

COLORADO

Colorado Water Conservation Board

Department of Natural Resources

DIRECTOR'S REPORT

November 2018

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



TO: Colorado Water Conservation Board Members

FROM: Rebecca Mitchell

Andrew Rickert

DATE: November 14-15, 2018

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

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~STATEWIDE~

CWCB SMALL FEASIBILITY STUDY GRANT FUND UPDATE—

New grant applications approved:

- 1. Silt Water Conservancy District Harvey Gap Reservoir Upgrades (\$13,400)
- 2. Evergreen Metro District Evergreen Dam Evaluation (\$50,000)

Previously approved grants in FY18/19:

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

Total funds approved for feasibility study grants in FY18/19: \$123,162 (Anna Mauss)

~DOLORES RIVER BASIN~

LOWER DOLORES PLAN WORKING GROUP UPDATE — The Lower Dolores Plan Working Group's Drafting Team, appointed by the Group's Legislative Subcommittee, completed the latest version of the draft National Conservation Area (NCA) legislation in December 2017. On September 27, 2018, a delegation from Dolores County and San Miguel County met with the Montrose County Commissioners, and the County's attorney and Director of Government Affairs in Naturita. The goal was to inform and update Montrose County on the draft legislation since the County has two relatively new Commissioners. The outcome of the meeting was that Montrose County will continue to assess whether it can support the NCA and if so, under what circumstances. Outreach efforts also may include a workshop with representatives of entities involved in establishing other NCAs (both in Colorado and in Utah).

~COLORADO RIVER BASIN~

UPPER COLORADO WILD AND SCENIC STAKEHOLDER GROUP UPDATE— CWCB Staff continues to engage in the Upper Colorado Wild and Scenic Stakeholder Group (SG). The SG is collecting information to better understand the resources in its focal area, including a study on macroinvertebrates and continued user surveys of recreationalists that use the river. The SG continues to work towards final ORV Indicators and Resource guides to protect recreational floatboating and recreational fishing. One hot topic being discussed by the group is the appropriate role for considering "channel maintenance flows" in the final Management Plan that the SG is working to complete by June 2020. Channel maintenance flows move bedload substrate, are typically similar to bankful flows, and benefit both aquatic life and recreational floatboating. The SG Plan provides that during the provisional period while working on the final Management Plan, the SG agrees to study the extent to which channel maintenance flow guides will be incorporated into that Plan. Stakeholders are discussing whether these flows should be included, and, if so, the role they should hold in the Plan. Other flow discussions include seasonal and flushing flows. (Linda Bassi)

HIGH FLOW EXPERIMENT AT GLEN CANYON DAM— The Department of the Interior will conduct a High Flow Experiment (HFE) at Glen Canyon Dam on November 5-8. Monsoonal floods in August led to more than 560,000 tons of sediment entering the Colorado River through the Paria River below Glen Canyon Dam. The HFE simulates a flood, moving that sediment load downstream to rebuild sandbars in the Grand Canyon. Dam releases under this HFE will reach a peak magnitude of 38,100 cfs for 60 hours. The total annual volume of water released will not change; other monthly releases will be reduced to account for the HFE.

Colorado actively participated in discussions leading up to Interior's decision. Colorado's representatives were torn as to the best course of action because of concerns stemming from a hypothesis that fall HFEs may be a significant factor in promoting population growth of the highly piscivorous brown trout. These brown trout may prey upon the endangered humpback chub that lives in the Grand Canyon below the dam. There is no conclusive evidence that the HFEs are a causal contributor to the brown trout and thus the US Fish and Wildlife Service and other federal agencies supported the HFE. Colorado ultimately chose to abstain from a recommendation to Interior on this matter. (*Carlee Brown*)

NATIONAL PARK SERVICE EA ON NON NATIVE AQUATIC SPECIES BELOW GLEN CANYON DAM— The National Park Service (NPS) has issued an expanded Environmental Assessment (EA) to treat non-native aquatic species below Glen Canyon Dam. Recent increases of brown trout populations at Lees Ferry—along with the persistence of other non-native species of concern like the green sunfish—have led NPS to seek more management options through the expanded EA. The Upper Colorado River Commission (UCRC) participated as a Cooperating Agency and Colorado was active in that process as a UCRC member. Colorado also offered comments on the EA as a member of the public, echoing the comments in the UCRC's past letters. Options considered in the EA include incentivized harvest, mechanical removal, and chemical treatment. NPS is currently in the process of preparing a final decision document. (Carlee Brown)

FUNDING FOR THE COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAMS AND GLEN CANYON ADAPTIVE MANAGEMENT PROGRAM— Funding for the Upper Colorado and San Juan Endangered Fish Recovery Programs, along with the Glen Canyon Dam Adaptive Management Program, has been secured for FY19. The President has signed an Energy and Water Appropriations bill that provides a year's worth of appropriations for these programs. CWCB, DNR, and Colorado AG staff actively worked with other state and non-federal partners to convey the value in funding these programs. These efforts included sending a letter from the Governors of the four Upper Colorado River Basin states; a separate letter from the the seven Colorado River Basin State principals; and other letters and requests made by Colorado Water Congress, Colorado Water Users, environmental organizations, and tribes. These letters primarily requested that the Office of Management and Budget (OMB) withdraw a directive to the Western Area Power Administration that prevents the transfer of Colorado River Storage Project hydropower revenues to the Bureau of Reclamation -- the typical funding mechanism for the programs. OMB did not withdraw the directive; rather, this one year fix will be paid for via appropriations. The suite of letters and support was influential in securing this one year of funding; however, larger issues regarding the future ability to use hydropower funds remains.

CWCB staff and program partners are still working on securing funding for all programs and reauthorizing the recovery programs through 2023. Two bills are making their way through Congress. Senate Bill 2166 and House Bill 4465 reauthorize the recovery programs and secures funding through 2023. S. 2166 has recently passed out of Committee. H.R. 4465 has passed out of the House. No further action on the bills will likely be taken until Congress reconvenes after the election. CWCB staff's objective is to get a bill passed in the session of Congress after the election. (*Jojo La*)

COLORADO RIVER BASIN SALINITY CONTROL PROGRAM— The Colorado River Basin Salinity Control Forum held its fall meeting in Santa Fe, New Mexico on October 29-30. The Forum heard reports from the federal agencies involved in the Program, including from the Bureau of Reclamation its plan to open a Funding Opportunity Announcement (FOA) for salinity control projects in June 2019. This FOA is still tentative as it needs to pass through a waiver process with Department of Interior leadership in order to proceed. The funding provided through this process is at the heart of what the Salinity Control Program does: irrigation infrastructure improvements made possible through the FOA dollars help reduce deep percolation of water through saline soils in the Colorado Basin, reducing the amount of salt dissolved in the water and reducing the level of treatment needed for the Lower Basin water users. If the FOA proceeds as intended, applications will be due in September 2019; contracting will be completed in time for project implementation in 2020. (Carlee Brown)

COLORADO RIVER WATER USE—

2018 Colorado River S	Storage as of September	4th, 2018	
	Elevation (feet above mean sea level)	Storage (MAF)	Percent of Capacity
Lake Mead	1,078.81	9.913	38%
Lake Powell	3,590.78	10.891	45%
Total System Active Storage		27.766	47%
2017 Total Active Storage		32.642	55%
		Flow (MAF)	Percent of Average
Forecasted Unregulated Inflow into Powell		4.612	43%

Forecasted CY 2018 Lower Basin Consumptive Use				
State	Us	se (MAF)	Total (MAF)	
Arizona		2.571		
California				
California Agricultural	3.454	4.220	7.047	
Metro. Water District	0.750	4.220	7.047	
Other	0.016			
Nevada		0.255		

^{*}Note MAF = million acre-feet

CWCB WATER EFFICIENCY GRANT FUND PROGRAM (WEGP) UPDATE—

Three grant applications have been received since the September 2018 Director's Report

- City of Durango Drought Management Plan
- Town of Firestone Drought Management Plan Update

[~] WATER CONSERVATION AND DROUGHT PLANNING UPDATES ~

• City of Alamosa – Water Efficiency Plan Update

Two grants were approved since the September 2018 Director's Report:

- City of Fort Lupton Water Efficiency Plan Update (\$30,000)
- City of Durango Drought Management Plan (\$30,000)

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

- City of Fort Collins CII Training Workshops 75% Progress Report
- Town of Olathe Water Efficiency Plan Update 50% Progress Report
- Town of Firestone Irrigation Clock Retrofit Program 75% Progress Report
- Town of Wellington Water Efficiency Plan 50% Progress Report
- City of Aspen Landscape Certification/QWEL Program Final Report
- **Keystone Center** Water & Land Dialogue *Final Report* (Ben Wade)

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

Colorado Drought Mitigation and Response Plan: Per FEMA requirements this updated plan was approved by the CWCB Board at the September 2018 meeting and has been integrated into the State's All Hazard Mitigation Plan, the All Hazard Mitigation Plan will be sent to the Governor for approval in the fall and to FEMA following that.

DROUGHT MANAGEMENT PLANS:

Approved Plans

• No Plans in Review

Drought Management Plans In Review:

No Plans in Review

WATER EFFICIENCY PLANS:

Approved Plans:

- Town of Severance
- Eagle River Regional Water Efficiency Plan

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

- Thornton
- Lafayette
- East Cherry Creek Valley Water & Sanitation District

Water Efficiency Plans in Review:

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

- Pinery
- St Charles Mesa Water District

(Kevin Reidy & Ben Wade)

GOVERNOR'S WATER AVAILABILITY TASK FORCE— There will be a Water Availability Task Force meeting will be on November 13th from 9:30am-11:30am at the Colorado Parks & Wildlife Headquarters 6060 Broadway, Denver, CO. Please check the website (http://cwcb.state.co.us/public-information/flood-water-availability-task-forces/Pages/main.aspx) for additional information.

DROUGHT UPDATE— As a result of the persistent drought conditions throughout parts of Colorado, <u>the Governor activated the State Drought Response Plan for the agricultural sector in 40 Colorado Counties.</u> This activation remains 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, Pitkin, Eagle, Summit, Grand, Moffat & Routt counties. The USDA has issued primary secretarial drought designations for 47 counties in the state, and contiguous designations for an addition 10 counties.

The 2018 Water Year ended on September 30th as the warmest and the second driest in 124 years of records. Some communities on the Western Slope saw double their average for 90 degree days during the year, the Town of Gateway had 46 consecutive days without precipitation, and statewide thousands of daily records were broken. Significantly more record high minimum temperatures were broken than daytime high temperatures; indicating less nighttime cooling. Early estimates indicate that 120K acres of crops failed while 150K acres were prevented from being planted. Fires burned four times more land than an in average year, making it one of the worst fire seasons in Colorado's history.

Water Year 2019, which began on October 1st, has seen above normal precipitation and below average temperatures across large areas of the state. This has helped to relieve some drought conditions but as of October 23rd, exceptional drought, D4, continues to affect southern Colorado covering 14 percent of the state, a five percent increase since the last board update. Extreme drought, D3, has decreased since the last update to covers 25 percent of the state; severe drought 20 percent and nine percent is classified as moderate drought. An additional 16 percent of the state is currently experiencing abnormally dry conditions.

An El Niño watch remains in effect, meaning there is a greater than 70 percent chance of an El Niño developing, which could bring an increased chance of wet extremes for southern Colorado beginning late this Fall, however the Northwest corner remain an area of concern as El Niño can result in dry conditions to the north. The Drought Task Force and the Agricultural Impact Task Force will continue to monitor conditions and respond accordingly. (*Taryn Finnessey*)

CO WATER LOSS INITIATIVE— Kevin has started the CO Water Loss Initiative which will culminate in a 2-year training and technical assistance water loss control program for water providers across Colorado. Kevin convened a small advisory group to weigh in on the scope of work and to assist with the development of the programming. The contract was awarded to the Cavanaugh and Associates/Water Systems Optimization team in early June. Approximately 60 water providers have signed up so far for the training that will begin in Spring 2019. (*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. The latest training took place September 24-26 with 5 communities participating. (Kevin Reidy)

~CONFERENCE AND WORKSHOPS UPDATES~

CWOA CONFERENCE—Several CWCB staff members attended the Colorado Water Officials Association (CWOA) annual conference on October 4-5, in Pueblo. Each year, CWOA holds a conference in different locations around the state to raise money for local scholarships and other causes, while simultaneously promoting its mission. The mission of CWOA is to educate Colorado's citizens to the importance of water rights administration, water issues and to further the professional development of its members, comprised of DWR and CWCB employees. The conference theme this year was "H2O Above and Below" and featured presentations such as: "Demystifying Aquifer Properties and Modeling", "Governance of Groundwater in Colorado", and "The Looming Groundwater Crisis". (*Rob Viehl*)

GROUND WATER COMISSION MEETING— The Ground Water Commission (GWC) has not held a regular meeting since the last CWCB meeting. The Ground Water Commission will hold its next regular meeting on November 2, 2018 in Castle Rock, CO. For more information, visit:

http://water.state.co.us/groundwater/CGWC/Pages/default.aspx. (Erik Skeie)

~WATERSHED AND FLOOD UPDATES~

MAPPING UPDATE—

FY18 Activities: The CWCB was recently awarded the FY18 FEMA grant funding for Risk Map projects. In total, the CWCB will receive \$5.5 million for the Risk Map program for all projects starting this year. The following is a list of the FY18 Risk Map projects:

The CWCB received a \$231,823 from FEMA for Project management tasks. This also includes \$80,000 allocated to the Division of Water Resources Dam Safety office for a pilot project.

\$350,000 was awarded to fund Delta County Risk Map Phase 2, which will include data development tasks such as hydrology, hydraulics, and floodplain mapping throughout Delta County. The CWCB previously funded a scoping project, which includes a high level countywide analysis of flood risk throughout most of the stream reaches within Delta County. The scoping meeting is set to take place in mid-November with local community officials. Delta County Risk Map Phase 2 includes 41.5 river miles of enhanced flood study, post-fire flooding analysis, and an evaluation of sediment-bulked flooding.

The Upper White Watershed Risk Map project will receive an additional \$70,000 from FEMA to conduct analysis on two levees that were discovered within Rio Blanco County during the routine hydraulic analysis.

The Cache La Poudre Risk Map project is also receiving additional funds to address local community comments. A total of \$195,000 of FEMA funding is awarded to resolve the comments and complete the Risk Map project for Cache La Poudre.

Analyzing levees continue to be a challenge for the Risk Map program. Fortunately, FEMA provides funding and resources to help Cooperating Technical Partners (CTPs), such as the CWCB to assess levee precertification options. The CWCB will receive \$275,000 from FEMA to evaluate the Templeton Gap levee in Colorado Springs. A portion of this funding will also be used to conduct a high level base level engineering analysis for Teller County.

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 Phase 2 in 2017. This year, FEMA has awarded \$295,000 to complete this project through effective mapping.

This year, FEMA has awarded the CWCB \$620,000 to complete CHAMP Phase 3 projects through data development tasks. The remaining counties from CHAMP Phase 3 that are not updated will remain on the priority list until updated, high quality topographic data becomes available.

The CWCB funded regional hydrology updates for the Arkansas River from the headwaters near Leadville, Colorado to the Kansas State line as well as the Colorado River from Granby to the western border of Mesa County. The CWCB leveraged this work to obtain funds from FEMA this year to study the Arkansas River hydraulics and floodplain mapping. \$340,000 was awarded for this effort. Garfield County Phase 3 will receive \$346,752 from FEMA and this effort will include completing this Risk Map project through effective maps.

As the project list continues to expand, the engagement and outreach needs also increase. FEMA is awarding \$315,000 to the CWCB for outreach and community engagement activities for ongoing and new projects.

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 (Phase 2). A kick off meeting was held on April 5, 2018 and survey data has been collected. The hydrology analysis has been approved by FEMA and Wood is currently working on the hydraulic analysis. FEMA has awarded the CWCB funds for Phase 3 of this project in FY 2018. 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 has begun on the Physical Map Revisions for these counties. A Flood Risk Review meeting is scheduled with Larimer County in mid-November.

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 is Phase 2 and 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 has been completed and additional coordination with local communities has taken place to determine if additional work to include impacts from the wild fires is needed. FEMA has awarded the CWCB funds for Phase 3 of this project, which will cover tasks through effective mapping.

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. The final report has been approved by FEMA. The final report is available on the CWCB website.

FY16 Activities: Upper White Watershed Risk Map Phase II preliminary map issuance will be delayed. A revised scope of work was submitted and approved by FEMA to conduct additional analysis, including a levee study, in Rio Blanco County and the Town of Rangely. St. Vrain Risk Map Phase III is also well under way. FEMA has approved the hydraulic and floodplain mapping tasks.

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

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

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

Upper Gunnison Risk Map Project Phase 2 hydraulic tasks were recently submitted to FEMA for review. Draft results show increased flood risk throughout the Town of Crested Butte. The model was done in HEC-RAS 2D and the mapping contractor is working on refining the results. A Flood Risk Review meeting will take place with local community officials before the end of the year.

FY14 Activities: The erosion zone study for the Salt Creek Wash near the Town of Collbran in Mesa County was approved by FEMA. This report is now available on the Risk Map website. FEMA has provided funding to conduct a countywide approximate floodplain mapping for El Paso County, referred to as a Base Level Engineering (BLE) study. A part of this grant funding will be rescoped to fund the

revised preliminary project for the El Paso County DFIRM project, which will become effective at the end of 2018.

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

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

Purgatoire Watershed Risk Map project is now in the post appeal period. An additional scope of work was submitted and approved to resolve tie in issues. This project includes Las Animas County, City of Trinidad, as well as a few other incorporated towns in Las Animas County. The Task Order was approved and a Letter of Map Revision (LOMR) will be completed to move this project forward to completion.

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

FY12 Activities: The grant for Purgatoire Watershed was funded through floodplain mapping and all tasks have been completed under the 2012 grant. A new grant was approved in 2013 to complete the Purgatoire Risk Map project to effective and the progress report is found under FY 13 Activities. The Cache La Poudre Risk Map project was funded in FY 2012 and the hydraulic and floodplain mapping tasks are almost complete. A new FEMA grant was awarded in FY 2015 to complete the Cache La Poudre Risk Map project under Phase III. Additional tie in work is needed and the State Task order is being completed now.

FY11 Activities: Hydrology tasks for St. Vrain and Clear Creek watersheds have been completed and approved. The scope of work for the St. Vrain watershed was revised to include areas that were impacted by the flood. All tasks under this grant have been completed through to floodplain mapping. The FEMA grant for this project has expired and a new grant was approved in 2016 to complete additional tasks to finalize the maps as FEMA effective products. Updates for the St. Vrain Risk Map project will be provided under FY 2016 activities. Some streams updated through the Colorado Hazard Mapping Project will be included in the St. Vrain map update.

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

FLUVIAL HAZARD MAPPING UPDATE— The floods of September 2013 reminded Coloradans how quickly rivers and streams in their state can change and morph into extreme storm events. Approximately half of the private structure damages and losses experienced in the 2013 flood were located outside of the regulatory floodplain, or Special Flood Hazard Area (SFHA), designated by the Federal Emergency Management Agency (FEMA). These flood-related risks associated with erosion, deposition, degradation, lateral migration, and avulsion created disastrous outcomes in 2013, and those outcomes may occur again in future flood events in Colorado. The identification of fluvial hazard zones has become a high priority as Colorado recovers from the September 2013

floods and transitions toward long-term river corridor planning. Planning for erosion hazards is an essential component of effective river corridor management and the prevention of future flood damages. Broadly defined, the Fluvial Hazard Zone (FHZ) is the area a stream has occupied in recent history, could occupy, or could physically influence as it stores and transports sediment and debris. 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 Wood 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, the Town of Holyoke is the last of 252 total communities to adopt or provide documentation to the CWCB. 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 remaining community is 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 the community. The Town of Holyoke has provided the CWCB with an update of their progress to date and are working towards final adoption at the local level. The CWCB anticipates receiving a final ordinance from the community no later than January 2019. (Stephanie DiBetitto)

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

Floodplain Mapping for all Year 1 streams have been approved by FEMA. Stream modeling of Big Thomas Year 2 streams is complete, and working with local agencies, the data is being reviewed. We are coordinating with Larimer County, Estes Park, and EWP team. The St. Vrain Watershed Year 1 floodplain mapping task has been submitted to FEMA. The floodways are also being analyzed for St. Vrain Creek in Longmont and East of Longmont, and Boulder Creek in Weld County. Most Year 2 streams' hydraulic modeling is complete- except for Left Hand Creek. We are coordinating with Boulder County for data reviews and will hold flood risk reviews with other communities soon. Stream modeling is completed and being reviewed by local agencies for South Plate Year 2 streams, and floodplain mapping will begin shortly. All of the CHAMP reaches under Phase 1 and 2 will move forward with FEMA regulatory map updates. The first Flood risk review meeting will take place for Jefferson County at the end of October 2018.

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

We have completed the hydrologic analysis the 12 studied counties with the last of the initial hydrologic submittals completed in 2017. Stream modeling began in January 2018, and the Southwest Hydraulic Kick-off is on-going this spring. Floodplain mapping started this past summer 2018 and FEMA has approved funding for the regulatory updates for CHAMP Phase 3. Flood risk review meetings will begin this winter 2018.

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*)

NEW SNOW DATA INSTALLATION IN THE GUNNISON— As part of the CWCB's water forecasting partnerships authorization/program the Mirror Lake, Italian Creek, and Trail Creek SNOTEL-Lites were installed in late October at elevations ranging from 10,400 to 11,600 in the Upper Taylor River Basin. This will help better characterize snowpack and provide more snow data for water supply forecasting. The project is a collaboration of the Upper Gunnison River WCD, National Center for Atmospheric Research, NRCS Snow Survey Program, and the CWCB. This project will hopefully improve streamflow forecast accuracy to allow for better reservoir management, reservoir releases and storage to benefit recreation, irrigation and fisheries. Previously the Gunnison only had the Park Cone and the Upper Taylor NRCS SNOTEL sites. The fourth SNOTEL lite will be installed adjacent to the Cottonwood Pass road next summer. Once all are installed it will triple the amount of snow data that can be used for water supply modeling in the Taylor River Basin. Pictured is Dr. Dave Gochis of NCAR and Michelle Cwelich an intern for the Upper Gunnison River WCD at a SNOTEL-Lite. Picture courtesy of Frank Kugel. (Joe Busto



SNOW SCHOOL FOR WATER MANAGERS— This is a 2.5 day professional development opportunity (February 20-22, 2019) for water professionals in Colorado. Jeff Derry, the Director of the Center for Snow and Avalanche Studies, will review Colorado's snow climatology, snowpack information, snowmelt processes, discuss recent field campaigns and literature, and visit the snow and weather monitoring systems operated by CSAS. Also covered is learning about Colorado's Dust on Snow Program (CoDos) that is sponsored by several water districts around the state. Heavy dust years have shown to impact the timing and volumes of peak streamflow forecasts. The class is \$500 but does not include hotel accommodations in Silverton. For more information on this program email jderry@snowstudies.org.

~AGENCY UPDATES~

KEVIN REIDY RECEIVES AWARD— Kevin Reidy received a Conservation Hero Award from Resource Central (formerly Center for Resource Conservation) for his work in conservation. Kevin & staff have helped Resource Central with past projects including residential/commercial audits, Slow the Flow program and most recently a turf removal pilot project. Kevin will be given the award on November 16 at the Jewish Community Center in Boulder.

THUY PATTON COAUTHORS PUBLICATION WITH USGS— Thuy Patton from the Flood Section recently published a report with the USGS titled <u>Flood-inundation maps for the South Platte River at Fort Morgan, Colorado, 2018</u>. This report provides digital flood inundation maps for various flows in the Fort Morgan area. The maps depict the areal extents and depths of flooding corresponding to selected flood stages for the area. These maps can be used with real time data provided by the USGS stream gauge in Fort Morgan as an effective emergency management tool during times of flooding. Prior to this study, emergency managers relied on several online information sources to make decisions on how to best alert the public and mitigate flood damages.

The report is also referred to as "Scientific Investigations Report 2018-5514" and can be found at (https://doi.org/10.3133/sir20185114.

BEAR CREEK LAKE— CWCB Staff has been working with contracted engineering firm Brown and Caldwell to reach out to interested stakeholders to better understand their water needs for the Bear Creek Lake Reallocation and water rights application. As of this report, Evergreen Metropolitan District, Consolidated Mutual, Berthoud, Dacono, Hidden Valley Water District and the City of Brighton will be asking their Boards for approval to move forward with the CWCB on the water rights application. These entities represent a combined interest of 11,450 AF in the storage right. Once each partnership is formalized, Brown and Caldwell will model various demand and operational scenarios using a modified version of the Chatfield spreadsheet model. Staff also met with Colorado Parks and Wildlife to better understand how an environmental pool could be incorporated into the application. Staff has meetings scheduled with Foothills Parks and Recreation regarding their needs and potential partnership, as well as the City of Lakewood to provide an update. All of these meetings will occur prior to the November CWCB Board Meeting. (Erik Skeie)

CWCB/NRCS PARTNERSHIP RESULTS IN MULTIPLE AWARDS— CWCB and its staff recently wrapped up a very large flood recovery program in partnership with the NRCS related to the 2013 Flood in Northern Colorado and El Paso County. This project, a \$60 million program to administer flood recovery and watershed restoration projects in the flood affected area and known as the Emergency Watershed Protection (EWP) program, was part of an even larger

overall recovery program which also included the Department of Local Affairs, the Department of Public Safety, and the US Department of Housing and Urban Development. The CWCB served as the non-federal sponsor and overall program manager for the program on behalf of the State.

At the 2018 Colorado Association of Stormwater and Floodplain Managers (CASFM) Annual Conference, the EWP program was awarded the Engineering Excellence Award for the year. This award is presented to one project in the state that the association feels embodies all facets of engineering excellence.

In addition, Jeff Sickles, a consultant to the CWCB, was awarded the Project Manager of the Year Award by the National Society of Professional Engineers Colorado Chapter (NSPE-CO). Although not a CWCB employee, the success of the program was a large part of the reason for his winning the award. Jeff managed the consultant team in charge of design and construction management, participated in criteria and process development, and contributed to certain elements of program management as well. (*Kevin Houck*)

~INSTREAM FLOW ATTACHMENTS~

- Instream Flow and Natural Lake Level Program Summary of Resolved Opposition Cases
- 02 Instream Flow and Natural Lake Level Proram— Summary of Decreed Acquisition Change Case
- 03 Recently Decreed Instream Flow Water Rights
- 04 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

November 14-15, 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. 15CW3079 (Water Division 5) - Application of Peak Materials, LLC (FKA Everist Materials)

The Board ratified this Statement of Opposition at its January 2016 meeting. Applicant sought an augmentation plan and exchange to replace depletions from a well. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

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

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
80CW0447		, , ,	confl Williams Fork River	90 (1/1 - 12/31)	07/08/1980
90CW0301	Crooked Creek	confl Spring Branch Creek	confl Pole Creek	6 (4/15 - 8/14) 1.5 (8/15 - 4/14)	11/27/1990
90CW0296	Crooked Creek	confl Pole Creek	confl Fraser River	2.75 (10/1 - 4/14) 8 (4/15 - 8/14) 4 (8/15 - 9/30)	11/27/1990
90CW0308	Fraser River		confl Crooked Creek	17 (5/15 - 9/15) 11 (9/16 - 5/14)	11/27/1990
90CW0308	Fraser River		confl Colorado River	30 (5/15 - 9/15) 19 (9/16 - 5/14)	11/27/1990

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

- Decree terms explain how this plan and the previously decreed plan in Case No. 08CW61 will operate in relationship to the instream flow water rights via exchange or curtailment when necessary.
- Decree terms commit to this plan an adequate amount of stored water at the start of each operating season in May to replace out-of-priority lagged depletions. Pumping shall not exceed the amount of water available in the pond.
- Decree terms require the pond outflow structure to replace water at or above the well depletions to an instream flow call.

(2) Case No. 17CW3063 (Water Division 5) - Application of Copper Mountain Consolidated Metropolitan District

The Board ratified this Statement of Opposition at its July 2017 meeting. Applicant sought a change of water right for a portion of a groundwater right to several alternate points of diversion. Such changed water right is to be augmented under an existing plan for augmentation. Staff, in cooperation with the Attorney General's Office, has negotiated a settlement to ensure that the CWCB's instream flow water rights will not be injured.

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

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
86CW0209	Tenmile Creek	confl West Tenmile Creek	confl Dillon Res	7 (10/1 - 3/31) 10 (4/1 - 9/30)	03/14/1986
86CW0205	West Tenmile Creek	confl Union Gulch	confl Tenmile Creek	2 (10/1 - 3/31) 5 (4/1 - 9/30)	03/14/1986

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

- Decree terms are included to describe the diversions to be augmented under this plan versus the diversions to be augmented under previous augmentation plans by the Copper Metropolitan District, and the Powdr-Copper ski area.
- Pertinent limits regarding type of use and volume of use under previous decrees and augmentation plans are included in this decree.
- Claimed well numbers were renamed to eliminate confusion between these wells and wells identically named and owned by Powdr-Copper.
- A decree statement is included that this decree does not modify or otherwise alter the terms of the ski area and Colorado Department of Natural Resources' Memorandum of Agreement dated March 11, 1986, and amended on October 25, 1988.

November 14-15, 2018 Board Meeting Instream Flow and Natural Lake Level Program McKinley Ditch - Summary of Decreed Acquisition Change Case

CWCB's Case No. 14CW3108, Water Division 4, filed with Colorado Water Trust as a coapplicant on December 31, 2014, was decreed on October 1, 2018. Under a partnership agreement, the Water Trust maintained ownership but conveyed to CWCB a "Grant of Flow Restoration Use" in its shares to allow for instream flow use. The CWCB and the Water Trust filed Case No. 14CW3108 as co-applicants to change shares of the water rights decreed to the McKinley Ditch, a ditch with four priorities that diverts water from the Little Cimarron River, a tributary of the Cimarron River, a tributary of the Gunnison River. The goal of the change is to allow the shares to be used in a split-season arrangement for both instream flow use and irrigation uses, which is a new approach for an instream flow right. Three parties filed statements of opposition (two by owners of shares in the McKinley Ditch, and one by a neighboring ditch company). After long and detailed negotiations, CWCB and CWT finalized a stipulation with the last opposer, the Collier Ditch Company, this summer, which the Court approved on August 30, 2018. The final decree was submitted shortly thereafter and was approved by the Court on October 1, 2018.

RECENTLY DECREED ISF WATER RIGHTS:

On September 19, 2018, the Division 7 Water Court decreed instream flow water rights to the CWCB on a reach of Vallecito Creek in Case No. 17CW3045 for 20 cfs (01/01 - 03/15), 33 cfs (03/16 - 04/15), 92 cfs (04/16 - 08/31), 70 cfs (09/01 - 10/31), 45 cfs (11/01 - 11/15), 31 cfs (11/16 - 12/14), and 25 cfs (12/14 - 12/31), with an appropriation date of January 24, 2017. The upstream terminus is the Weminuche Wilderness boundary, and the lower terminus is the U.S. Forestry Service (USFS) boundary. This ISF reach is approximately 0.51 miles long and flows in a southwesterly direction through parts of La Plata County. The USFS recommended this reach of Vallecito Creek to help protect its self-sustaining populations of rainbow trout (Oncorhynchus mykiss), brown trout (Salmo truta), brook trout (Salve linus fontinalis), and hybridized cutthroat trout (Oncorhynchus clarki spp.).

On October 7, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on a reach of Fourmile Creek in Case No. 17CW3040 for 0.41 cfs (08/01 - 03/31), 1.3 cfs (04/01 - 04/30), 3.8 cfs (05/01 - 06/30), and 0.97 cfs (07/01 - 07/31), with an appropriation date of January 24, 2017. The upstream terminus is headwaters of Fourmile Creek, and the lower terminus is the Norma Ryan Ditch headgate. This ISF reach is approximately 3.13 miles long and flows in a northwesterly direction through parts of Moffat County. The Bureau of Land Management recommended this reach of Fourmile Creek to protect its genetically pure self-sustaining population of Colorado River cutthroat trout (Oncorhynchus clarkii pleuriticus).

On October 8, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on a reach of Piceance Creek in Case No. 16CW3038 for 4.0 cfs (01/01 - 12/31), with an appropriation date of January 26, 2016. The upstream terminus is the confluence with Dry Fork Piceance Creek, and the lower terminus is the confluence with the White River. This ISF reach is approximately 9.96 miles long and flows in a northerly direction through parts of Rio Blanco County. The Bureau of Land Management recommended this reach of Piceance Creek to protect its self-sustaining populations of flannelmouth suckers (Catostomus latipinnis), speckled dace (Rhinichthys osculus), and mountain sucker (Catostomas platyrhynchus).

On October 8, 2018, the Division 6 Water Court decreed instream flow water rights to the CWCB on two reaches of Willow Creek in Case No. 16CW3044, both having an appropriation date of January 26, 2016. The upper ISF reach was decreed for 7.0 cfs (04/16 - 06/30), from the outlet of Steamboat Lake downstream to the confluence with Beaver Creek, being a distance of approximately 4.94 miles. The lower ISF reach was decreed for 13.0 cfs (04/16 - 06/30) and 3.0 cfs (07/01 - 07/31), from the confluence with Beaver Creek downstream to the confluence with Lester Creek, being a distance of approximately 1.47 miles. These ISF reaches flow in a southeasterly direction through parts of Routt County. The Bureau of Land Management recommended these reaches of Willow Creek to protect its self-sustaining populations of mountain suckers (Catostomas platyrhynchus), mottled sculpin (Cottus bairdii), and speckled dace (Rhinichthys osculus). The CWCB has existing instream flow water rights on Willow Creek: one from the outlet of Steamboat Lake to the confluence with

Beaver Creek, for 5.0 cfs (01/01 - 12/31), decreed in Case No. W-1270-77 with an appropriation date of 9/23/1977, and a second reach from the confluence with Beaver Creek to the confluence with the Elk River, for 7 cfs (01/01-12/31), decreed in Case No. W-1273-77 with an appropriation date of 9/23/1977.

Director's Report Attachment - November 14-15, 2018 CWCB Meeting Stream and Lake Protection Section De Minimis Cases

The following table summarizes an application that has the potential to injure the Board's instream flow water rights, but the impact is considered de minimis. In this case, the cumulative impact to the Board's right is less than 1%. Pursuant to ISF Rule 8(e) (the de minimis rule), staff has not filed a Statement of Opposition in this case and has provided the required notification to the Division Engineer and applicant.

Case No.	Applicant	Stream/ Case Number	ISF Amount	Individual Injury (%)	Cumulative Injury (%)	Count
18CW3120	440-808, LLC	Ranch Creek 90CW0305	8 (5/15 - 9/15) 5 (9/16 - 5/14)	0.00190 0.00250	0.24327 0.15722	13
18CW3120	440-808, LLC	Ranch Creek 90CW0306	4 (5/15 - 9/15) 1.5 (9/16 - 5/14)	0.00380 0.00840	0.27619 0.50771	10
18CW3120	440-808, LLC	Ranch Creek 90CW0306	7 (5/15 - 9/15) 1.5 (9/16 - 5/14)	0.00210 0.00840	0.01314 0.03143	4
18CW3120	440-808, LLC	Fraser River 90CW0308	17 (5/15 - 9/15) 11 (9/16 - 5/14)	0.00090 0.00110	0.65016 0.58249	35
18CW3120	440-808, LLC	Fraser River 90CW0308	30 (5/15 - 9/15) 19 (9/16 - 5/14)	0.00050 0.00070	0.03417 0.03849	13



1313 Sherman Street Denver, CO 80203

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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: November 14-15, 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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Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E., Marketing

Finance Section

DATE: November 14-15, 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 Ap	proved Applica	ations			
Ditch Company	Schneider Ditch Diversion Structure Replacement	Sept 1, 2018	South Platte	The existing Schneider Ditch diversion structure is nearing the end of its useful life. The company would like to replace the existing structure with new Obermeyer gates.	\$1,089,000
LLC	Water Rights Purchase on received O			Bullseye Holding plans to purchase augmentation credits from the Town of Wiggins to offset well depletions. ded for approval or further consi	\$517,500 deration.
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 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					\$2,291,500

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 Rehabilitatio	n \$6,000,000
 Bijou Irrigation District 	Reservoir Rehabilitatio	n \$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
 Lower Arkansas Water Mgmt Assoc. 	Gravel Pit Purchase	\$4,500,000
•Subtotal		\$21,300,000

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	\$20,000,000
 Orchard Mesa Irr. Dist. 	Lateral Piping	\$300,000
Silt Water Conservancy DistrictSubtotal	Harvey Gap Reservoir	\$300,000 \$20,600,000

Gunnison River Basin

•Gunnison County Electric	Hydroelectric Project	\$1,000,000

Rio Grande Basin

•Manasa Land & Irrigation Co.	Ditch Rehabilitation	\$6,000,000
•Baca Grande Water and San District	Water Rights Purchase	\$1,000,000
•Sanchez Ditch and Reservoir Co.	Dam Rehabilitation	\$4,000,000
•Rio Grande WCD	Water Rights Purchase	\$5,000,000
•Trinchera Water Conservancy District	Water Rights	\$2,000,000
•Town of Center	Water Meter Project	\$200,000
•Town of South Fork	Regional Water Projects	\$TBD
•Subtotal	-	\$18,200,000

Yampa River Basin

•Town of Oak Creek	Reservoir Rehabilitation	\$500,000
•Rio Blanco Water Conservancy Dist	Wolf Creek Reservoir	\$100,000,000
•Subtotal		\$100,500,000

North Platte Basin

•No projects at this time



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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: November 14-15, 2018 Board Meeting

Directors Report: Water Project Loan Program

Design & Construction Status Report

The CWCB Loan Program has Substantially Completed fourteen (14) projects in Calendar Year 2018 as shown in Table 1. There are currently fifty two (52) projects authorized to receive loan funding totaling \$396 million. There are forty (40) projects currently under contract and in the Design and Construction phase totaling \$233 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

		INDLL			
	Borrower	Project	County	Loan Amount	Complete
1	Riverside Ditch and Allen Extension Company	Phased Canal Improvements	Chafee	\$186,345	1/1/2018
2	Lookout Mountain Water District	Upper Beaver Brook Dam Spillway	Clear Creek	\$3,099,690	1/1/2018 (a)
3	Supply Irrigating Ditch Company	Emergency Supply Irrigating Ditch Repair Project	Boulder	\$324,210	3/1/2018
4	Georgetown, Town of	Outlet Works Modification Project	Clear Creek	\$2,976,975	4/1/2018(b)
5	Lake McIntosh Reservoir Company	Lake McIntosh Outlet Works Repair	Boulder	\$1,727,100	5/1/2018 (c)
6	Dixon Canon Ditch & Reservoir Company	Dixon Reservoir Dam Improvements	Larimer	\$278,100	7/1/2018 (d)
7	Bennett, Town of	Wells #3 and #6 Replacement Project	Adams/Arapahoe	\$1,454,000	7/1/2018
8	North Poudre Irrigation Company	Mountain Supply Reservoir No. 10 Repairs	Larimer	\$802,950	7/1/2018 (e)
9	Corsentino Dairy Farms, Inc.	Holita Dam Rehabilitation	Walsenburg	\$112,716	9/1/2018 (f)
10	Grand Valley Water Users Association	Government Highline Canal Lining	Mesa	\$151,500	9/1/2018
11	Sanchez Ditch and Reservoir Company	Sanchez Reservoir Outlet Rehabilitation Project	Costilla	\$1,502,476	9/1/2018 (g)
12	Monte Vista, City of	Augmentation Water Rights Acquisition	Rio Grande	1,690,770	9/1/2018
13	Lupton Bottom Ditch Company	Diversion Structure Repair	Weld	606,000	10/1/2018
14	North Poudre Irrigation Company	Fossil Creek Reservoir Diversion Structure Repair	Larimer	\$876,680	11/1/2018
			Total	\$15,792,512	

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





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.

Р	R O J E C	T DAT	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.				



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 Cr	reek	Water Source: South Fork Beaver Brook		
Type of Loan: Reservoir Enlargen	nent	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					



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	n	Board Approval	Date: November 2014	
Terms of Loan: \$324,210 at 2.25	% for 30 years			
Design Engineer: S ₂ O Design				
Contractor: Environmental Excava	ation, LLC			



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.

Р	R O J E C	T DAT	A	
Sponsor: Town of Georgetown (Water and Sewer Enterprise)	County: Clear Ci	reek	Water Source: Clear Creek	
Type of Loan: Dam Rehabilitation Board Appl			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 Consti	ruction			



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.

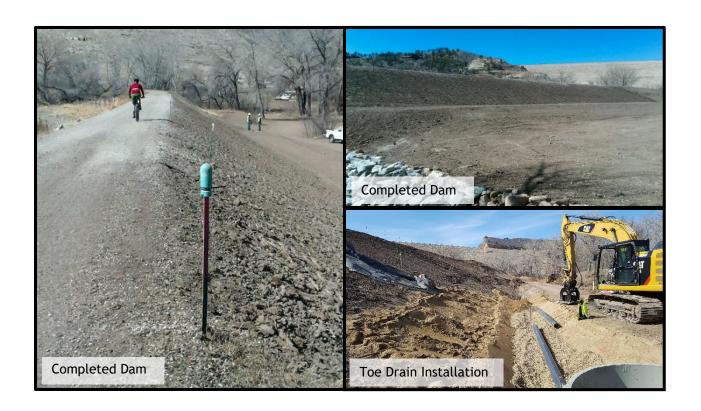
The reservoir was constructed in 1890 and enlarged in 1902. In May 2015, a section of the reservoir's outlet pipe collapsed, creating a sinkhole which deposited soil in the outlet works pipes downstream for approximately 300 feet, rendering the reservoir's outlet works unusable. This Project restored 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 DAT	A	
Sponsor: Lake McIntosh Reservoir Company	County: Boulde	r	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				



Dixon Reservoir Dam Improvements

Dixon Canon Ditch and Reservoir Company Substantially Complete July 1, 2018



Project Description

Dixon Canon Ditch and Reservoir Company owns and operates the Dixon Reservoir Dam and associated ditch located in Larimer County on the west side of Fort Collins. The ditch diverts water off of Dixon Creek and provides water for outdoor irrigation to a 206-acre service area via approximately 9,000 feet of pipe and ditch. The dam was constructed in 1885 and is classified as a Significant Hazard Dam by the Dam Safety Branch of the Office of the State Engineer (SEO). The Reservoir has a decreed storage volume of 412 acre-feet. Recent SEO inspections identified areas of seepage that need to be addressed in order to maintain the full storage decrees. To address the SEO concerns, this Project installed a seepage filtration and collection system including a sand and gravel filter with a toe drain, cleanouts, and flow monitoring weirs. Construction occurred from January 2018 through April 2018.

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



Well #3 and #6 Replacement Project

Town of Bennett

Substantially Complete August 1, 2018



The Town of Bennett prepared to address operational reliability, efficiency, and safety of the Town of Bennett's well #3 and well #6. The replacement of the wells provided the Town with additional supply to meet demands and needed redundancy in its water supply system. Construction activity included drilling the wells, electrical work, testing, and bringing the wells online.

PROJECT DA	ТА			
Sponsor: Town of Bennett	County: Adams	& Arapahoe	Water Source: Non-Tributary Groundwater	
Type of Loan: Well Drilling Board Approval Date: November 2014				
Terms of Loan: \$1,454,400 at 3.25% for 30 years				
Design Engineer: Jehn Water Consultants and Pure Cycle Corporation				
Contractor: Hydro Resources - Rocky Mountain, Inc. (Fort Lupton, CO)				



Mountain Supply Reservoir No. 10 Repairs

North Poudre Irrigation Company Substantially Complete August 1, 2018



Project Description

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

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

	R O J E C		A
Sponsor: North Poudre Irrigation	County: Larime	r	Water Source: Cache la Poudre
Company		•	River
Type of Project: Reservoir Reha	bilitation	Board Approval	Date: March 2017
Loan Terms: 2.50% for 30 years (0	Original) \$802,95	0 (Final) \$726,2°	13.77
Design Engineer: Tessara Water,	Inc		
Contractor: Zak Dirt, Inc.			



Holita Dam Rehabilitation

Corsentino Dairy Farms, Inc. Substantially Complete September 1, 2018



Figure 1 - Reservoir before construction



Figure 2 - Downstream view of dam before construction



Figure 3 - Construction - Dam core



Figure 4 - Embankment reconstruction



Figure 5 - Finished dam

Project Description

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

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

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

P R O J E C T	D A T A
Borrower: Corsentino Dairy Farms, Inc. County: Huerfa	ino Water Source: Cucharas River
Type of Loan: Reservoir Rehabilitation	Board Approval Date: July 2017
Loan Terms: 0.5% for 10 years (Original) \$112,716.00 (Fin	nal) \$99,263.32
Design Engineer: Nicholas Kock, P.E.	
Contractor: Double M Excavating, Inc., La Veta, CO	



Government Highline Canal Lining

Grand Valley Water Users Association Substantially Complete September 1, 2018



Project Description

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

P	R O J E C	T DAT	A				
Sponsor: Grand Valley Water Users Association	County: Mesa		Water Source: Colorado River				
Type of Project: Ditch Rehabilit	Type of Project: Ditch Rehabilitation Board Approval Date: September 2016						
Loan Terms: 1.55% for 30 years (6	Original) \$151,50	0 <i>(Final)</i> \$151,50	00				
Design Engineer: SGM, Inc.							
Contractor: Mountain Valley Contracting, Inc.							



Sanchez Reservoir Outlet Rehabilitation Project

Sanchez Ditch and Reservoir Company Substantially Complete September 1, 2018



Figure 1 -Before construction - original outlet tower



Figure 2 - New staff gage construction



Figure 3 - After construction - new outlet controls



Figure 4 - After construction - new intake



Figure 5 - After construction - new staff gage

Project Description

The Sanchez Ditch and Reservoir Company provides irrigation water for users in Costilla County, southwest of the town of San Luis. The Company's primary storage reservoir is Sanchez Reservoir. The approximately 104,000 acre-foot reservoir was built in 1910. The reservoir's original outlet included a 135-foot tall concrete gate tower. In order to operate the dam, a tramway/gondola ran along a cable and was powered by a portable gasoline generator. Because daily operation of the gate is required during irrigation season, the reliability and safety of the gondola system was a concern of the Company. Using loan and grant funds, the Company demolished the gate tower; the installed new control gates and operators; lined the outlet conduit with shotcrete; repaired the downstream outlet structure; and, installed a new perimeter drain and weir along the right side of the outlet structure to control seepage. Additional seepage monitoring was also funded through the project.

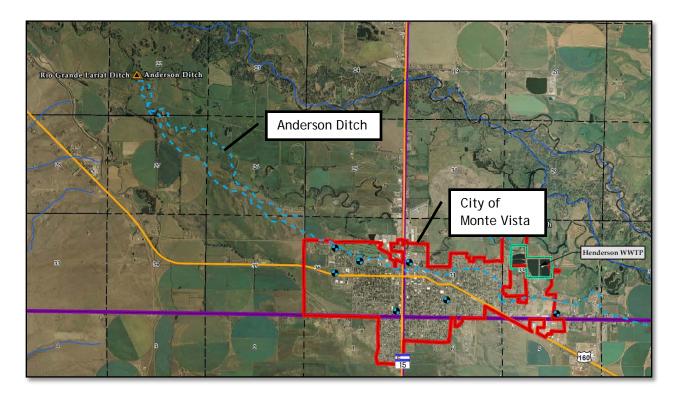
	PROJECT	D A	ΤА					
Sponsor: Sanchez Ditch and Reservoir Company	County: Costilla		Water So	ource: Ventero Creek				
Type of Loan: Reservoir Rehabilita	tion	Board Approval Date: September 2012						
Loan Terms: 2.0% for 40 years (Ori	ginal) \$1,502,476.00 (Fin	al) \$1,502	.465.51	WSRF Funding: \$914,400				
Design Engineer: Smith Geotech & AECOM								
Contractor: Moltz Construction, Inc	Contractor: Moltz Construction, Inc.							



Water Rights Acquisition Project

City of Monte Vista

Substantially Complete September 1, 2018



Project Description

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. Recent rules from the Office of the State Engineer 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. As a result, the City needed an additional 321 acre-feet of replacement water. In order to meet this need, the City borrowed funds from the CWCB to purchase Anderson Ditch water rights and storage in the Rio Grande Reservoir to store the excess credits from the water it purchased.

Р	R O J E C	T DAT	A				
Sponsor: City of Monte Vista	County: Rio Gra	nde	Water Source: Rio Grande River				
Type of Loan: Water Rights Purc	hase	Board Approval Date: May 2010					
Terms of Loan Loan Terms: 4.5%	for 30 years (Orig	inal) \$1,693,770.	00 (Final) \$1,627,359.48				
Design Engineer: Bikis Water Consultants, LLC							
Contractor: N/A							



Diversion Structure Repair Project

Lupton Bottom Ditch Company Substantially Complete October 1, 2018



Figure 1 - Diversion repair on North side of diversion structure and Lupton Bottom headgate.



Figure 2 - Diversion repair on South side of diversion structure.



Figure 3 - Diversion structure.





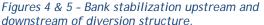




Figure 6 - Lupton Bottom Ditch headgate.

Project Description

The Lupton Bottom Ditch Company diverts water from the South Platte River near Wattenberg in Weld County. The original 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 September 2013 flooding and further damaged in subsequent high river flows. This repair work was 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, upstream stabilization and installation of sheet piling and the construction of a concrete apron occurred. The downstream side of the structure was stabilized with grouted boulders. The second stage included rebuilding the rock dam on the southern side of the diversion structure.

With this project, the Company repaired and improved the diversion and intake structures, provided water deliveries to the shareholders, and improved operation safety. Design commenced in 2017, project construction occurred in early 2018 through summer 2018 and construction is complete.

P R O	JECT	D A T	A						
Sponsor: Lupton Bottom Ditch Company	County: Weld		Water Source: South Platte						
Type of Loan: Diversion Structure Repair	Board Ap	proval Date: January 2018							
Loan Terms: 1.6% for 10 years (Original) \$	\$606,000 (Final)	\$561,832							
Design Engineer: Civil Resources, LLC									
Contractor: Zak Dirt, Inc.									



Project Closeout November 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 Fossil Creek Reservoir inlet diversion off the Cache la Poudre River. The entire concrete dam spanning the river was undermined and washed out during the flood. This Project repaired the existing diversion structure by rebuilding the check dam, abutment, and bypass gate. Additionally, the Company worked with Colorado Parks and Wildlife to incorporate a fish ladder on the north end of the check structure. Construction occurred from December 2015 to March 2016. The Project was eligible for FEMA public assistance and received grant funding to help offset the construction costs.

P	R O J E C	T DAT	A					
Sponsor: North Poudre Irrigation Company	County: Larimer		Water Source: Cache la Poudre River					
Type of Loan: Diversion Rehabilit	Type of Loan: Diversion Rehabilitation Board Approval Date: October 2013							
Terms of Loan: (Original) \$876,6	80 at 2.35% for 32	years (Disbursed	() \$846,222.20					
Design Engineer: Ronald H. Slosson, P.E.								
Contractor: Naranjo Civil Constructors								

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
	Projects in Design or Construction							
1	Bessemer Irrigation Ditch Company >Landslide Stabilization and Dirtch Lining CT2018-2829	Pueblo	\$909,000	80%	March 2018 - Dec 2019	50%	RP	Ditch stabilization phase complete. Backfill complete along wall. Winter 2019 design/bid ditch lining.
2	Big Elk Meadows Association > Emergency Raw Water Storage Repair C150391	Boulder/ Larimer	\$2,020,000	80%	July 2014 - Sept 2019	60%	JH	Project will rebuild 5 dams damaged in 2013 flood. 3 dams completed: Mirror Dam (2015), Rainbow Dam (2016), Willow Dam (2017). Meadow Dam construction pending Notice of Award. Sunset Dam design pending. Loan increased at March 2017 Board meeting, 0% interest thru 2020.
3	Bonus Ditch Company > St. Vrain Diversion Replacement CT2018-2081	Longmont & Boulder	\$1,309,970	100%	Fall 2018 - Spring 2019	0%	JH	City of Longmont will perform project management for this project. Project went out to bid in October 2018.
4 - 0	HATFIELD Reallocation Project - First Cost of Storage							6
а	Castle Pines North Metropolitan District >(C150404A) CT2018-1617	Arapahoe Douglas Park Weld	\$723,160	N/A	N/A	0%	JH	
b	Centennial Water & Sanitation District >(C150405A) CT2016-2053	Arapahoe Douglas Park Weld	\$4,978,290	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
С	Center of Colorado Water Conservancy District >(C150406A) CT2016-2047	Arapahoe Douglas Park Weld	\$94,637	N/A	N/A	0%	JH	storage in the new reservoir pool is allowed (after Phase 1 Mitigation contract is complete).
d	Central Colorado Water Conservancy District >(C150407A) CT2016-2057	Arapahoe Douglas Park Weld	\$3,187,560	N/A	N/A	0%	JH	
5 - 0	HATFIELD Reallocation Project - Phase 1 Mitigation							\$39,334,349
а	Castle Pines North Metropolitan District >(C150404B) CT2018-1616 *\$	Arapahoe Douglas Park Weld	\$5,462,484	99%	Sept 2017 - Fall 2019	50%	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.
b	Centennial Water & Sanitation District >(C150405B) CT2016-2055	Arapahoe Douglas Park Weld	\$37,573,717	99%	Sept 2017 - Fall 2019	50%	JH	Several of the modified recreation areas within the park are already completed and are now open to the public including the North Boat Ramp and the perimeter road. Remaining construction activities and revegetation efforts along the west side of the Park associated with Season One construction are expected to be completed by December 2018. Impacted construction areas in Season Two include the Marina (docks and landside), South Boat Ramp, Roxborough Cove, Plum Creek Day Use Area, Kingfisher, Gravel Pond, and a portion of the Perimeter Road from Jamison
С	Center of Colorado Water Conservancy District >(C150406B) CT2016-2048	Arapahoe Douglas Park Weld	\$511,363	99%	Sept 2017 - Fall 2019	50%	JH	

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	РМ	Status Description/Update
d	Central Colorado Water Conservancy District >(C150407B) CT2016-2058	Arapahoe Douglas Park Weld	\$19,812,059	99%	Sept 2017 - Fall 2019	50%	JH	Day Use Area to the Park Headquarters. Overall, CRMC is anticipating reopening a large majority of the recreational areas impacted by Memorial weekend 2019.
6 - 0	CHATFIELD Reallocation Project - Phase 2 Mitigation							\$7,000,310
а	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,
b	Centennial Water & Sanitation District >(C150405C) CT2016-2056	Arapahoe Douglas Park Weld	\$10,934,260	0%	Fall 2019 - Summer 2020	0%	JH	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
С	Central Colorado Water Conservancy District >(C150407C) CT2016-2060	Arapahoe)ouglas Weld	\$7,000,310	0%	Fall 2019 - Summer 2020	0%	JH	summer 2020.
7	Centenial Irrigating Ditch Company >Centenial Diversion Replacement CT2108-1999	Rio Grande	\$232,300	100%	Jan 2018 - Oct 2018	95%	JH	This project is part of the Rio Grand Five Ditches WSRF Project and consisted of replacing the existing diversion dam. Contractor mobilized to site in January 2018 and construction was substantially completed by the end of March 2018. Miscellaneous site clean up will occur fall 2018 and then final billing will occur.
8	Central Colorado Water Conservancy District >Shores Lakes Pond C Infrastructure Improvement CT2018-2851	Weld	\$2,367,440	95%	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 to be completed and out to bid in Fall 2018.
9	Chilcott Ditch Comapny >Chilcott Augmentation Station CT2019-2252	El Paso	\$505,000	95%	Fall 2018 - Spring 2019	0%	RP	Construction to begin in Spring 2019. Out for bid November 2018.
10	Church Ditch Water Authority >Ditch System Improvements CT2018-1335	Jefferson	\$3,615,000	80%	Dec 2017 - Oct 2019	50%	RP	Loan covers 5 individual projects within the Church Ditch system. Leyden Flushing Structure, Headgate 53 Retaining Wall complete. The Area 15 Ditch Lining, Ford Street Siphon, and Legacy Farms Culvert will be completed after the 2018 irrigation season. Area 15 Ditch lining - NOA anticipated Nov 2018.
11	Consolidated Ditch and Headgate Co >Consolidated Diversion and Headgate Replacement CT2018-1017	Rio Grande	\$1,010,000	95%	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	Duke Ditch Company >Piping the Duke Ditch CT2017-915 CTGG1 2017-212 (WSRF)	Delta	\$90,000	100%	Fall 2019 - Spring 2020	0%	AM	NRCS finalized the design in August 2018. Cost estimates were updated with the final design. Additional funding is needed.
13	Fort Lyon Canal Company >Adobe Creek Dam Rehabiliatation CT2018-1960 CTGG1 2018-806 (WSRF)	Bent	\$8,181,000	100%	Fall 2017 - Spring 2020	0%	RP	Waiting Dam Safety conditional approval 8/31/2018. Out for bid 7/31/2018. Award 9/5/2018. PreCon 9/13/2018

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
14	Fowler, Town of >Augmentation Pipeline Project C150359 (CT2015-054)	Otero	\$277,245	100%	Fall 2018 - Spring 2019	0%	RP	Engineering completed. Easement and appraisal processes causing delay; might result in litigation per disc with Town 5/23/17. Bid process on hold. tt Kelly (Town Clerk) - no updates, project on hold until Fall 2018.
15	Grand Mesa Water Conservancy District >Peak Res. & Blanche Park Res. Rehabilitation C150354 (CT2015-061)	Delta	\$227,250	100%	Mar 2013 - Sept 2019	50%	JH	Construction on Peak Reservoir began in the 2013 season and was completed in Oct 2014. Blanche Park construction was delayed due to Forest Service permit issues. Access road construction began Fall 2018 and dam construction will begin spring 2019.
16	Grand Valley Water Users Association >Grand Valley Power Plant Rehabilitation CT2017-2875 - SCTF	Mesa	\$1,717,000	100%	Spring 2019 - Fall 2020	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. Final approval on electrical anticipated end of November, for a December go/no-go decision.
17	Huerfano County Water Conservancy District >Regional Augmentation Project C150364 (CT2015-047) CTGG1 2015-528 (WSRF)	Huerfano	\$2,222,000	100%	Jan 2014 - Jun 2019	60%	RP	Land and water rights purchase occurred in January 2014. Camp Ranch augmentation site construction is complete. Phase I of III at Sheep Mountain Ranch augmentation site was completed in Oct 2017. Sheep Mtn. Ph2 approval 8/31/2018. Consider ext. loan to 6/2020.
18	Lake Durango Water Authority >Source Water Supply Project C150317 (CT2015-013) CTGG1 2015-370	LaPlata	\$2,525,000	100%	Oct 2016 - July 2018	98%	KR	All project components are completed. Final testing and warranty monitoring is underway. Project substantial completion is expected Fall 2018
19	Lamar, City of >Repurposing of Wells 12 and 13 CT2017-917 CTGG1 2017-211 (WSRF)	Prowers	\$101,000	100%	Jun 2017 - Jul 2019	70%	RP	Precon mtg held 5/23/17. City staff is doing construction. Work has been postponed due to staffing/workload issues. Staffing changes. JVA additional scope approved by CWCB Board Sept2018.
20	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.
21	Left Hand Water District >Participation in Southern Water Supply Project II CT2018-2028	Broomfield & Weld	\$10,000,000	100%	July 2018 - March 2020	5%	JH	Project is managed by Northern Water with Left Hand Water District paying for its prorata share based on pipeline capacity. Contractor mobilized July 2018 and began laying pipe at the end of August.
22	Missouri Heights >Mountain Meadow Irrigation Company CT2019-2241	Garfield	\$303,000	100%	Oct 2018 - Spring 2020	0%	JH	Phase B1 lining began in October 2018. Phase B2 lining to begin Fall 2019 if NRCS approves grant funds for Phase B2.
23	Orchard Mesa Irrigation District >Grand Valley Power Plant Rehabilitation CT2017-2878 - SCTF	Mesa	\$1,717,000	100%	Spring 2019 - Fall 2020	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. Final approval on electrical anticipated end of November, for a December go/no-go decision.
24	Orchard Ranch Ditch Company >Orchard Ranch Ditch Pipe Project CT2016-2795 POGG1 2017-493	Delta	\$151,500	90%	Dec 2018 - Mid 2020	0%	RP	Design and permitting work is underway. Construction is expected to begin in Fall 2018. PreBid 7/23/18. Material supply issue - JUB redesign and rebid 10/2018. Construction begin 12/15/2018

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
25	Overland Ditch and Reservoir Company >Overland Reservoir Rehabilitation C150206 (CT2015-034)	Delta	\$1,141,300	50%	No Est Permitting	0%	KR	Permitting issues are being addressed to enlarge reservoir. Company is concerned about the impact of increased costs to the project. Staff reviewing project with Borrower to determine feasibility.
26	Pueblo Consevancy District > Arkansas River and Wildhorse Creek Levees CT2019-366	Pueblo	\$17,170,000	80%	Spring 2015 - Fall 2020	0%	RP	Phases 1-4 complete. KRS awarded Phase 5 Oct 2018. Funds approved June 2018. July 2018 meeting with PCD.
27	Riverside Reservoir and Land Company >Emergency Spillway Project C150291 (CT2015-026)	Weld	\$2,838,100	100%	July 2018 - Jun 2019	20%	RP	Plans SEO approved, preparing bid package. Construction timing non-irrigation season. Contract extension approved through 12/31/2018. Awarded Connell Resources April 2018. June pre-con. Loan extension to 6/30/2019.
28	Roxborough Water and Sanitaion District >Ravenna Development Interconnect CT2019-2250	Douglas	\$1,584,690	100%	Nov 2018 - Feb 2019	0%	JH	This Project will connect the Ravenna water service area into Roxboroughs water system. Project bid and awarded in October 2018 for a construction start of November 2018.
29	San Luis Valley Canal Company >San Luis Canal Headgate Construction CT2019-2046	Rio Grande	\$303,000	100%	Fall 2018 - Spring 2020	0%	JH	This project is part of the Rio Grand Five Ditches WSRF Project and consisted of replacing the existing diversion dam. Bids were received in October 2018.
30	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	5%	KR	Moltz Constructors has mobilized to the site. Batch plant has been built. Reservoir has been lowered to coffer dam. Inlet side of CD exposed and found a broken pipe at gate. Repairs complete.
31	St. Vrain & Left Hand Water Conservancy 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 fall 2018 for a construction start of fall 2018.
32	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 fall 2018 for a construction start of fall 2018.
33	Southeastern CO Water Conserv. District >Pueblo Dam Hydroelectric Project CT2018-833	Pueblo	\$16,725,600	100%	June 2017 - Fall 2019	80%	RP	Construction beginning fall 2017. District anticipates power production by fall of 2018. Tie-in to SDS complete April 2018. Turbines delivered. Waiting on transformer approval from Black Hills. Siding powerhouse complete. Tubine and generator placement and fiber optic line approval.
34	Town of Firestone >Storage Development and Water Rights Purchase CT2017-2880	Weld	\$10,000,000	50%	May 2018 - Dec 2019	0%	RP	LG Everist to complete mining and reclamation of future reservoir in Fall 2017/Winter 2018. Lower Boulder water rights purchased in July 2017. Final design pending - engineer looking at filling reservoir via wells/pipelines instead of diversion off river. Change case application to be filed 2nd half of 2017 for reservoir water rights. Want to look at addtl water supply.
35	Trinchera Irrigation Company >Mountain Home Dam Outlet Rehibilitation Phase III CT2018-3122 CTGG1 2018-1773 (WSRF)	Costilla	\$756,490	100%	Oct2018 - Feb 2019	0%	JH	This is a loan/grant project to replace outlet valves at Trinchera Reservoir. Company received a loan increase to add outlet lining. Construction started October 2018 and is schedule to finish by February 2019.

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
36	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 will being October 2018 until winter will close the site, and be completed in spring 2018. Company received a loan increase at March 2018 meeting to fully cover expected Phase 2 costs.
37	Wiggins, Town of >Wiggins Recharge Facility at Glassey Farms CT2018-892	Morgan	\$2,408,850	95%	Fall 2018 - Spring 2019	0%	JH	Town purcahsed Galssey Farms in 2017. Final design of the project should be complete by September 2018, with site operational by December 2018. Town is finishing agreement with Morgan Community College to allow land to be used for an experimental precision agricultural program.
38	-WISE Project - Phase 1 Infrastructure							\$16,802,501
а	Cottonwood W&S Dist - C150408B (CT2015-106)	Douglas/ Arapahoe	\$2,636,100	100%	Spring 2015 - Dec 2018	80%	RP	
b	Inverness W&S Dist - C150409B (CT2015-118)	Douglas/ Arapahoe	\$1,181,700	100%	Spring 2015 - Dec 2018	40%	RP	Infrastructure to treatment plant completed. 42-inch Pipeline construction on Ridgeway line continues. E470 bore complete. All lines in ground and connections in place. Next step, testing. Waiting on water treatment piece before startup testing in May 2018. Ridgegate pipeline complete - punchlist items. WISE system has been delivering water since August of 2017 as
С	Parker W&S Dist - C150410B (CT2015-108)	Douglas/ Arapahoe	\$6,785,321	90%	Spring 2015 - Dec 2018	60%	RP	connection come online. All but 2 members connected to the pipeline and those connections have been tested. Centennial Water and Sanitation has built their connection and is working on finalizing the controls programing. Anticipate CWSD start up around Fall 2018. Pinery working on physical connection and anticipate accepting water Fall 2018.
d	Pinery (Den SE WSD)C150411B (CT2015-085)	Douglas/ Arapahoe	\$6,199,380	90%	Spring 2015 - Dec 2018	60%	RP	
39	- WISE Project - Phase 2 Infrastructure							\$7,400,078
а	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	
С	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	
40	- WISE Project - DIA Connection							

	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
а	Cottonwood W&S Dist - C150408D (CT2015-104)	Douglas/ Arapahoe	\$363,600	35%	N/A	35%	RP	
b	Inverness W&S Dist - C150409D (CT2015-120)	Douglas/ Arapahoe	\$454,500	35%	N/A	35%	RP	Annual disbursment to be made on this loan through 2021.Design Status
С	Parker W&S Dist - C150410D (CT2015-110)	Douglas/ Arapahoe	\$1,099,890	46%	N/A	46%	RP	indicates percent of funds disbursed to date.
d	Pinery (Den SE WSD)C150411B (CT2015-087)	Douglas/ Arapahoe	\$454,500	46%	N/A	46%	RP	
				4000/				
	Projects Un	der Contract	\$233,412,244	100%				
	Approved Projects - Not Under Contract							
а	Florida Consolidated Ditch Company >Hess Lateral Improvement CT2019-2034 CTGG1 2016-1316 (WSRF)	La Plata	\$1,085,750	0%	Spring 201x - Fall 202x	0%	АМ	Contract need by - unknown (Waiting on CDOT contract) Loan contract in their hands since 12/2017 - Peg
b	San Juan Water Conservancy District >Dry Gultch Reservior Land Acquistion CT2018-839	Archuleta	\$2,000,000	0%	Spring 201x - Fall 202x	0%	JH	Contract needed by - Postponed Indefinitely CWCB approval is conditioned on voters approving debt. Debt approval failed at November 2017 election. District is regathering to determine if/how/when to move the project forward.
С	Southeastern CO Water Conserv. District > Arkansas Valley Conduit C150238	Crowley	\$40,000,000	0%	Spring 201x - Fall 202x	0%	KR	Contract needed by - > 12months Pending Federal Appropriation. Southeastern's Pueblo Dam Hydro project was taken out of these loan funds.
d	City of Walsenburg > City Lake Dam Rehabilitation & Enlargement CT2019-648 Grant CTGG1 2019-094	Huerfano	\$6,889,210	100%	Nov 2018 - May 2019	0%	AM	Peg to call 9/24 Prebid occurred 10/24/18. Bid open 11/7/18. Communicated with city and engineer 10/26 concerns about contracting process. Still need AOL & parity cert.
е	Fruitland Irrigation Company >Tunnel and Canal Renvation CT2019- XXXX CTGG1 2019XXXX	Delta & Montrose	\$1,746,290	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - 11/30/2018 Sept 2018 letter from Bureau of Reclamation recvd. Require letter prior to CWCB contract.
f	Municipal Subdistrict >Windy Gap Project CT2019-XXXX	Larimer	\$90,000,000	0%	Spring 201x - Fall 202x	0%	JH	Contract needed by - November 2018? Contracts waiting on participant water storage agreements with Northern.

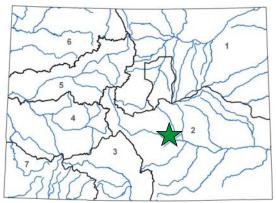
	Projects	County	Loan Amount	Design Status	Const. Start/End	Proj. Status	PM	Status Description/Update
g	Julesburg Irrigation District >Diversion Structure Rehabilitation CT2019-2073	Sedgwick	\$3,341,080	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - unknown Per Rachel-there is a delay before Julesburg is ready to execute a loan contract. The District seeking additional funding. They plan to gather additional funding sources prior to holding special election. This project is not a rush in any way at this point./no BOL needed just AOL
h	Ogilvy Irrigating and Land Comapny >Seely Reservoir Dredging CT2019-2099 CTGG1 2019-2018 (WPG)	Weld	\$2,274,520	0%	Spring 201x - Fall 202x	0%	RP	Contract needed by - unknown (permitting considerations being made) Permitting/Eval Jul 2018 and Construction Aug 2018 Peg waiting on AOL all contracts signed by borrower.
i	Central Colorado WCD >Walker Recharge CT2019-XXXX	Weld	\$2,272,500	0%	Fall 2018 - Spring 2019	0%	JH	Contract needed by - Contract Pending 2019 Projects Bill
j	Groundwater Management Subdistrict of CCWCD >Walker Recharge CT2019-XXXX	Weld	\$9,847,500	0%	Fall 2018 - Spring 2019	0%	JH	Contract needed by - Contract Pending 2019 Projects Bill
k	Well Augmentation Subdristrict of CCWCD >Walker Recharge CT2019-XXXX	Weld	\$3,030,000	0%	Fall 2018 - Spring 2019	0%	JH	Contract needed by - Contract Pending 2019 Projects Bill
I	Arabian Acres >Automatic Meter Implementation CT2019-2792	Teller	\$404,000	50%	Fall 2018 - Fall 2019	0%	RP	Contract needed by - December 30,2018
	Not Under Contract	ct SubTotal =	\$162,890,850					
		Grand Total =	\$396,303,094					



Landslide Stabilization and Ditch Lining Project

Bessemer Irrigation Ditch Company January 2018 Board Meeting

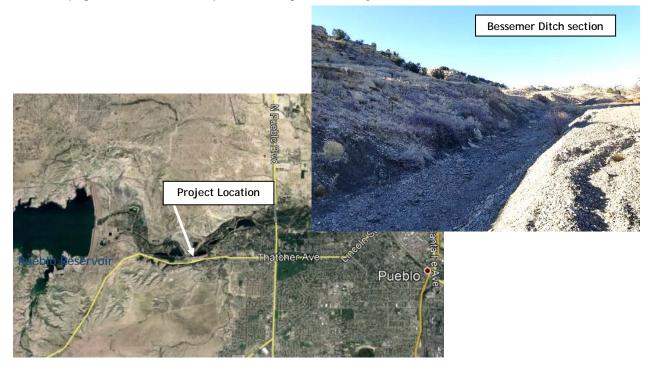
LOAN DETA	AILS
Project Cost:	\$900,000
CWCB Loan (with Service Fee):	\$909,000
Loan Term and Interest Rate:	20 years @ 1.65%
Funding Source:	Construction Fund
BORROWER	TYPE
Agriculture Municipal	Commercial
62% 38% Low - 0% Mid -0%	High 0%
P R O J E C T D E	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	71,600 AF



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

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Water	- Sour	ce:		Arkansas Rive				
Draina	age B	asin:				Ar	kansas	
Divisio	on:	2		Distri	ict:	1	4	

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.

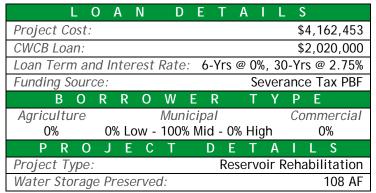




Emergency Raw Water Storage Repair

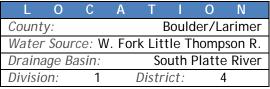
Big Elk Meadows Association
March 2017 Board Meeting

(Loan Increase)

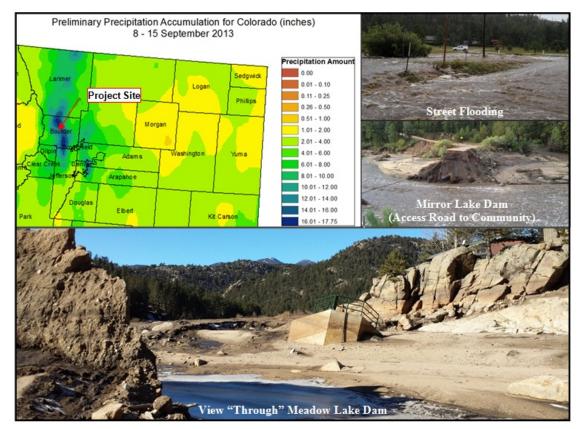


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During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. Measured rainfall in and around Big Elk Meadows exceeded the 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.

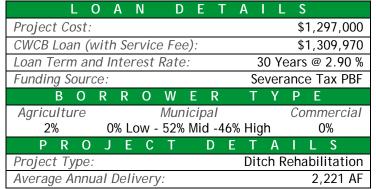


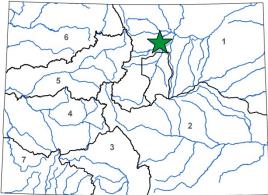


St. Vrain Diversion Replacement

Bonus Ditch Company

September 2017 Board Meeting



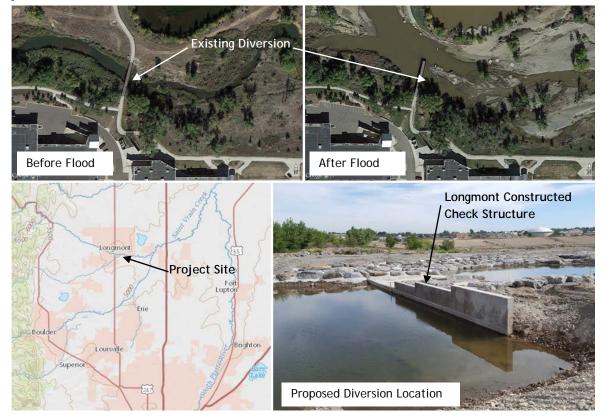


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Count	ty:					В	oulder
Water	r Sour	ce:			St '	Vrain	Creek
Drain	age B	asin:			S	outh	Platte
Divisi	on:	1		Distri	ict:	5	

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.

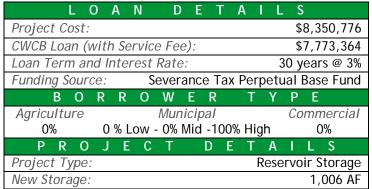




Castle Pines North Metropolitan District

Chatfield Reallocation Project
January 2018 Board Meeting

(Loan Increase)



G A T O N

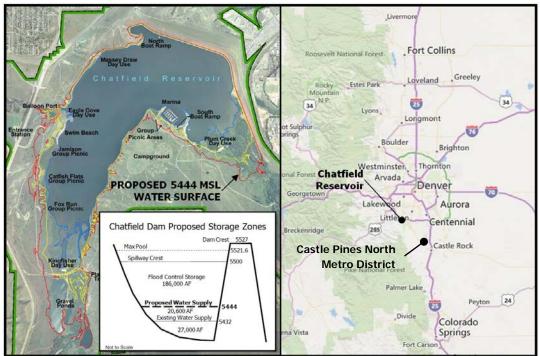
The Castle Pines North Metropolitan District provides water and wastewater services to the residents and businesses in the City of Castle Pines, Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful completion of the Project would result in

County: Douglas

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

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.



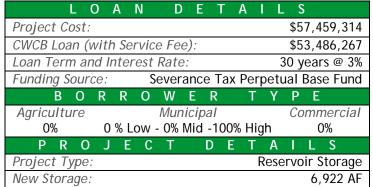
Water Project Loan Program - Project Data Sheet



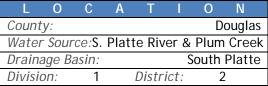
Centennial Water and Sanitation District

Chatfield Reallocation Project
January 2018 Board Meeting

(Loan Increase)

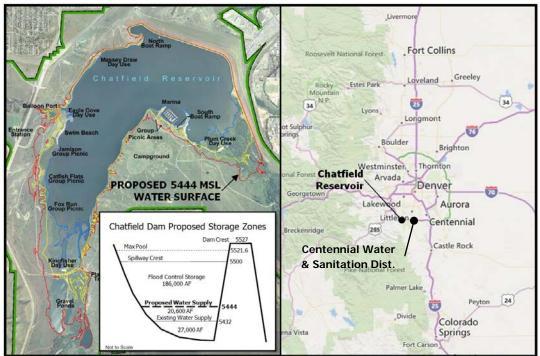


The Centennial Water & Sanitation District provides water and wastewater services to the residents and businesses of Highlands Ranch in Douglas County. The District is participating in the Chatfield Reallocation Project in order to increase the permanence and reliability of its water supply. Successful 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.



Water Project Loan Program - Project Data Sheet

CWCB Water Project Loan Program Project Data Sheet

County: Park

C150406

Borrower: Center of Colorado Water

Conservancy District

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

Plum Creek

Total Project Cost: \$931,000 **Funding Source:** Severance Tax Perpetual

Base Fund

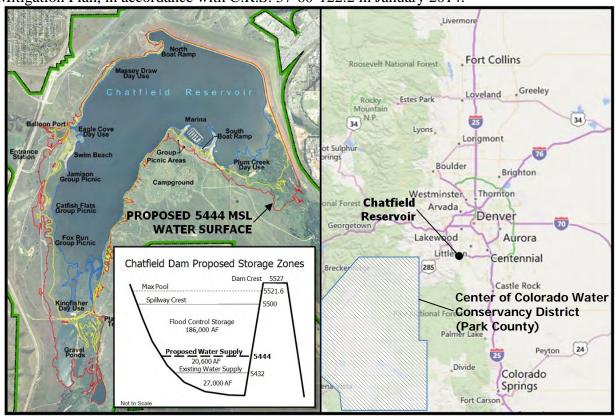
Type of Borrower: Middle-income Municipal **Average Annual Diversion:** 700 AF

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.

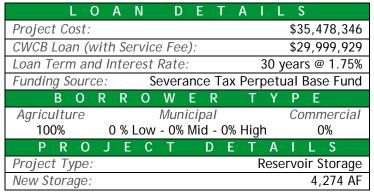




Central Colorado Water Conservancy District

Chatfield Reallocation Project
January 2018 Board Meeting

(Loan Increase)



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

L O C A T I O N

County: Douglas

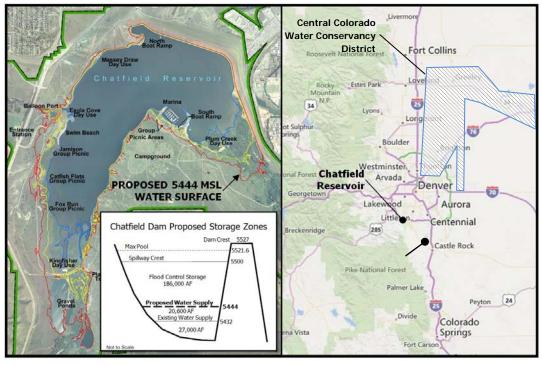
Water Source:S. Platte River & Plum Creek

Drainage Basin: South Platte

Division: 1 District: 2

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.



Water Project Loan Program - Project Data Sheet



Centenial Diversion Replacement

Centenial Irrigating Ditch Company September 2017 Board Meeting

LOAN DET.	AILS
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
1000/ 00/ Law 00/ Mil 00/	
100% 0% Low - 0% Mid - 0%	High 0%
P R O J E C T D E	High 0% T A I L S
	J

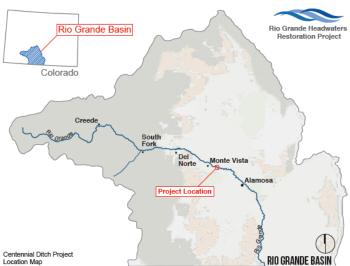
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The Company's diversion and headgate structures are located four miles east of Monte Vista on the Rio Grande. 8,500 acres are irrigated under the system. The diversion was highlighted as a river rehabilitation priority in a 2001 study titled "Rio Grande Headwater Restoration Project." That study analyzed the condition of riparian habitats and

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Water	Sour	ce:				Rio (Grande
Draina	age B	asin:				Rio (Grande
Divisio	on:	3		Distri	ct:	2	.0

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.



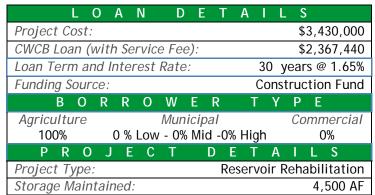




Conservation Board Shores Lakes Ponds C Infrastructure Improvement

Central Colorado Water Conservancy District

January 2018 Board Meeting

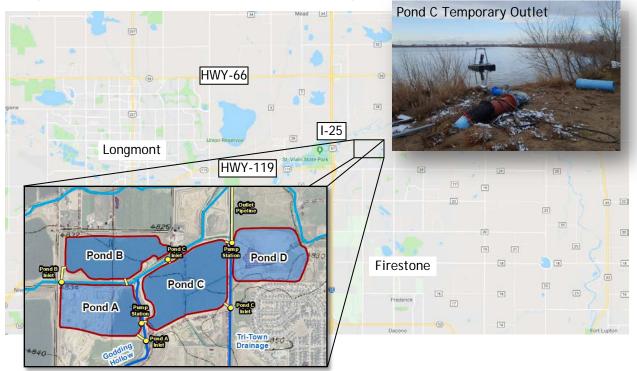


The Well Augmentation Subdistrict (WAS) was formed in 2004 to develop a permanent augmentation plan for well owners who were previously members of the Groundwater Appropriators of the South Platte (GASP), and covers land in Adams, Weld, and Morgan counties. There are currently 275 wells contracted for coverage in

LOCATIONWeldWater Source:South Platte RiverDrainage Basin:South PlatteDivision:1District:2

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.

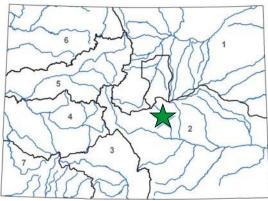




Chilcott Augmentation Station

Chilcott Ditch Company July 2018 Board Meeting

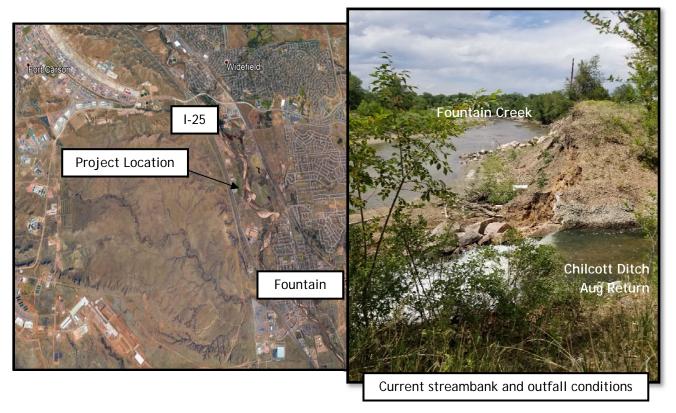
LOAN DETAILS
Project Cost: \$500,000
CWCB Loan (with Service Fee): \$505,000
Loan Term and Interest Rate: 20 Years @ 2.55%
Funding Source: Construction Fund
B O R R O W E R T Y P E
Agriculture Municipal Commercial
0%
PROJECT DETAILS
Project Type: Ditch Rehabilitation
Average Annual Diversions: 4,961 AF



The Chilcott Ditch Company operates the Chilcott Ditch for the benefit of its shareholders by providing direct flow irrigation water. The ditch diverts from Fountain Creek, just north of the Town of Fountain, and water travels through the Company's eight-mile-long ditch to land under the ditch as well as to an augmentation

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Water	Sour	ce:			Four	ntain	Creek
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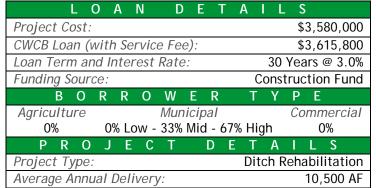
station that measures return flow to Fountain Creek on behalf of shareholders taking delivery of their pro-rata share through the augmentation station. Over time the streambank near the augmentation station has eroded and undercut the augmentation station flume. This has caused concern about the structural stability and discharge functionality and operation of the augmentation station. The Company has concluded that the protection of the augmentation station is needed. The Company desires to stabilize the embankment and reconstruct the outfall and sand discharge line considering a 100-yr flood recurrence interval and associated streamflow and water surface profile. Construction is scheduled for the fall of 2018/winter of 2019.

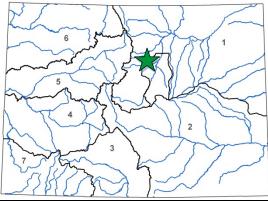




Ditch System Improvements

Church Ditch Water Authority
July 2017 Board Meeting





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.

L O C A T I O N

County: Jefferson

Water Source: Clear Creek

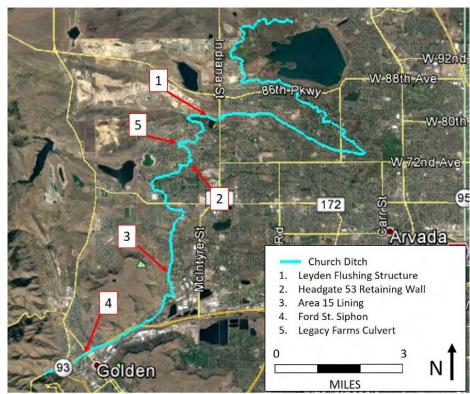
Drainage Basin: South Platte

Division: 1 District: 7

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.

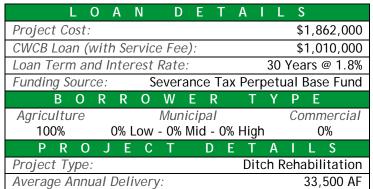


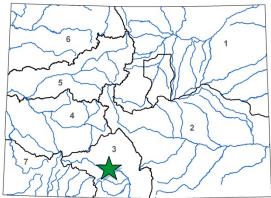


Consolidated Diversion and Headgate Replacement

Consolidated Ditch and Headgate Company

July 2017 Board Meeting



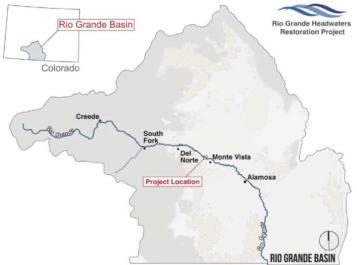


The Company is a Mutual Ditch Company formed in 1910. Its diversion and headgate structures are located five miles northwest of Monte Vista on the Rio Grande. The company serves 38 shareholders made up of water right owners who use the ditch as a carrier ditch. The diversion dam and headgate structures are at the end of its service

L	0	С	Α	T		0	N
Count	y:					Rio C	Grande
Water	- Sour	ce:				Rio C	Grande
Draina	age B	asin:				Rio C	Grande
Divisio	on:	3		Distri	ct:	2	0

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.





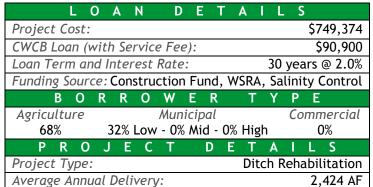


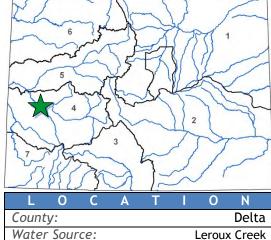
Piping the Duke Ditch **Duke Ditch Company**

March 2016 Board Meeting

Gunnison

42





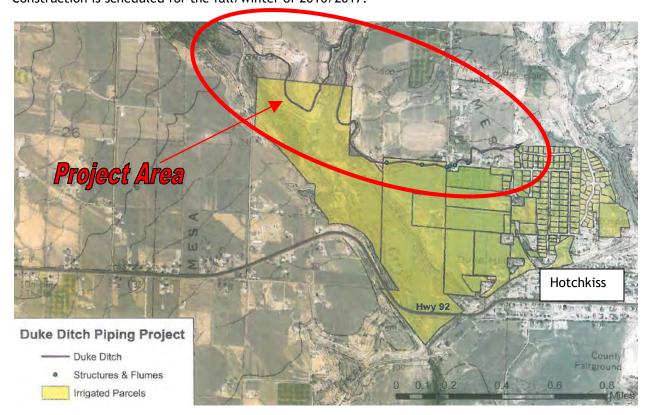
District:

Drainage Basin:

Division:

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.





Adobe Creek Dam Rehabilitation

Fort Lyon Canal Company September 2017 Board Meeting

LOAN DET	AILS
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 Ta	x Perpetual Base Fund
BORROWER	TYPE
Agriculture Municipal	Commercial
99.1% <1% Low - TBD% Mid -0	% High <1%
PROJECT DE	TAILS
Project Type:	Dam Rehabilitation
Average Annual Diversions:	221,000 AF
Recovered Storage:	32,560 AF
Preserved Storage:	81,692 AF

L O C A T I O N

County:

Water Source:

Arkansas River

District:

Arkansas

17

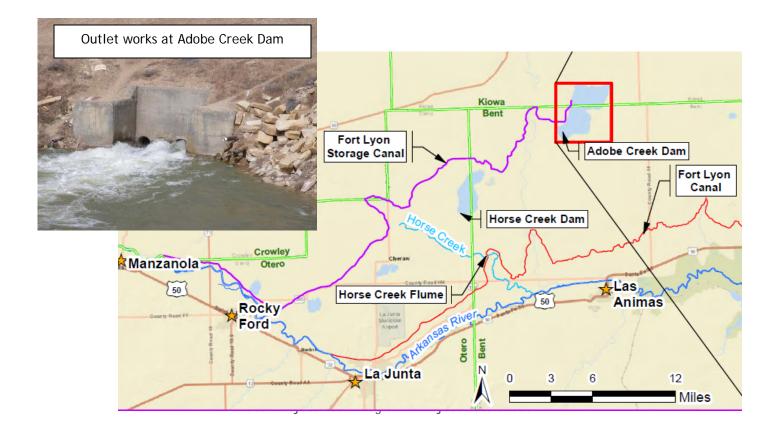
Drainage Basin:

Division:

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.



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

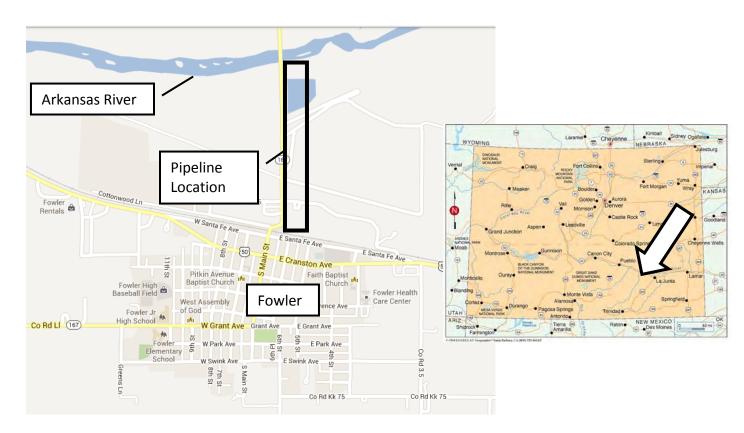
Total Project Cost: \$305,000 **Funding Source:** Construction Fund

Type of Borrower: Municipal (Low) **Average Annual Diversion:** 157 AF

CWCB Loan: \$277,245 Interest Rate: 2.25% Term: 30 years

(with 1% Service Fee)

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

County: Delta

Borrower: Grand Mesa Water Conservancy

District

Project Name: Peak Reservoir and Blanche

Park Reservoir Rehabilitation

Drainage Basin/ District: Gunnison / 40 **Water Source:** Surface Creek

Total Project Cost: \$640,000 Funding Source: Construction Fund/

WSRA Gunnison Basin Funds

Project Type: Reservoir Rehabilitation

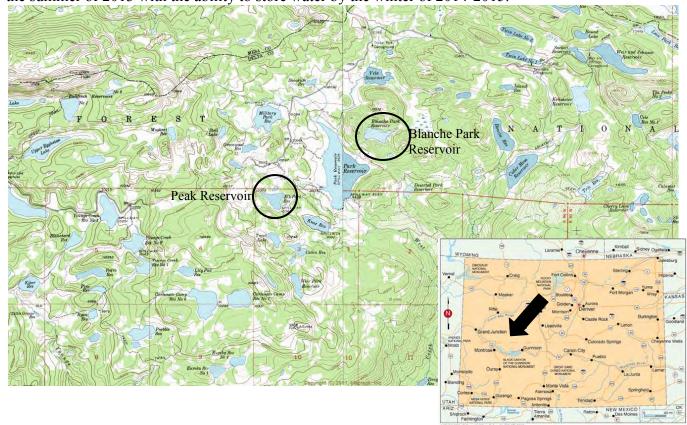
Type of Borrower: Municipal/Agricultural **Average Annual Diversion:** 400 AF

Storage Added: 155 AF

CWCB Loan: \$227,250 Interest Rate: 1.55%* Term: 20 years

(with 1% Service Fee) (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.

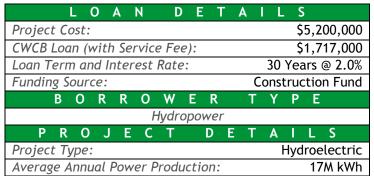




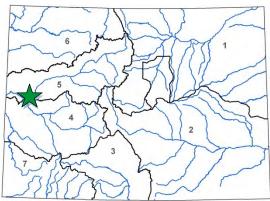
Grand Valley Power Plant Rehabilitation

Grand Valley Water Users Association

November 2016 Board Meeting



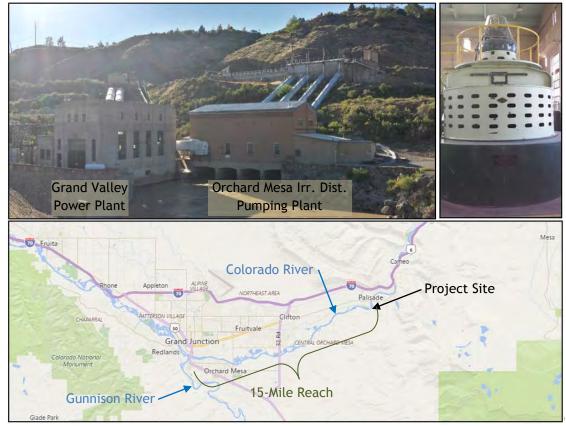
The Grand Valley Water Users Association (Association) and Orchard Mesa Irrigation District (District) are each seeking a loan to cover its cost share for the Grand Valley Power Plant (GVPP) Rehabilitation Project. The GVPP is owned by the Bureau of Reclamation and originally operated by Public Service 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



L O	С	Α	T		0	N
County:						Mesa
Water Sou	ırce:			Col	orado	River
Drainage I	Basin:				Co	lorado
Division:	5		Distr	ict:	7	2

revenues from the GVPP under a Lease of Power Privilage with Reclamation and a Power Purchase Agreement with Xcel. In addition to being a revenue source, the GVPP serves an importnant role in providing water to the "15-Mile Reach" which has been designated by the Upper Colorado River Endangered Fish Recovery Program as critical habitat. The non-consumptive hydropower water right ensures continued flows for this important stretch of river.

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



Water Project Loan Program - Project Data Sheet



Water Project Loan Program Project Data Sheet

Borrower: Huerfano County Water Conservancy **County:** Huerfano

District

Project Name: Regional Augmentation Project Project Type: Water Rights Acquisition

and Augmentation

Drainage Basin: Arkansas / District 67 **Water** Huerfano River

Source:

Total Project \$3,050,000 **Funding** Construction Fund

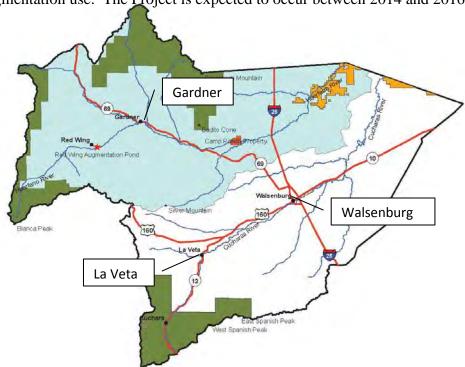
Cost: Source:

Type of Low-Income Municipal Avg. Annual 19.5 AF

Borrower: Diversions:

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).





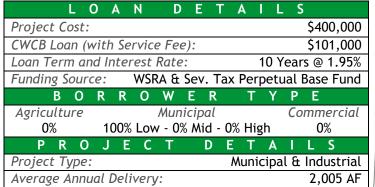


Repurposing of Wells 12 and 13

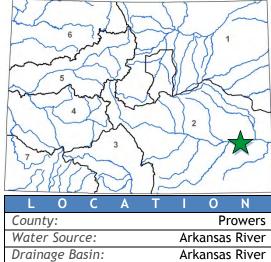
City of Lamar

September 2015 Board Meeting





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



District:

67

2

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.

Division:



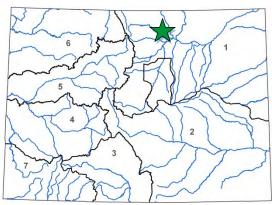
Water Project Loan Program - Project Data Sheet



Headgate Structure Replacement

Larimer and Weld Irrigation Company September 2016 Board Meeting

LOAN DET	AILS
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%
	J
PROJECT DE	
PROJECT DE Project Type:	



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

L O C A T I O N

County: Larimer & Weld

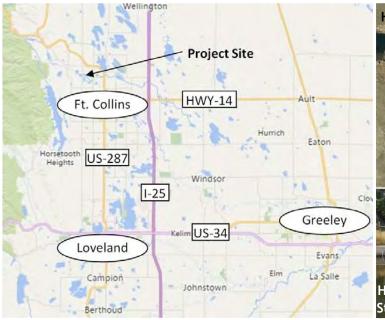
Water Source: Cache la Poudre River

Drainage Basin: South Platte

Division: 1 District: 3

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.



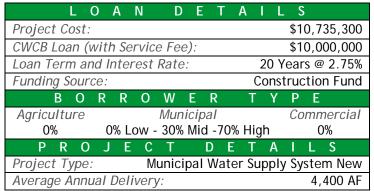




COLORADO Participation in Southern Water Supply Project II

Left Hand Water District

September 2017 Board Meeting



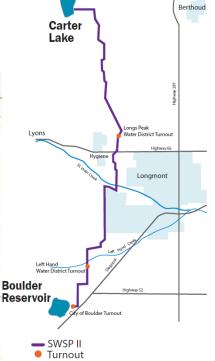
The District provides potable water service within a 108 square mile service area within unincorporated areas of Boulder and Larimer Counties; serving approximately 20,000 people through 7,154 individually metered taps. Water is treated at the Spurgeon Water Treatment Plant (WTP) and Dodd WTP. Spurgeon WTP is operated yearround while Dodd WTP is operated only during the

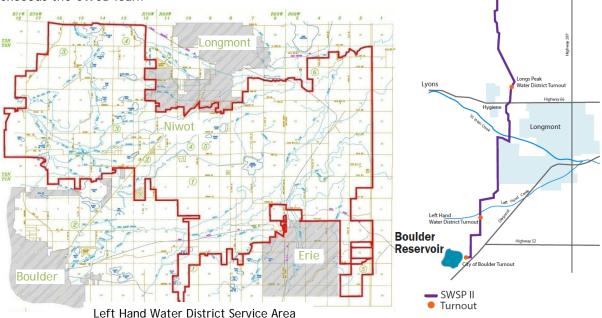
Broomfield, Weld County: Water Source: Drainage Basin: South Platte Division: District: 5

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.



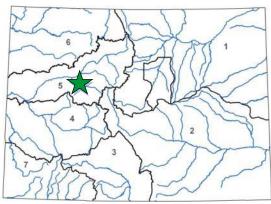




Ditch Piping Phase B

Missouri Heights Mountain Meadow Irrigation Company
July 2018 Board Meeting

LOAN DET.	AILS
Project Cost:	\$400,000
CWCB Loan (with Service Fee):	\$404,000
Loan Term and Interest Rate:	30 Years @ 2.05%
Funding Source:	Construction Fund
BORROWER	TYPE
Agriculture Municipal	Commercial
78% 0% Low - 0% Mid -22%	High 0%
PROJECT DE	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	5,500 AF



The Company operates the Missouri Heights Mountain Meadow Irrigation Ditch to provide irrigation water from the Spring Park Reservoir to approximately 2,000 acres of ranch land located 12 miles northeast of Carbondale. The Company worked with the Natural Resources Conservatio service (NRCS) to evaluate water losses

L O C A T I O N

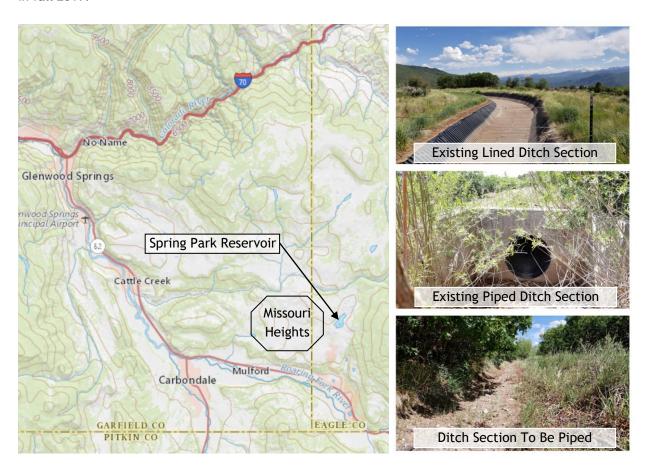
County: Garfield

Water Source: Cattle Creek

Drainage Basin: Colorado

Division: 5 District: 38

within its ditch. Previous construction activity lined 3,500 LF of ditch and piped 5,750 LF of ditch. This Project will pipe 9,120 LF of ditch, a section where water losses are estimated to be as high as 20%. Construction for Phase B-1 is scheduled for fall of 2018. Construction for Phase B-2 is planned to occur in fall 2019.

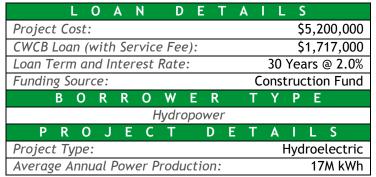




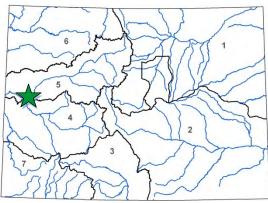
Grand Valley Power Plant Rehabilitation

Orchard Mesa Irrigation District

November 2016 Board Meeting



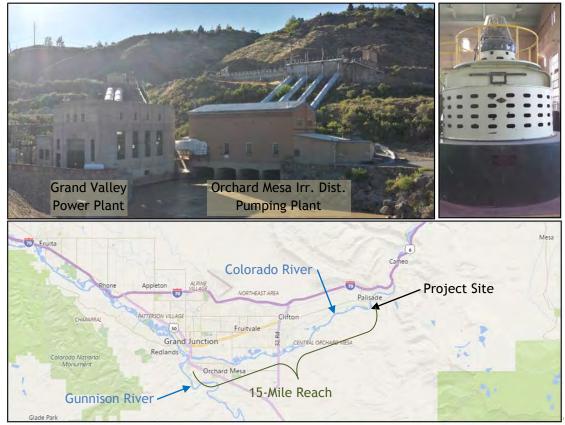
The Orchard Mesa Irrigation District (District) and Grand Valley Water Users Association (Association) are each seeking a loan to cover its cost share for the Grand Valley Power Plant (GVPP) Rehabilitation Project. The GVPP is owned by the Bureau of Reclamation and originally operated by Public Service 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



L 0 (C A	TI	0 N
County:			Mesa
Water Source	:	Co	olorado River
Drainage Basi	n:		Colorado
Division:	5	District:	72

from the GVPP under a Lease of Power Privilage with Reclamation and a Power Purchase Agreement with Xcel. In addition to being a revenue source, the GVPP serves an importnant role in providing water to the "15-Mile Reach" which has been designated by the Upper Colorado River Endangered Fish Recovery Program as critical habitat. The non-consumptive hydropower water right ensures continued flows for this important stretch of river.

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

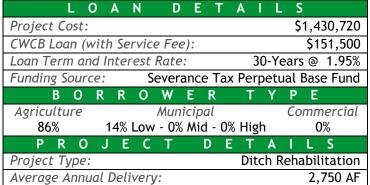


Water Project Loan Program - Project Data Sheet

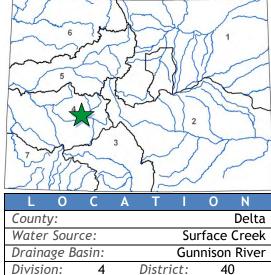


Orchard Ranch Ditch Pipe Project

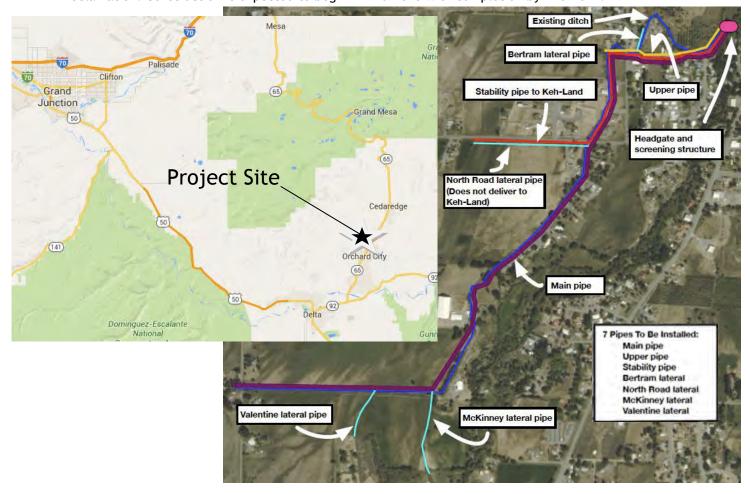
Orchard Ranch Ditch Company January 2016 Board Meeting



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

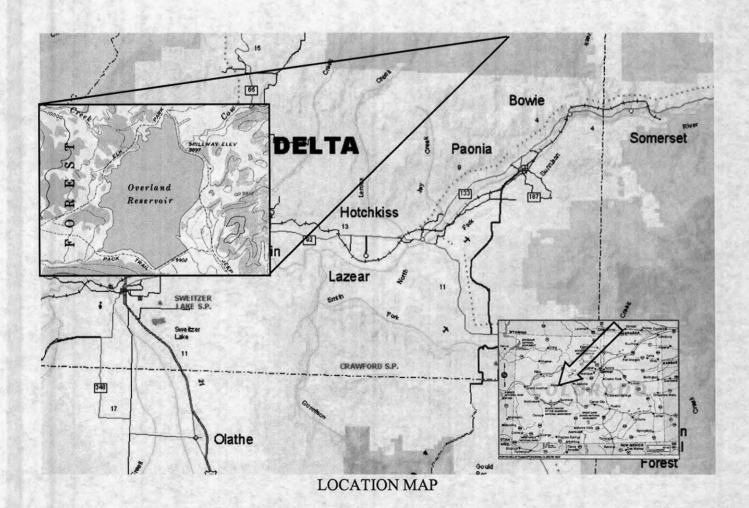
Drainage Basin: Gunnison River Basin Water Source: Cow Creek

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

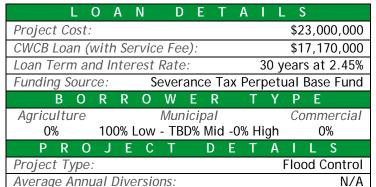
The Overland Reservoir Company is a non-profit mutual ditch company established in the State of Colorado in 1895. The Company owns and operates the Overland Reservoir for the 120 shareholders and delivers an average of 17,000 AF of irrigation water annually. The Reservoir is located in Delta County in 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.





Arkansas River and Wildhorse Creek Levee Rehabilitation

Pueblo Conservancy District September 2017 Board Meeting

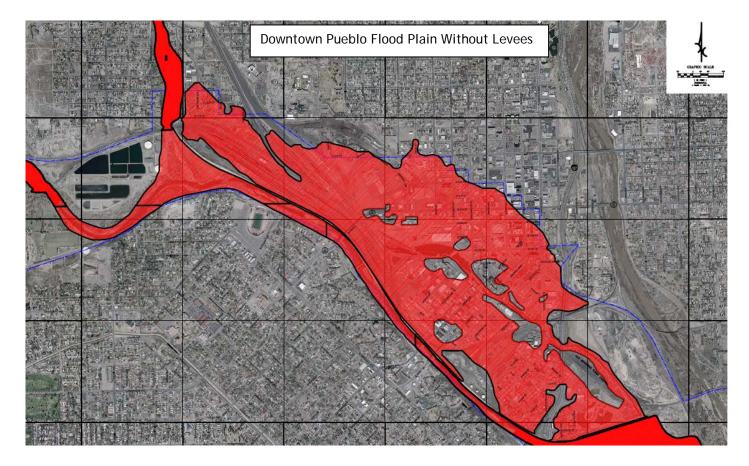


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The District was formed in response to the 1921 flood in Pueblo. Its primary function is flood protection within its designated boundaries. In 2006, the District was advised that unless the Arkansas and Wildlhorse Creek levees were accredited by the Federal Emergency Management Agency (FEMA), the City would lose it protected status which ensures that flood insurance can be provided at

L	0	С	Α	T	-1	0	N
Count	y:					F	Pueblo
Water	- Sour	ce:			Ark	ansas	River
Draina	age B	asin:				Arl	kansas
Divisio	on:	2		Distri	ict:	1	4

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.



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

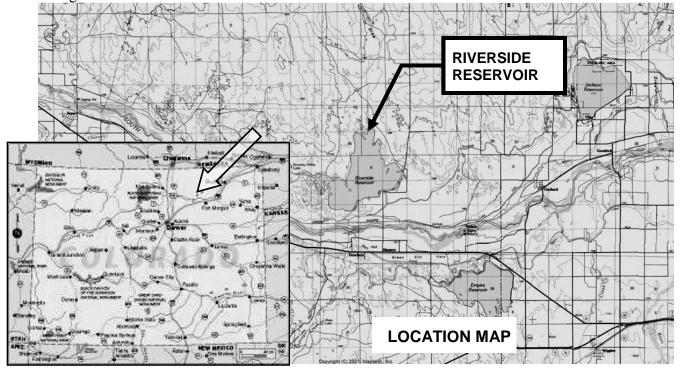
Perpetual Base Account

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.





Ravenna Development Interconnect

Roxborough Water and Sanitation District July 2018 Board Meeting

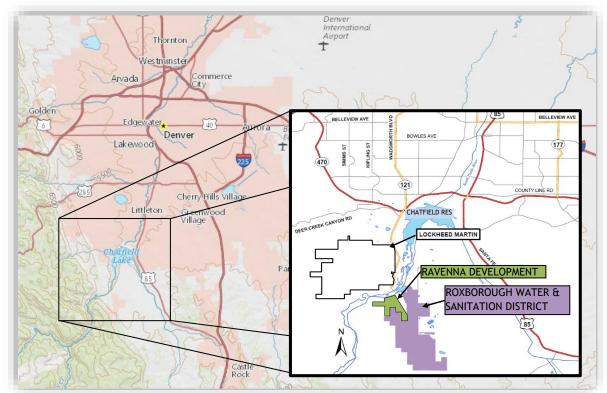
LOAN DETAILS	
Project Cost: \$1,	763,750
	584,690
Loan Term and Interest Rate: 30 Years	@ 3.15%
Funding Source:	TBD
BORROWER TYPE	Ξ
Agriculture Municipal Com	mercial
0%	0%
PROJECT DETAIL	S
Project Type: Municipal Water Supply Syste	em New
Average Annual Diversions:	,200 AF

The Roxborough Water and Sanitation District was established in 1971 and provides water and sewer service within its service area in northwest Douglas County. In 2017 the District included the Ravenna Development (Ravenna) into its water service area. Ravenna sought inclusion into the District as a means to replace its

L O C	ATION
County:	Douglas
Water Source:	South Platte River
Drainage Basin:	South Platte
Division: 1	District: 8

non-renewable water supply (non-tributary groundwater wells) with a renewable water supply and as a means to efficiently provide potable water to the residents of Ravenna.

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



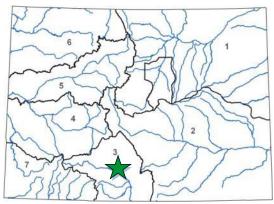
Water Project Loan Program - Project Data Sheet



San Luis Valley Canal Headgate Construction

San Luis Valley Canal Company May 2018 Board Meeting

L O A N D E	TAILS
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
BORROWE	RTYPE
Agriculture Municipa	al Commercial
100% 0%	0%
PROJECTI	DETAILS
Project Type:	Headgate Replacement
Average Annual Diversions:	24,000 AF



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

L	0	С	Α	Т	- 1	0	N
County	/:					Rio C	Grande
Water	Sour	ce:				Rio C	Grande
Draina	ge Bo	asin:				Rio C	Frande
Divisio	n:	3		Distri	ct:	2	0

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.



Water Project Loan Program - Project Data Sheet



Rio Grande Reservoir Rehabilitation Project

San Luis Valley Irrigation District
March 2018 Board Meeting

LOAN	DETA	ILS
Project Cost:		\$25M
Funding Package:	\$10M	Grant & \$15M Loan
Loan Term and Interest R	ate:	30 years @1.65%
Funding Source:	Const Fund	& NonReimbursable
BORRO	W E R	TYPE
Agriculture N	Nunicipal	Commercial
100% 0% Low -	0% Mid - 0% H	igh 0%
PROJEC	T DE	TAILS
Project Type:	Rese	rvoir Rehabilitation
Preserved Storage:		51,113 AF

6 1

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 onchannel Rio Grande Reservoir Dam. The Reservoir has a capacity of 51,113 acre-feet and delivers water to nearly

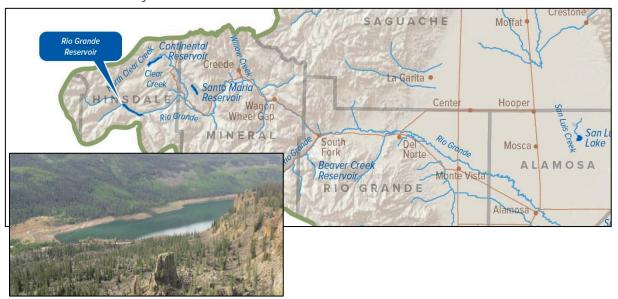
LOCATIONCounty:Hinsdale, Rio GrandeWater Source: Beaver Creek & Rio GrandeDrainage Basin:Rio GrandeDivision:3District:20

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.



St Vrain Creek

South Platte

5



Lake 4 Outlet Pipeline Repair

St. Vrain and Left Hand Water Conservancy District
January 2017 Board Meeting

LOAN DETAILS	
Project Cost: \$912,0	00
CWCB Loan (with Service Fee): \$619,1	30
Loan Term and Interest Rate: 30 Years @ 2.8!	5%
Funding Source: Construction Fu	nd
BORROWER TYPE	
Agriculture Municipal Commerci	al
0% 0% Low - 0% Mid - 97% High 3%	
PROJECT DETAILS	
Project Type: Reservoir Rehabilitation	on
Average Annual Delivery: 182	ΑF
Storage Preserved: 600 i	ΑF

L O C A T I O N
County: Boulder

District:

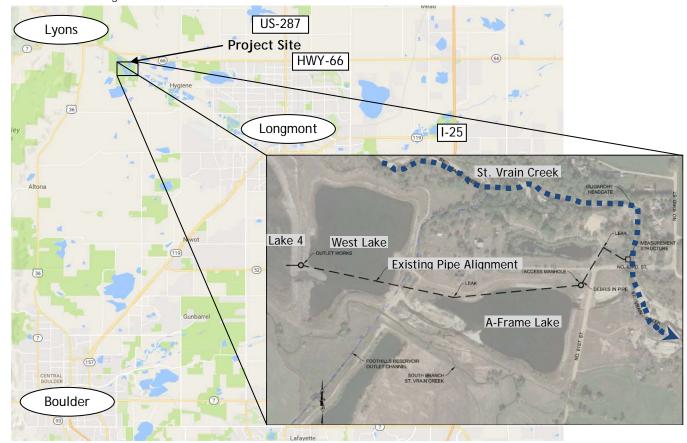
The St. Vrain and Left Hand Water Conservancy District and Boulder County Parks and Open Space jointly own a lined reservoir known as Rock'n WP Ranch Lake No. 4 (Lake 4). Lake 4 was created by reclaiming mined slopes, installing a slurry wall liner around the former gravel pit,

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.

Water Source:

Division:

Drainage Basin:



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

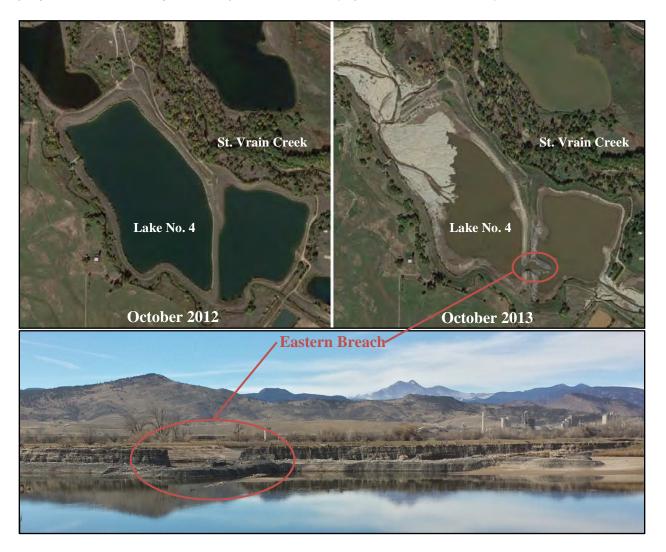
Funding Source: Severance Tax Perpetual

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.

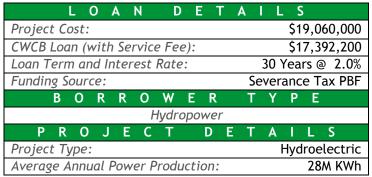




Arkansas Valley Conduit Phase One Pueblo Dam Hydroelectric Project

Southeastern Colorado Water Conservancy District

July 2016 Board Meeting



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

L O C A T I O N

County: Pueblo

Water Source: Arkansas River

Drainage Basin: Arkansas River

District:

10

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.

Division:

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.





Storage Development and Water Rights Purchase

Town of Firestone

November 2016 Board Meeting

L O	A	N	D	Ε	Т	Α	1	L	S		
Project Cost:								\$	10	,04	3,150
CWCB Loan (wit	th Se	rvic	e Fee):				\$	10	,00	0,000
Loan Term and	Inter	rest	Rate:				20	Yec	ırs	@ .	2.35%
Funding Source	:						Cor	ıstru	ct	ion	Fund
B O R	R	0	W	E I	R	1	·)	Y P		E	
1 11											
Agriculture			Muni	cipa	l			С	on	ıme	ercial
-	0% Lo	ow -	Muni 0% M	•		% H	igh	С	on	nme 0%	
-	0% Lo			•	100		igh		on		
0%		C	0% M	id - D	100 E	. 1	· /	\	Į	0%	
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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

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County	<b>/:</b>						Weld
Water	Sour	ce:					River /
					Во	ulder	Creek
Draina	ge Bo	asin:		So	uth l	Platte	River
Divisio	n:	1		Distr	ict:	2	2

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.



Water Project Loan Program - Project Data Sheet

# Conservation Board Mountain Home Dam Outlet Rehabilitation Phase III

Trinchera Irrigation Company

March 2018 Board Meeting

LOAN DETA	AILS
Project Cost:	\$987,000
CWCB Loan (with Service Fee):	\$440,360
Loan Term and Interest Rate:	30 years @ 1.65%
Funding Source: Severa	nce Tax PBF & WRSF
BORROWER	TYPE
Agriculture Municipal	Commercial
100% 0% Low - 0% Mid - 0% l	High 0%
PROJECT DE	TAILS
Project Type:	Dam Rehabilitation
Average Annual Diversions:	9,000 AF

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

L O C A T I O N

County: Costilla

Water Source: Trinchera Creek

Drainage Basin: Rio Grande

Division: 2 District: 14

Parks and Wildlife operates a State Wildlife Area around the Reservoir and maintains a conservation pool of 653 AF in the Reservoir.

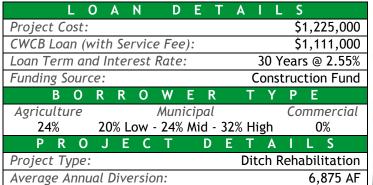
The Reservoir's existing outlet works experience significant leakage and since only one of the three valves is operable, does not meet the State Engineer's Office, Dam Safety Branch's emergency drawdown requirements. This Project will replace the original valves with new valves and make other minor repairs 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.

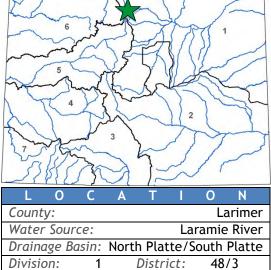




#### **Laramie-Poudre Tunnel Rehabilitation**

The Tunnel Water Company September 2015 Board Meeting

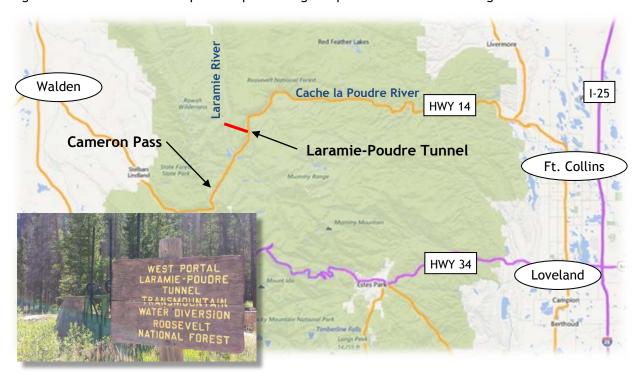




The Tunnel Water Company operates the Laramie-Poudre Tunnel for the benefit of its two shareholders: Water Supply and Storage Company (WSSC) and Windsor Reservoir and Canal Company (WRCC). The tunnel diverts from the Laramie River, about 60 miles west of Fort Collins, and delivers water through a 2.15-mile 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.

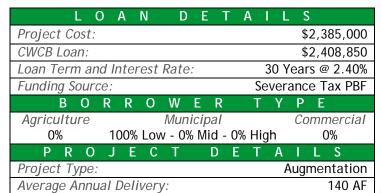


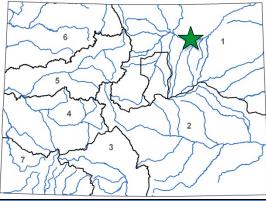


# Wiggins Recharge Facility at Glassey Farms

Town of Wiggins

March 2017 Board Meeting





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.

L	0	С	Α	Т	- 1	0	N	
County	y:					N	<i>N</i> orgar	า
Water	Sour	ce:		So	uth	Platte	e Rive	r
Draina	ige B	asin:		Sc	uth	Platte	e Rive	r
Divisio	n:	1		Distr	ict:	,	1	

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.



County: Douglas & Arapahoe

**Project Type:** New Water Supply

C150408

**Borrower:** Cottonwood Water & Sanitation

District

**Project Name:** Water Infrastructure and Supply

(WISE) Efficiency Project

**Drainage Basin/ District:** South Platte / 8 Water Source: South Platte

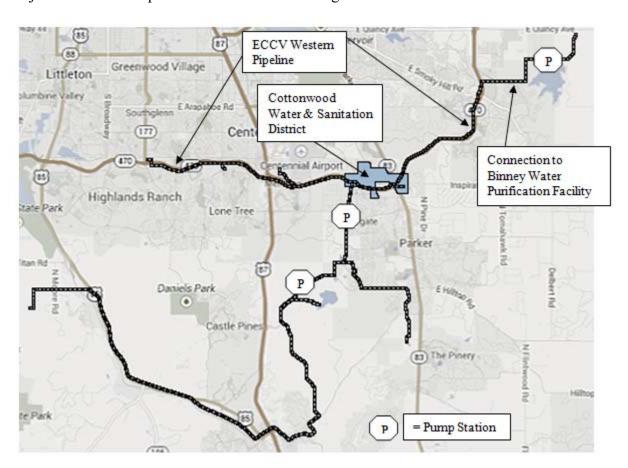
**Total Project Cost:** \$4,960,000 Funding Source: Construction Fund

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.



County: Douglas & Arapahoe

Water Source: South Platte

**Project Type:** New Water Supply

C150409

**Borrower:** Inverness Water & Sanitation

District

**Project Name:** Water Infrastructure and Supply

(WISE) Efficiency Project

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

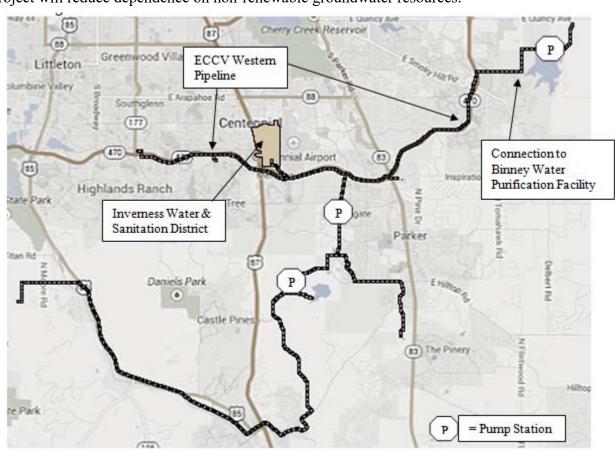
**Total Project Cost:** \$5,400,000 **Funding Source:** Construction Fund

**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.



C150410

**Borrower:** Parker Water & Sanitation District County: Douglas & Arapahoe

**Project Name:** Water Infrastructure and Supply **Project Type:** New Water Supply

(WISE) Efficiency Project

**Drainage Basin/ District:** South Platte / 8 **Water Source:** South Platte

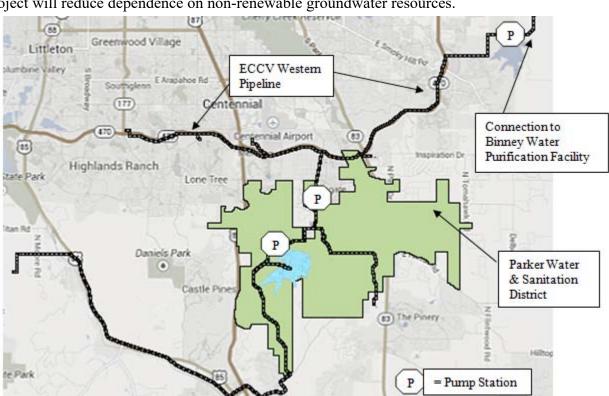
**Total Project Cost:** \$17,305,500 Funding Source: Construction Fund

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.



County: Douglas

**Project Type:** New Water Supply

C150411

**Borrower:** Denver Southeast Suburban Water

and Sanitation District (dba

Pinery Water and Wastewater District)

**Project Name:** Water Infrastructure and Supply

(WISE) Efficiency Project

**Drainage Basin/ District:** South Platte / 8 **Water Source:** South Platte

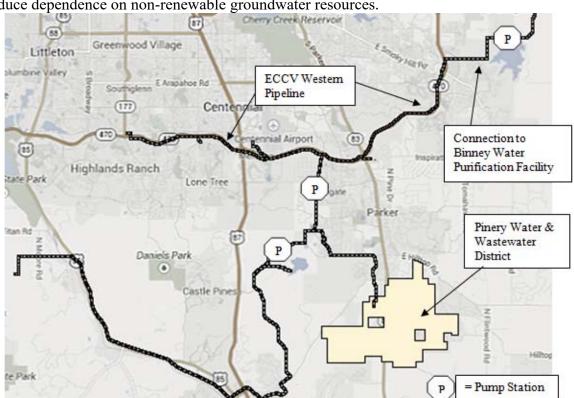
**Total Project Cost:** \$10,920,000 Funding Source: Construction Fund

**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.



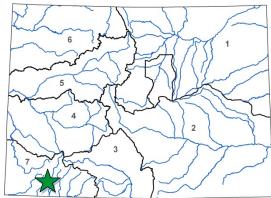
# **Projects Not Under Contract**



# **Hess Lateral Improvement**

Florida Consolidated Ditch Company May 2017 Board Meeting

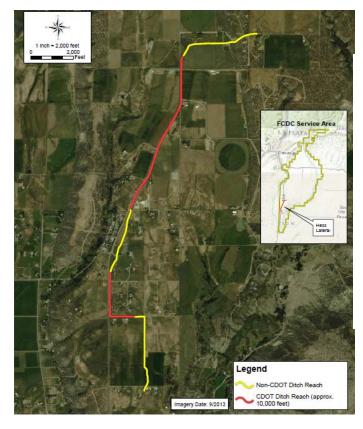
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Project Cos	t:									\$2,	800	,000
CWCB Loan.										\$1,	085	,750
Loan Term	and	Inte	eres	t Rate	):			30	-ye	ars	@ 1	.80%
Funding Sou	ırce	:		Sever	ance	Tax	∢ Pe	rpe	tua	al Ba	ise I	und
ВО	R	R	0	W	E R		Т	Υ	P	E		
Agriculture	ò			Mun	icipa	1			(	Com	mei	rcial
100%				0%	)					0%		
P R C	J	Ε	С	Т	D	Ε	T	Α	- 1	L	S	
Project Typ	e:			•			Di	tch	Re	hab	ilita	ition
Average Ani	nuai	Div	ersi	ion:						43	3,00	0 AF

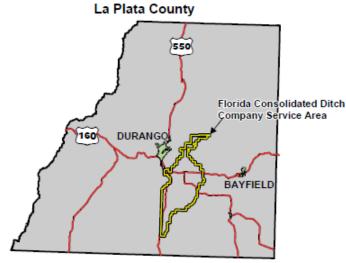


The Hess Lateral, part of the Florida Consolidated Ditch Company water conveyance system, is located 7 miles south of Durango, CO on the Florida Mesa. The lateral serves approximately 67 users irrigating over 1,500 acres of hay and pasture land. The project will replace the open ditch with buried gravity-pressurized pipeline and

L	0	С	Α	Т	- [	0	N
Count	y:					La	Plata
Water	Sour	ce:			Α	nimas	River
Draina	age B	asin:	Sa	n Jua	n/D	olores	River
Divisio	on:	7		Distri	ct:	3	0

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.



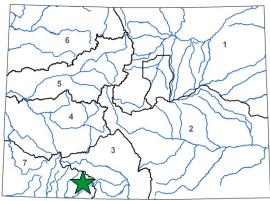




### **Dry Gulch Reservoir Land Acquisition**

San Juan Water Conservancy District
May 2017 Board Meeting

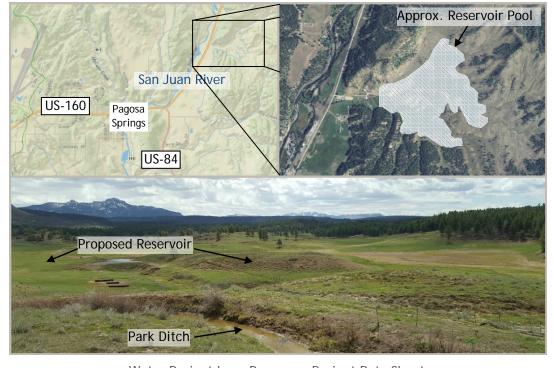
LOAN DET	AILS
Project Cost:	\$2,000,000
CWCB Loan (with Service Fee):	\$2,000,000
Loan Term and Interest Rate:	30 Years @ 2.55%
Funding Source:	Construction Fund
BORROWER	TYPE
Agriculture Municipal	Commercial
0% 100% Low - 0% Mid - 0	0% High 0%
PROJECT DE	ETAILS
Project Type: Water Sto	orage Land Acquisition
Average Annual Delivery:	NA



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.

L	0	С	Α	T	I	0	N
Count	y:					Arc	huleta
Water	⁻ Sour	ce:			Sar	ı Juar	n River
Draina	age B	asin:				Sout	hwest
Divisio	on:	29		Distri	ict:	7	1

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 Loan Program - Project Data Sheet

#### Water Project Construction Loan Program - Project Data

**Borrower:** SECWCD - Enterprise **County**: Pueblo, Crowley, Otero, Bent, Prowers

**Drainage Basin:** Arkansas — Fry-Ark Project

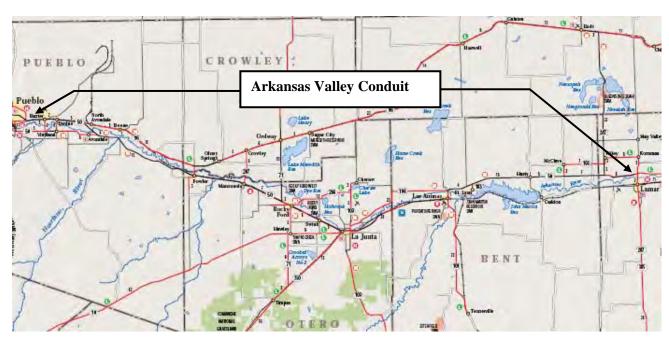
**Total Project Cost:** \$300,000,000 **Funding Sources:** CWCB, Federal

**Type of Borrower:** Municipal/Low **Aver. Delivery:** 6,555 AF (2005 demand)

CWCB Construction Fund Loan: \$60,600,000 Interest Rate: 3.25% Term: 30 years

(incl. 1% loan fee)

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** 



# City Lake Dam Rehabilitation & Enlargement

City of Walsenburg July 2017 Board Meeting

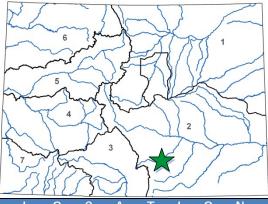
LOAN DETAI	L S
Project Cost:	\$6,821,000
CWCB Loan (with Service Fee):	\$6,889,210
Loan Term and Interest Rate:	30 years @ 2.0%
Funding Source:	Severance Tax
B O R R O W E R T	Y P E
Agriculture Municipal	Commercial
0% 100% Low - 0% Mid - 0% Hig	h 0%
PROJECT DET	AILS
Project Type: Reservo	oir Rehabilitation
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.





L	0	С	Α	T	- 1	0	N
Count	y:					Hue	erfano
Water	Sour	ce:			Cuc	haras	River
Draina	age B	asin:			Ark	ansas	River
Divisio	on:	2		Distr	ict:	1	6





#### **Tunnel and Canal Renovation**

Fruitland Irrigation Company September 2017 Board Meeting

LOAN DETAILS
<i>Project Cost:</i> \$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
1.3
100% 0% Low - 0% Mid -0% High 0%
100% 0% Low - 0% Mid -0% High 0%

6

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.

L O C A T I O N

County: Delta & Montrose

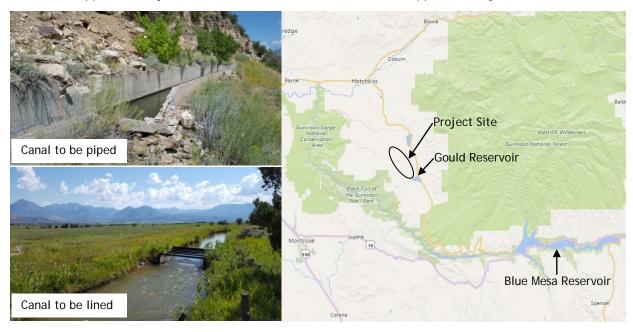
Water Source: Crystal Creek

Drainage Basin: Gunnison

Division: 4 District: 40

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.





### Windy Gap Firming Project

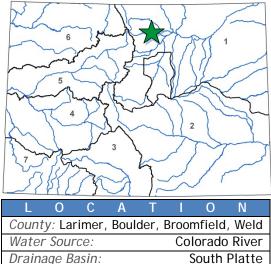
Municipal Subdistrict, Northern Colorado Water Conservancy District Windy Gap Firming Project Water Activity Enterprise

Division:

November 2017 Board Meeting



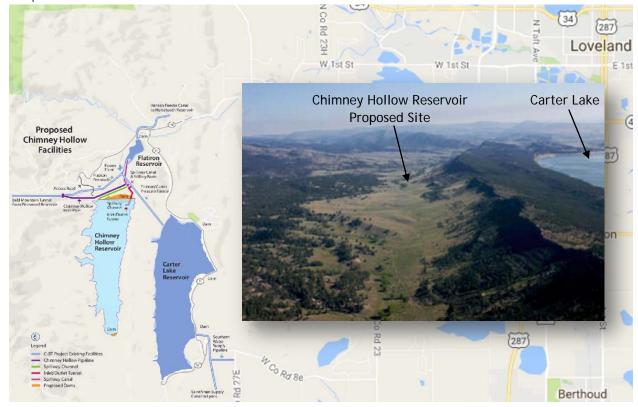
In 1970, six Northern Colorado cities formed the Municipal Subdistrict to plan, finance, and build the Windy Gap project. That project was completed in 1985. The annual delivery of Windy Gap water is not reliable because in dry years the junior water rights may not come into priority, and in wet years,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



District:

2,3,4,5,6

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.

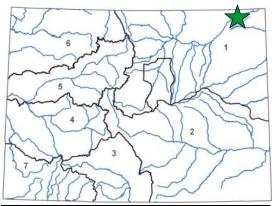




#### **Diversion Structure Rehabilitation**

Julesburg Irrigation District
May 2018 Board Meeting

LOAN DETAI	L S
Project Cost:	\$3,308,000
CWCB Loan (with Service Fee):	\$3,341,080
Loan Term and Interest Rate: 30	Years @ 1.70%
Funding Source: Seve	erance Tax PBF
B O R R O W E R T '	Y P E
Agriculture Municipal	Commercial
98% 1% Low - 0% Mid -0% High	1%
PROJECT DETA	AILS
Project Type: Diversion Structure	Rehabilitation



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.





# Seeley Reservoir Dredging

Ogilvy Irrigating and Land Company
May 2018 Board Meeting

L O	A I	N	D	Е	Τ.	A	I L	. S	
Project Cost:								\$	3,667,740
CWCB Loan (with	ı Sei	vice	e Fee,	):				\$	2,274,520
Loan Term and I	nter	est	Rate:				30 Y	'ear	rs @ 1.70%
Funding Source:	S	evei	rance	Tax	PBF	&	Wat	er F	Plan Grant
B O R	R	0	W	E R		T	Υ	Р	E
Agriculture			Muni	cipal	1			Со	mmercial
95%			5% ľ	Mid					0%
									070
P R O J	Е	С	Т	D	Ε	T	Α	1	L S
PROJ Project Type:	Ε	С	T	D				l Reha	0.0
			T ns:	D					L S

L O C A T I O N

County: Weld

Water Source: Cache La Poudre

District:

South Platte

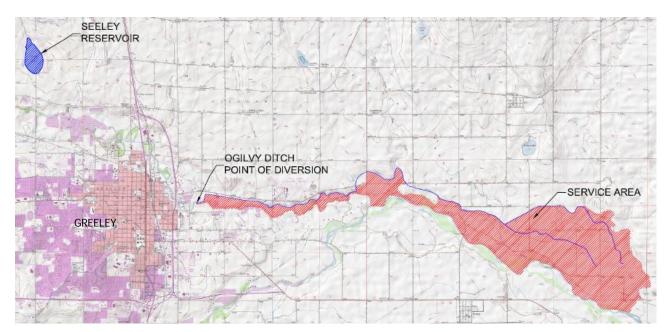
3

Drainage Basin:

Division:

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

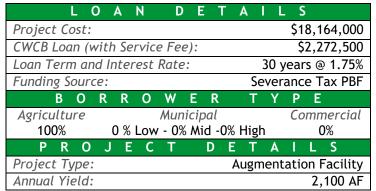
acre-feet. The proposed project will re-establish the physical capacity to this decreed volume. The water stored in the reservoir is used to provide supplemental irrigation supplies to the Ogilvy Ditch service area. Stored water is also used to provide augmentation water for the Ogilvy Augmentation Company, 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.





### Walker Recharge

Central Colorado Water Conservancy District
September 2018 Board Meeting





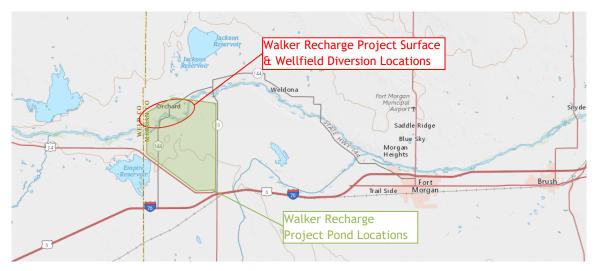
The Central Colorado Water Conservancy District (CCWCD) was formed in 1965 to develop, manage, and protect water resources in northeast Colorado. CCWCD includes approximately 210,000 acres of irrigated agricultural lands. CCWCD has two subdistrict each with its own augmentation plan: The Groundwater

LOCATIONCounty:Weld & MorganWater Source:South Platte RiverDrainage Basin:South PlatteDivision:1District:1

Management Subdistrict (GMS), formed in 1973, and the Well Augmentation Subdistrict (WAS), formed in 2004. CCWCD, GMS, & WAS have partnered together to build and the Walker Recharge Project.

The Walker Recharge Project will be located in Weld and Morgan Counties between the towns of Orchard and Wiggins. CCWCD, GMS, & WAS jointly filed an application for water rights and for approval of plan of augmentation for the Walker Recharge site (Division 1 Water Court Case No. 16CW3202) on December 30, 2016. The court application includes surface water rights for three diversions, groundwater rights for four well fields and one existing well, numerous recharge structures, and a plan for augmentation. The plan for augmentation would allow diversions from the included water rights as well as other water rights owned or otherwise controlled by CCWCD, GMS, or WAS to be delivered to the recharge ponds to generate accretions to the South Platte River.

Construction is expected to generally occur in two phases, each taking three to four years. When finished, recharge credits will be used by GMS and WAS to increase the well pumping quota issued under the respective augmentation plans. CCWCD will use its recharge credits to increase the amount of water leased to GMS, WAS, and other water users within the CCWCD boundaries.

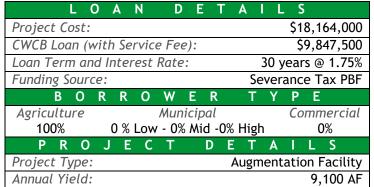


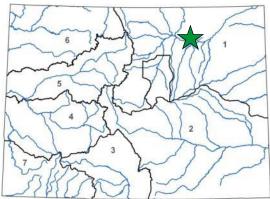


### Walker Recharge

# Groundwater Management Subdistrict of Central Colorado Water Conservancy District

September 2018 Board Meeting





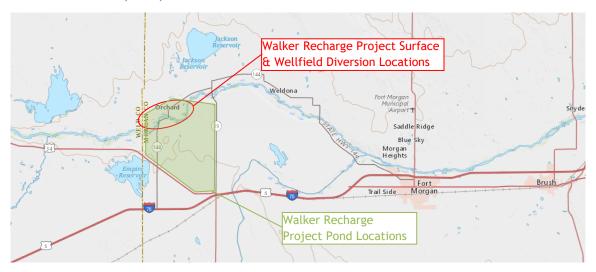
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	L	0	С	Α	Т	- 1	0	N
C	ount	y:				Wel	d & M	Norgan
И	/ater	Sour	ce:		Sc	outh F	Platte	River
D	raina	age Bo	asin:			S	outh	Platte
D	ivisio	on:	1		Distr	ict:	1	

Management Subdistrict (GMS), formed in 1973, and the Well Augmentation Subdistrict (WAS), formed in 2004. CCWCD, GMS, & WAS have partnered together to build and the Walker Recharge Project.

The Walker Recharge Project will be located in Weld and Morgan Counties between the towns of Orchard and Wiggins. CCWCD, GMS, & WAS jointly filed an application for water rights and for approval of plan of augmentation for the Walker Recharge site (Division 1 Water Court Case No. 16CW3202) on December 30, 2016. The court application includes surface water rights for three diversions, groundwater rights for four well fields and one existing well, numerous recharge structures, and a plan for augmentation. The plan for augmentation would allow diversions from the included water rights as well as other water rights owned or otherwise controlled by CCWCD, GMS, or WAS to be delivered to the recharge ponds to generate accretions to the South Platte River.

Construction is expected to generally occur in two phases, each taking three to four years. When finished, recharge credits will be used by GMS and WAS to increase the well pumping quota issued under the respective augmentation plans. CCWCD will use its recharge credits to increase the amount of water leased to GMS, WAS, and other water users within the CCWCD boundaries.





### Walker Recharge

#### Well Augmentation Subdistrict of Central Colorado Water Conservancy District September 2018 Board Meeting

LOA	N DETA	I L S
Project Cost:		\$18,164,000
CWCB Loan (with Se	ervice Fee):	\$3,030,000
Loan Term and Inte	rest Rate:	30 years @ 1.75%
Funding Source:		Severance Tax PBF
BORR	OWER	TYPE
Agriculture	Municipal	Commercial
100% 0 %	6 Low - 0% Mid -0% Hi	igh 0%
PROJE	ECT DE	TAILS
Project Type:	Aug	gmentation Facility
Annual Yield:		2,800 AF

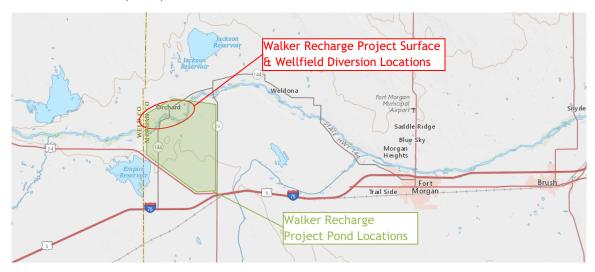
The Central Colorado Water Conservancy District (CCWCD) was formed in 1965 to develop, manage, and protect water resources in northeast Colorado. CCWCD includes approximately 210,000 acres of irrigated agricultural lands. CCWCD has two subdistrict each with its own augmentation plan: The Groundwater

L O C	A T I O N	
County:	Weld & Morga	ın
Water Source:	South Platte Rive	er
Drainage Basin:	South Platt	:e
Division: 1	District: 1	

Management Subdistrict (GMS), formed in 1973, and the Well Augmentation Subdistrict (WAS), formed in 2004. CCWCD, GMS, & WAS have partnered together to build and the Walker Recharge Project.

The Walker Recharge Project will be located in Weld and Morgan Counties between the towns of Orchard and Wiggins. CCWCD, GMS, & WAS jointly filed an application for water rights and for approval of plan of augmentation for the Walker Recharge site (Division 1 Water Court Case No. 16CW3202) on December 30, 2016. The court application includes surface water rights for three diversions, groundwater rights for four well fields and one existing well, numerous recharge structures, and a plan for augmentation. The plan for augmentation would allow diversions from the included water rights as well as other water rights owned or otherwise controlled by CCWCD, GMS, or WAS to be delivered to the recharge ponds to generate accretions to the South Platte River.

Construction is expected to generally occur in two phases, each taking three to four years. When finished, recharge credits will be used by GMS and WAS to increase the well pumping quota issued under the respective augmentation plans. CCWCD will use its recharge credits to increase the amount of water leased to GMS, WAS, and other water users within the CCWCD boundaries.

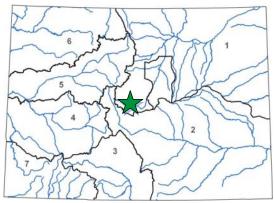




### **Automatic Meter Implementation**

Arabian Acres Metro District September 2018 Board Meeting

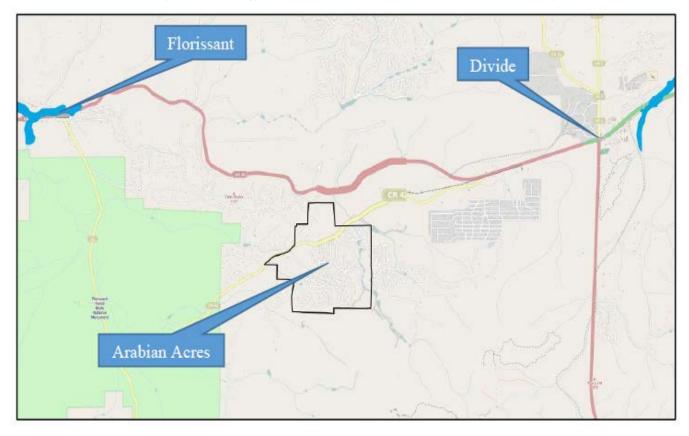
LOAN DETAILS
Project Cost: \$400,000
CWCB Loan (with Service Fee): \$404,000
Loan Term and Interest Rate: 10 Years @ 1.85%
Funding Source: Construction Fund
B O R R O W E R T Y P E
Agriculture Municipal Commercial
0% 100% Low - 0% Mid -0% High 0%
PROJECT DETAILS
Project Type: Water Meter Replacement
Average Annual Diversions: 17 AF



The Arabian Acres Metropolitan District (District) provides potable water service to the Arabian Acres subdivision and Trout Haven Estates in Teller County. The District currently serves 145 residential and 5 commercial taps for a population of approximately 392 people. The District has had trouble providing reliable service with an

L	0	С	Α	Т		0	N
County	<i>':</i>					-	Teller
Water	Sour	ce:			Gr	ound	water
Drainage Basin:				South Platte			
Divisio	n:	1		Distr	ict:	23	3

approximately 40-year-old, poorly constructed distribution system that leaks considerably and lacks adequate flow measurement of potable water delivery. Through this Automatic Meter Implementation (Project) the District intends to install an automatic meter reading (AMR) system, new meter pits, installation hardware, a drive-by meter read base station, and software. This Project will help improve the District's operational efficiency by upgrading its water system. The meters will help accurately measure the amount of water usage and help quantify the system water loss. In addition to the loan, the District is also seeking a DOLA Energy Impact Assistance Fund Grant for 50% of the project cost.



# WATER PROJECT CONSTRUCTION LOAN PROGRAM LOAN REPAYMENT DELINQUENCY REPORT LOAN FINANCIAL ACTIVITY REPORT NOVEMBER 2018

#### LOAN REPAYMENT DELINQUENCY

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

Repayments due for the first four months of Fiscal Year 2019 totaled 119. No loan payments were late during this period. Two Rivers Water Company is on an adjusted approved loan payment plan and is scheduled to be compliant by the end of October 2019.

#### LOAN FINANCIAL ACTIVITY

Loan Financial Activity relative to the Water Project Construction Loan Program and Severance Tax Perpetual Base for Fiscal Year 2019 is summarized as follows: Funds received relative to loans in repayment totaled \$10.8M for this year. Funds disbursed relative to new project loans totaled \$17.6M for this year. Net activity resulted in \$6.8M 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 \$5.5M in receivables and \$0.9M in disbursements for a total net activity of \$4.6 M received over disbursed. The STPBF consists of \$5.4M in receivables and \$16.8M in disbursements for a total net activity of \$11.4M disbursed over received.

#### **COLORADO WATER CONSERVATION BOARD**

#### FINANCIAL ACTIVITY REPORT FOR FISCAL YEAR 2019

#### **CONSTRUCTION FUND**

Period	Principal	Interest	Total	Disbursements	Net Activity
July 2018	\$519,412	\$91,022	\$610,435	\$-	\$610,435
August 2018	\$1,991,498	\$219,422	\$2,210,919	\$327,219	\$1,883,700
September 2018	\$605,071	\$1,233,446	\$1,838,517	\$132,471	\$1,706,047
October 2018	\$528,453	\$284,876	\$813,329	\$439,324	\$374,005
November 2018	\$-	\$-	\$-	\$-	\$-
December 2018	\$-	\$-	\$-	\$-	\$-
January 2019	\$-	\$-	\$-	\$-	\$-
February 2019	\$-	\$-	\$-	\$-	\$-
March 2019	\$-	\$-	\$-	\$-	\$-
April 2019	\$-	\$-	\$-	\$-	\$-
May 2019	\$-	\$-	\$-	\$-	\$-
June 2019	\$-	\$-	\$-	\$-	\$-
FY 2019 Totals	\$3,644,434	\$1,828,766	\$5,473,200	\$899,014	\$4,574,186

#### SEVERANCE TAX TRUST FUND PERPETUAL BASE ACCOUNT

Period	Principal	Interest	Total	Disbursements	Net Activity
July 2018	\$14,077	\$10,745	\$24,822	\$3,032,872	\$(3,008,050)
August 2018	\$3,084,903	\$883,026	\$3,967,929	\$5,601,106	\$(1,633,177)
September 2018	\$93,782	\$22,836	\$116,618	\$4,013,995	\$(3,897,377)
October 2018	\$638,829	\$627,556	\$1,266,385	\$4,109,500	\$(2,843,115)
November 2018	\$-	\$-	\$-	\$-	\$-
December 2018	\$-	\$-	\$-	\$-	\$-
January 2019	\$-	\$-	\$-	\$-	\$-
February 2019	\$-	\$-	\$-	\$-	\$-
March 2019	\$-	\$-	\$-	\$-	\$-
April 2019	\$-	\$-	\$-	\$-	\$-
May 2019	\$-	\$-	\$-	\$-	\$-
June 2019	\$-	\$-	\$-	\$-	\$-
FY 2019 Totals	\$3,831,590	\$1,544,163	\$5,375,753	\$16,757,473	\$(11,381,720)
			_	_	
GRAND TOTALS	\$7,476,024	\$3,372,929	\$10,848,953	\$17,656,487	\$(6,807,534)
GRAND TOTALS	\$7,470,024	35,572,929	\$10,048,953	\$17,030,487	(۵,۵۵/,۵34)