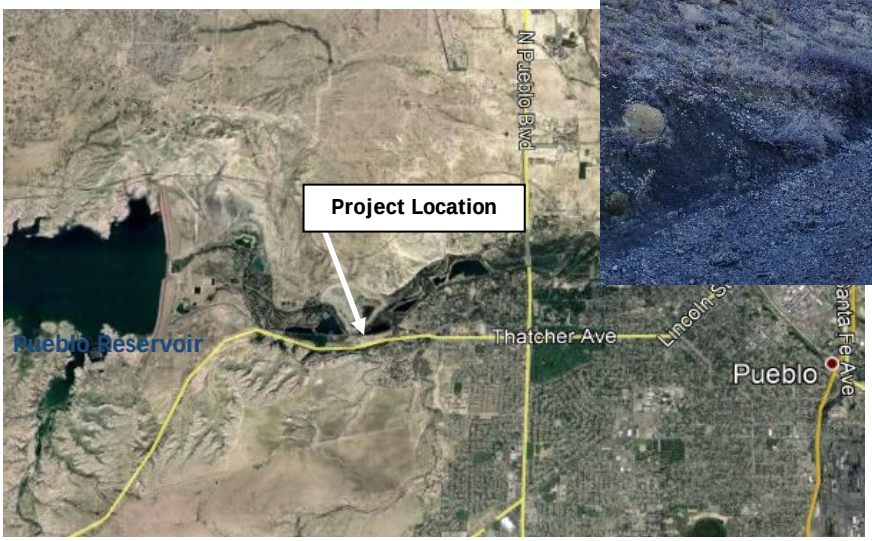
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
62%	38% Low - 0% Mid -0% High	0%

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

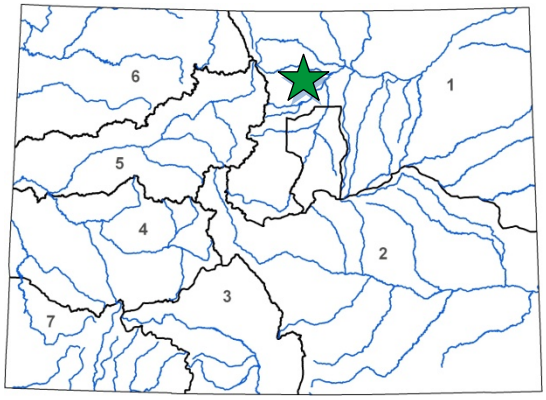
March 2017 Board Meeting

(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

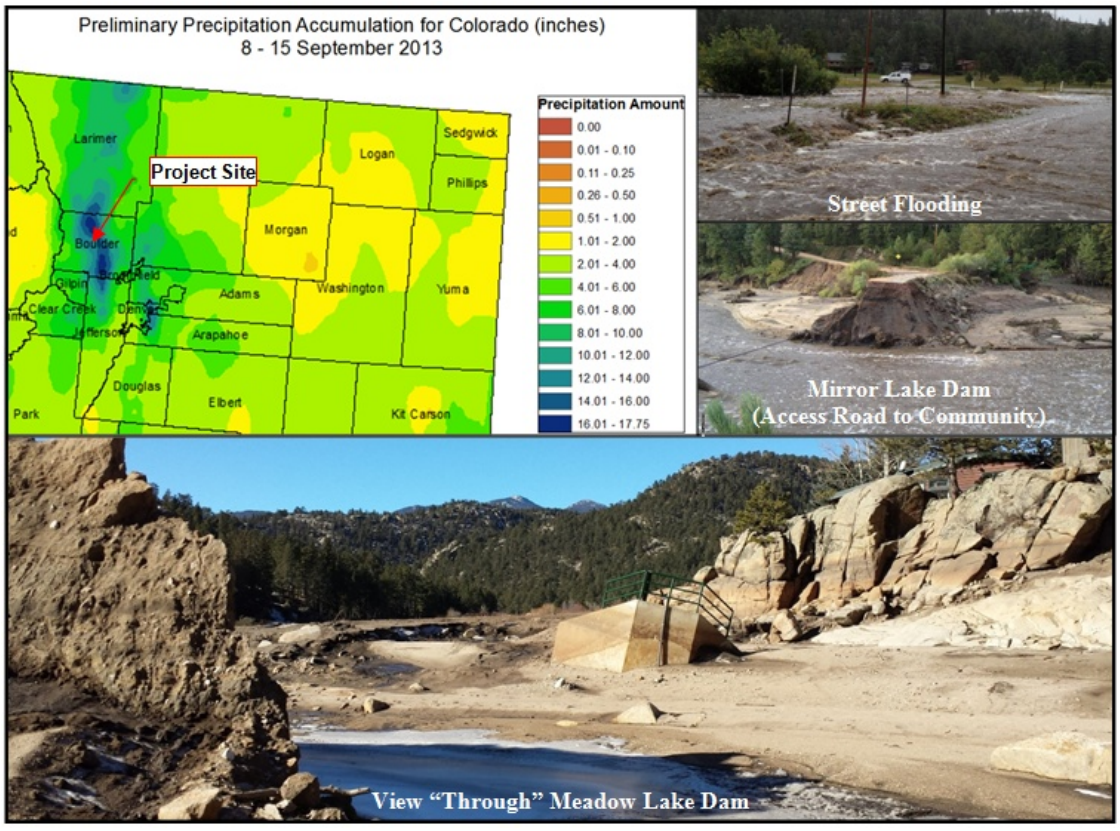
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 100% Mid - 0% High	0%

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

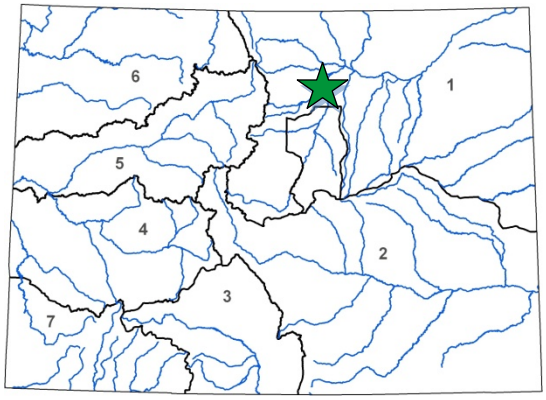
Bonus Ditch Company

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%

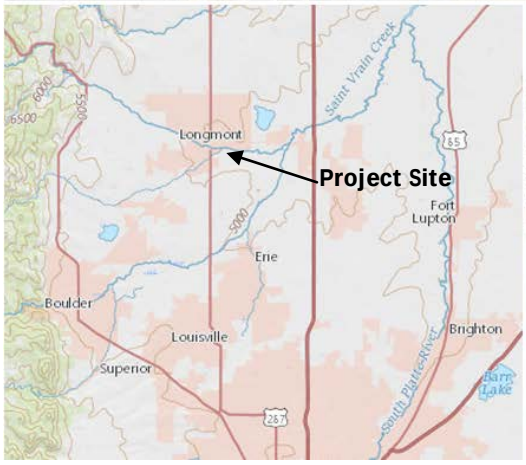
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	2,221 AF

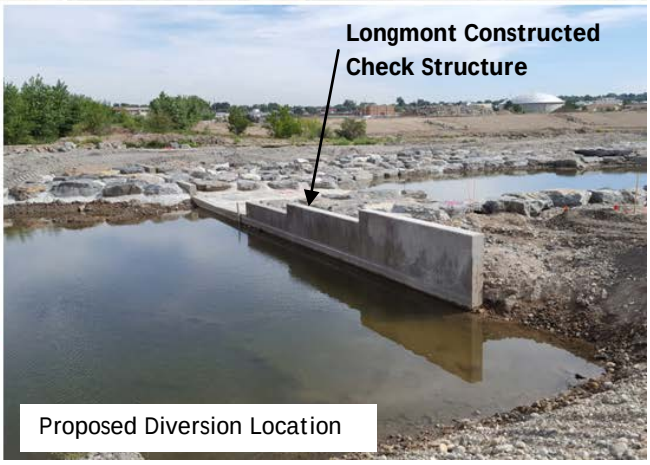


LOCATION			
County:			Boulder
Water Source:			St Vrain Creek
Drainage Basin:			South Platte
Division:	1	*District:*	5

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

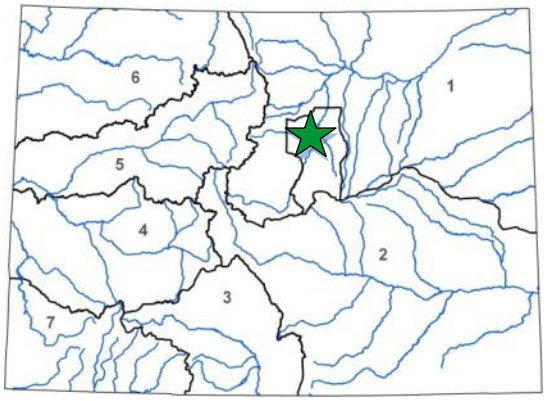
January 2018 Board Meeting

(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%

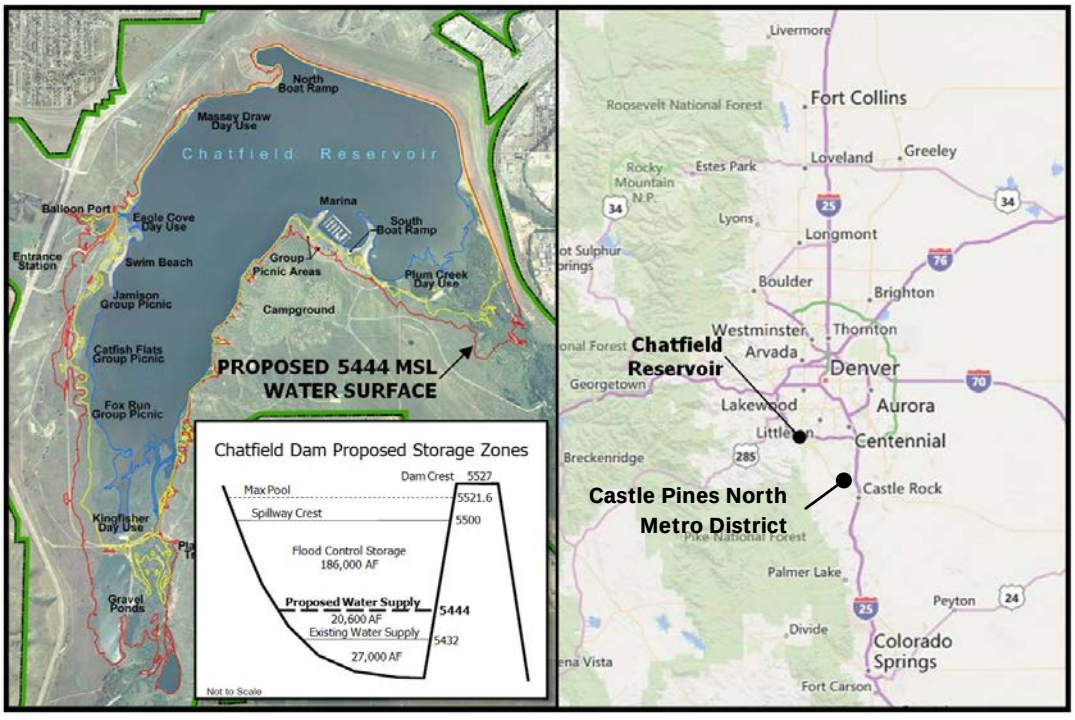
PROJECT DETAILS	
Project Type:	Reservoir Storage
New Storage:	1,006 AF



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

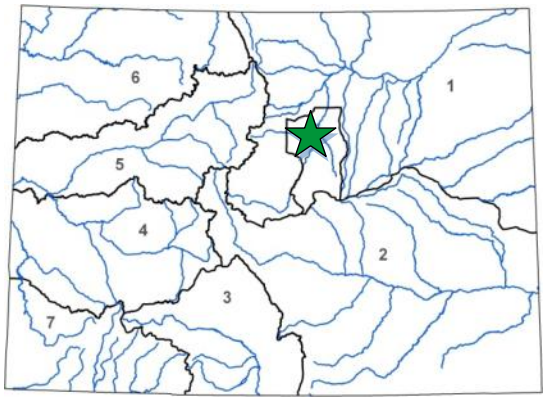
January 2018 Board Meeting

(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%

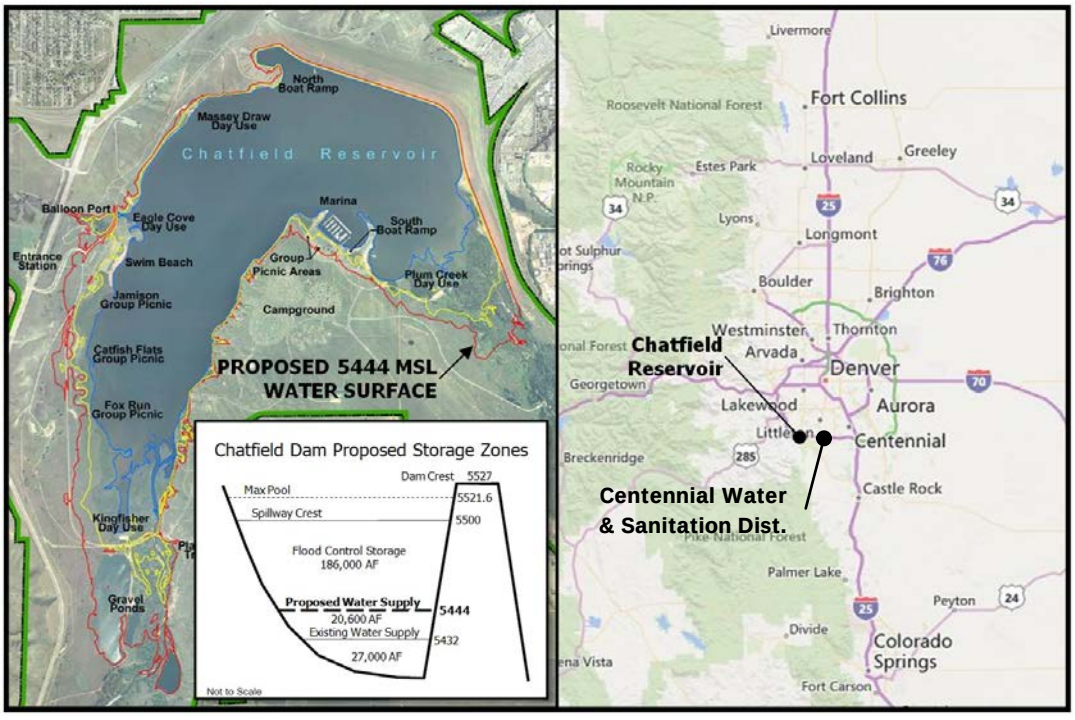
PROJECT DETAILS	
Project Type:	Reservoir Storage
New Storage:	6,922 AF



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.



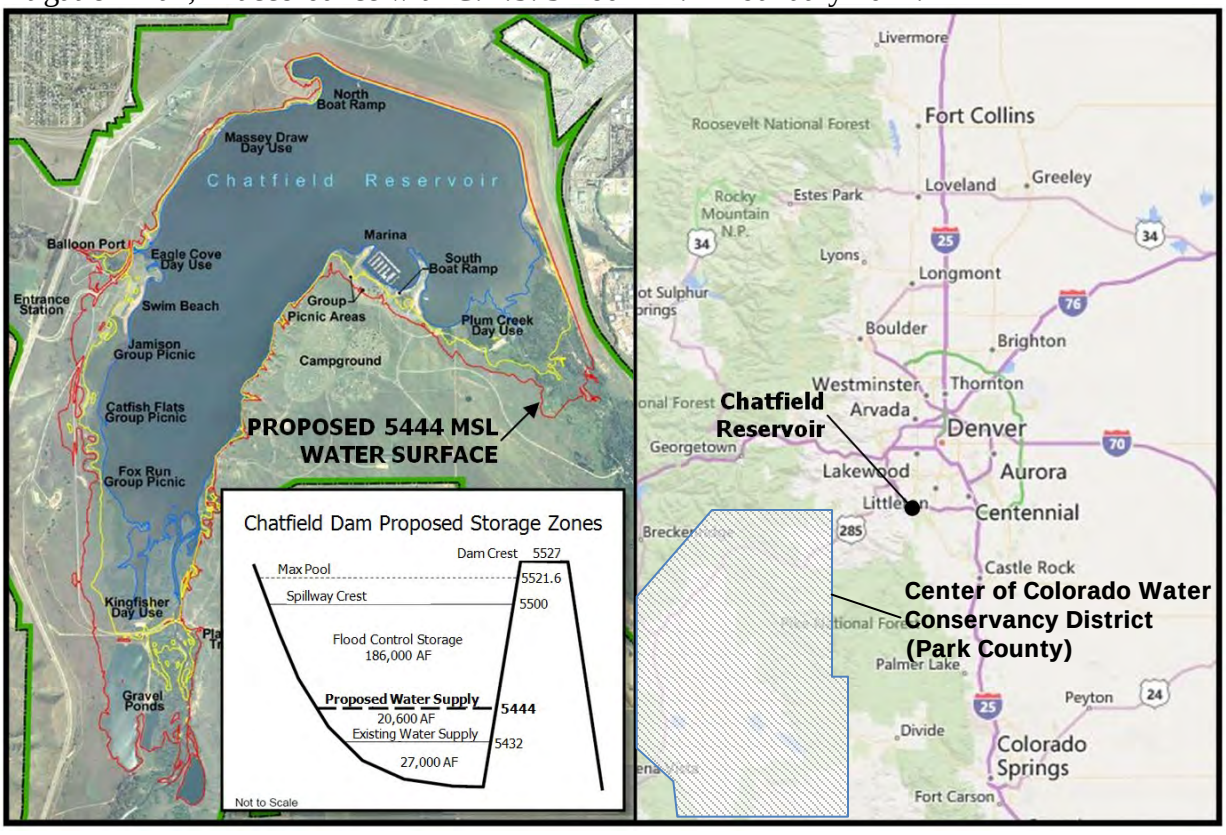
CWCB Water Project Loan Program
Project Data Sheet

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

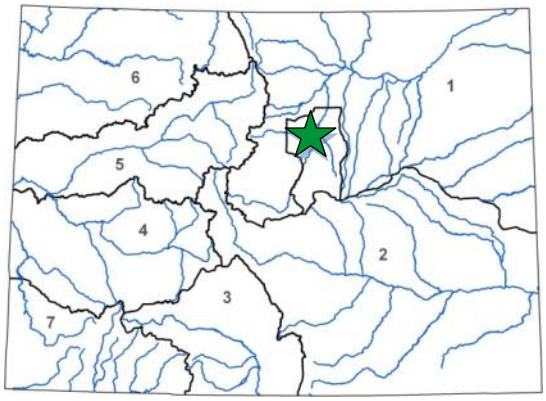
January 2018 Board Meeting

(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%

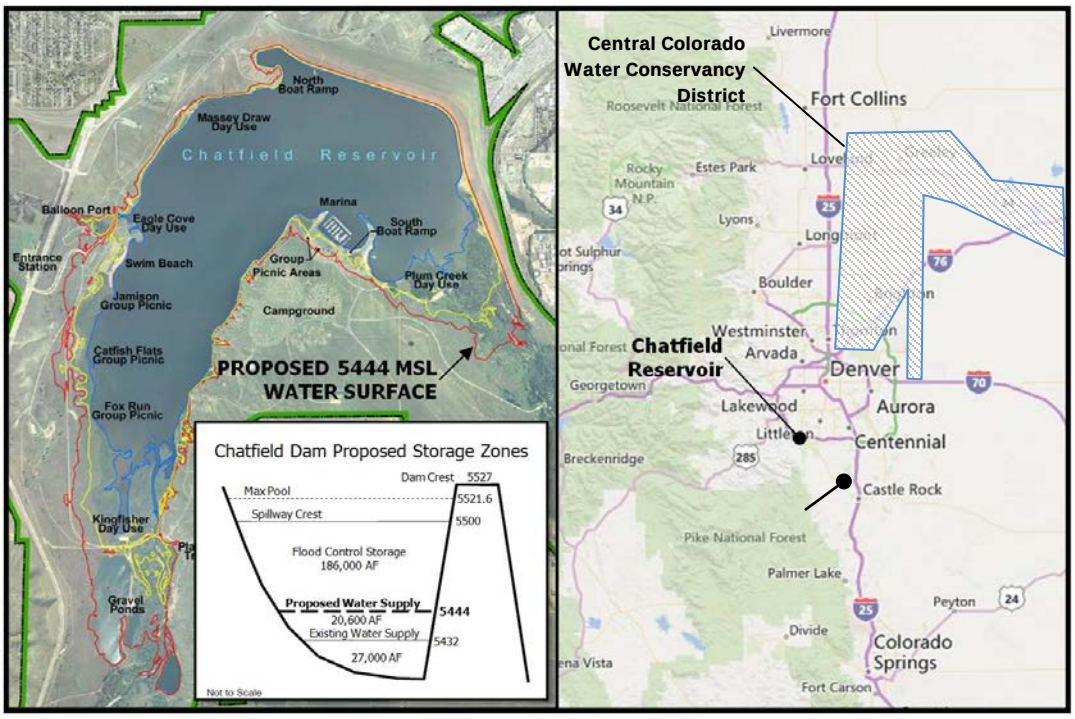
PROJECT DETAILS	
Project Type:	Reservoir Storage
New Storage:	4,274 AF



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

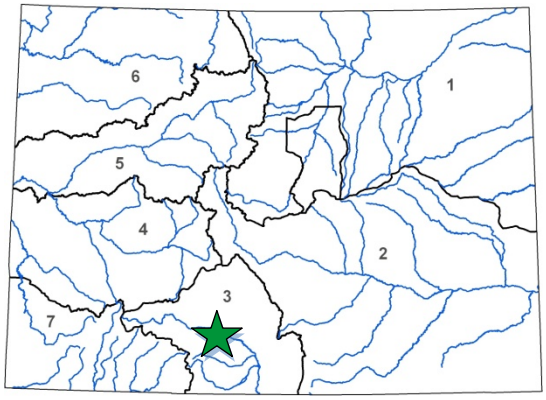
Centenial Irrigating Ditch Company

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%

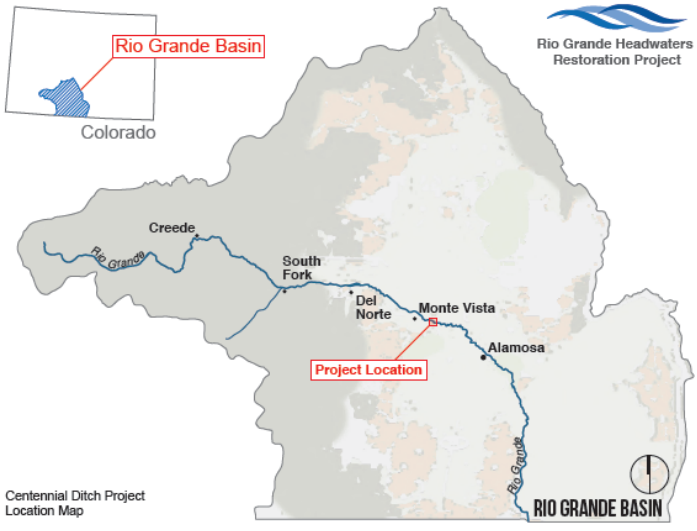
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	21,700 AF



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

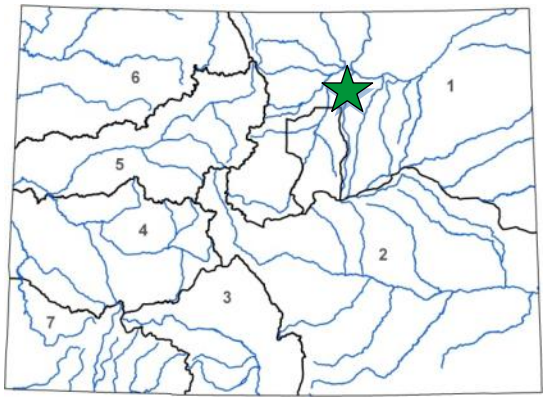
Central Colorado Water Conservancy District

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%

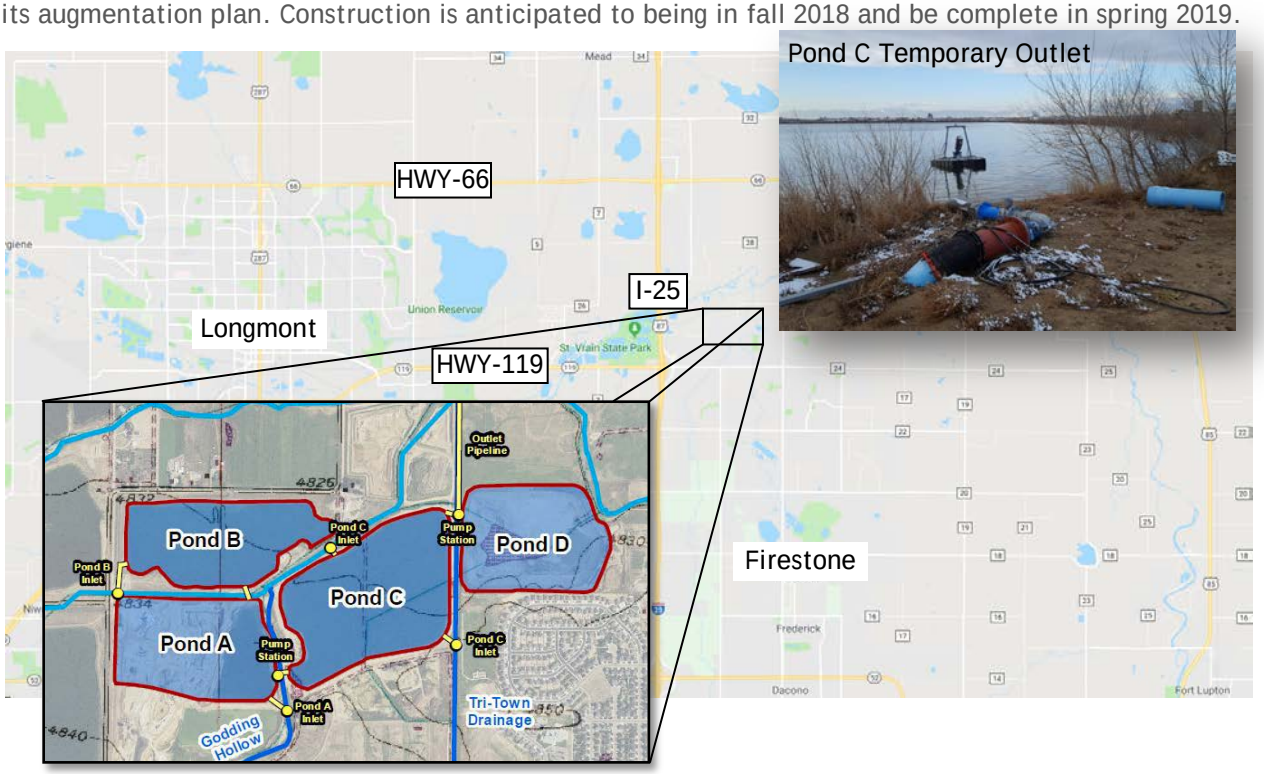
PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Storage Maintained:	4,500 AF



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.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Ditch System Improvements

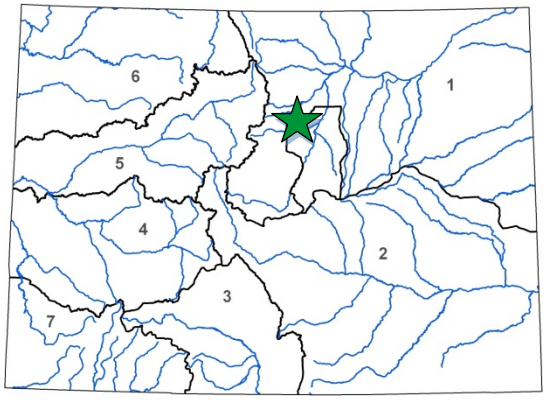
Church Ditch Water Authority

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

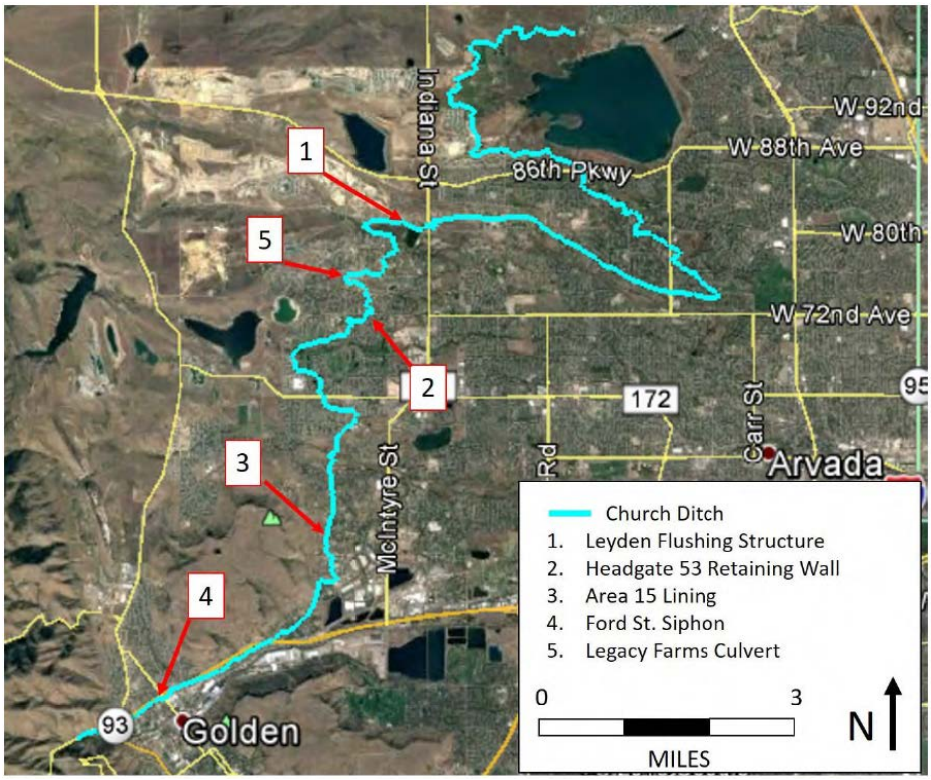


LOCATION			
County:			Jefferson
Water Source:			Clear Creek
Drainage Basin:			South Platte
Division:	1	*District:*	7

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

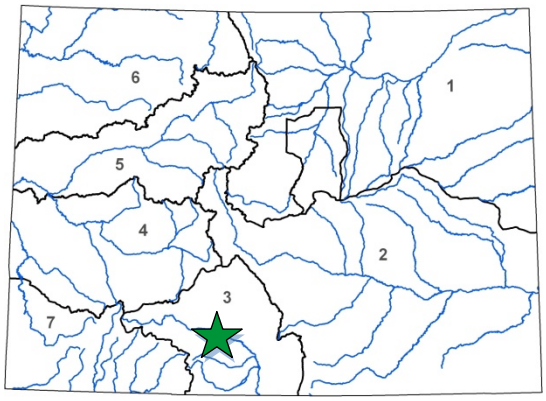
Consolidated Ditch and Headgate Company

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%

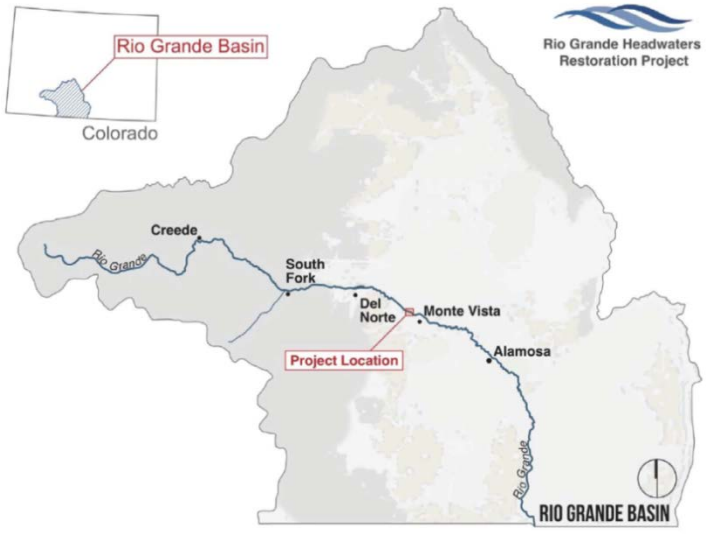
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	33,500 AF



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

Holita Dam Rehabilitation

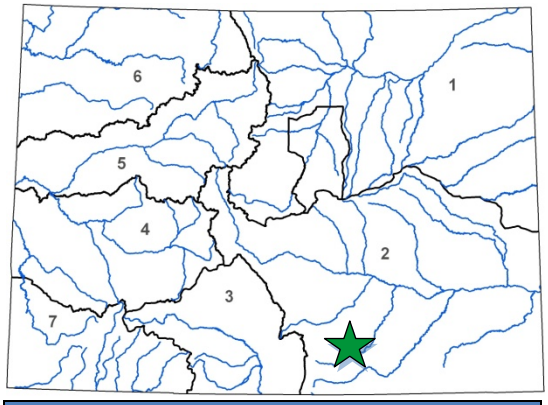
Corsentino Dairy Farms

July 2017 Board Meeting

LOAN DETAILS	
Project Cost:	$94,000
CWCB Loan (with Service Fee):	$85,446
Loan Term and Interest Rate:	10 Years @ 0.5%
Funding Source:	Severance Tax

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

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	540 AF
Storage Preserved:	274 AF



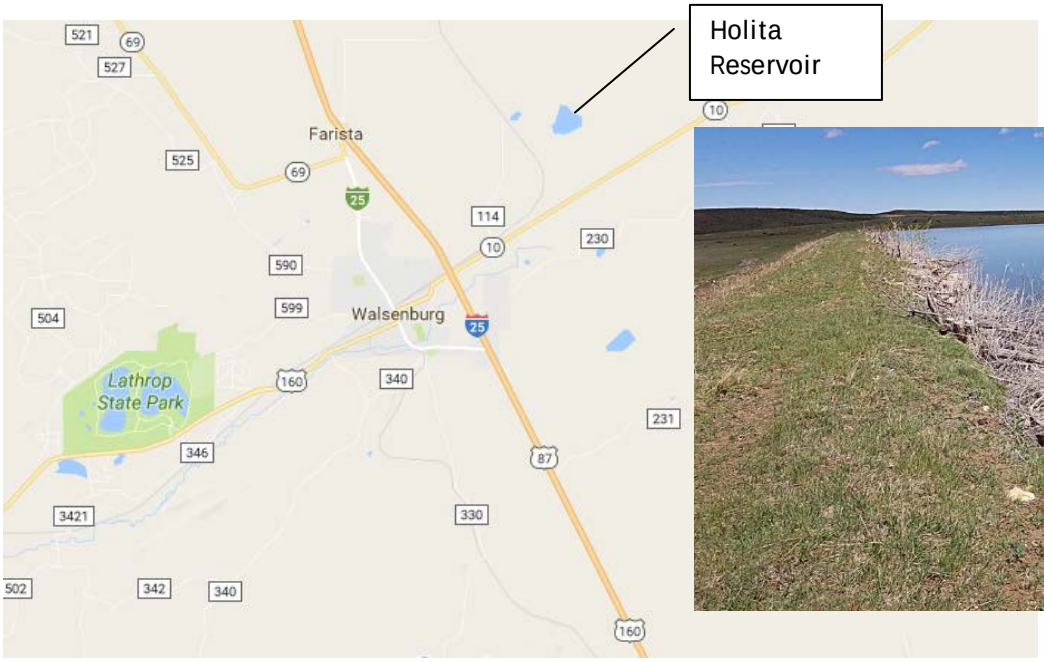
LOCATION			
County:			Huerfano
Water Source:			Cucharas River
Drainage Basin:			Arkansas
Division:	2	*District:*	16

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. If the dam safety issues are not addressed by December 2017, the Dairy could be required to breach the dam.

The intent of the SEO storage restriction is to eliminate uncontrolled seepage from the dam. The SEO also identified the spillway as unsafe and is requiring a permanent lowering that will result in a storage volume of 274 acre-feet. Through this loan, the Dairy plans to rehabilitate the dam in the fall/winter of 2017.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Dixon Reservoir Dam Improvement

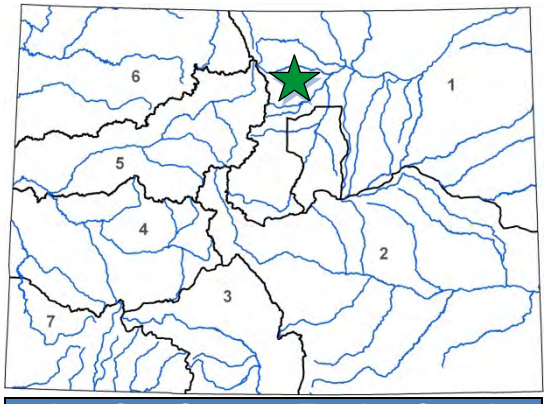
Dixon Canon Ditch and Reservoir Company

May 2016 Board Meeting

LOAN DETAILS	
Project Cost:	$309,000
CWCB Loan (with Service Fee):	$278,100
Loan Term and Interest Rate:	30 years @ 2.55%
Funding Source:	Construction Fund

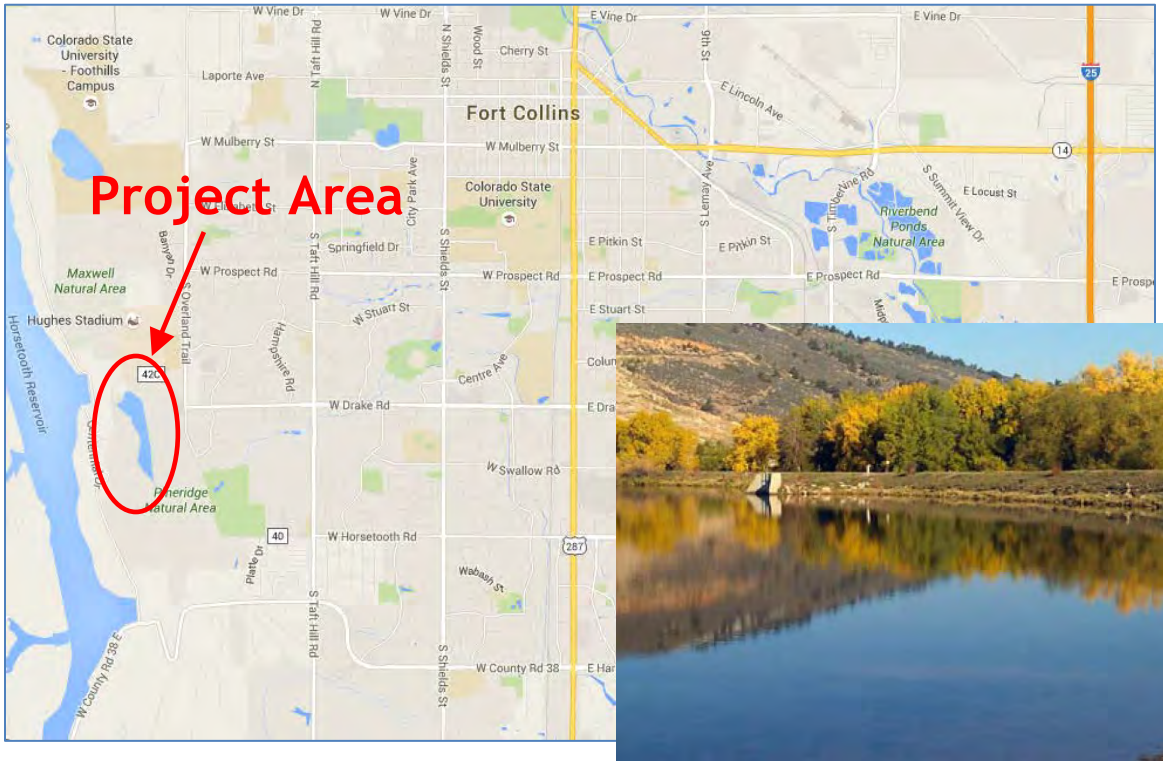
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
17%	0% Low - 83% Mid - 0% High	0%

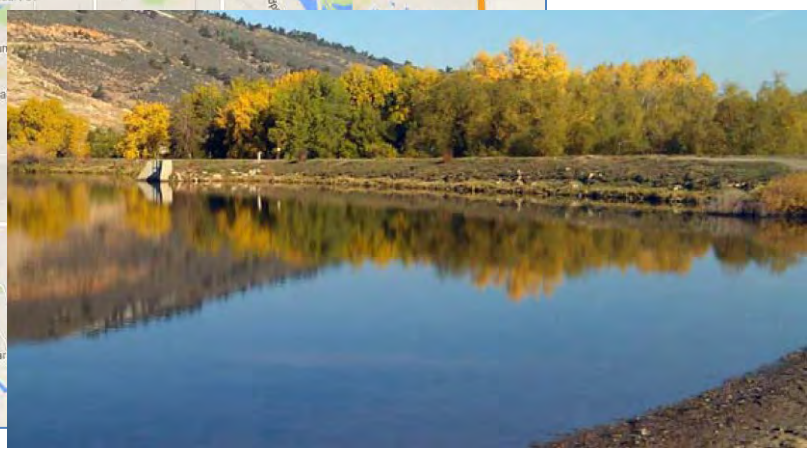
PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average Annual Delivery:	312 AF
Total Storage Effect:	412 AF



LOCATION			
County:			Larimer
Water Source:			Dixon Creek
Drainage Basin:			South Platte River
Division:	1	*District:*	3

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





COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Piping the Duke Ditch

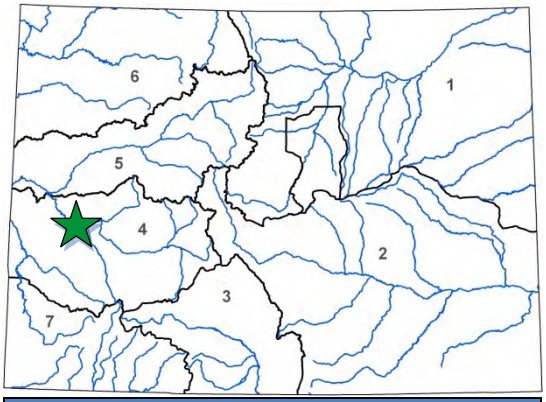
Duke Ditch Company

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

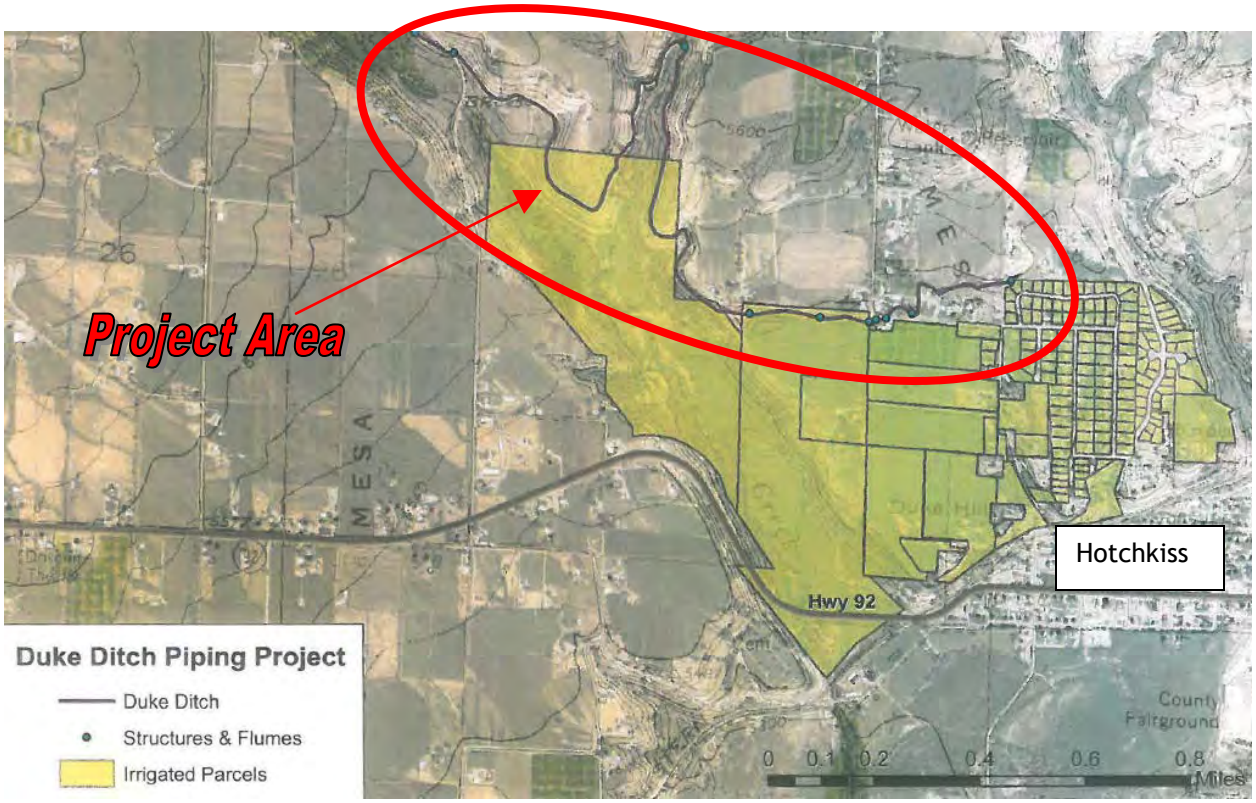
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
68%	32% Low - 0% Mid - 0% High	0%

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

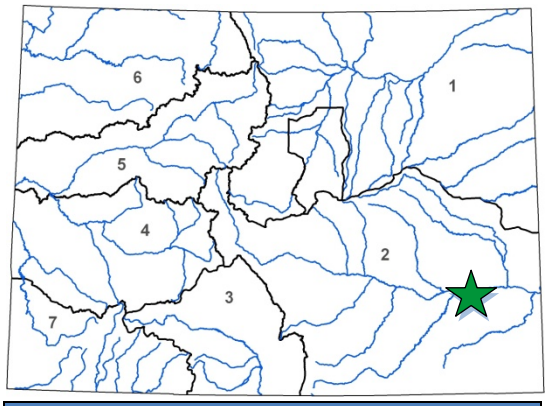
Fort Lyon Canal Company

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%

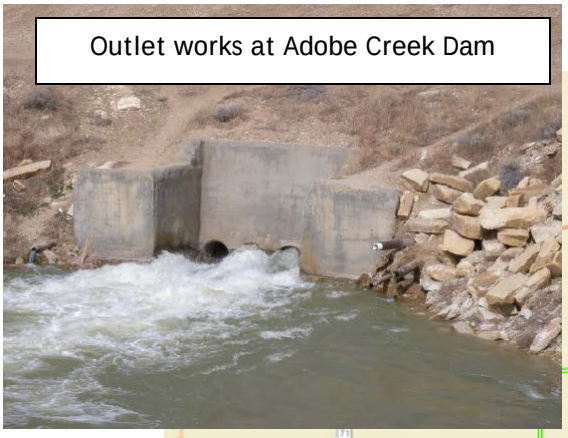
PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average Annual Diversions:	221,000 AF
Recovered Storage:	32,560 AF
Preserved Storage:	81,692 AF



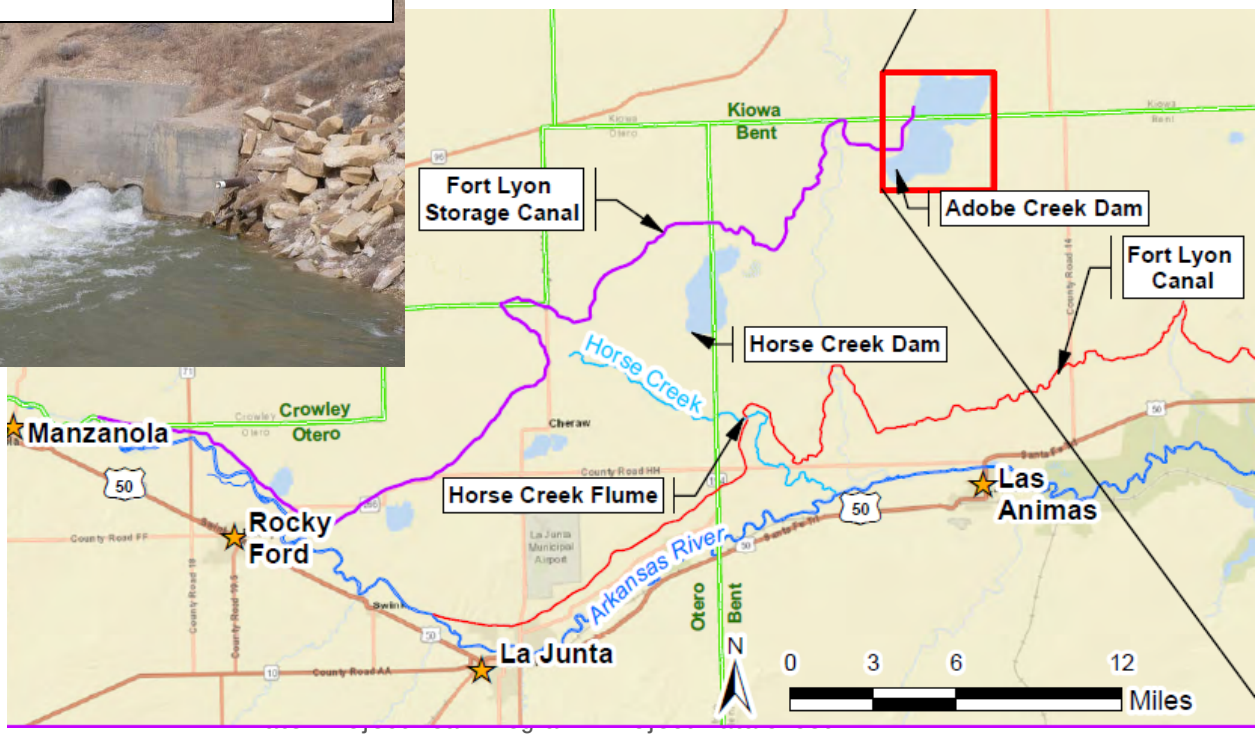
LOCATION			
County:			Bent
Water Source:			Arkansas River
Drainage Basin:			Arkansas
Division:	2	*District:*	17

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

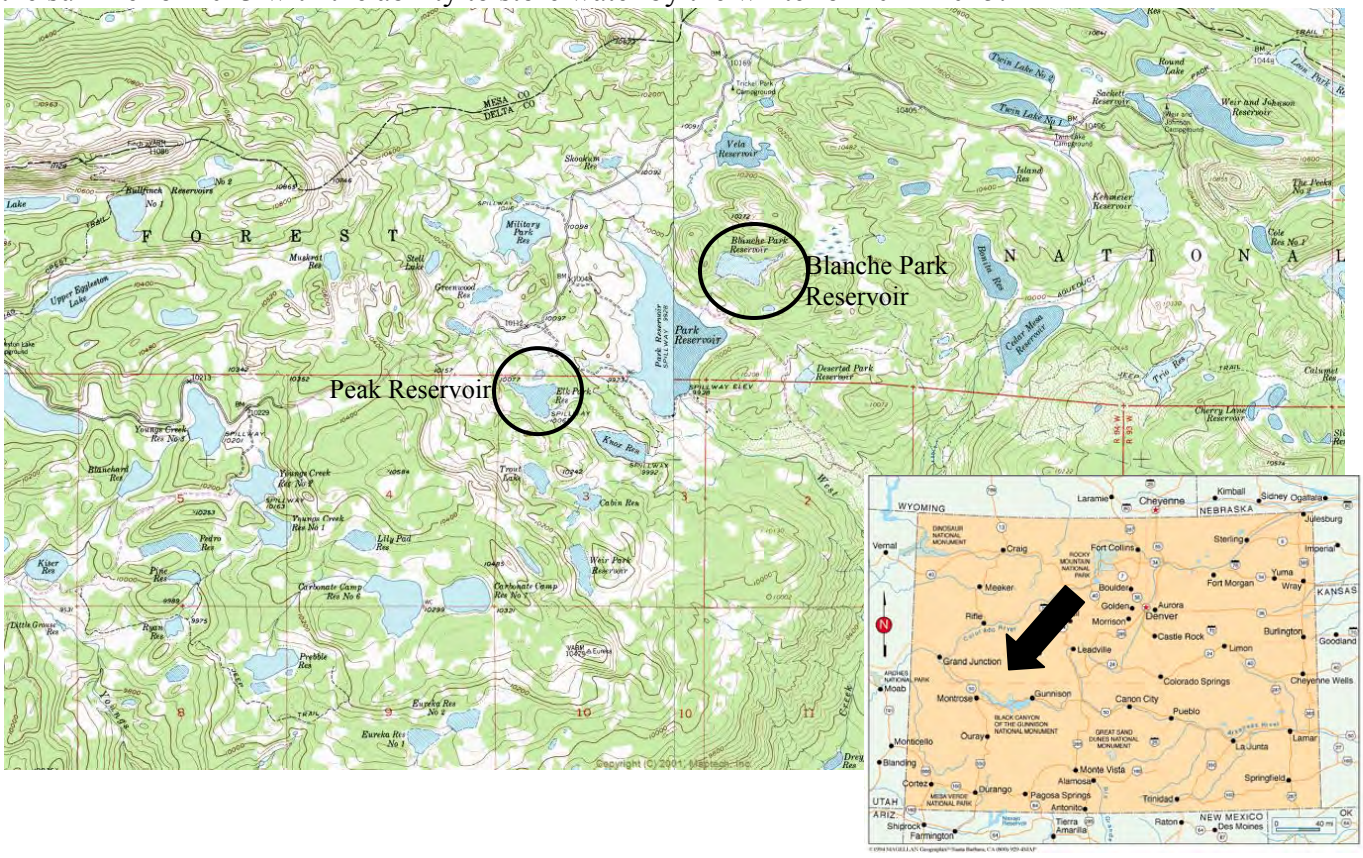
Type of Borrower: Municipal/Agricultural

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

Government Highline Canal Lining

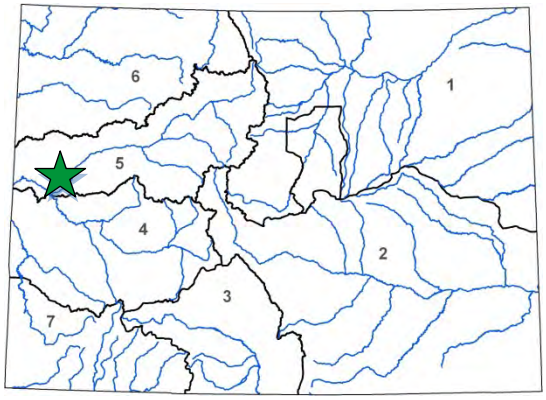
Grand Valley Water Users Association

September 2016 Board Meeting

LOAN DETAILS	
Project Cost:	$800,000
CWCB Loan (with Service Fee):	$151,500
Loan Term and Interest Rate:	30 Years @ 1.55%
Funding Source:	Construction Fund

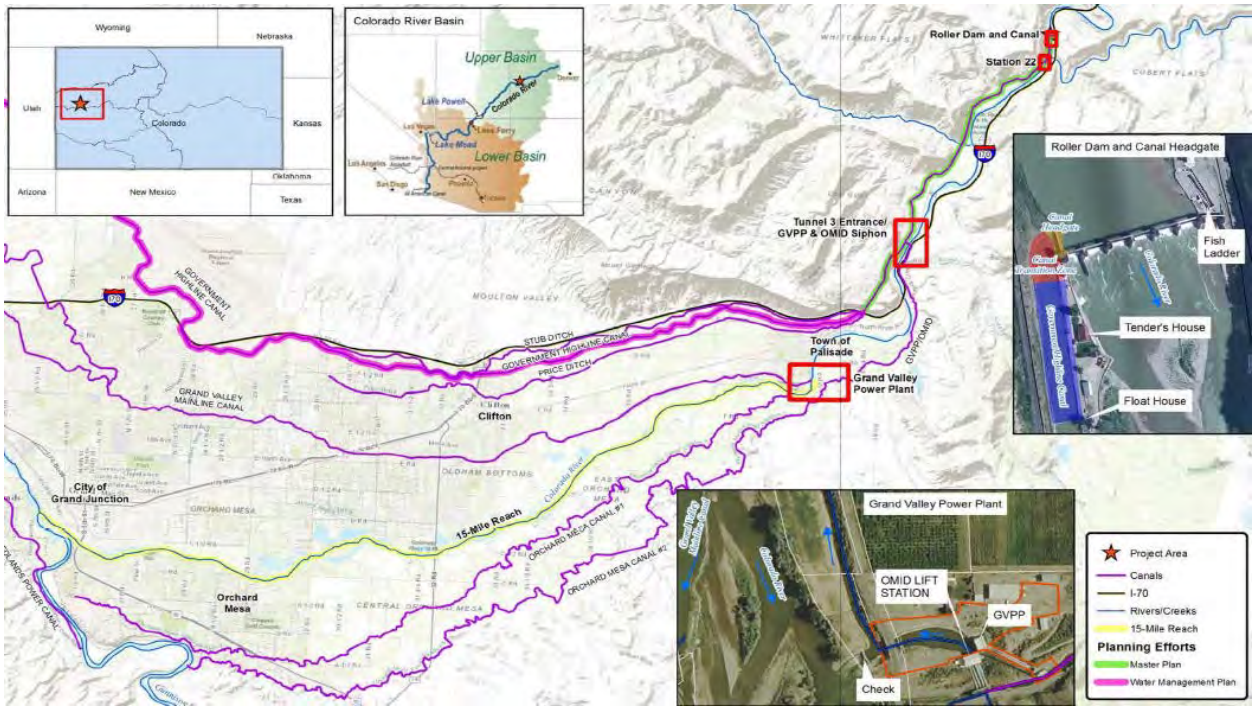
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
90%	0% Low - 10% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	260,000 AF



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

The Grand Valley Water Users Association (Association), is requesting 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 include the Grand Valley Diversion Dam (also known as the Roller Dam) on the Colorado River in De Beque Canyon, the 55-mile-long Government Highline Canal,150 miles of project operated laterals, 100 miles of drainage ditches, and a hydroelectric power plant. 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 has slumped, settled and degraded. Occasional erosion within the embankment has led to material loss and sinkholes. As a result of canal degradation, water flow is restricted and the canal cross section has been reduced, causing a reduction in capacity of the canal channel. The canal is currently physically restricted to approximately 1,600 cfs while the water rights are for 1,730 cfs. To increase the capacity, the Association intends to improve first 500 feet of the canal. Permitting and final design are scheduled for completion by March 2017. Construction is anticipated in summer and fall of 2017.



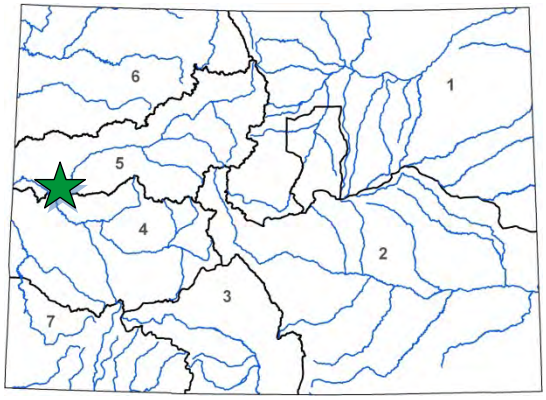
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Grand Valley Power Plant Rehabilitation

Grand Valley Water Users Association

November 2016 Board Meeting

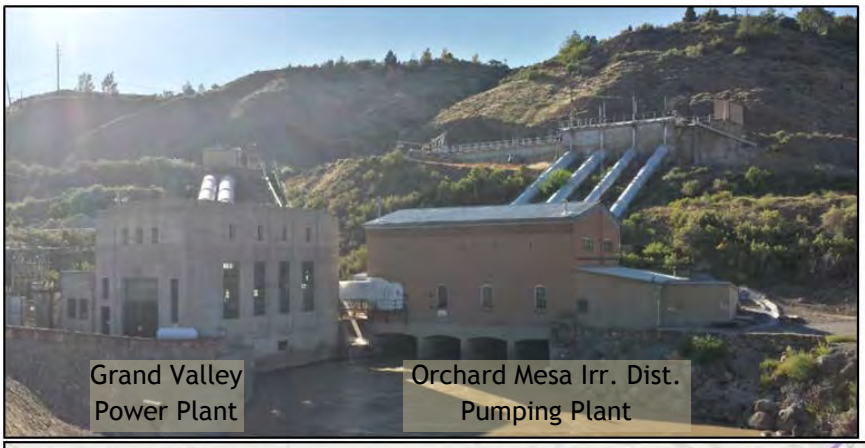
LOAN DETAILS	
Project Cost:	$5,200,000
CWCB Loan (with Service Fee):	$1,717,000
Loan Term and Interest Rate:	30 Years @ 2.0%
Funding Source:	Construction Fund
BORROWER TYPE	
Hydropower	
PROJECT DETAILS	
Project Type:	Hydroelectric
Average Annual Power Production:	17M kWh



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.

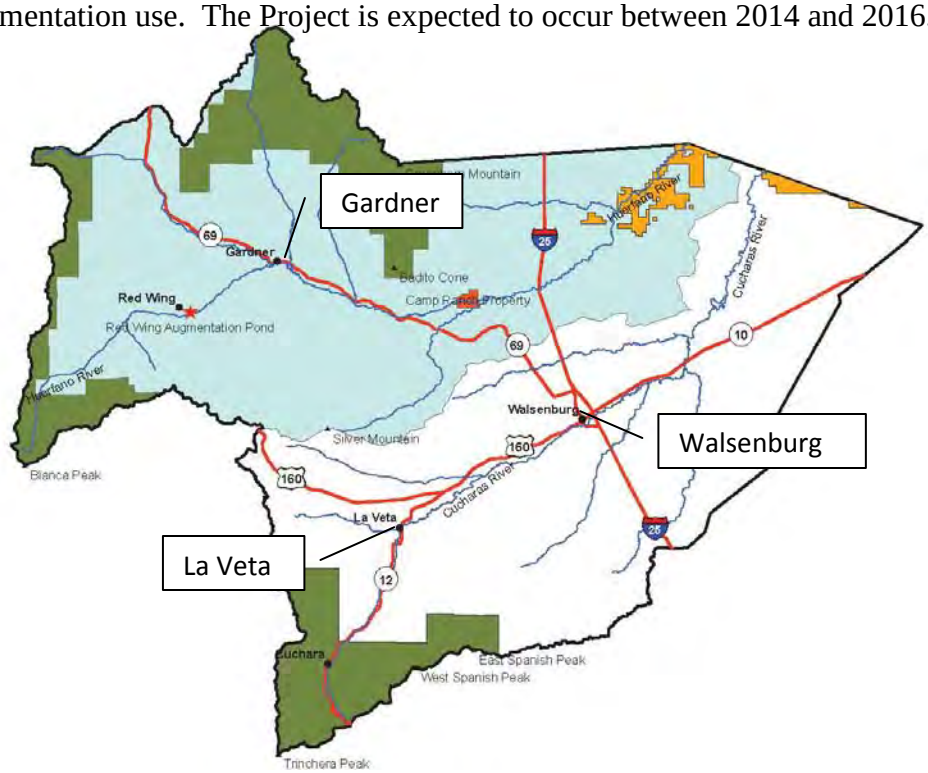

Grand Valley Power Plant


Orchard Mesa Irr. Dist. Pumping Plant

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

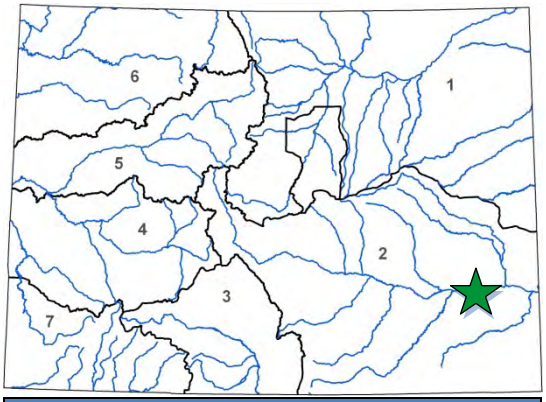
City of Lamar

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

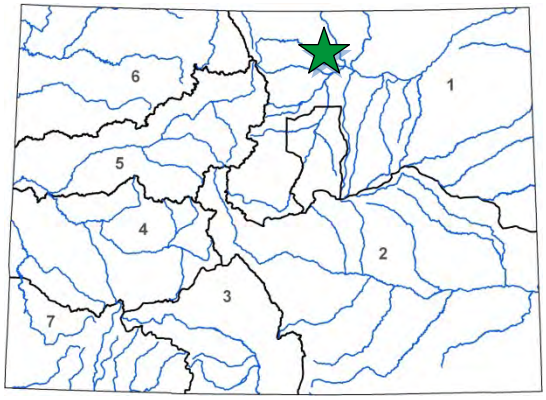
Larimer and Weld Irrigation Company

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%

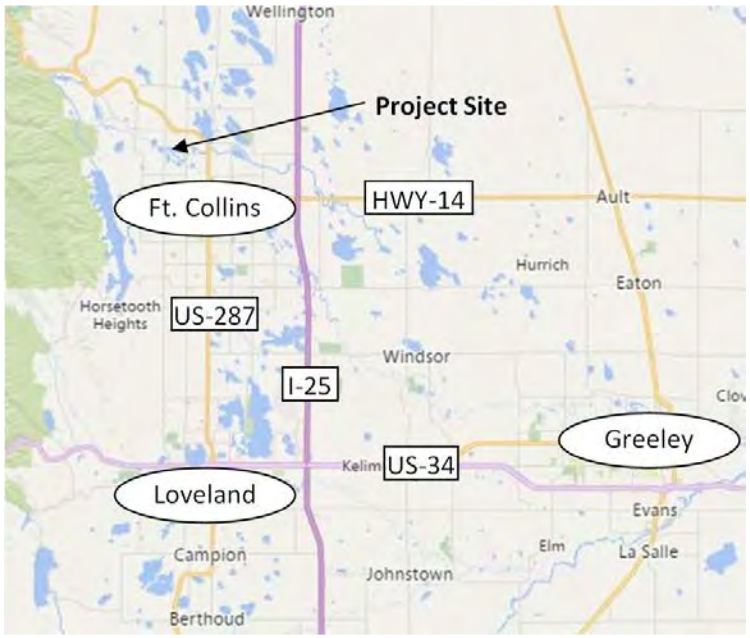
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Delivery:	85,000 AF

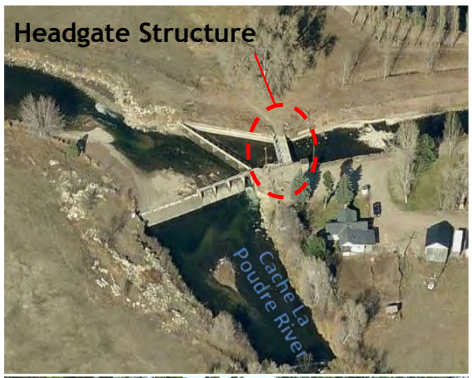


LOCATION			
County:			Larimer & Weld
Water Source:			Cache la Poudre River
Drainage Basin:			South Platte
Division:	1	*District:*	3

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

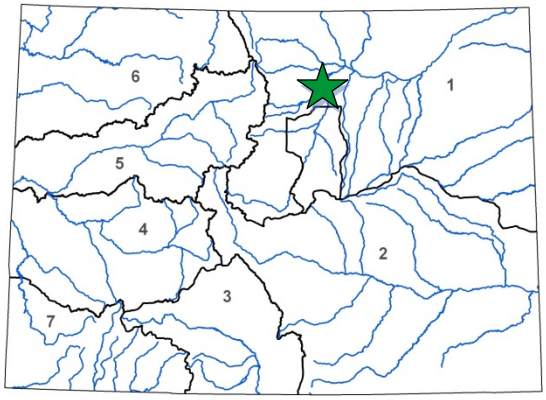
Left Hand Water District

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%

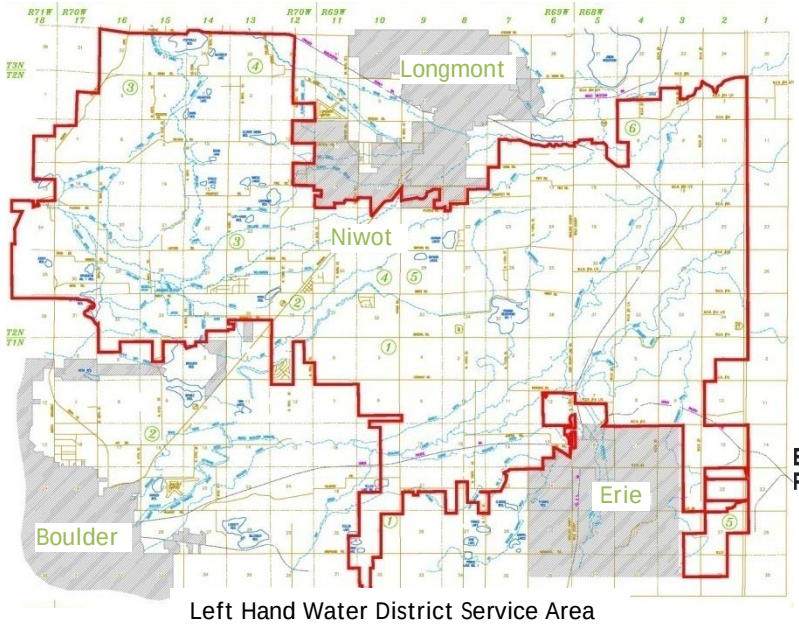
PROJECT DETAILS	
Project Type:	Municipal Water Supply System New
Average Annual Delivery:	4,400 AF



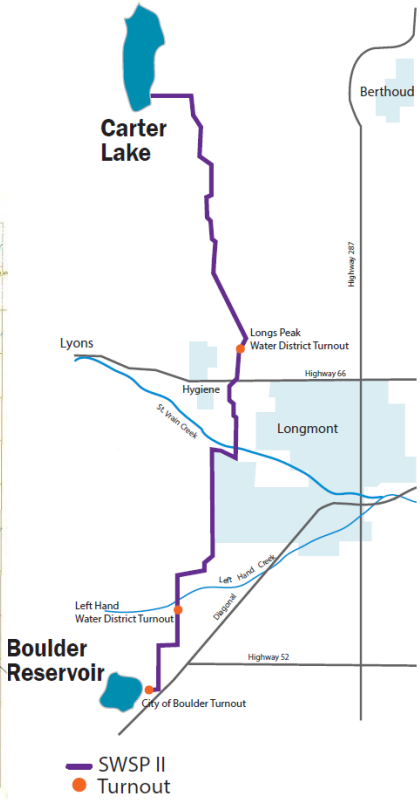
LOCATION			
County:			Broomfield, Weld
Water Source:			
Drainage Basin:			South Platte
Division:	1	*District:*	5

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

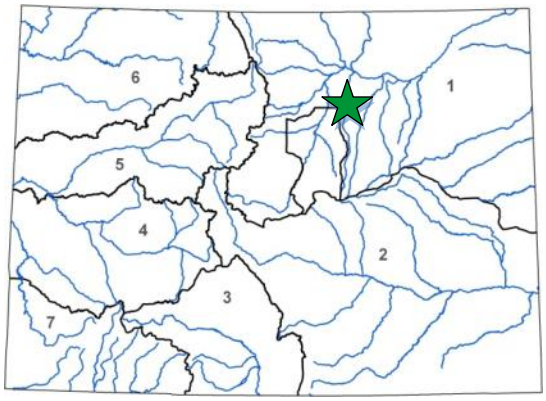
Lupton Bottom Ditch Company

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.

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

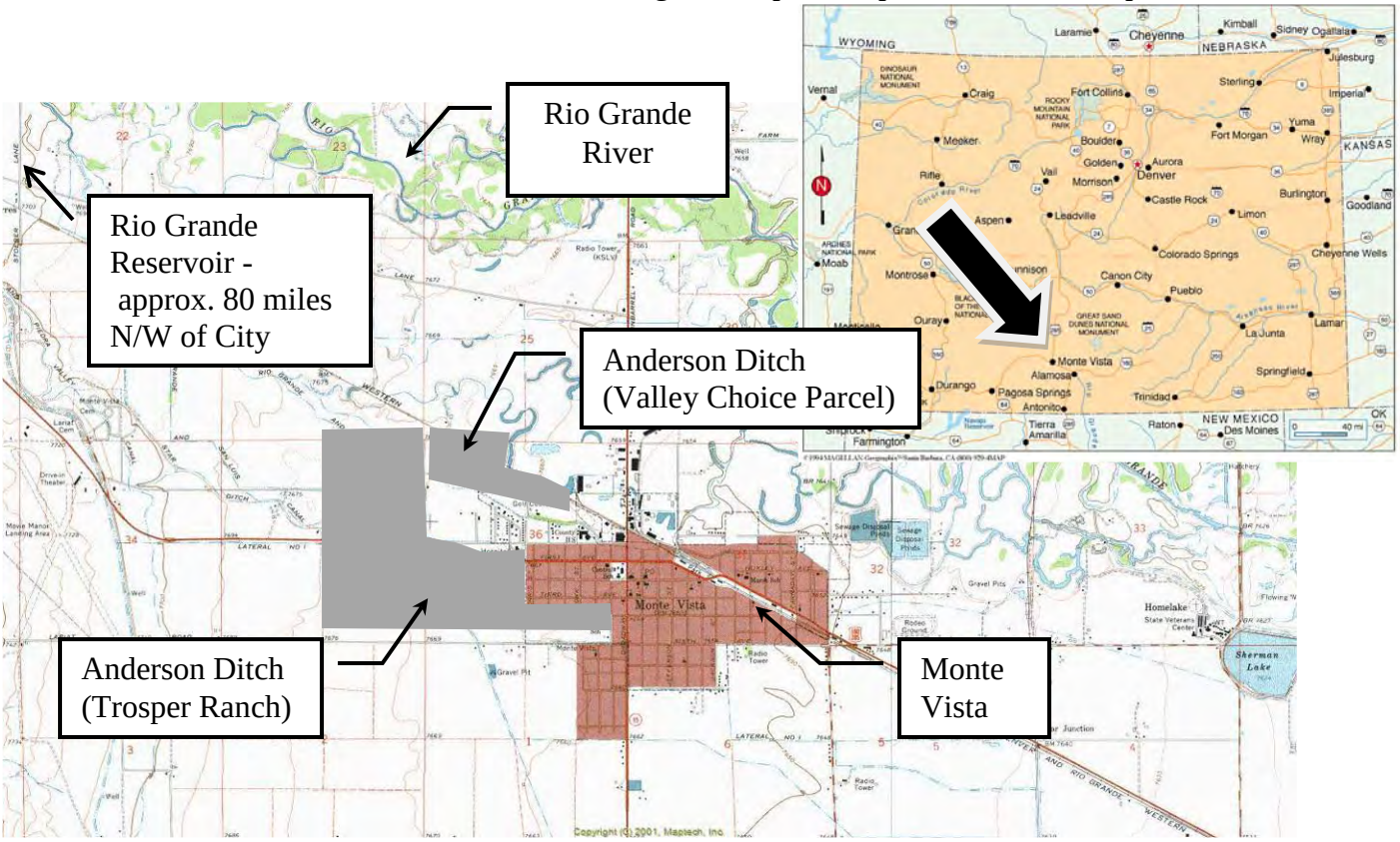
Type of Borrower: Low-Income Municipal

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

Mountain Supply Reservoir No. 10 Repairs

North Poudre Irrigation Company

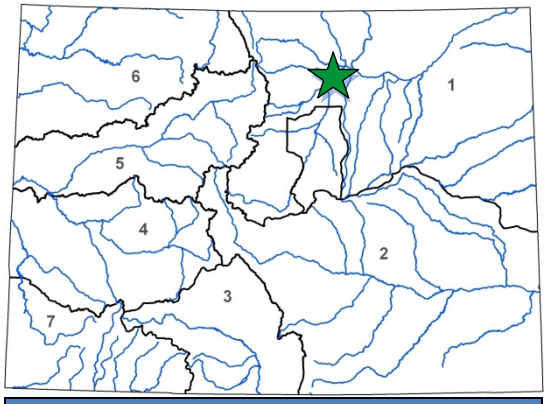
November 2017 Board Meeting

(Loan Increase)

LOAN DETAILS	
Project Cost:	$795,000
CWCB Loan (with Service Fee):	$802,950
Loan Term and Interest Rate:	30 years @ 2.50%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
26%	0% Low - 73% Mid - 0% High	1%

PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	44,400 AF
Storage Maintained:	344 AF
Storage Recovered:	264 AF



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

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 that own Company shares.

Mountain Supply Reservoir No. 10 (Reservoir), owned and operated by the Company, was constructed in 1905, and a major rehabilitation of the dam was completed in 1973. The Company has a storage decree in this reservoir of 344 acre-feet. The reservoir is an off-stream reservoir with a drainage basin of approximately 0.14 square miles. In August of 2015, the Reservoir's outlet works experienced a failure in the corrugated metal pipe (CMP) outlet. The reservoir was drained and a full storage restriction was imposed by the State Engineer's Office (SEO). The Company made temporary emergency repairs in 2016 and were then permitted to store up to 80 AF.

The Project components are: (1) repair the outlet works including construction of a new inlet gate tower and walkway, and lining the length of the outlet conduit using a cured-in-place pipe (CIPP) liner; (2) remove silt from the reservoir bottom and install a new spillway control wall to achieve the ability to store the full decreed storage amount of 344 AF; and (3) repair 500 feet of 30-inch inlet works by installing a CIPP liner in the existing inlet pipe from the Upper 10 Ditch to the reservoir, as well as replacing the inlet works and installing a new energy dissipation structure.

Bids were opened on October 12, 2017. The Company is seeking an increase to its loan amount as the bids exceeded the original budget. Construction is planned to begin in November 2017, and be completed before the start of the 2018 irrigation season.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Fossil Creek Reservoir Diversion Structure Repair

North Poudre Irrigation Company

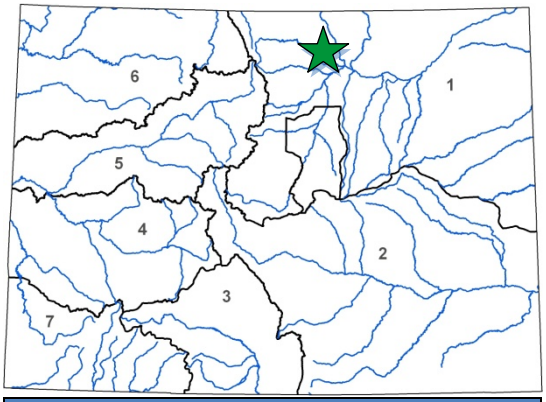
September 2015 Board Meeting

(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.

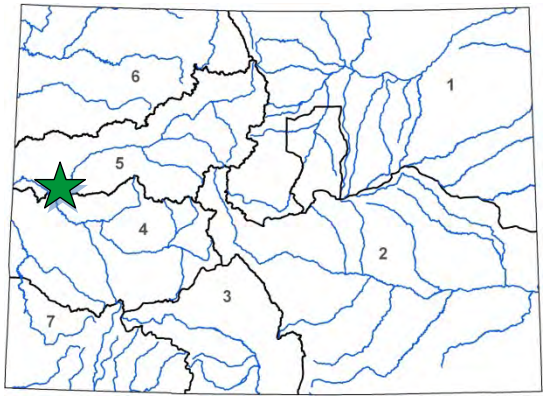
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Grand Valley Power Plant Rehabilitation

Orchard Mesa Irrigation District

November 2016 Board Meeting

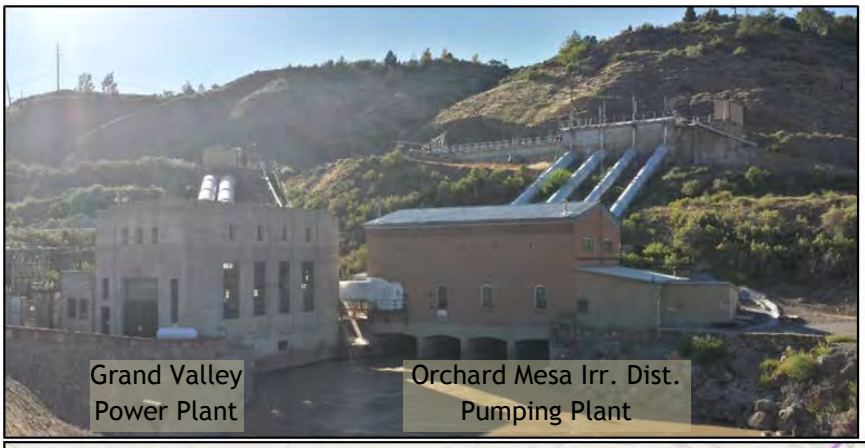
LOAN DETAILS	
Project Cost:	$5,200,000
CWCB Loan (with Service Fee):	$1,717,000
Loan Term and Interest Rate:	30 Years @ 2.0%
Funding Source:	Construction Fund
BORROWER TYPE	
Hydropower	
PROJECT DETAILS	
Project Type:	Hydroelectric
Average Annual Power Production:	17M kWh



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

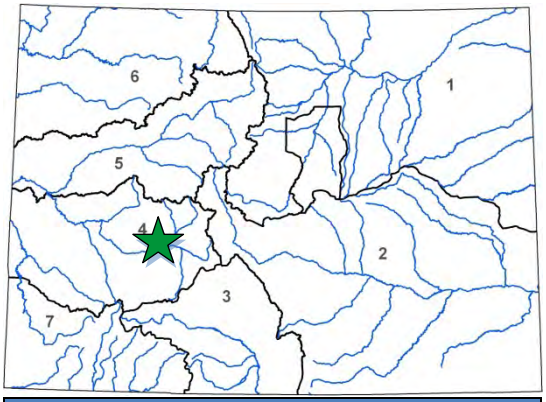
Orchard Ranch Ditch Company

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

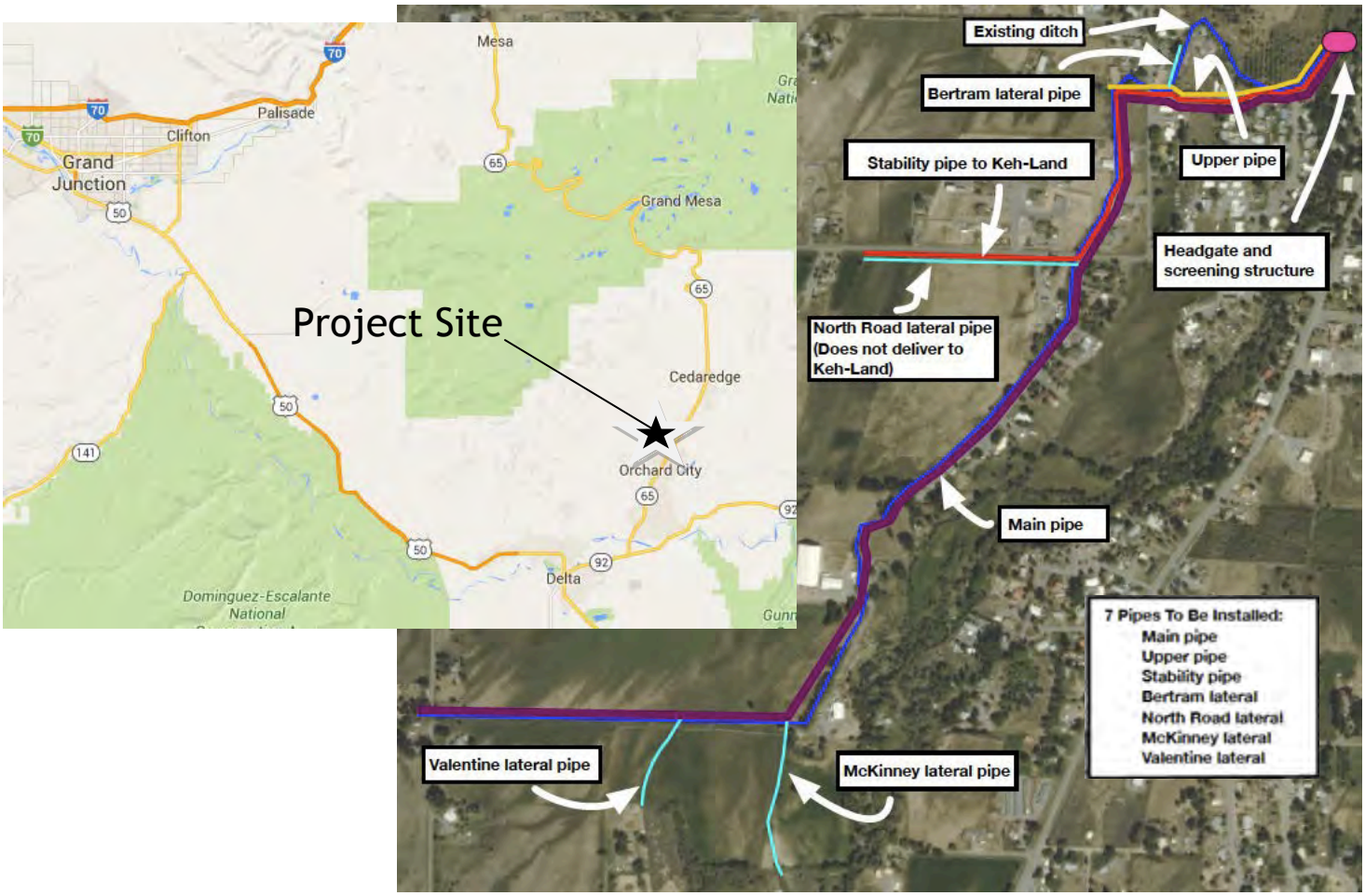
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
86%	14% Low - 0% Mid - 0% High	0%

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

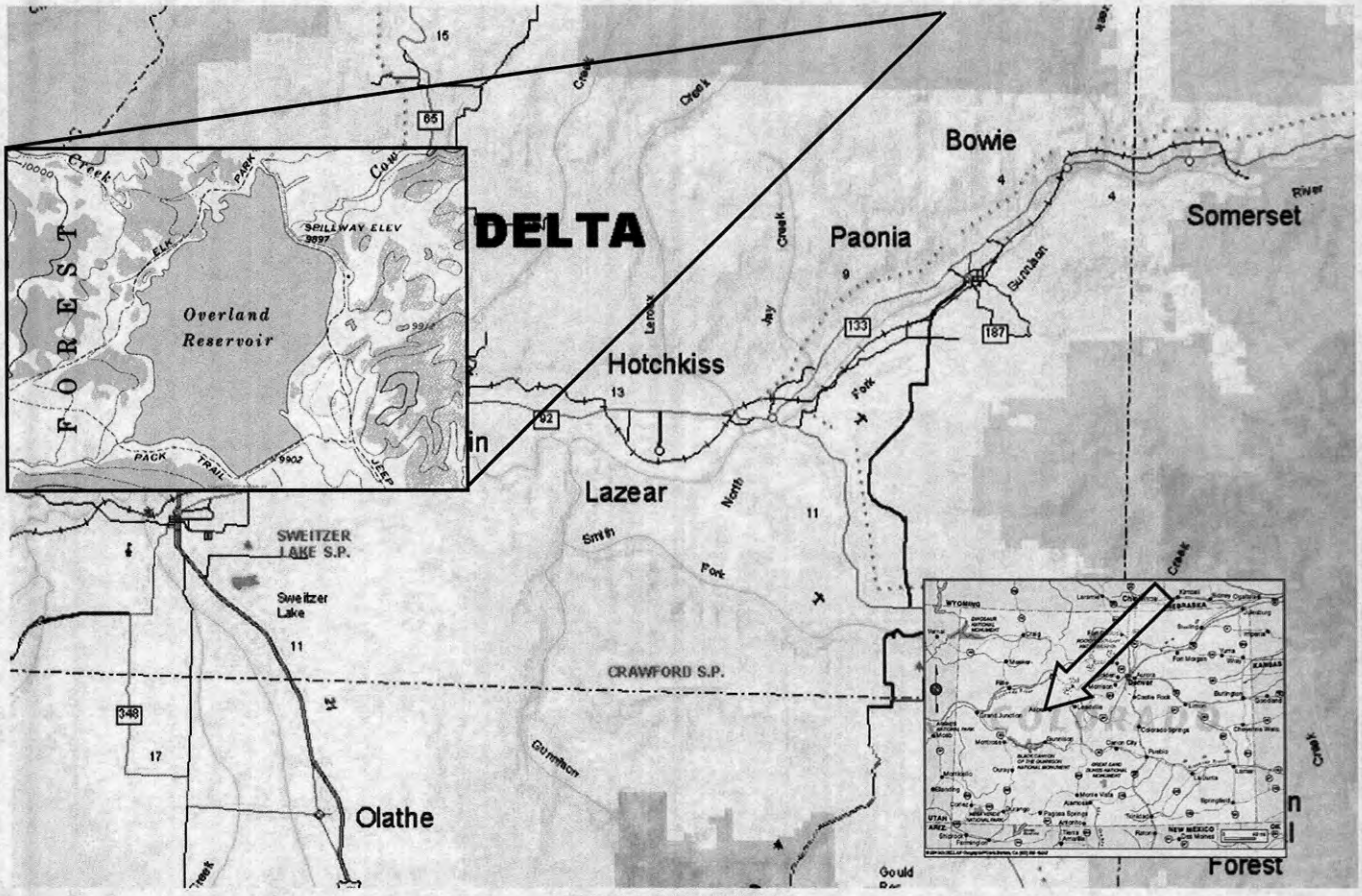
Drainage Basin: Gunnison River Basin **Water Source**: Cow Creek

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

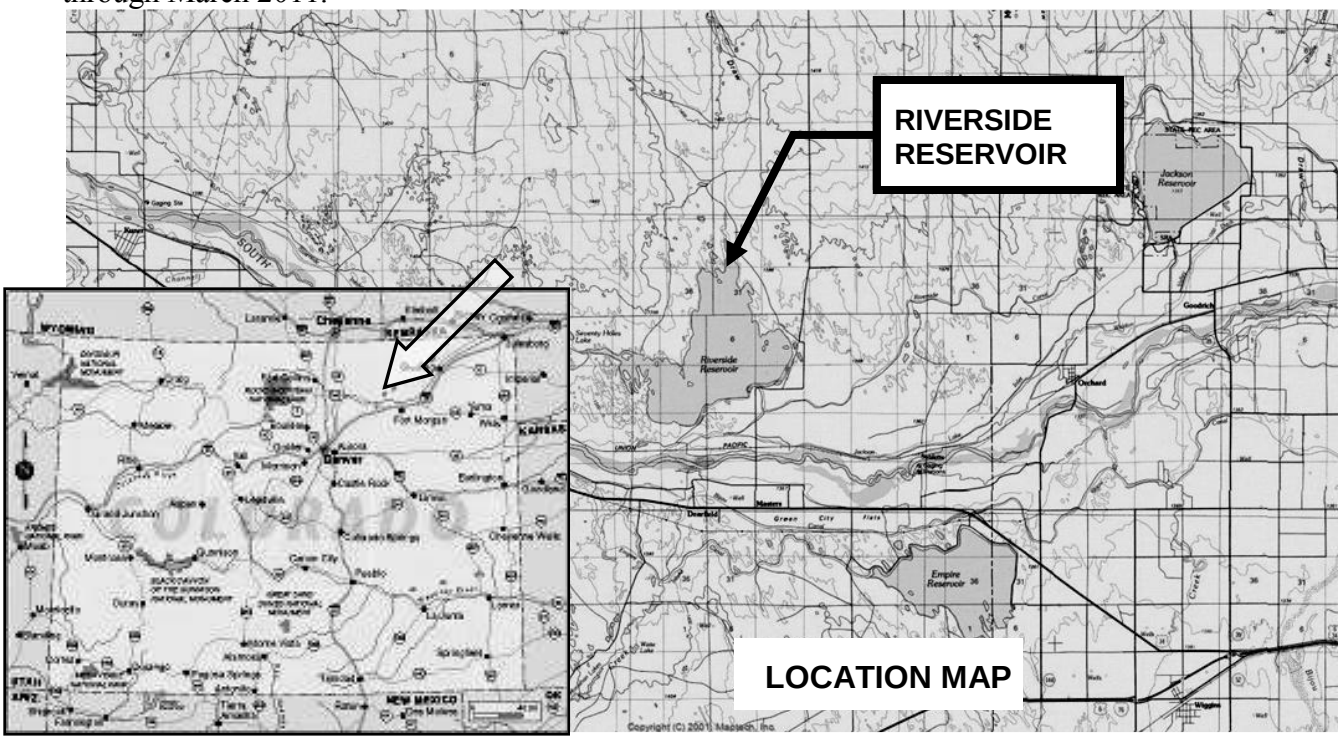
Average Delivery: 39,000 AF (from Reservoir storage) (105,000 Total AF for Company)

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

Sanchez Reservoir Outlet Rehabilitation Project

Sanchez Ditch and Reservoir Company

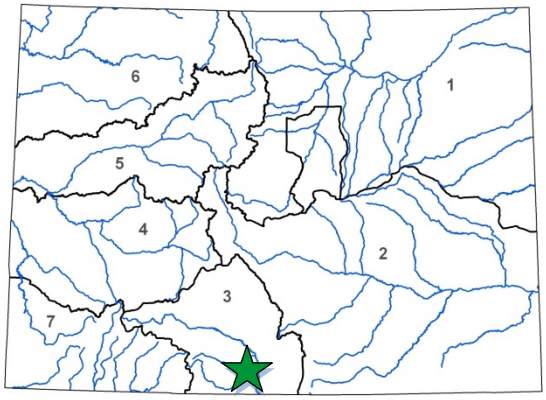
May 2017 Board Meeting

(2nd Loan Increase)

LOAN DETAILS	
Project Cost:	$2,402,000
CWCB Loan (with Service Fee):	$1,502,476
Loan Term and Interest Rate:	40 Years @ 2.0%
Funding Source:	Construction Fund / WSRF

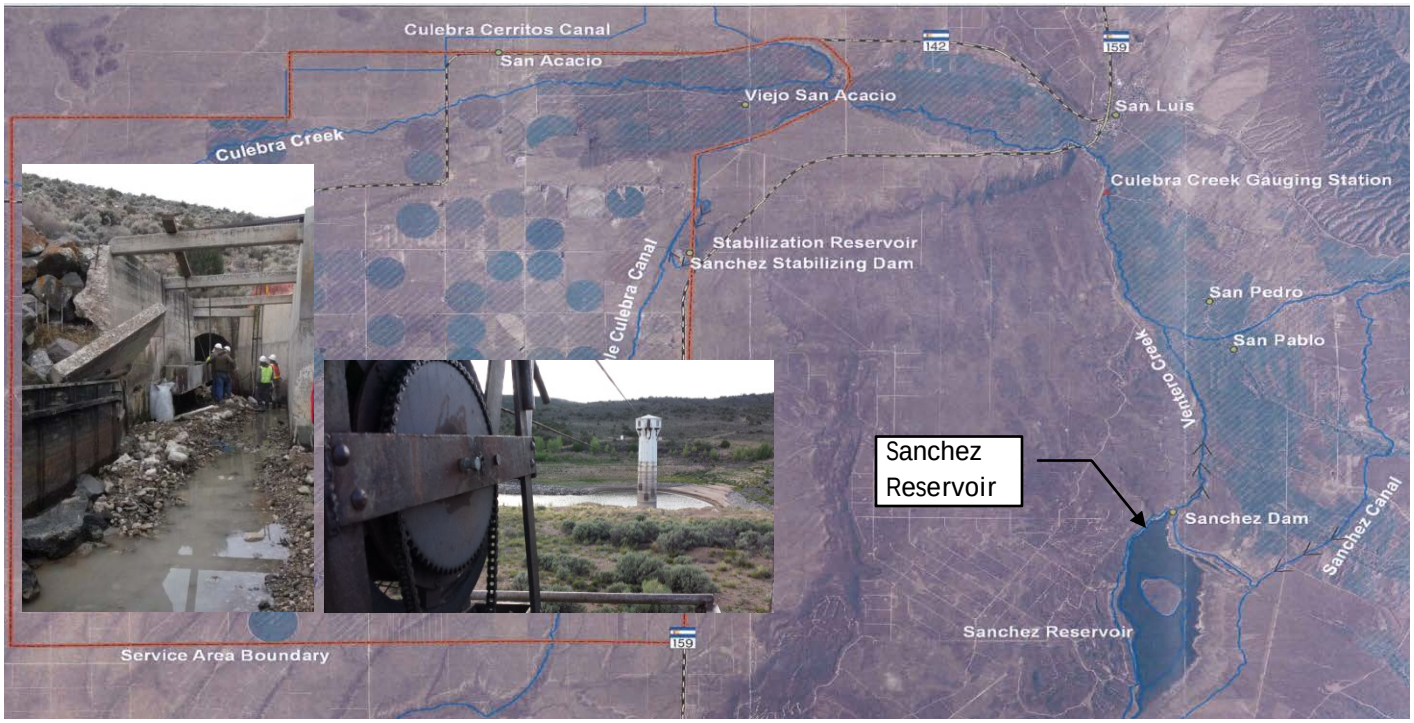
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Dam Rehabilitation
Average Annual Delivery:	15,000AF



LOCATION			
County:			Costilla
Water Source:			Ventero Creek
Drainage Basin:			Rio Grande
Division:	3	*District:*	24

The Sanchez Ditch and Reservoir Company provides irrigation water for users in Costilla County, southwest of the town of San Luis. Its primary storage reservoir is Sanchez Reservoir. The approximately 104,000 acre-foot reservoir was built in 1910. The reservoir's outlet originally included a 135 foot tall concrete gate tower. To operate the dam, a tramway/gondola ran along a cable and was powered by a portable gasoline generator. Because daily access to the tower was required during irrigation season, the reliability and safety of the gondola system had been a concern of the Company. Using loan and grant funds, the Company replaced the outlet tower with new control gates and operators; patched the outlet conduit; repaired the downstream outlet structure. It is in the process of addressing seepage monitoring concerns. The seepage monitoring (both installation of equipment and engineering to review and analyze the data) is more expensive than the Company originally budgeted. Therefore, the Company is requesting a $120,000 loan increase. With this increase the total CWCB funding into the project will be $1,502,476 in loan funds and $914,400 in Water Supply Reserve Fund Grant funds.



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Rio Grande Reservoir Rehabilitation Project

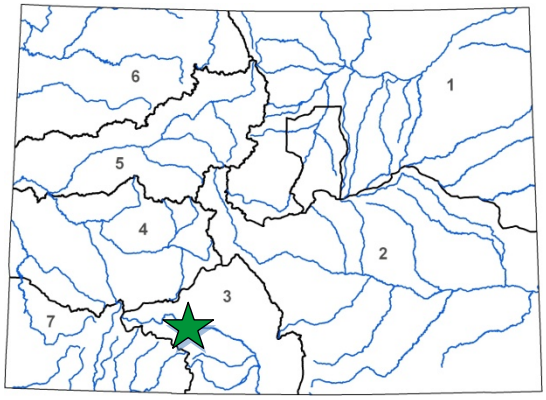
San Luis Valley Irrigation District

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

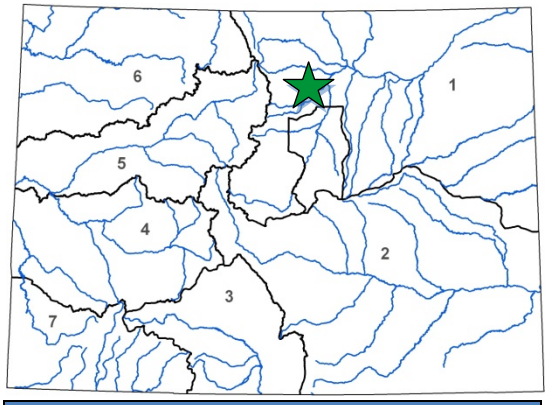
St. Vrain and Left Hand Water Conservancy District

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

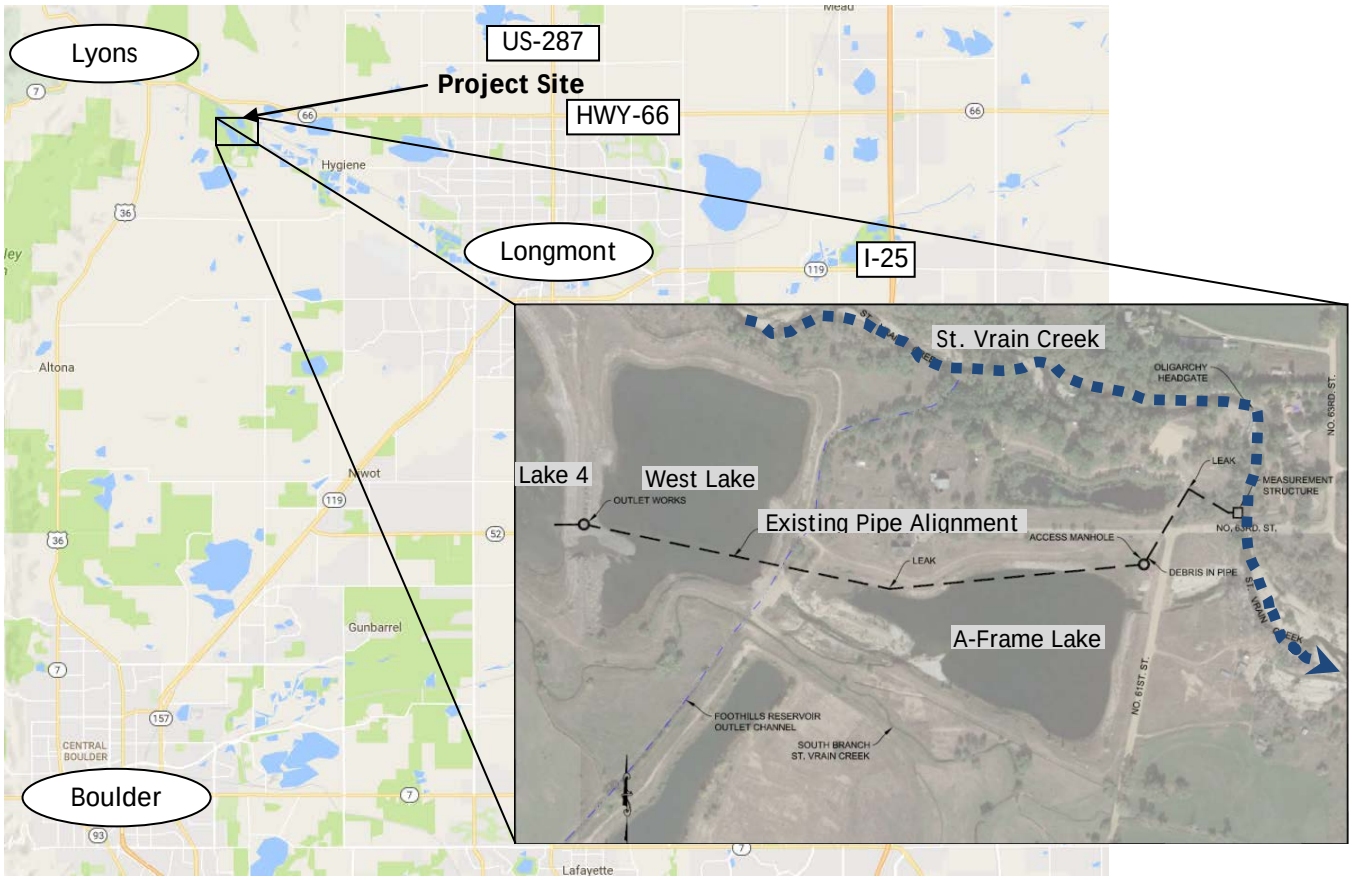
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 0% Mid - 97% High	3%

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)

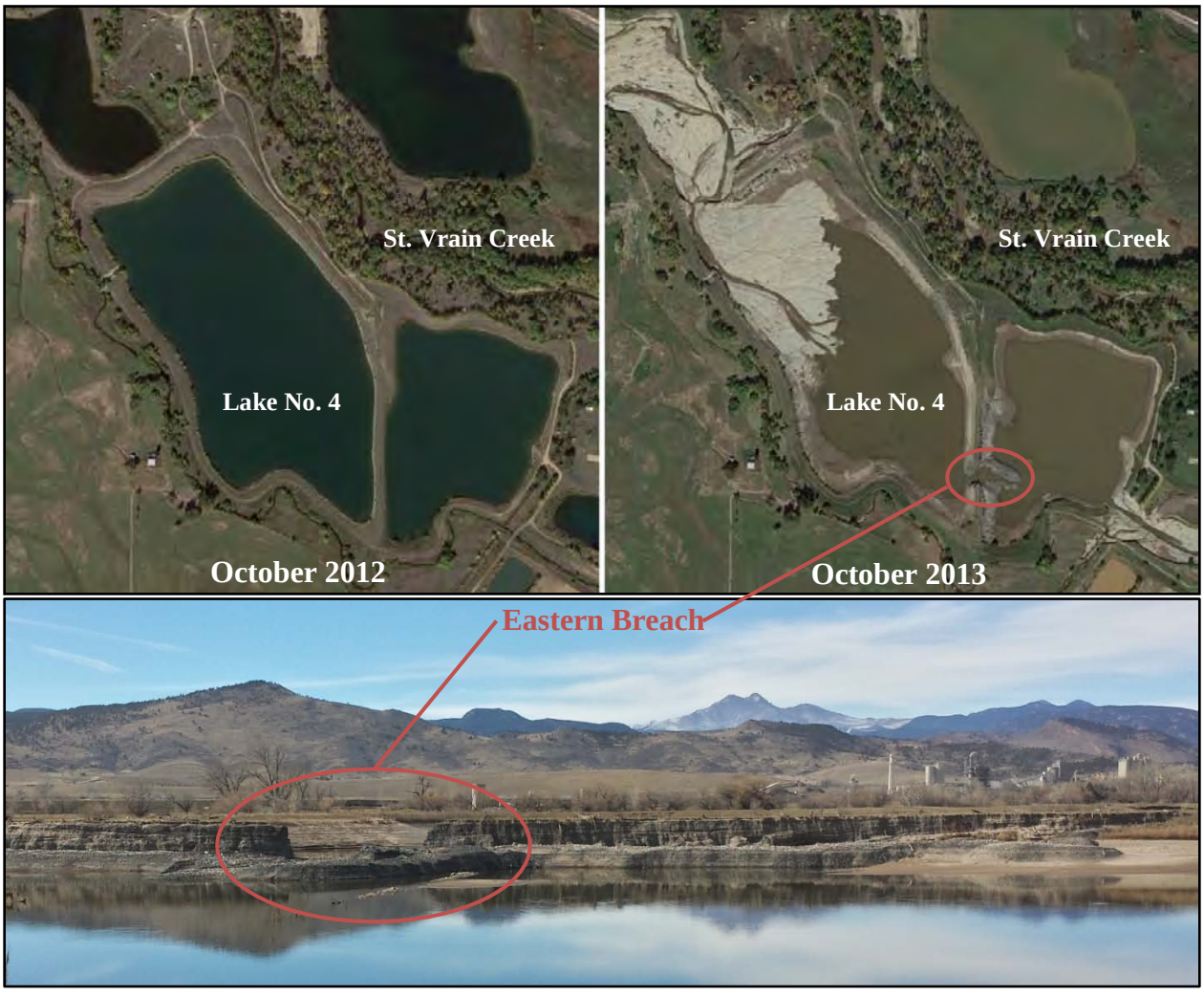
County: Boulder

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.



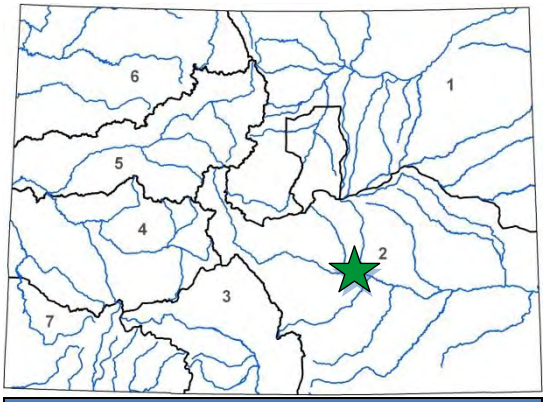
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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

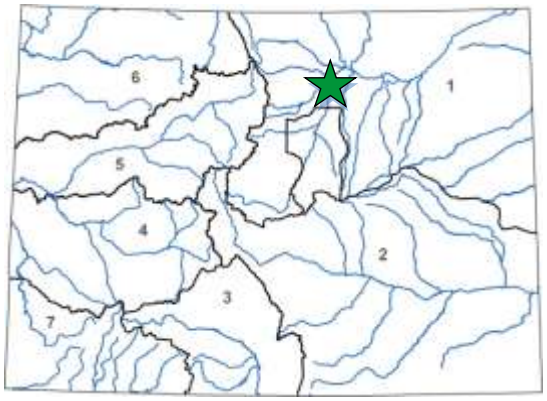
Town of Firestone

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

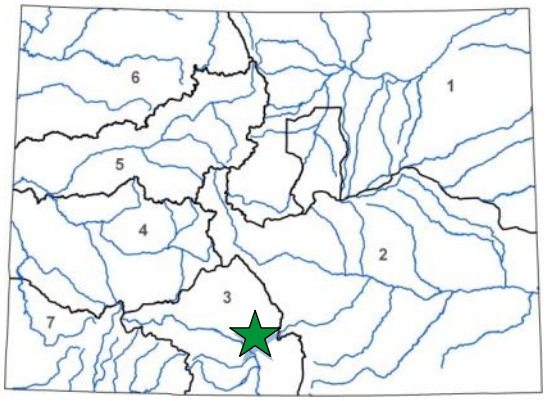
Trinchera Irrigation Company

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

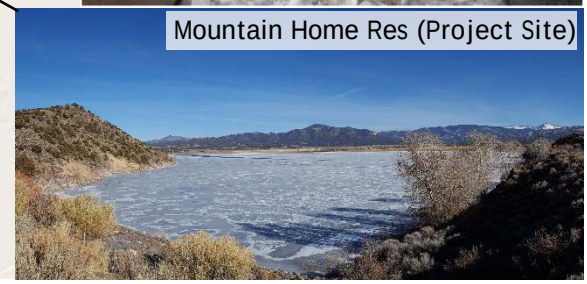


LOCATION			
County:			Costilla
Water Source:			Trinchera Creek
Drainage Basin:			Rio Grande
Division:	2	*District:*	14

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

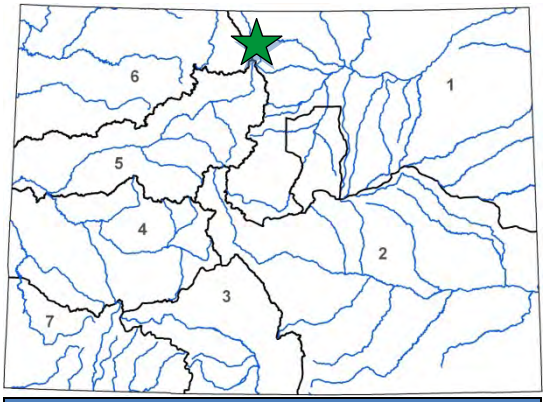
The Tunnel Water Company

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%

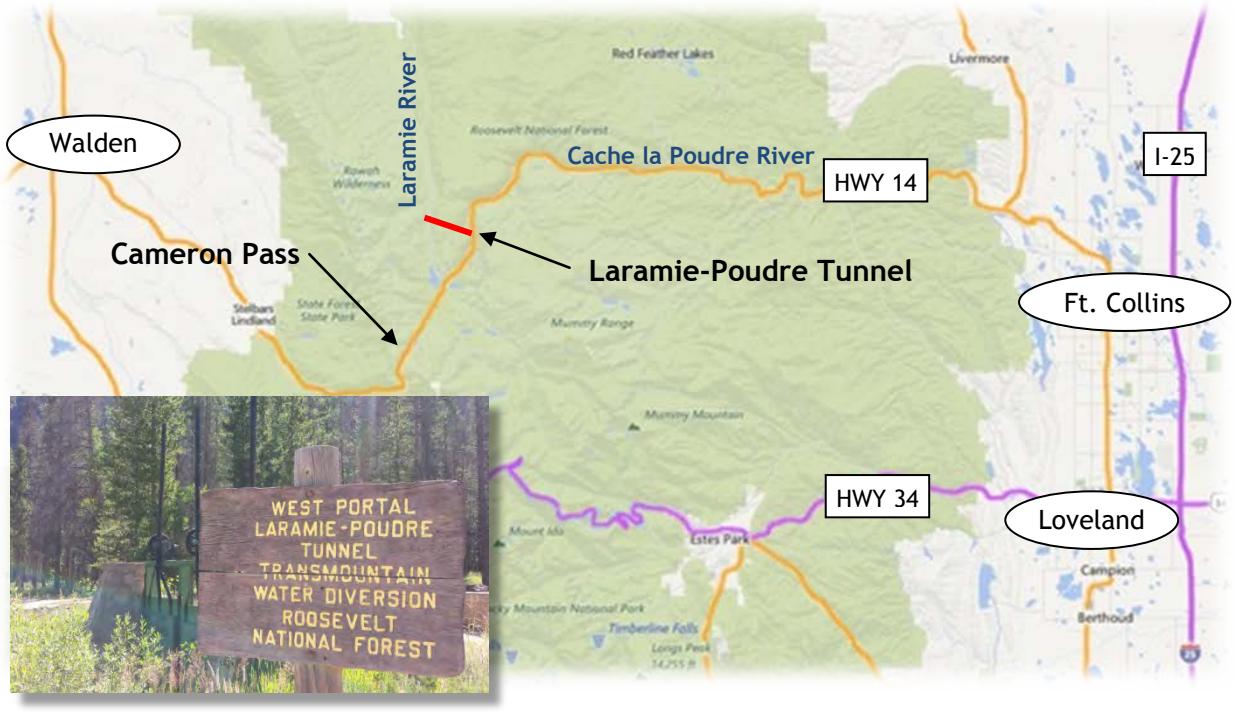
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	6,875 AF



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

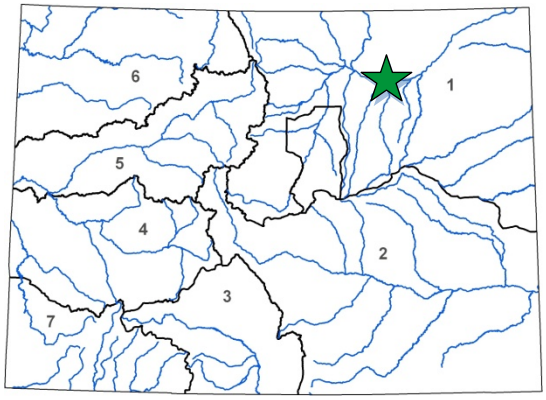
Town of Wiggins

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%

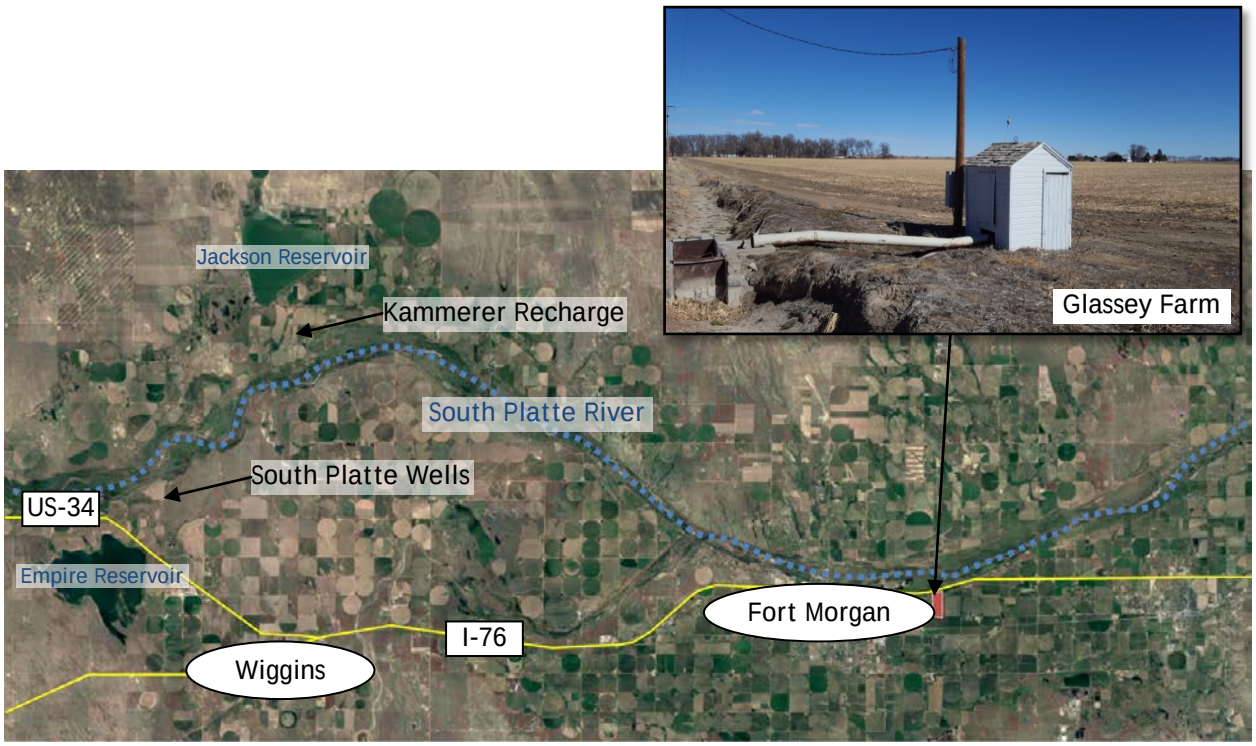
PROJECT DETAILS	
Project Type:	Augmentation
Average Annual Delivery:	140 AF



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

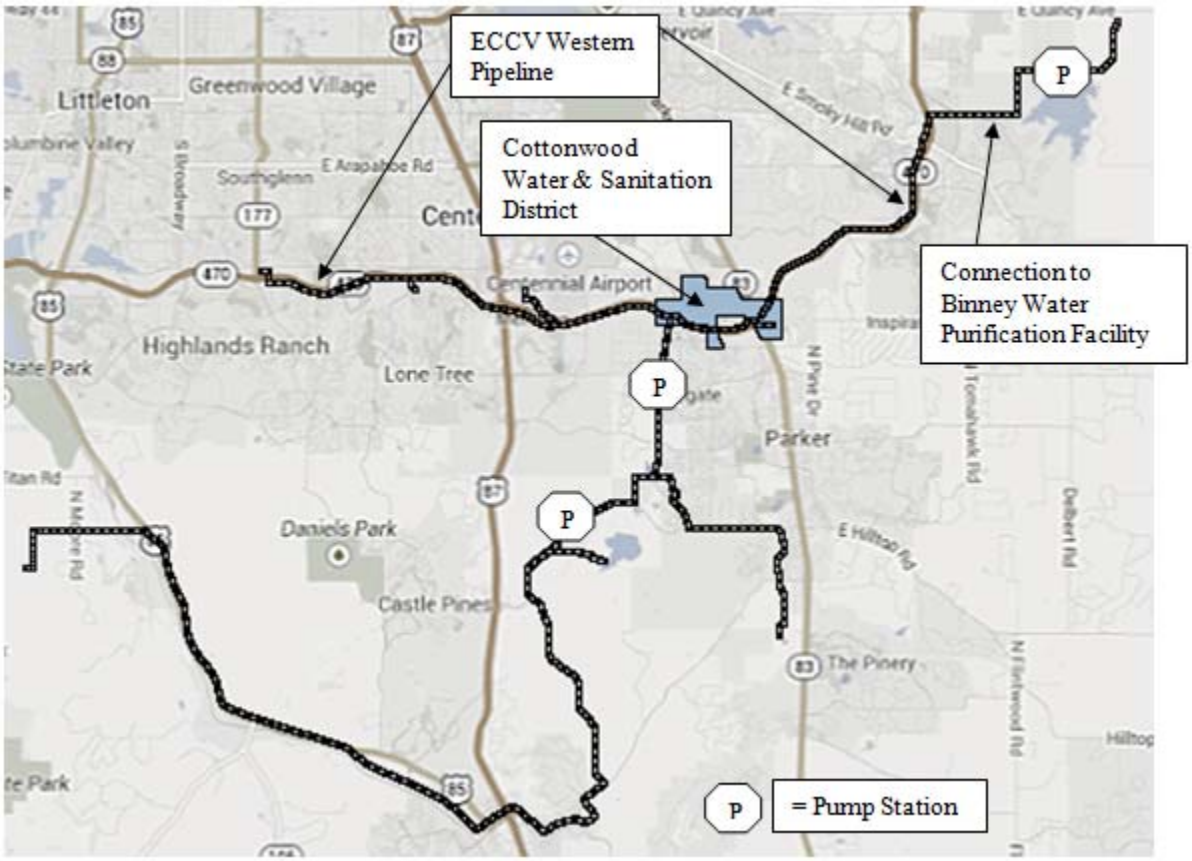
C150408

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

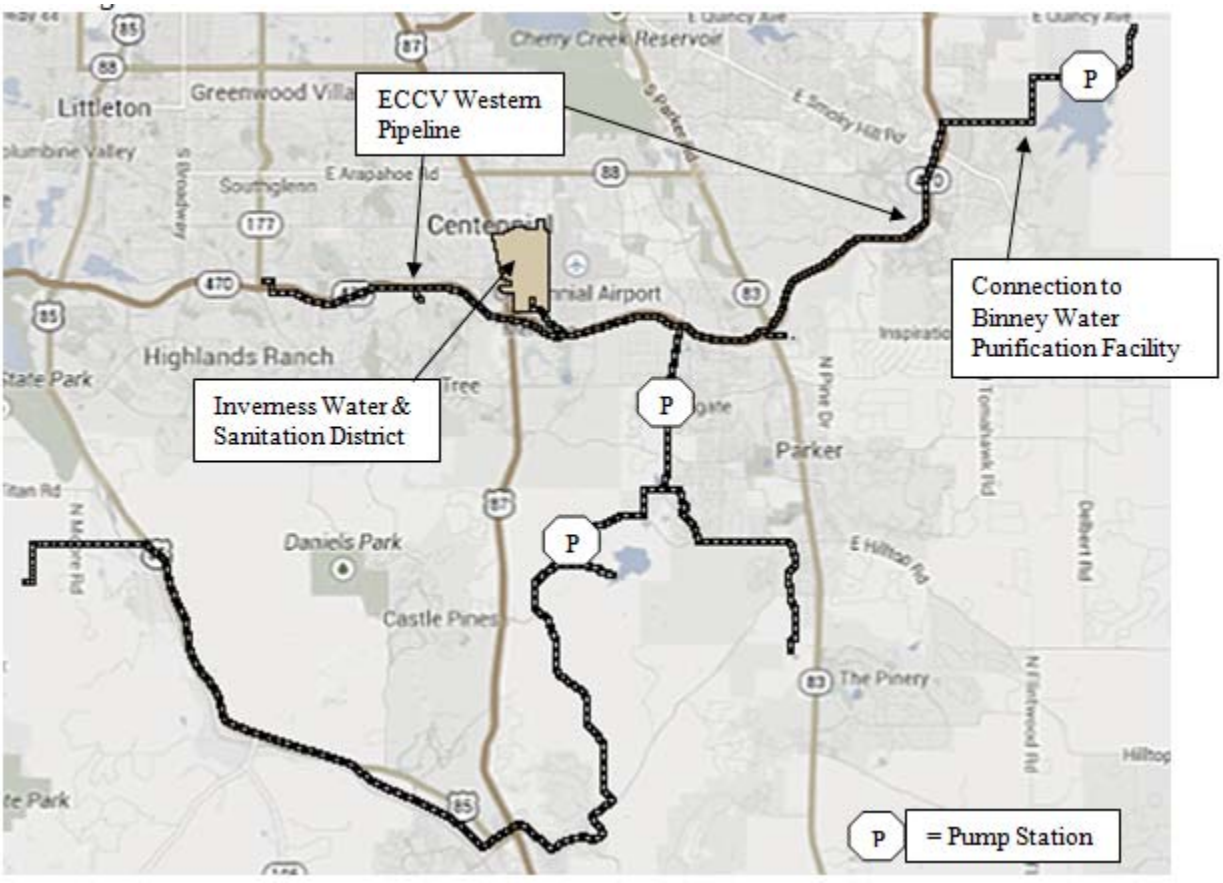
CWCB Loan: $4,908,600 (with 1% service fee)

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

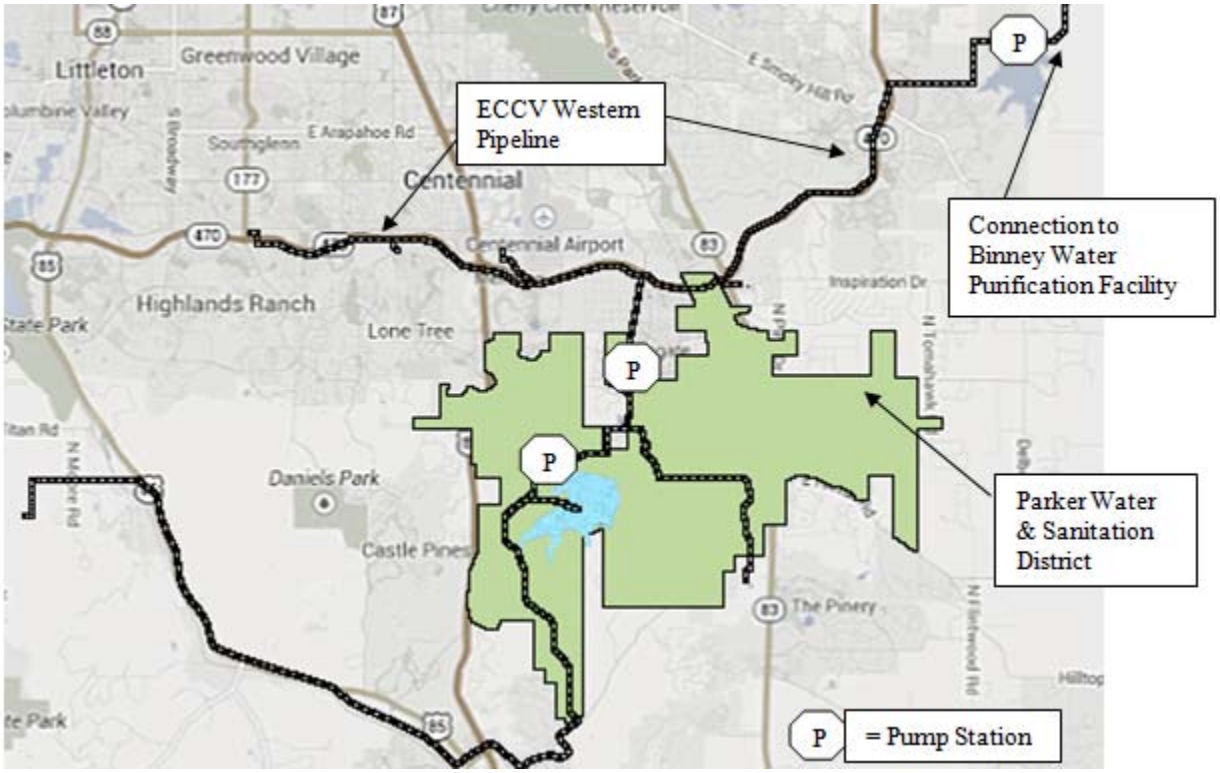
CWCB Loan: $15,734,790 (with 1% service fee)

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

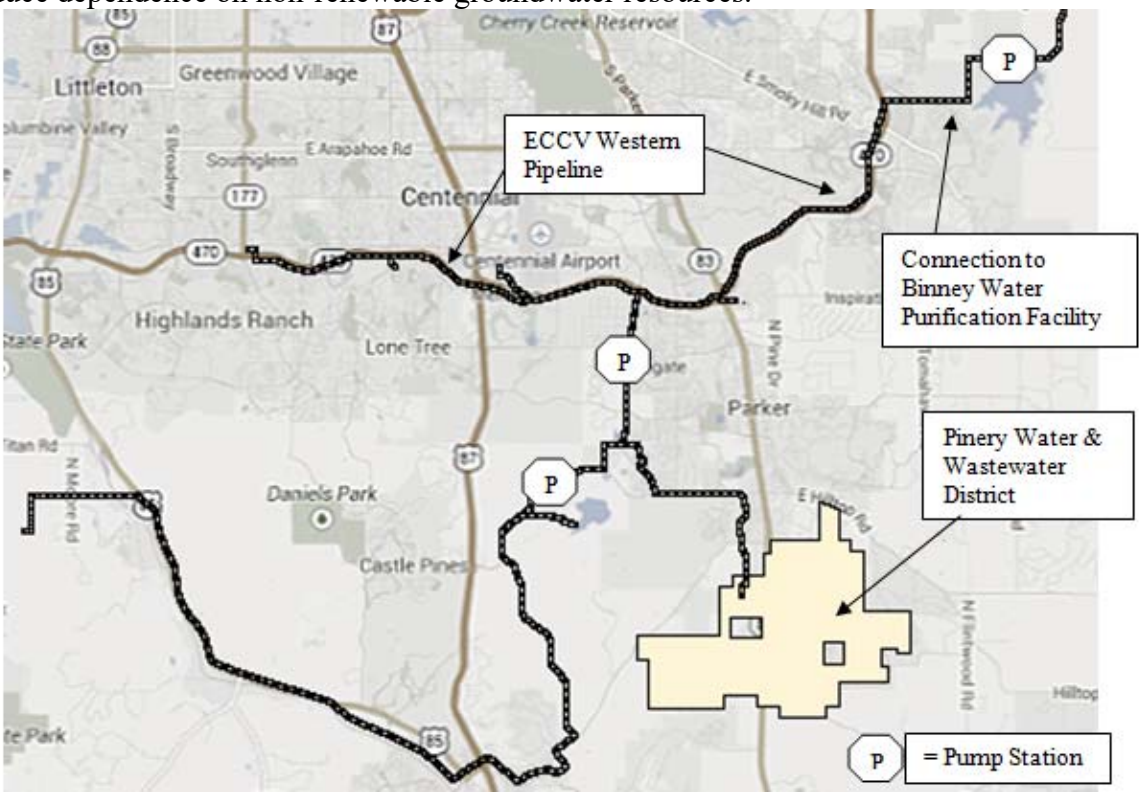
CWCB Loan: $9,926,280 (with 1% service fee)

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

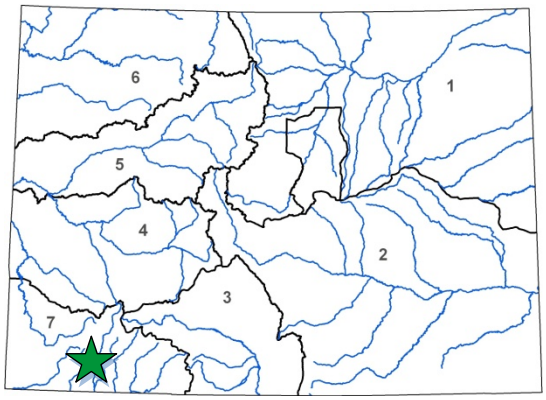
Florida Consolidated Ditch Company

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

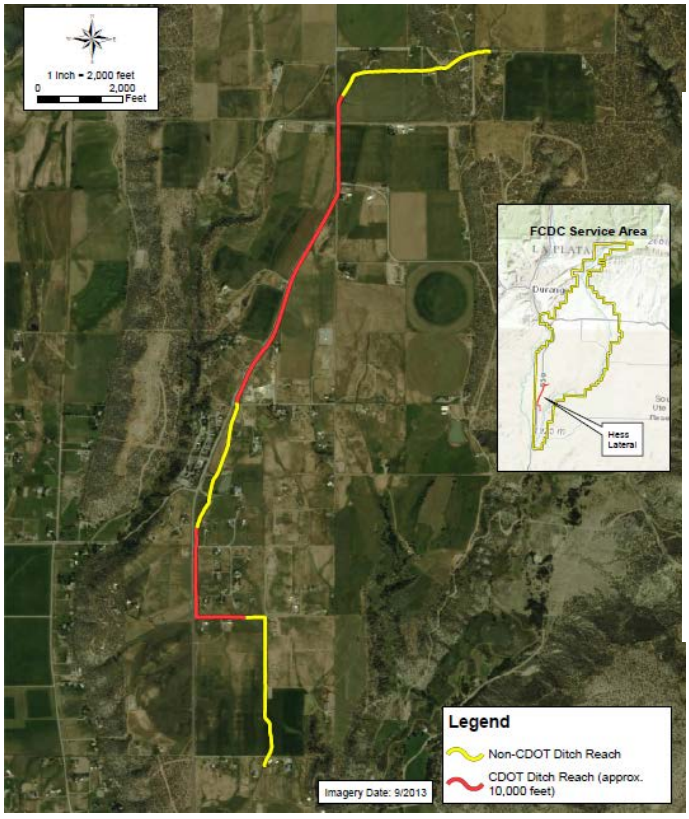
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0%	0%

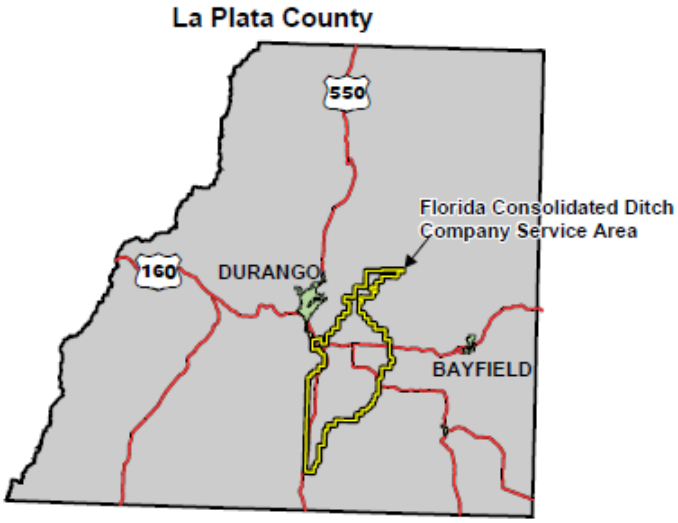
PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	43,000 AF



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

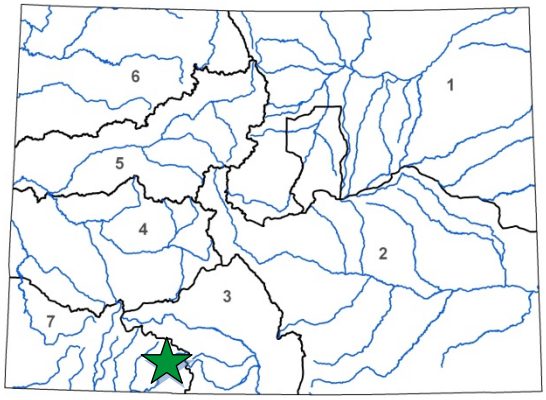
San Juan Water Conservancy District

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%

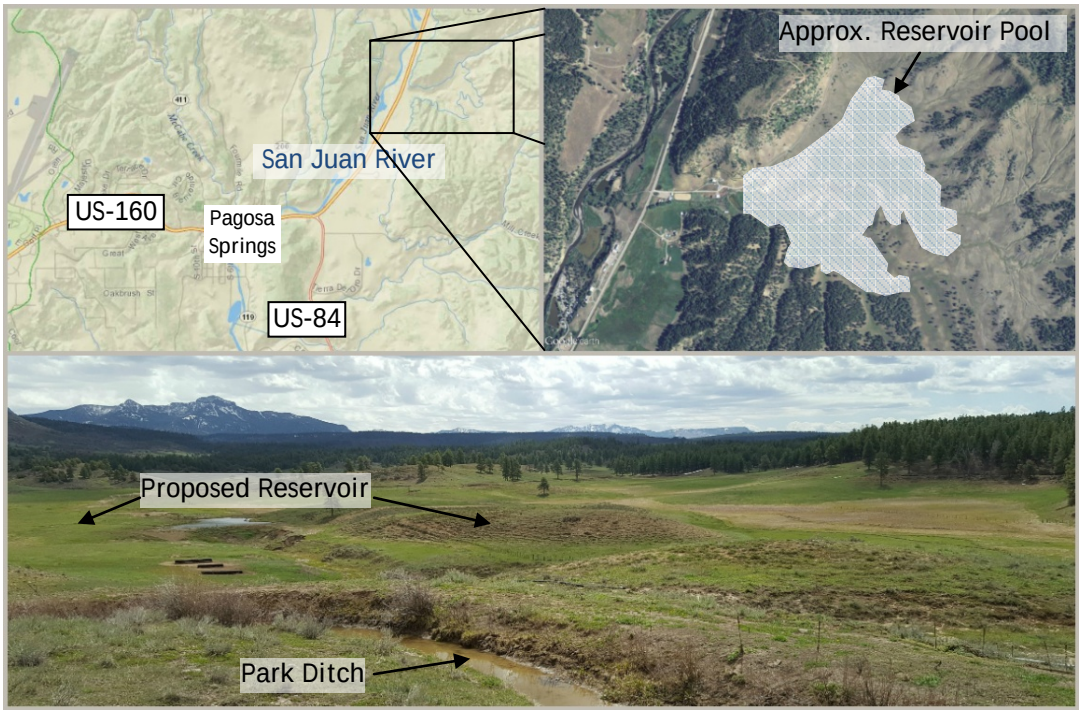
PROJECT DETAILS	
Project Type:	Water Storage Land Acquisition
Average Annual Delivery:	NA



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

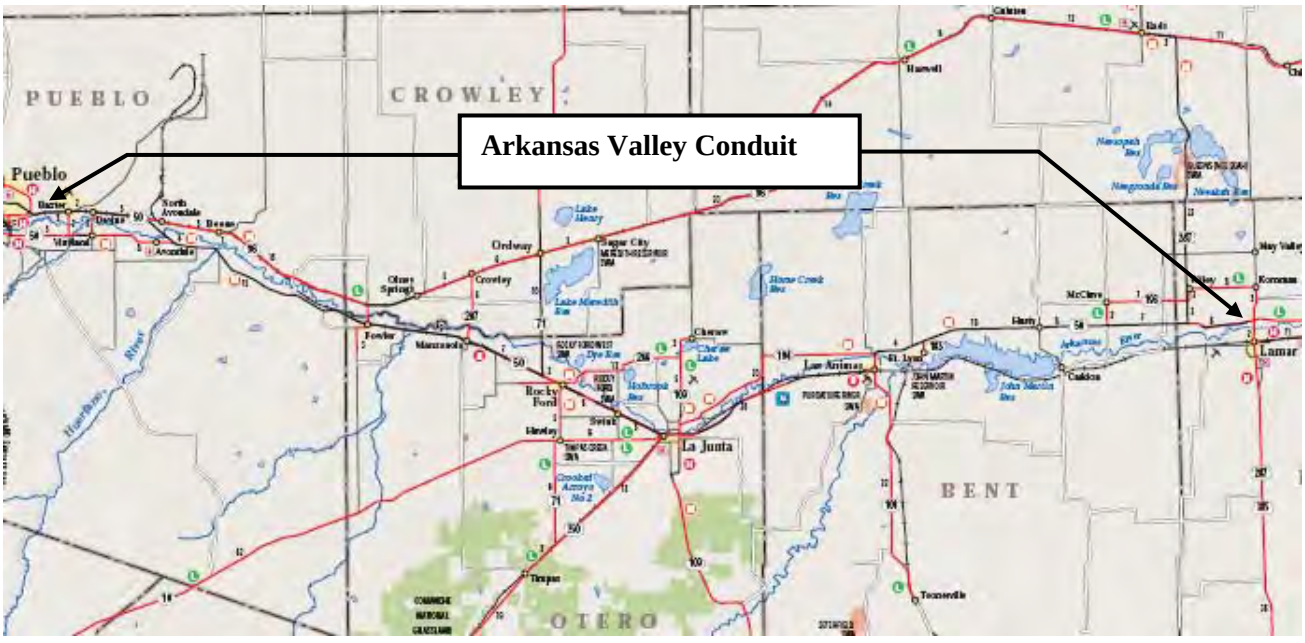
Aver. Delivery: 6,555 AF (2005 demand)

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

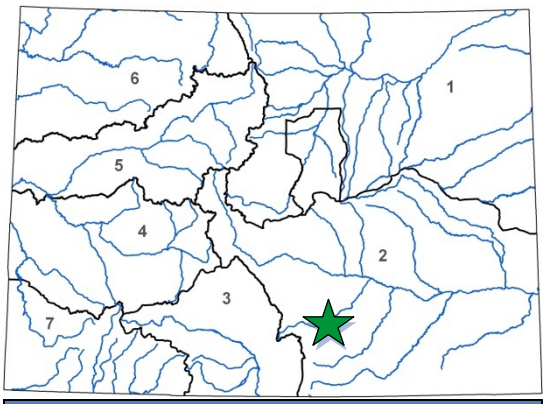
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - 0% Mid - 0% High	0%

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

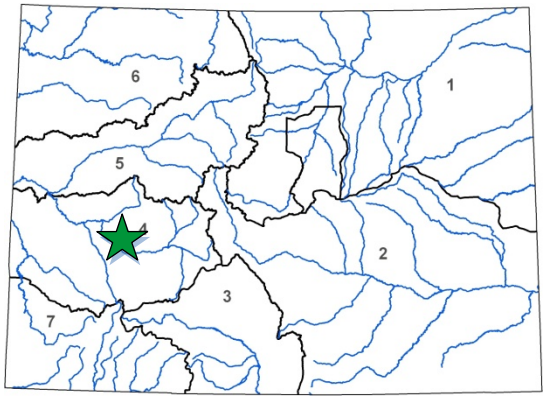
Fruitland Irrigation Company

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

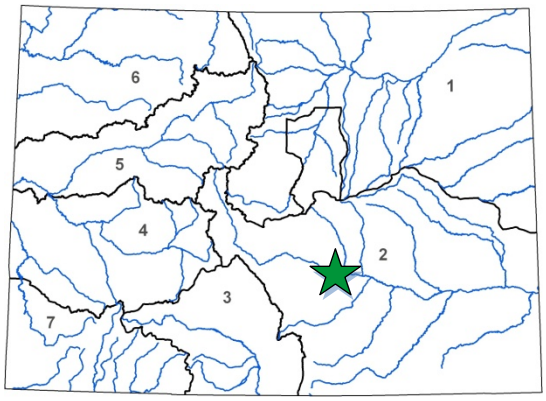
Pueblo Conservancy District

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

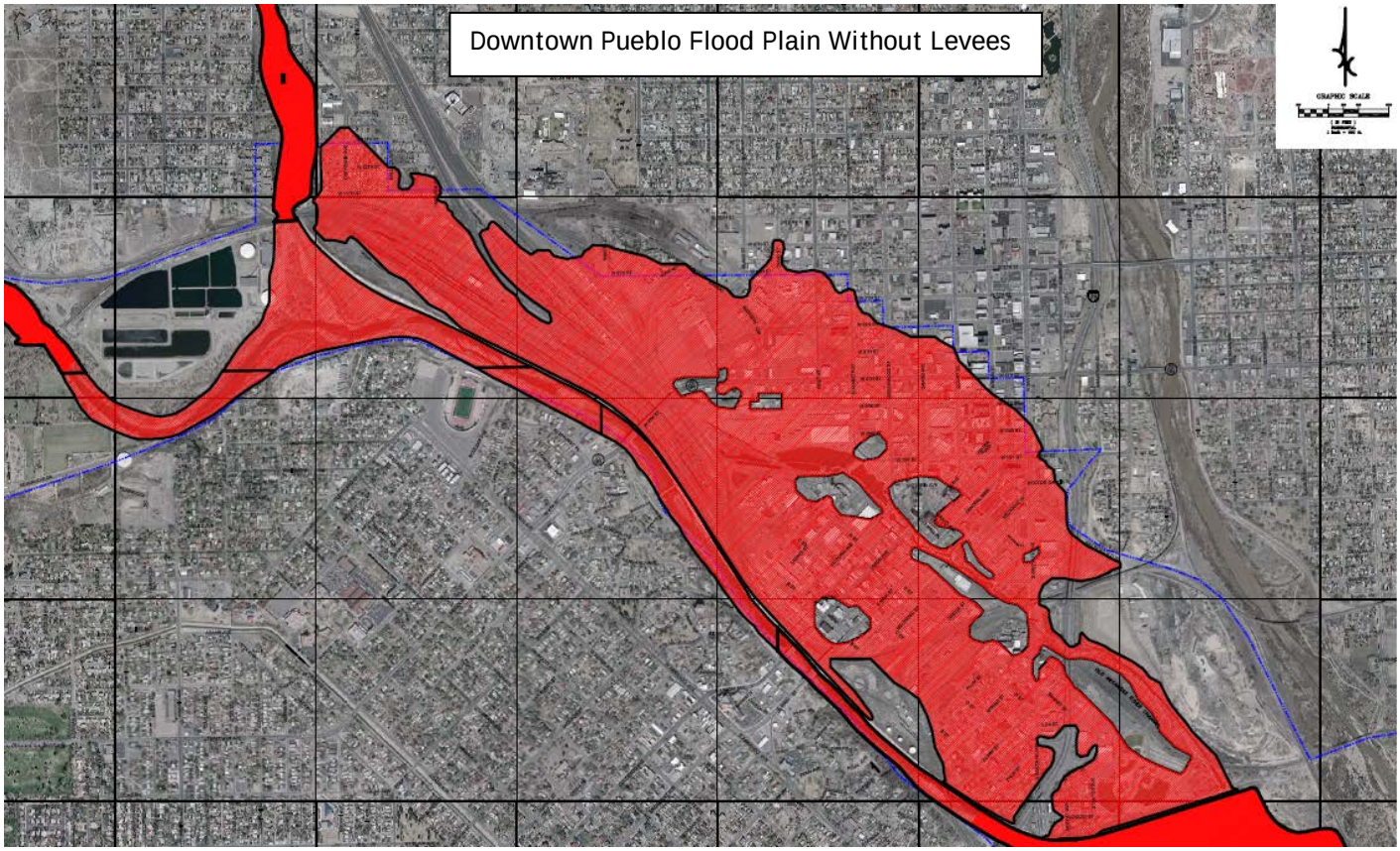
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	100% Low - TBD% Mid -0% High	0%

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

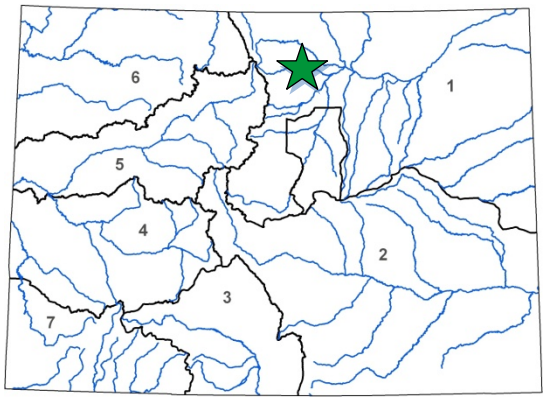
Windy Gap Firming Project

Municipal Subdistrict, Northern Colorado Water Conservancy District

Windy Gap Firming Project Water Activity Enterprise

November 2017 Board Meeting

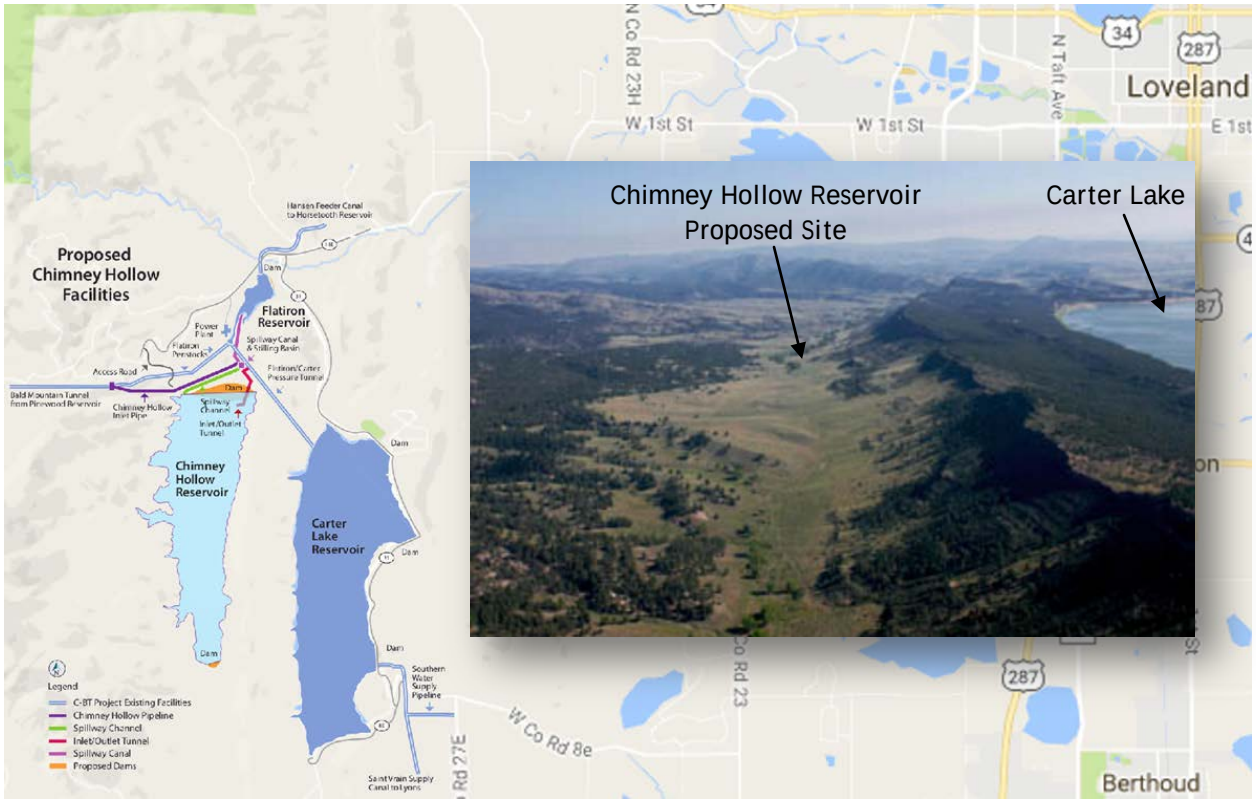
LOAN DETAILS	
Project Cost:	$440,000,000
CWCB Loan (with Service Fee):	$90,000,000
Loan Term and Interest Rate:	30 years @ 3.10%
Funding Source:	Revenue Bonds & Construction Fund Loan
BORROWER TYPE	
Municipal	
PROJECT DETAILS	
Project Type:	New Reservoir
New Storage Capacity:	90,000 AF



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

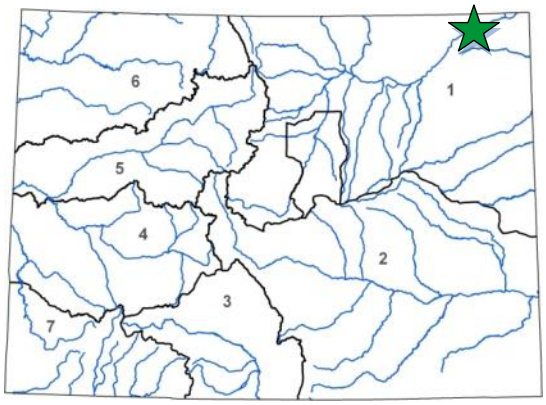
Julesburg Irrigation District

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

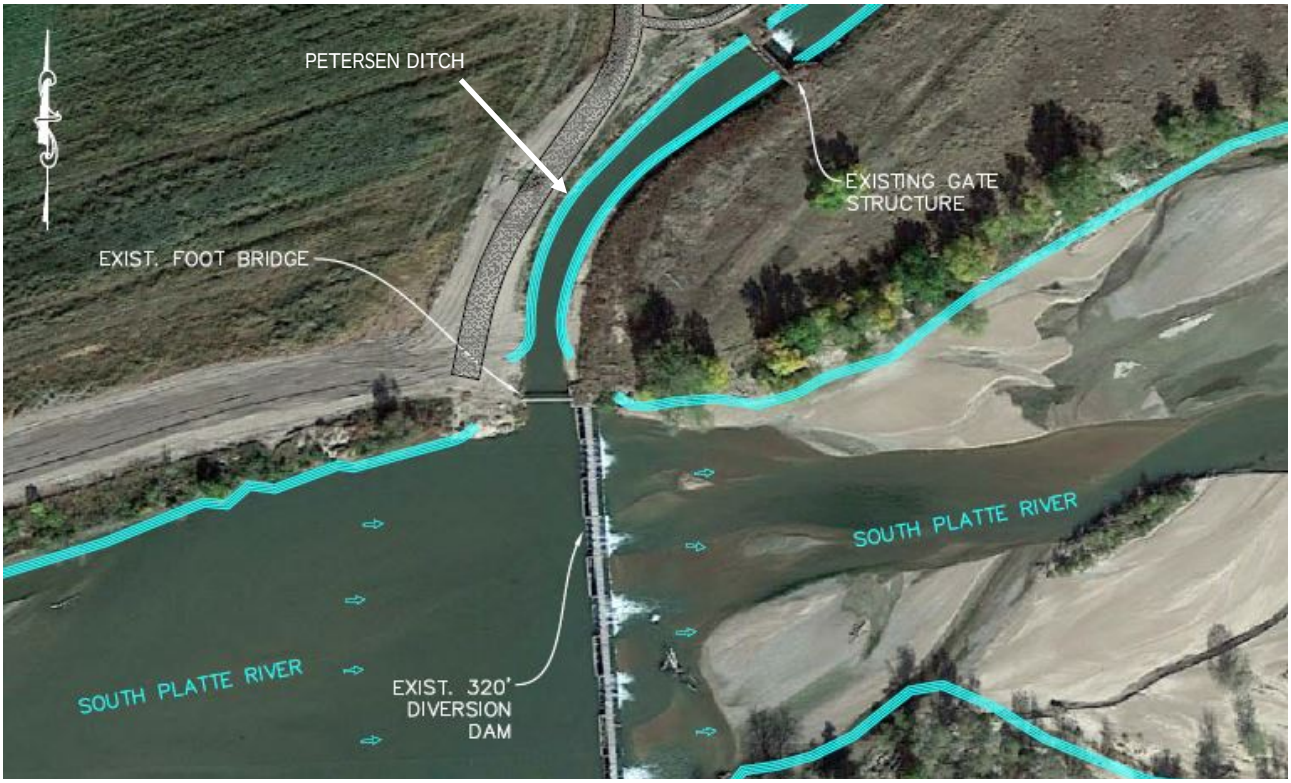
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
98%	1% Low - 0% Mid -0% High	1%

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

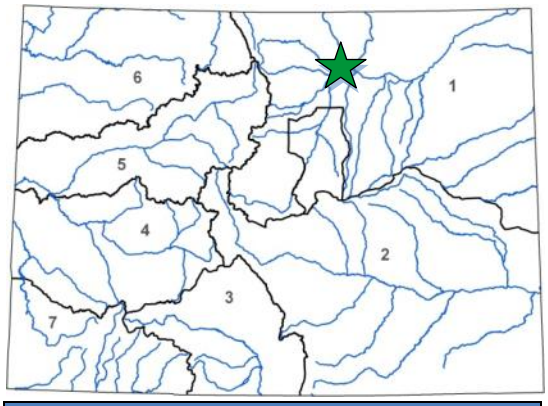
Ogilvy Irrigating and Land Company

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

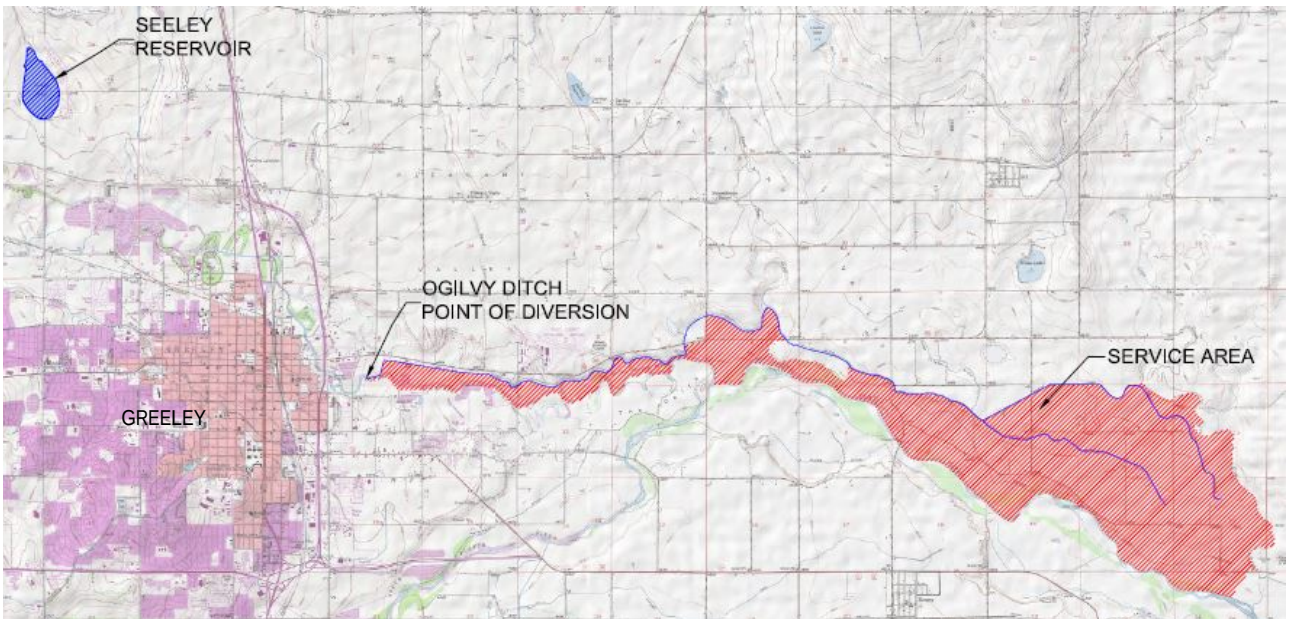
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
95%	5% Mid	0%

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

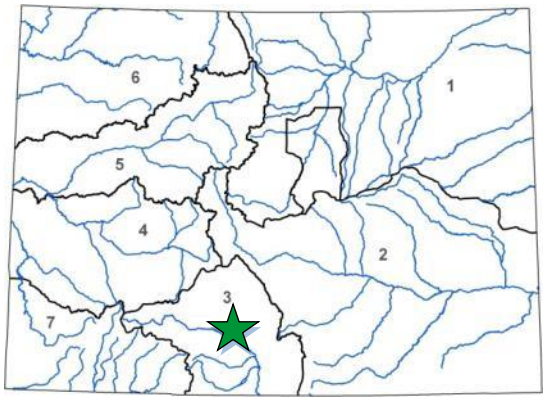
San Luis Valley Canal Company

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



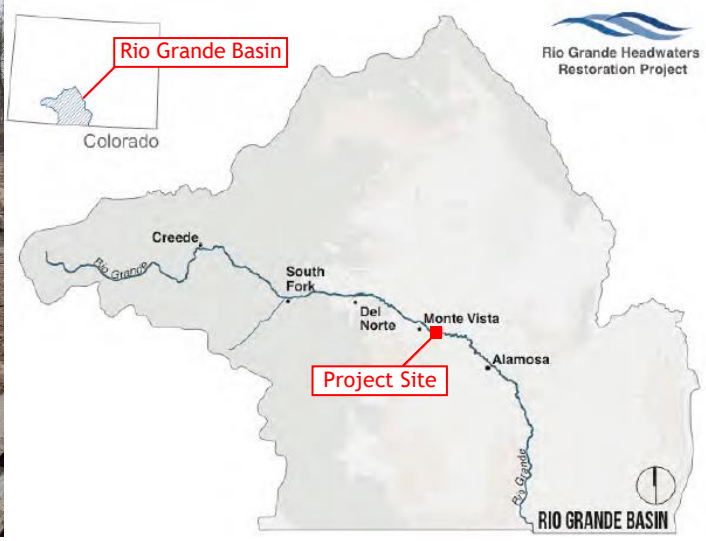
LOCATION			
County:			Rio Grande
Water Source:			Rio Grande
Drainage Basin:			Rio Grande
Division:	3	*District:*	20

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



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

LOAN REPAYMENT DELINQUENCY

Loan Repayments received relative to the Water Project Construction Loan Program have been reviewed for the period covering July 2017 through June 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 Fiscal Year 2018 totaled 326. There were two loan payments not received on time during this period. The loan payment from Fuchs Ranches, Inc. was less than 30 days late. A partial loan payment from the Two Rivers Water Company was less than 30 days late; which, is the first of four partial payments due to financial difficulty. Thus, the on-time performance for the total repayments due was 99% in compliance or 1% not in compliance.

LOANS PAID OFF

During Fiscal Year 2018, there were twenty-three loans repaid in full to the Construction Fund and two loans repaid in full to the Severance Tax Perpetual Base Fund, detailed as follows:

	Borrower	Contract No.	Original Loan	Principal Received
1	Beaver Park Water, Inc.	C153320	$ 1,500,000	$ 183,550
2	Beaver Park Water, Inc.	C153333	$ 350,000	$ 74,449
3	Beaver Park Water, Inc.	C153355	$ 280,000	$ 69,997
4	Beaver Park Water, Inc.	C153438	$ 125,000	$ 51,780
5	Beaver Park Water, Inc.	C153501	$ 125,000	$ 64,568
6	Cache La Poudre Reservoir Company	C153301	$ 880,000	$ 36,959
7	Central Colorado Water Conservancy District	C150160	$ 4,513,200	$ 3,092,073
8	City of Victor	C150081	$ 600,000	$ 228,195
9	East Dillon Water District	C150100	$ 2,550,000	$ 1,660,564
10	Fruitland Irrigation Company	C153542	$ 168,549	$ 85,863
11	Greeley & Loveland Irrigation Company	C153835A	$ 308,000	$ 152,191
12	John Peroulis & Sons Partnership	C150083	$ 250,000	$ 152,266
13	Kern Reservoir & Ditch Company	C150112	$ 1,000,000	$ 736,266
14	Kern Reservoir & Ditch Company	C150118	$ 3,620,000	$ 2,665,284
15	Lake Henry Reservoir Company	C150098	$ 147,701	$ 85,120
16	Montezuma Valley Irrigation Company	C150333	$ 252,225	$ 223,066
17	New Cache La Poudre Irrigating Company	C153639L	$ 450,000	$ 54,330
18	Overland Ditch & Reservoir Company	C153527	$ 541,947	$ 33,576
19	Smith Irrigation Ditch	C153787	$ 50,000	$ 3,399
20	Swan's Nest Metropolitan District	C150312	$ 151,500	$ 113,489
21	Town of Breckenridge	C153351	$ 1,200,000	$ 269,891
22	Town of Parachute	C153314	$ 250,000	$ 12,268
23	Woodchuck Ditch Company	C150041	$ 30,000	$ 624
	Totals for Construction Fund		$ 19,343,122	$ 10,049,768

	Borrower	Contract No.	Original Loan	Principal Received
24	Fulton Irrigating Ditch Company	C150168	$ 171,700	$ 71,115
25	Town of Monument	C150062	$ 202,000	$ 51,279
	Totals for Severance Tax PBF		$ 373,700	$ 122,394

LOAN FINANCIAL ACTIVITY

Loan Financial Activity relative to the Water Project Construction Loan Program for Fiscal Year 2018 is summarized as follows: Funds received relative to loans in repayment totaled $41.0 M for this year. Funds disbursed relative to new project loans totaled $49.0 M for this year. Net activity resulted in $8.0 M disbursed by the CWCB Construction Fund and the Severance Tax Perpetual Base Fund (STPBF) over the total received.

Further breakdown is summarized as follows: The Construction Fund portion consists of $31.1 M in receivables and $9.8 M in disbursements for a total net activity of $21.3 M received over disbursed. The STPBF consists of $9.9 M in receivables and $39.2 M in disbursements for a total net activity of $8.0 M disbursed over received.

COLORADO WATER CONSERVATION BOARD

FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2018

CONSTRUCTION FUND

Period	Principal	Interest	Total Received	Disbursements	Net Activity
July 2017	$ 865,621	$ 495,858	$ 1,361,479	$ -	$ 1,361,479
August 2017	$ 4,115,117	$ 164,144	$ 4,279,261	$ 1,811,633	$ 2,467,629
September 2017	$ 1,075,737	$ 1,590,612	$ 2,666,348	$ 211,542	$ 2,454,807
October 2017	$ 766,163	$ 150,209	$ 916,372	$ 395,859	$ 520,513
November 2017	$ 1,914,351	$ 933,157	$ 2,847,508	$ 19,724	$ 2,827,783
December 2017	$ 469,665	$ 471,879	$ 941,544	$ 556,783	$ 384,761
January 2018	$ 594,892	$ 333,192	$ 928,084	$ 676,607	$ 251,476
February 2018	$ 690,024	$ 377,672	$ 1,067,695	$ 182,204	$ 885,492
March 2018	$ 9,877,231	$ 858,546	$ 10,735,777	$ 2,185,743	$ 8,550,034
April 2018	$ 1,040,271	$ 548,916	$ 1,589,187	$ 465,379	$ 1,123,808
May 2018	$ 1,391,702	$ 392,697	$ 1,784,399	$ 1,764,171	$ 20,228
June 2018	$ 1,260,059	$ 681,984	$ 1,942,043	$ 1,481,168	$ 460,875
FY 2018 Totals	**$ 24,060,832**	**$ 6,998,865**	**$ 31,059,698**	**$ 9,750,813**	**$ 21,308,885**

COLORADO WATER CONSERVATION BOARD

FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2018

SEVERANCE TAX PERPETUAL BASE FUND

Period	Principal	Interest	Total Received	Disbursements	Net Activity
July 2017	$ 65,586	$ 33,608	$ 99,194	$ -	$ 99,194
August 2017	$ 2,963,482	$ 910,785	$ 3,874,267	$ 1,475,304	$ 2,398,963
September 2017	$ 456,050	$ 505,677	$ 961,727	$ 686,539	$ 275,188
October 2017	$ 173,878	$ 151,787	$ 325,666	$ 5,439,351	$ (5,113,685)
November 2017	$ 283,642	$ 83,985	$ 367,627	$ 1,575,331	$ (1,207,704)
December 2017	$ 712,814	$ 288,436	$ 1,001,250	$ 2,170,319	$ (1,169,069)
January 2018	$ 94,988	$ 74,396	$ 169,384	$ 2,409,449	$ (2,240,065)
February 2018	$ 705,594	$ 240,698	$ 946,292	$ 3,583,037	$ (2,636,745)
March 2018	$ 190,482	$ 61,759	$ 252,241	$ 4,603,657	$ (4,351,415)
April 2018	$ 146,891	$ 48,319	$ 195,210	$ 4,443,856	$ (4,248,646)
May 2018	$ 1,001,794	$ 566,048	$ 1,567,842	$ 4,201,728	$ (2,633,886)
June 2018	$ 99,624	$ 87,422	$ 187,046	$ 8,627,145	$ (8,440,099)
FY 2018 Totals	**$ 6,894,827**	**$ 3,052,921**	**$ 9,947,748**	**$ 39,215,717**	**$ (29,267,969)**
GRAND TOTALS	**$ 30,955,659**	**$ 10,051,786**	**$ 41,007,446**	**$ 48,966,530**	**$ (7,959,084)**