



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

January 7, 2019

Members of the 2019 Colorado General Assembly

Re: Small Project Loans Approved in 2018
Construction Fund and Severance Tax Perpetual Base Fund

Pursuant to C.R.S. § 37-60-122(b), the Colorado Water Conservation Board (CWCB) is submitting the attached written determination of the basis for all loans under \$10,000,000 authorized during the 2018 calendar year. The report will be presented to the CWCB at the January 28, 2019 Board meeting.

The report will be posted on the web at www.leg.colorado.gov and on the CWCB website www.cwcb.state.co.us. A copy of the report has been submitted to the Legislative Library, Room 029 of the State Capitol Building. Paper copies of the Report can be made available upon request.

If you have questions or need additional copies of the report, please contact Mr. Doug Vilsack, Legislative Liaison, at 303-866-3311 x8664.

Sincerely,

Rebecca Mitchell, Director
Colorado Water Conservation Board



PREFACE

Pursuant to Section 37-60-122(b) of the C.R.S. the Colorado Water Conservation Board (CWCB) is required to submit a report by January 15th of each year to the Colorado General Assembly describing the basis of all Construction Fund and Severance Tax Perpetual Base Fund loans authorized by the CWCB under \$10,000,000. This report fulfills the CWCB reporting obligations for those “Small Project” loans for Calendar Year 2018.

The report includes a summary spreadsheet identifying each loan approval date, the project sponsor or borrower, the project name, the loan amount, and the name of the County and River Basin where the project is located. There were 12 new loan projects under \$10,000,000 approved by the CWCB in Calendar Year 2018. The total loan value is approximately \$14.9 million.

Included in the report is a loan project Data Sheet for each new loan project. The Data Sheet includes a project description, project location map, and other pertinent loan and project information.

January 7, 2019

**Colorado Water Conservation Board
Small Project Loans
For Calendar Year 2018**

	Date Approved	Borrower	Project	Amount Approved	Funding Source*	County	Basin
1	01/22/18	Central Colorado Water Conservancy District	Shores Lakes Pond C Infrastructure Improvement	\$ 2,367,440	CF	Weld	South Platte
2	01/22/18	Bessemer Irrigating Ditch Company	Bessemer Ditch Landslide Stabilization and Ditch Lining	\$ 909,000	CF	Pueblo	Arkansas River
3	01/22/18	Lupton Bottom Ditch Company	Lupton Bottom Diversion Structure Repair	\$ 606,000	CF	Weld	South Platte
4	01/22/18	Colorado Parks and Wildlife	Chatfield Reallocation Project	\$ 1,796,120	CF	Douglas	South Platte
5	03/21/18	Trinchera Irrigation Company	Dam Outlet Rehabilitation Phase III	\$ 440,360	ST	Costilla	Rio Grande
6	05/23/18	Julesburg Irrigation District	Diversion Structure Replacement	\$ 3,341,080	ST	Sedgwick	South Platte
7	05/23/18	Ogilvy Irrigating and Land Company	Seeley Reservoir Dredging	\$ 2,274,520	ST	Weld	South Platte
8	05/23/18	San Luis Valley Canal Company	San Luis Valley Canal Headgate Construction	\$ 303,000	ST	Rio Grande	Rio Grande
9	07/18/18	Chicott Ditch Company	Chilcott Augmentation Station	\$ 505,000	CF	El Paso	Arkansas River
10	07/18/18	Missouri Heights Mountain Meadow Irrigation Company	Ditch Piping Phase B Project	\$ 404,000	CF	Garfield	Colorado River
11	07/18/18	Roxborough Water and Sanitation District	Ravenna Development Interconnect Project	\$ 1,584,690	CF	Douglas	South Platte
12	09/20/18	Arabian Acres Metropolitan District	Automatic Meter Implementation	\$ 404,000	CF	Teller	South Platte

Total Amount Approved in 2018

\$ 14,935,210

*Indicates whether the funding source is from Construction Fund (CF) or Severance Tax Fund (ST)



LOAN DETAILS

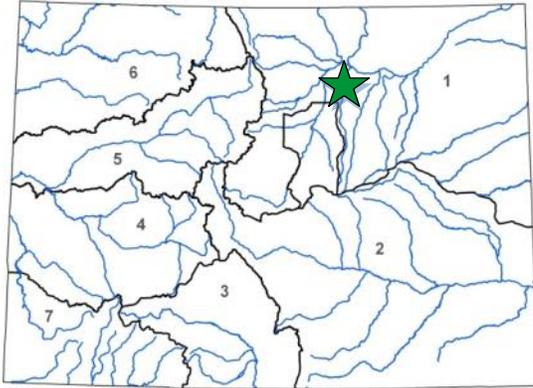
Project Cost:	\$3,430,000
CWCB Loan (with Service Fee):	\$2,367,440
Loan Term and Interest Rate:	30 years @ 1.65%
Funding Source:	Construction Fund

BORROWER TYPE

Agriculture	Municipal	Commercial
100%	0 % Low - 0% Mid -0% High	0%

PROJECT DETAILS

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

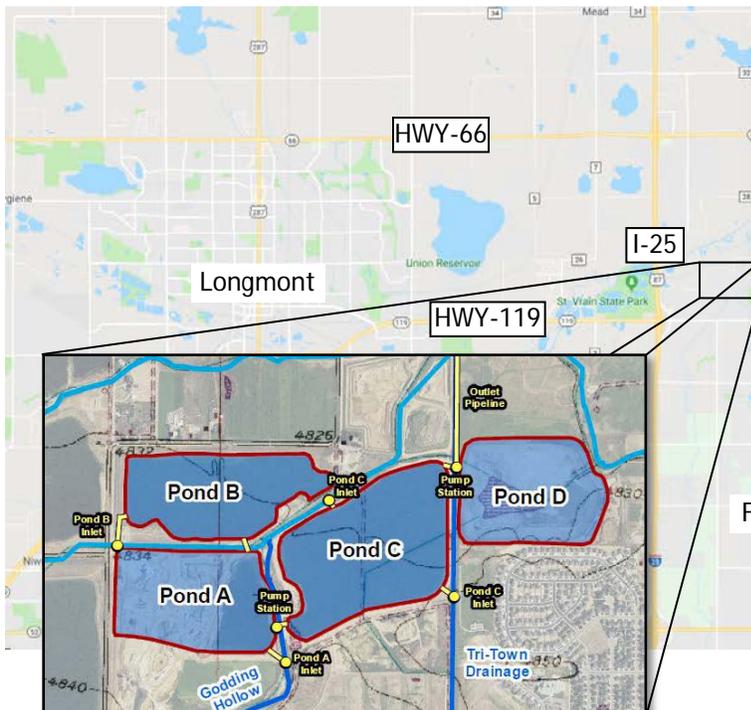


LOCATION

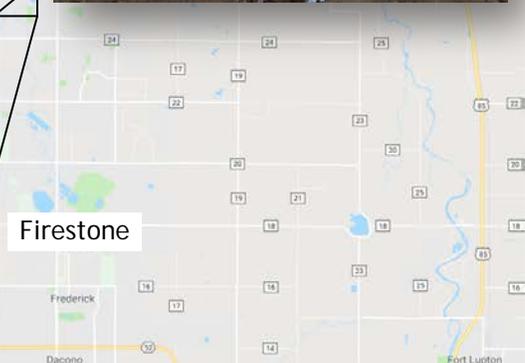
County:	Weld
Water Source:	South Platte River
Drainage Basin:	South Platte
Division:	1 District: 2

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

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



Pond C Temporary Outlet

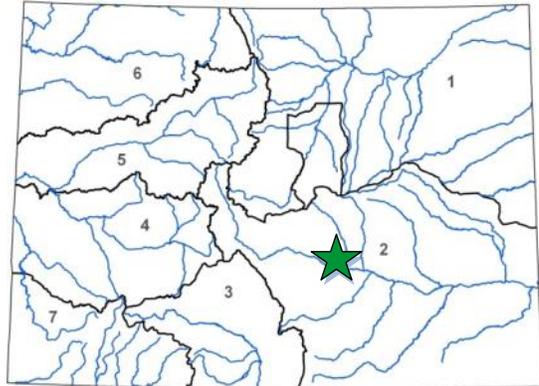




Landslide Stabilization and Ditch Lining Project

Bessemer Irrigation Ditch Company
 January 2018 Board Meeting

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



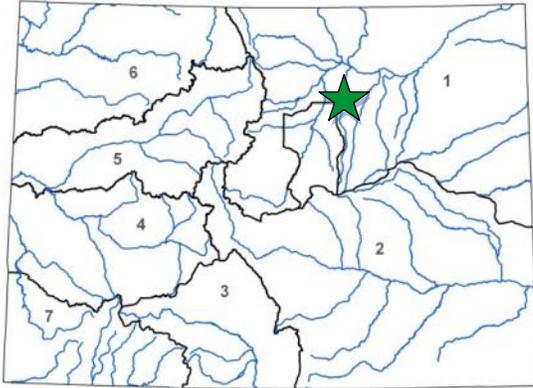
The Bessemer Ditch Company was incorporated in 1888 and construction of the ditch began in 1889. It serves nearly 20,000 irrigated acres in Pueblo County and provides water for municipal use. In the summer of 2017, land along limestone bluffs, approximately 2 miles east of Pueblo Dam, started sliding away from the Bessemer Ditch canal. The landslide area is approximately 200 feet wide. Stabilization and corrective work will occur in two 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.

L O C A T I O N	
County:	Pueblo
Water Source:	Arkansas River
Drainage Basin:	Arkansas
Division:	2
District:	14





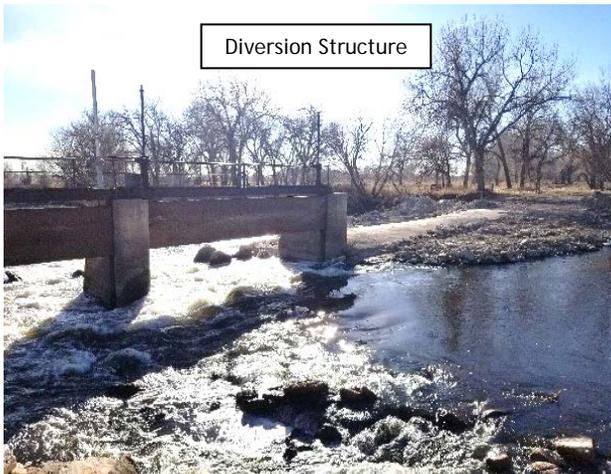
L O A N D E T A I L S	
Project Cost:	\$676,000
CWCB Loan (with Service Fee):	\$606,000
Loan Term and Interest Rate:	10 years @ 1.6%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
47.2%	0 % Low - 46.4% Mid -0% High
	Commercial
	6.4%
P R O J E C T D E T A I L S	
Project Type:	Diversion Structure Rehabilitation
Average Annual Diversions:	19,097 AF



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

The Lupton Bottom Ditch Company diverts water from the South Platte River near Wattenberg in Weld County. The existing check dam was built in 1949 and the gates were replaced in 2001. Damage to the structure began when high river flows overtopped the rock dam and scoured a large hole on the downstream side and subsequently extended that scour into the structure.

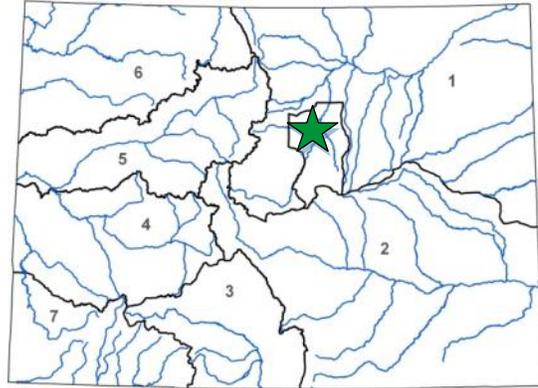
The structure was initially damaged during the September 2013 flooding and further damaged in subsequent high river flows. The proposed repair work will be completed in a two-stage process due to the requirement for construction to occur during low flow conditions within the river. During the first stage, stabilization and installation of upstream sheet piling followed by construction of a concrete apron is planned. The downstream side of the structure will be stabilized with grouted boulders. The second stage includes rebuilding the rock dam. Construction is scheduled for Winter/Spring of 2018.





(Loan Increase)

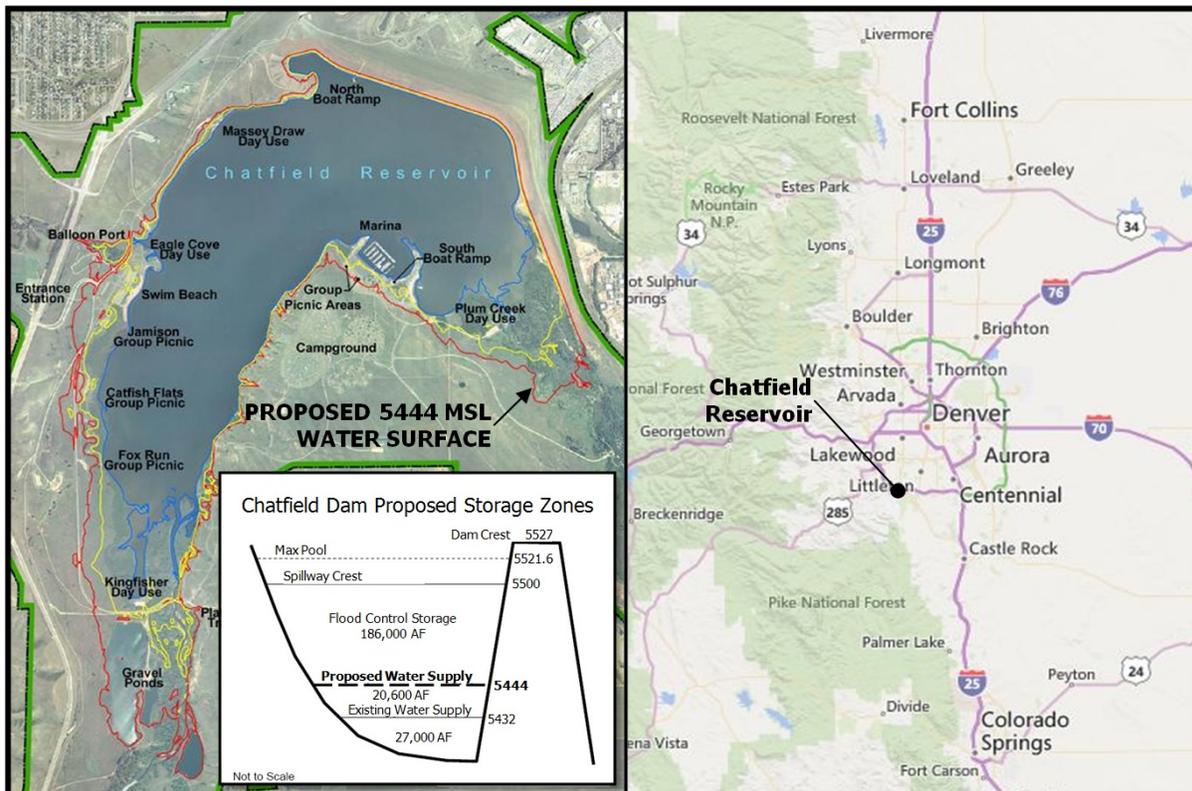
L O A N D E T A I L S	
Project Cost:	\$8,000,970
CWCB Loan:	\$8,000,970
Loan Term and Interest Rate:	30 years @ 0%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
State Government - DNR Agency	
P R O J E C T D E T A I L S	
Project Type:	Reservoir Storage
New Storage:	1,000 AF



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

Colorado Parks and Wildlife (CPW) is working cooperatively with CWCB to arrange for financing related to the Chatfield Reallocation Project. CPW purchased 1,000 AF of Project storage space CWCB was holding within a larger "orphan share" pool.

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. CPW and CWCB signed an Interagency Agreement (IAA) in 2015 for a loan amount of \$6,504,850 based on the October 2015 estimated Project cost. This increase will be executed through a new IAA in the amount of \$1,796,120.





COLORADO

Colorado Water Conservation Board
Department of Natural Resources

Mountain Home Dam Outlet Rehabilitation Phase III

Trinchera Irrigation Company

March 2018 Board Meeting

LOAN DETAILS

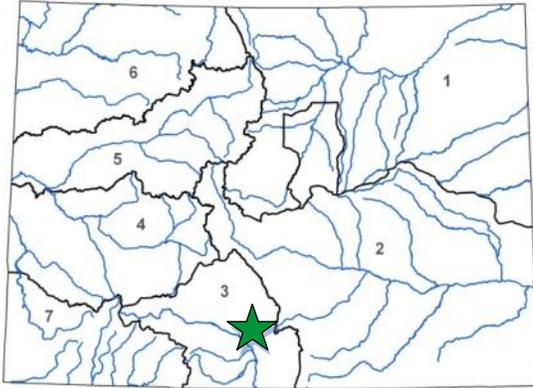
Project Cost:	\$987,000
CWCB Loan (with Service Fee):	\$440,360
Loan Term and Interest Rate:	30 years @ 1.65%
Funding Source:	Severance Tax PBF & WRSF

BORROWER TYPE

Agriculture	Municipal	Commercial
100%	0% Low - 0% Mid - 0% High	0%

PROJECT DETAILS

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



LOCATION

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

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

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



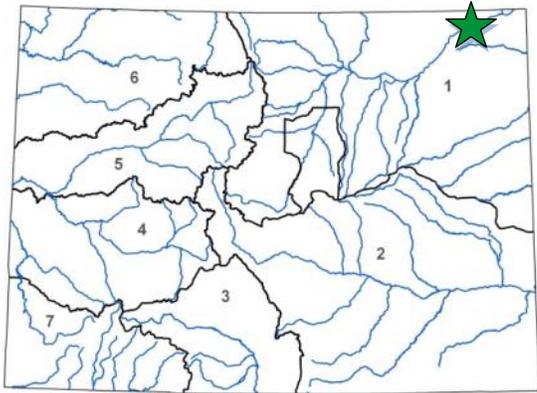
Leakage from Outlet Valves



Mountain Home Res (Project Site)

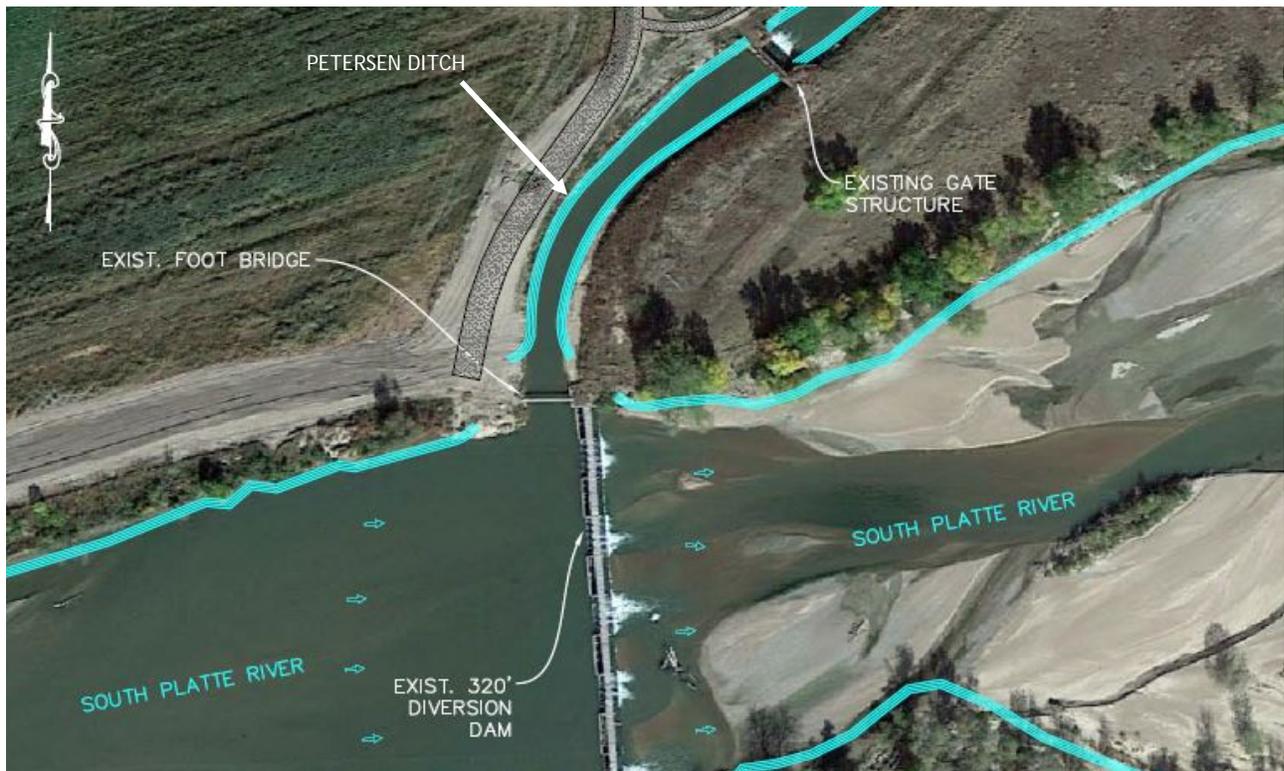


L O A N D E T A I L S	
Project Cost:	\$3,308,000
CWCB Loan (with Service Fee):	\$3,341,080
Loan Term and Interest Rate:	30 Years @ 1.70%
Funding Source:	Severance Tax PBF
B O R R O W E R T Y P E	
Agriculture	Municipal
98%	1% Low - 0% Mid - 0% High
	Commercial
	1%
P R O J E C T D E T A I L S	
Project Type:	Diversion Structure Rehabilitation
Average Annual Diversions:	54,421 AF



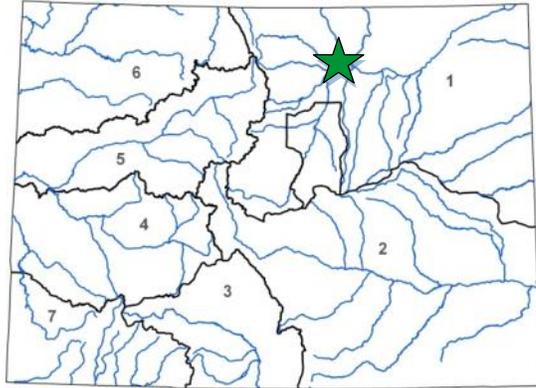
L O C A T I O N	
County:	Sedgwick
Water Source:	South Platte
Drainage Basin:	South Platte
Division:	1 District: 64

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



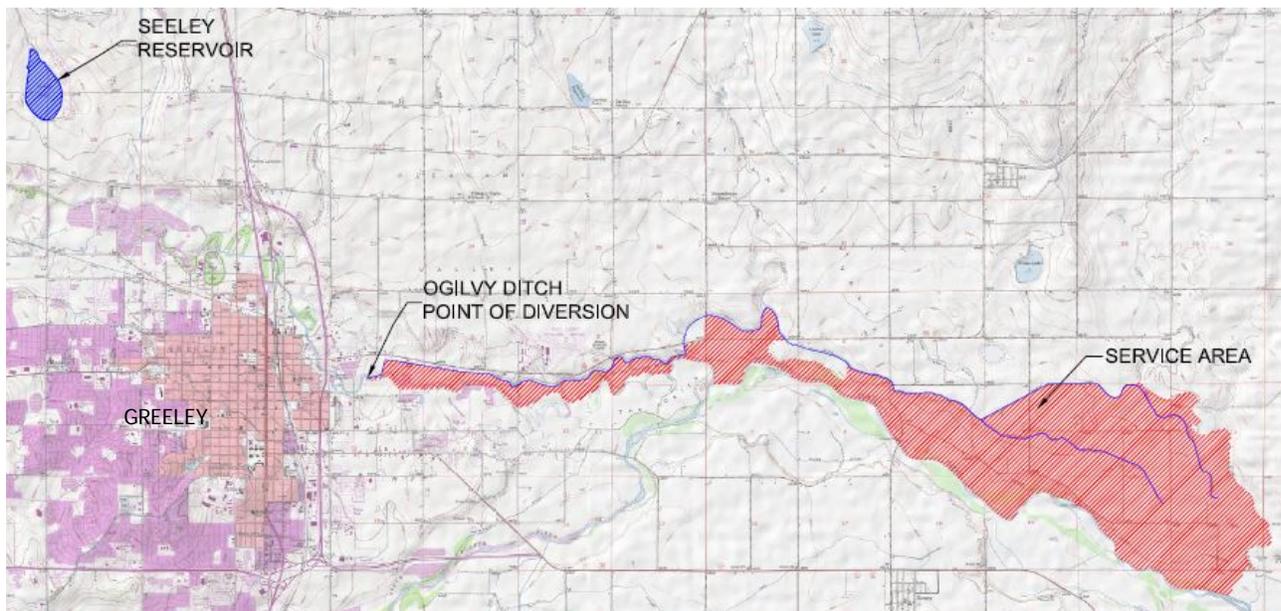


L O A N D E T A I L S		
Project Cost:	\$3,667,740	
CWCB Loan (with Service Fee):	\$2,274,520	
Loan Term and Interest Rate:	30 Years @ 1.70%	
Funding Source:	Severance Tax PBF & Water Plan Grant	
B O R R O W E R T Y P E		
Agriculture	Municipal	Commercial
95%	5% Mid	0%
P R O J E C T D E T A I L S		
Project Type:	Reservoir Rehabilitation	
Average Annual Diversions:	14,778 AF	
Recovered Storage:	356 AF	



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

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



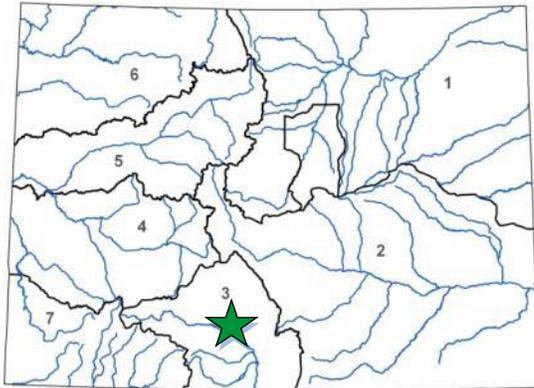


San Luis Valley Canal Headgate Construction

San Luis Valley Canal Company

May 2018 Board Meeting

L O A N D E T A I L S		
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	
B O R R O W E R T Y P E		
Agriculture	Municipal	Commercial
100%	0%	0%
P R O J E C T D E T A I L S		
Project Type:	Headgate Replacement	
Average Annual Diversions:	24,000 AF	



L O C A T I O N	
County:	Rio Grande
Water Source:	Rio Grande
Drainage Basin:	Rio Grande
Division:	3 District: 20

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

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

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



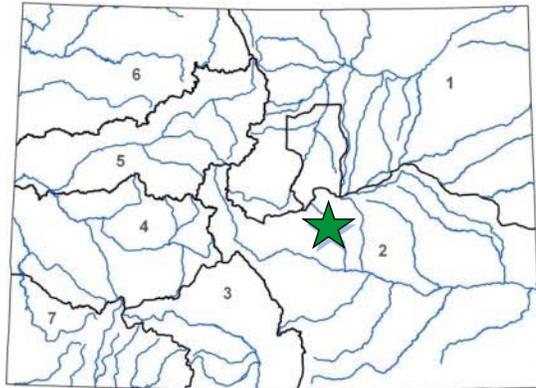
San Luis Valley Canal Headgate



Rio Grande Headwaters
Restoration Project

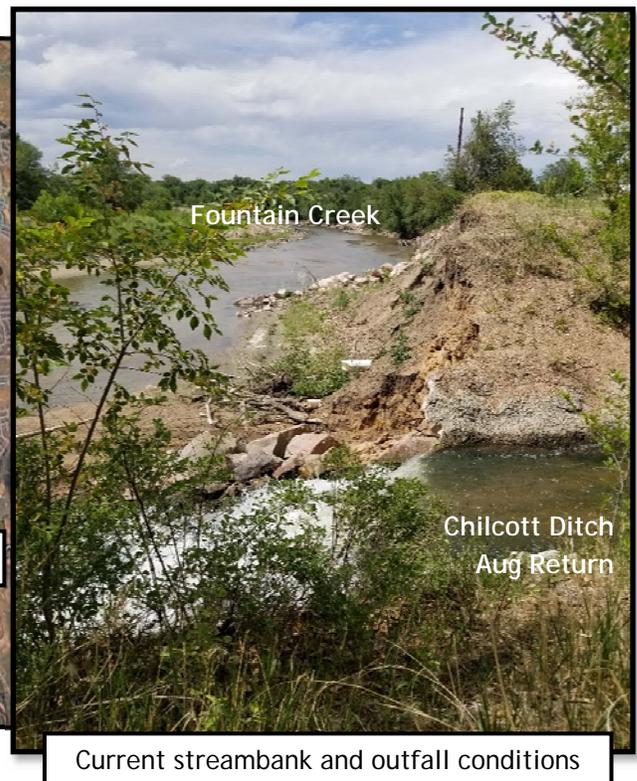
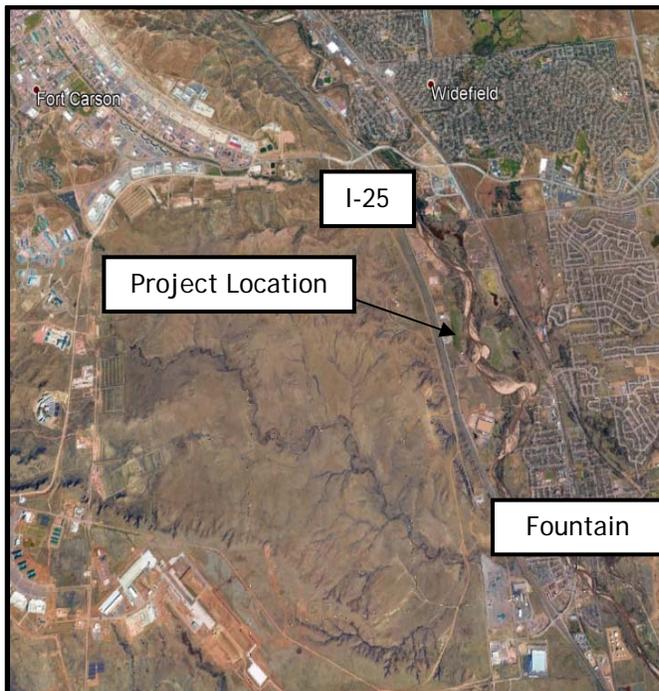


L O A N D E T A I L S	
Project Cost:	\$500,000
CWCB Loan (with Service Fee):	\$505,000
Loan Term and Interest Rate:	20 Years @ 2.55%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
0%	0% Low - 100% Mid -0% High
Commercial	0%
P R O J E C T D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	4,961 AF



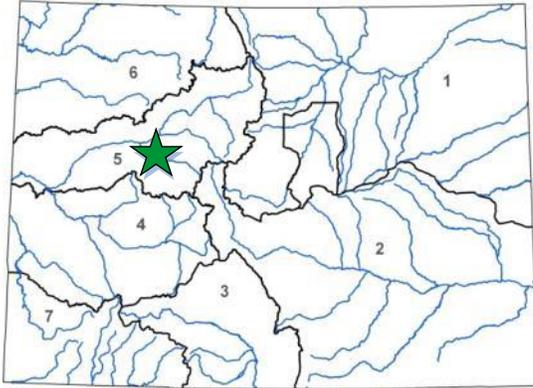
L O C A T I O N	
County:	El Paso
Water Source:	Fountain Creek
Drainage Basin:	Arkansas
Division:	2
District:	10

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



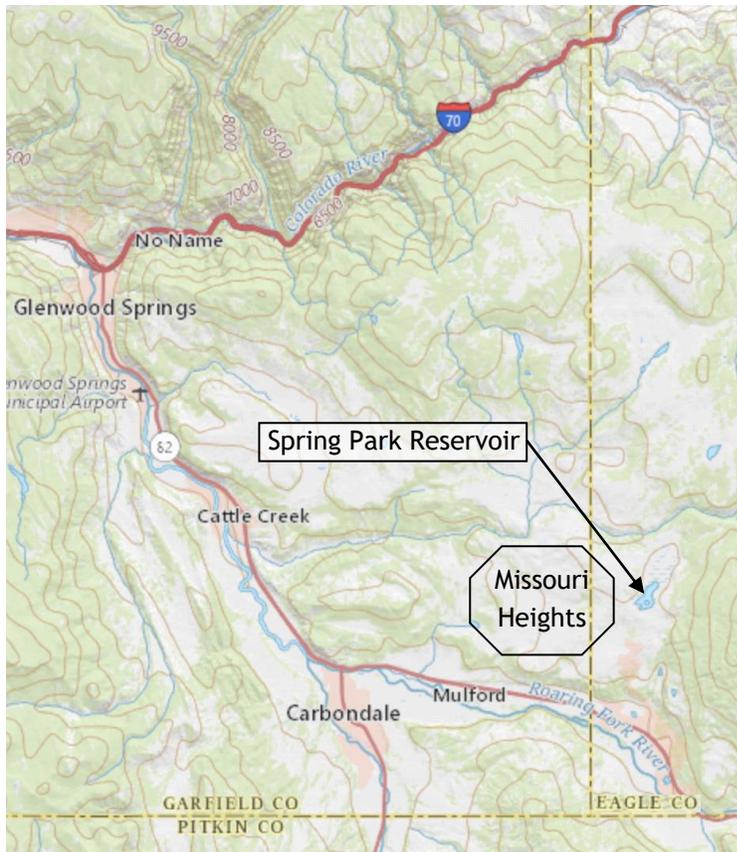


L O A N D E T A I L S	
Project Cost:	\$400,000
CWCB Loan (with Service Fee):	\$404,000
Loan Term and Interest Rate:	30 Years @ 2.05%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
78%	0% Low - 0% Mid -22% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	5,500 AF



L O C A T I O N	
County:	Garfield
Water Source:	Cattle Creek
Drainage Basin:	Colorado
Division:	5
District:	38

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



Existing Lined Ditch Section



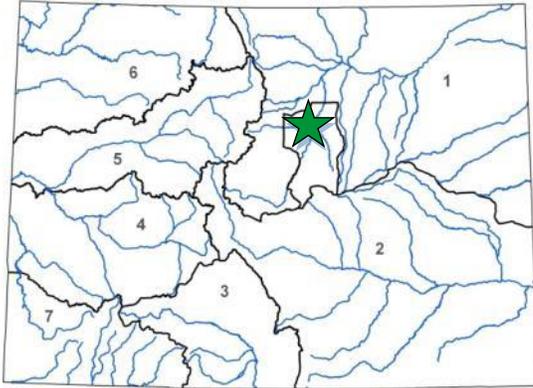
Existing Piped Ditch Section



Ditch Section To Be Piped



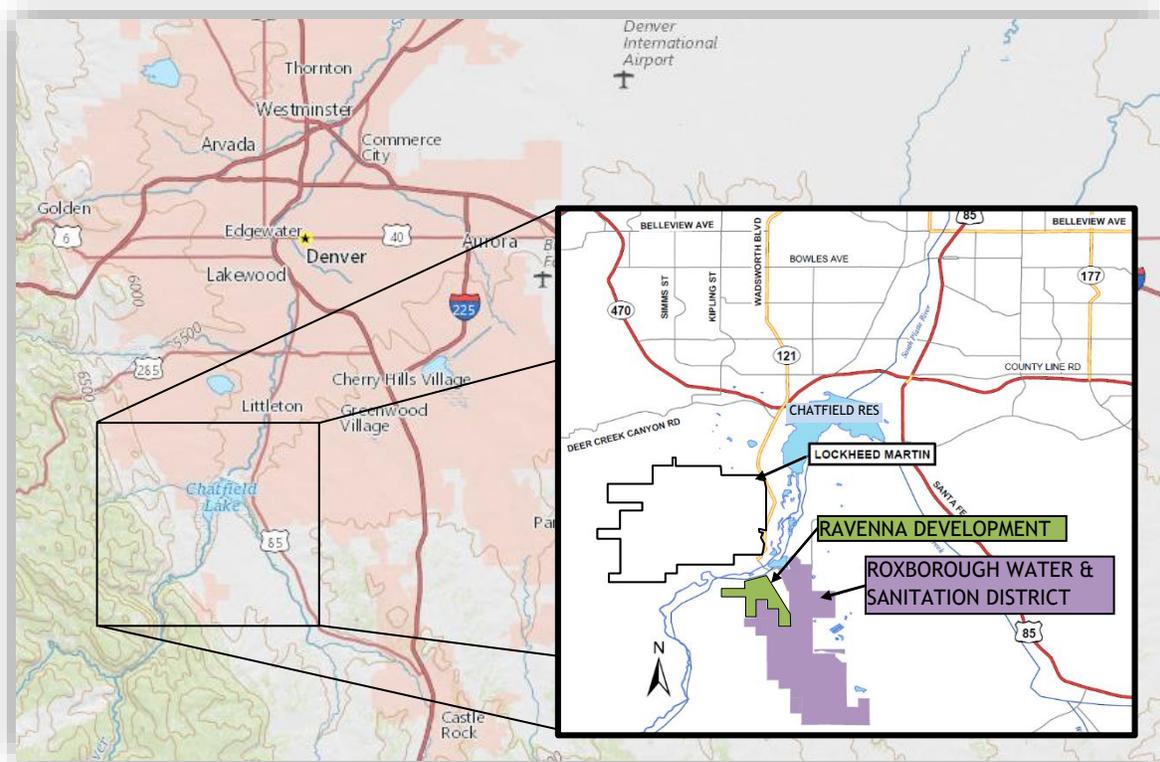
L O A N D E T A I L S		
Project Cost:	\$1,763,750	
CWCB Loan (with Service Fee):	\$1,584,690	
Loan Term and Interest Rate:	30 Years @ 3.15%	
Funding Source:	TBD	
B O R R O W E R T Y P E		
Agriculture	Municipal	Commercial
0%	0% Low - 0% Mid - 100% High	0%
P R O J E C T D E T A I L S		
Project Type:	Municipal Water Supply System New	
Average Annual Diversions:	1,200 AF	



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

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

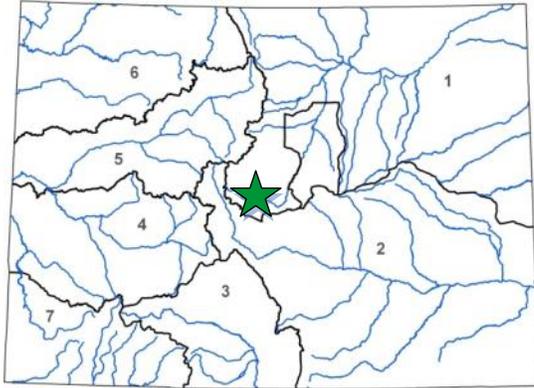
In summer of 2017, the District installed a single emergency interconnect with Ravenna and has been the sole source of potable water for Ravenna since. The inclusion agreement requires that in addition to the emergency interconnect, two additional interconnects between the District and Ravenna be constructed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



Water Project Loan Program - Project Data Sheet



L O A N D E T A I L S	
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
0%	100% Low - 0% Mid - 0% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Water Meter Replacement
Average Annual Diversions:	17 AF



L O C A T I O N	
County:	Teller
Water Source:	Groundwater
Drainage Basin:	South Platte
Division:	1 District: 23

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 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.

