

Colorado Water Conservation Board

CONSTRUCTION FUND
AND
SEVERANCE TAX TRUST FUND
PERPETUAL BASE ACCOUNT

SMALL PROJECT LOAN REPORT



Colorado Water Conservation Board
Department of Natural Resources

2006

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 for all Construction Fund and Severance Tax Trust Fund Perpetual Base Account loans authorized by the CWCB under \$5,000,000. This report fulfills the CWCB reporting obligations for those small project loans for calendar year 2006.

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 11 loan projects under \$5 million approved by the CWCB in calendar year 2006. The Board also approved loan amount increases to 5 previously approved projects. The total loan value of the 16 projects was over \$10,000,000

Also included in the report is a loan project data sheet for each project that includes a project description, project location map, and other pertinent loan and project information.

**Colorado Water Conservation Board
Small Project Loans - Severance Tax Trust Fund Perpetual Base Account
For Calendar Year 2006**

Item	Date Approved	Sponsor	Project	Amount Approved	County	Basin
1	03/21/06	Abbott Ranch	Abbott Ranch Well Replacement Project	\$ 49,440	Elbert	South Platte
2	03/21/06	Orchard Mesa Irrigation District	Stokes Gulch Siphon Replacement Project	\$ 545,400	Mesa	Colorado River
3	05/16/06	Logan Irrigation District	Prewitt Reservoir Emergency Spillway Construction	\$ 306,419	Logan, Morgan & Washington	South Platte
4	05/16/06	Riverside Irrigation District	Water Rights Purchase	\$ 1,464,500	Morgan & Weld	South Platte
5	11/13/06	Tom Hill	McElroy Dam Rehabilitation Project	\$ 862,540	Grand	Colorado River
6	11/13/06	Headgate 396 Lateral Corporation	Ditch Pipeline Project	\$ 232,300	Mesa	Colorado River
7	11/13/06	Platte Valley Irrigation Company	Platte Valley Reservoir No. 1 Construction	\$ 2,388,650	Weld	South Platte
8	09/19/06	Logan Irrigation District	Increase to Prewitt Reservoir Emergency Spillway Construction	\$ 198,581	Logan, Morgan & Washington	South Platte
9	01/25/06	Mancos Valley Beaver Ditch Company	Increase to Beaver Ditch Pipeline Project	\$ 496,668	Montezuma	Dolores & San Juan
10	09/19/06	Beaver Reservoir Company	Increase to Beaver Reservoir Liner Protection & Valve Replace	\$ 25,250	Gunnison	Gunnison
11	07/25/06	North Poudre Irrigation Company	Increase to Miner's Lake Reservoir #1 Rehabilitation	\$ 121,200	Larimer	South Platte

Total Small Project Loans Approved in 2006 From Severance Tax

\$ 6,690,948

Colorado Water Conservation Board
Small Project Loans - Construction Fund
For Calendar Year 2006

Item	Date Approved	Sponsor	Project	Amount Approved	County	Basin
1	01/25/06	Hope Ditch Company	Hope Ditch Well Replacement Project	\$ 154,530	Adams	South Platte
2	03/21/06	Keenesburg, Town of	Keenesburg Raw Water Pipeline Project	\$ 1,523,080	Weld	South Platte
3	07/25/06	Lincoln Park Crooked Ditch Company	Crooked Ditch Rehabilitation	\$ 1,818,000	Fremont	Arkansas
4	11/13/06	Lazy O Ranch Homeowners Association	Lazy O Secondary Water System	\$ 152,258	Pitkin	Colorado River
5	11/13/06	Orphans Wells of Wiggins, LLC	Increase to Orphans Recharge and Augmentation Project	\$ 202,000	Morgan	South Platte

Total Small Project Loans Approved in 2006 From Construction Fund

\$ 3,849,868

Water Project Construction Loan Program - Project Data

Borrower: Abbot Ranch

County: Elbert

Project Name: Well Replacement Project

Project Type: Well Replacement

Drainage Basin: South Platte

Water Source: Alluvial Well – Kiowa-Bijou

Total Project Cost: \$54,388

Funding Sources: CWCB, Abbott Ranch

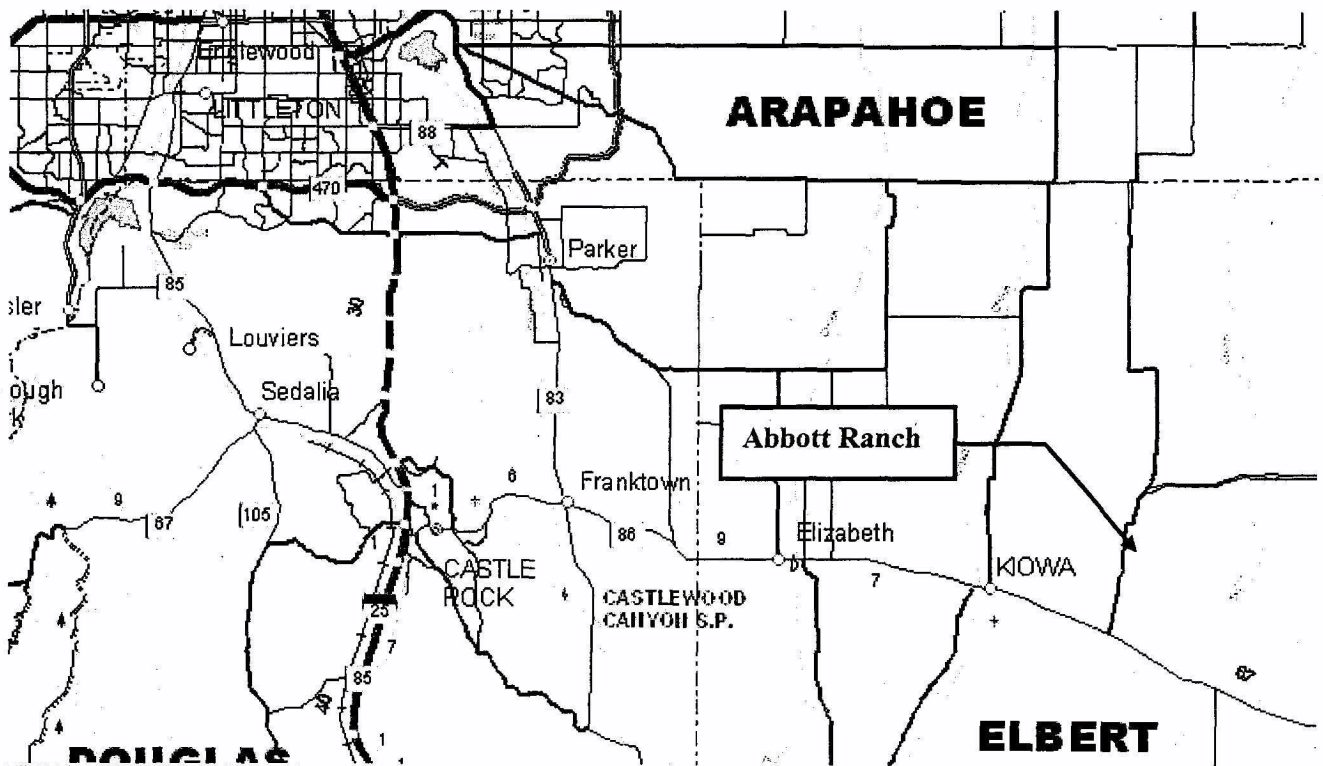
Type of Borrower: Agricultural

Aver. Delivery: 400 acre-feet

CWCB Construction Fund Loan: \$49,440
(incl. 1% loan fee)

Interest Rate: 2.00% **Term:** 10 years

The Abbott Ranch is located in Elbert County, approximately 10 miles northeast of the Town of Kiowa. It consists of 1727 acres, of which 150 acres are irrigated, and the remainder is in dry-land pasture. The Ranch relies on two main revenue streams, cattle sales and hay sales. Currently, the Ranch produces 300 tons of hay on the 150 acres, with 70% being available for sale as horse hay. For irrigation, the Ranch uses one alluvial well that is 80 feet deep, in the Bijou Creek alluvium of the Kiowa-Bijou Designated Basin. There is a one half-pivot (lower 70 acres) west of Comanche Creek, and one whole pivot (upper 80 acres) east of the Creek. The existing well feeds the lower center half-pivot first and then feeds the upper whole pivot by an interconnecting pipeline. The well permit allows an annual withdrawal of 400 AF at 700 gpm. Historically, the well pumped at 700 gpm which produced 6 tons per acre or a total of 900 tons. Due to deterioration of the casing pipe, the well can only pump 250 gpm, and production has been reduced to 2 tons/acre, or a total of 300 tons annually. The proposed project will include drilling the 80-foot replacement well with 16" casing (40' steel and 40' stainless steel), using the re-built pump from the existing well, and connecting the replacement well to the existing system with 250 lf of new 6" PVC-piping. In addition, the Ranch has incurred costs of \$12,678 in well-related expenses which will be included.



Location Map

CWCB Construction Loan Program Project Data Sheet

Borrower: Orchard Mesa Irrigation District

County: Mesa

Project Name: Stokes Gulch Siphon Replacemnt

Project Type: Ditch Rehabilitation

Drainage Basin: Colorado

Water Source: Colorado River

Total Project Cost: \$600,000

Funding Sources: District, CWCB

Type of Borrower: Agricultural

Average Delivery: 58,323 acre-feet

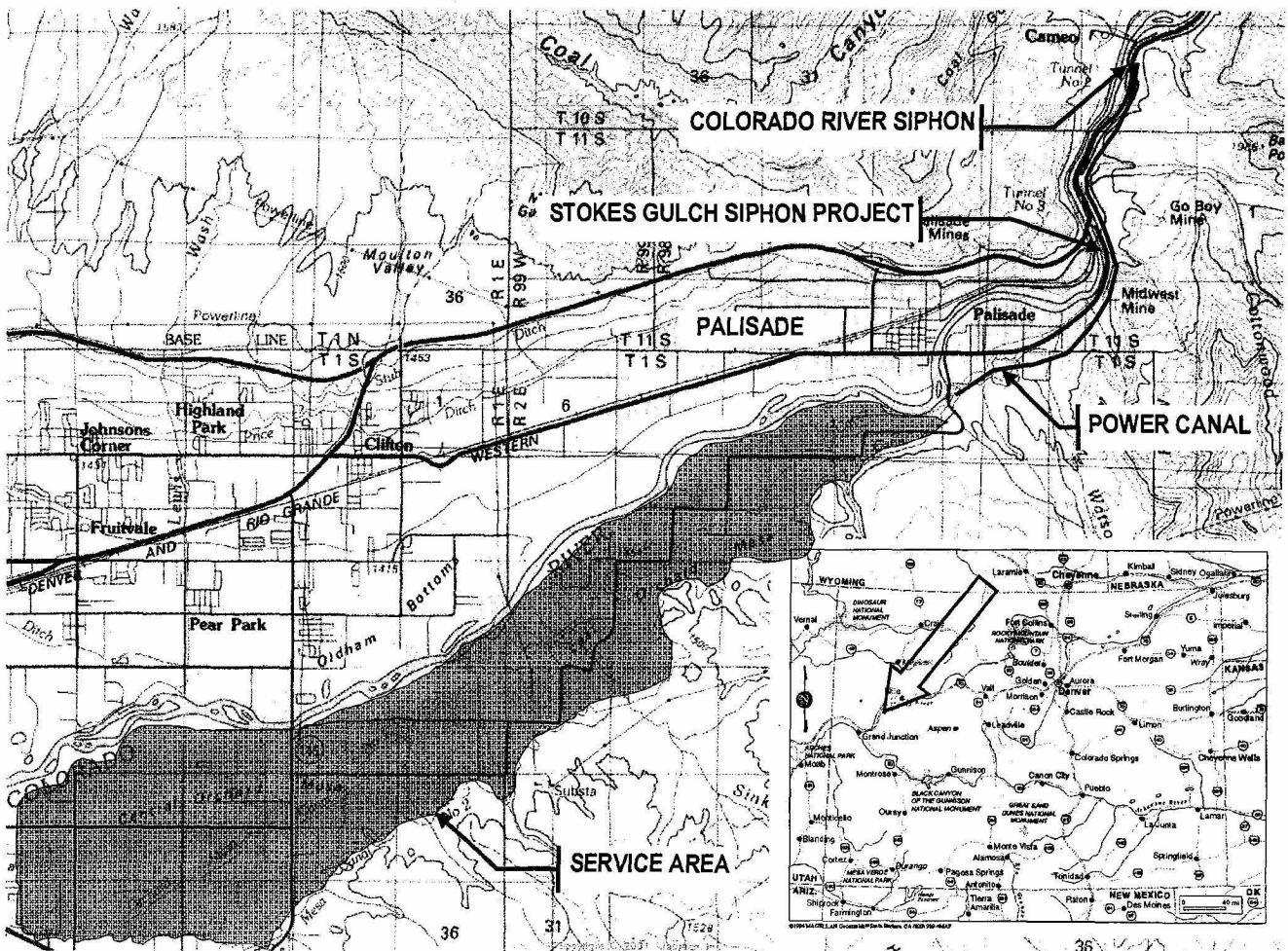
Loan: \$545,400

Study Grant: \$15,000

Interest Rate: 2.5%

Term: 30 years

The District was organized in 1904 and became a part of the Federal Grand Valley Project in 1922 and operates under the 1921 Irrigation Act. The District is located in Mesa County near the town of Palisade along the Colorado River. The Stokes Gulch Siphon was constructed in the 1920's and is in need of repair. The Siphon and Power Canal are owned and operated by the District for the conveyance of water for power generation and irrigation. The Siphon is located two miles east of Palisade along US 6. The Project will replace the existing siphon and is expected to cost \$600,000 and construction is scheduled for the winter of 2006. The Siphon was constructed in the 1920's and is in need of repair. In 2005, with the assistance of a Loan Feasibility Study Grant of \$15,000, the District evaluated repair and replacement options for the Siphon.



LOCATION MAP

Water Project Construction Loan Program - Project Data

Borrower: Logan Irrigation District (LID)

County: Logan, Morgan & Washington

Project Name: Prewitt Reservoir

Project Type: New Emergency Spillway

Drainage Basin: South Platte

Water Source: South Platte River

Total Project Cost: \$337,095

Funding Sources: CWCB, LID

Type of Borrower: Agricultural/Municipal

Aver. Delivery: 9,614 AF (LID)

CWCB STTFPBA Fund Loan: \$306,419
(incl. 1% loan fee)

Interest Rate: 2.35% **Term:** 20 years

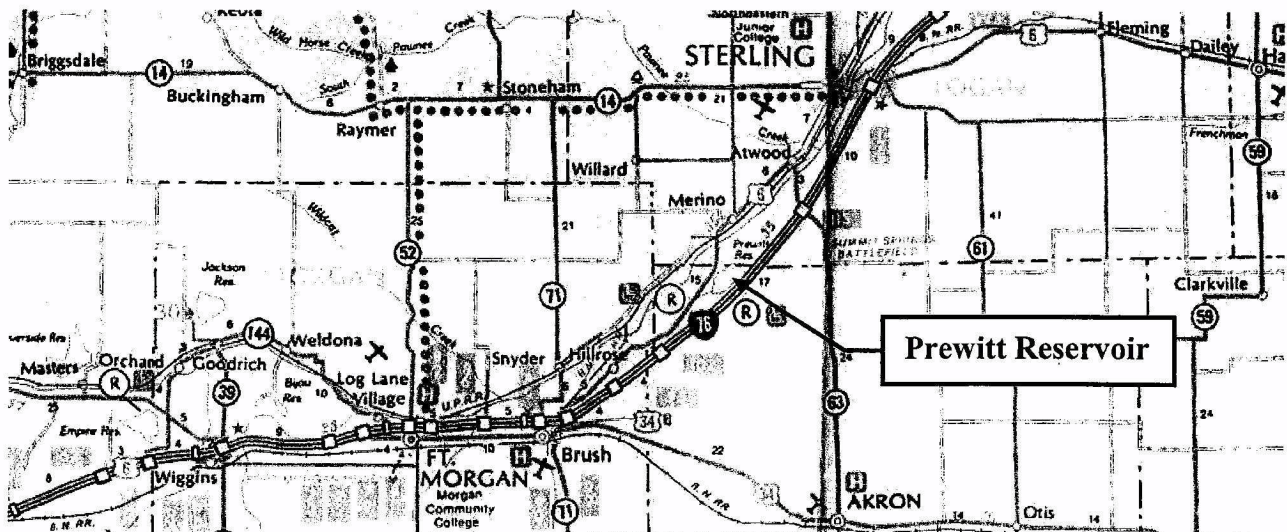
LID was formed in 1910 and operates under the Irrigation District Law of 1905, levying an acreage assessment to its members. LID is applying for a loan to construct a new emergency spillway on behalf of the owners of Prewitt Reservoir, who operate jointly as the Prewitt Operating Committee:

Logan Irrigation District (LID) 17/31 Interest (54.8%)

Iliff Irrigation District (IID) 8/31 Interest (25.8%)

Morgan Prewitt Reservoir Company (MPRC) 6/31 Interest (19.4%)

LID will accept responsibility for the loan, while IID and MPRC have agreed to be cooperating entities, providing a pro-rata share of the loan payment to LID. The reservoir provides supplemental irrigation water for approximately 28,000 acres, well augmentation, and recreation. Average annual diversions to the reservoir are 40,160 acre feet, and average annual delivery to landowners is approximately 18,400 acre feet. The reservoir is an off-stream reservoir constructed in 1910-12. The dam is a Medium Size, Class 1 Dam, with a height of 36 feet at GH 35.5, and a length of 3.5 miles. Maximum storage is 32,300 acre feet (GH 28.0), but the reservoir is currently restricted to 28,600 acre feet (GH 26.5). The lake has a surface area of 2300 acres at the restricted level. The outlet works is located in the NW corner of the reservoir, and a low depression in the SW corner operates as a natural open-channel emergency spillway. The proposed emergency pipe spillway will address SEO dam safety concerns. The project will construct an emergency spillway to provide unrestricted overflow to pass the 75% PMP, without overtopping the dam. Construction will include a 250 foot long, 72-inch RCP spillway with an overflow structure upstream of the dam, an energy dissipation structure at the terminal end of the pipe, and a short channel to the Prewitt outlet canal.



Location Map

Water Project Construction Loan Program - Project Data

Borrower: Riverside Irrigation District (RID)

County: Morgan & Weld

Project Name: RID Water Rights Purchase

Project Type: Water Rights Purchase

Drainage Basin: South Platte

Water Source: Riverside Reservoir

Total Project Cost: \$1,638,000

Funding Sources: CWCB, RID

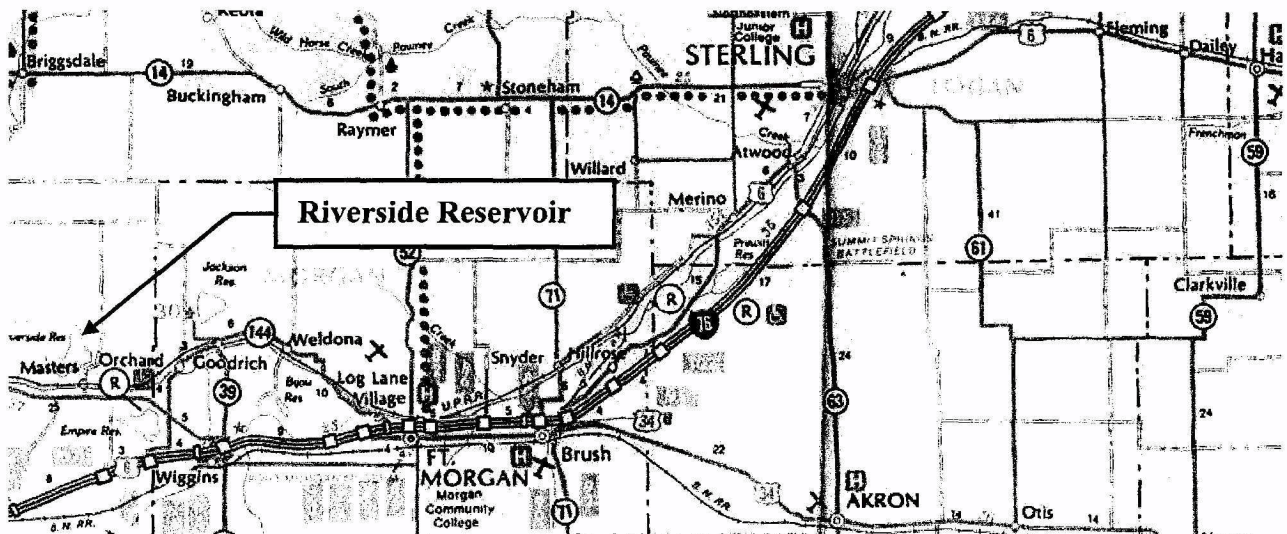
Type of Borrower: Agricultural

Aver. Delivery: 736 acre-feet

CWCB Construction Fund Loan: \$1,464,500
(incl. 1% loan fee)

Interest Rate: 2.50% **Term:** 30 years

RID was formed in 1907 and operates under the Irrigation District Law of 1905. The service area is located primarily in Morgan County, and water is tied to 22,494 acres of specific irrigated lands in the District, owned by 147 different farms. The water is typically used to irrigate corn, alfalfa, beans, and sugar beets. RID owns and operates the 90-mile long Riverside Service Canal. RID has a direct flow water right, but relies primarily on storage water in Riverside Reservoir, owned by RID's "sister" company Riverside Reservoir & Land Company (RRLC). RID farms also use alluvial wells (about 100) for additional water. RID has numerous recharge decrees, and is obtaining a court decreed augmentation plan. RID is able to deliver 41,500 acre feet to users. RID receives about 75% of its water through its controlling interest in RRLC's Riverside Reservoir. There are a total of 2505 Private Rights in RRLC. For over 20 years, RID was able to use 62 Private Rights owned by Groundwater Appropriators of the South Platte (GASP) for irrigation within the RID system, in exchange for allowing GASP to use excess RID augmentation credits. In 2005, GASP announced that they were dissolving and that all assets would be sold off, including their Riverside water. RID is dependent upon the continued use of the GASP's Riverside water rights as a supplemental source. RID was able to purchase 46 out of the available 65.5 Private Rights at the GASP auction in February 2006, using interim financing. That loan would be extinguished using the proceeds of the CWCB loan. Prior to the acquisition of the subject 46 Rights, RID owned 1954 Rights (78.0%). With the acquisition, RID now owns 2,000 Rights (79.8%).



Location Map

CWCB Construction Loan Program Project Data Sheet

Borrower: Tom Hill

County: Grand

Project Name: McElroy Dam Rehabilitation

Project Type: Dam Rehabilitation

Drainage Basin: Colorado River

Water Source: Pass Creek

Total Project Cost: \$854,000

Funding Sources: CWCB

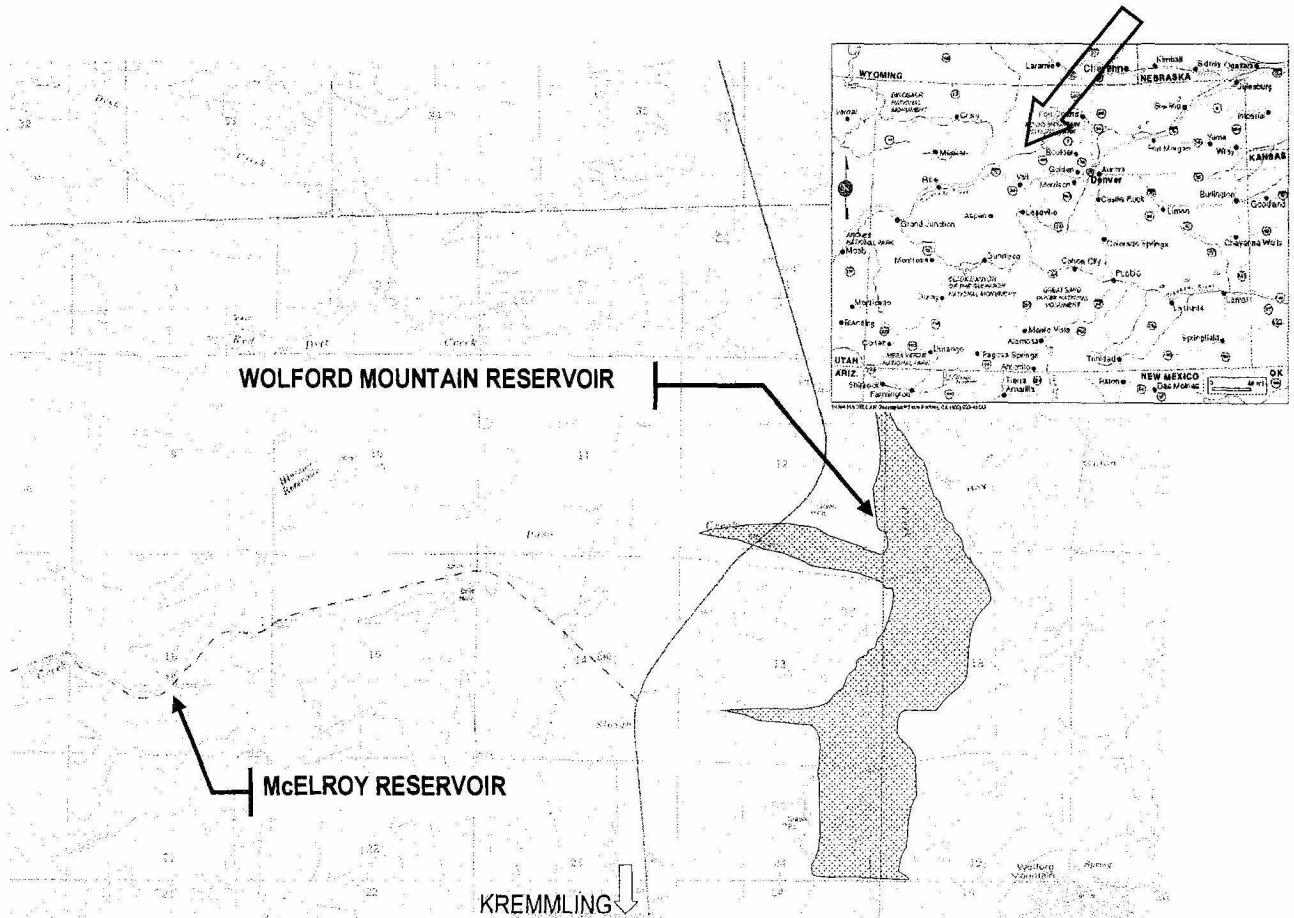
Type of Borrower: Agricultural

Average Reservoir Delivery: 240 acre-feet

Loan: \$854,000 (100% of total project cost)

Interest Rate: 2.5% **Term:** 30 years

McElroy Dam is a Class III, 35 foot high dam holding 240 AF of irrigation water located in Grand County approximately 5 miles north and west of Kremmling. The Reservoir is on land owned by the State Land Board and leased/operated/maintained by the Tom Hill family. On June 17, 2006 the outlet works failed and the embankment of the reservoir began piping through the outlet works. The Hills received a verbal breach order from the SEO. The Project will replace the dam (same size). The Hills spent \$100,000 on the emergency breach of the dam. The total breach, engineering and reconstruction cost is \$854,000. The Hills loan request is for \$854,000 (100% of total costs) due to the emergency nature. Design is presently under review by the SEO. Construction is scheduled to begin in July 2007 with completion by October 2007. The water is used for growing hay for cattle production and sale.



LOCATION MAP

CWCB Construction Loan Program Project Data Sheet

Borrower: Headgate 396 Lateral Corporation

County: Mesa

Project Name: Ditch Pipeline Project

Project Type: Ditch Piping for Salinity Control

Drainage Basin: Colorado

Water Source: Grand Valley Irrigation Canal

Total Project Cost: \$230,000

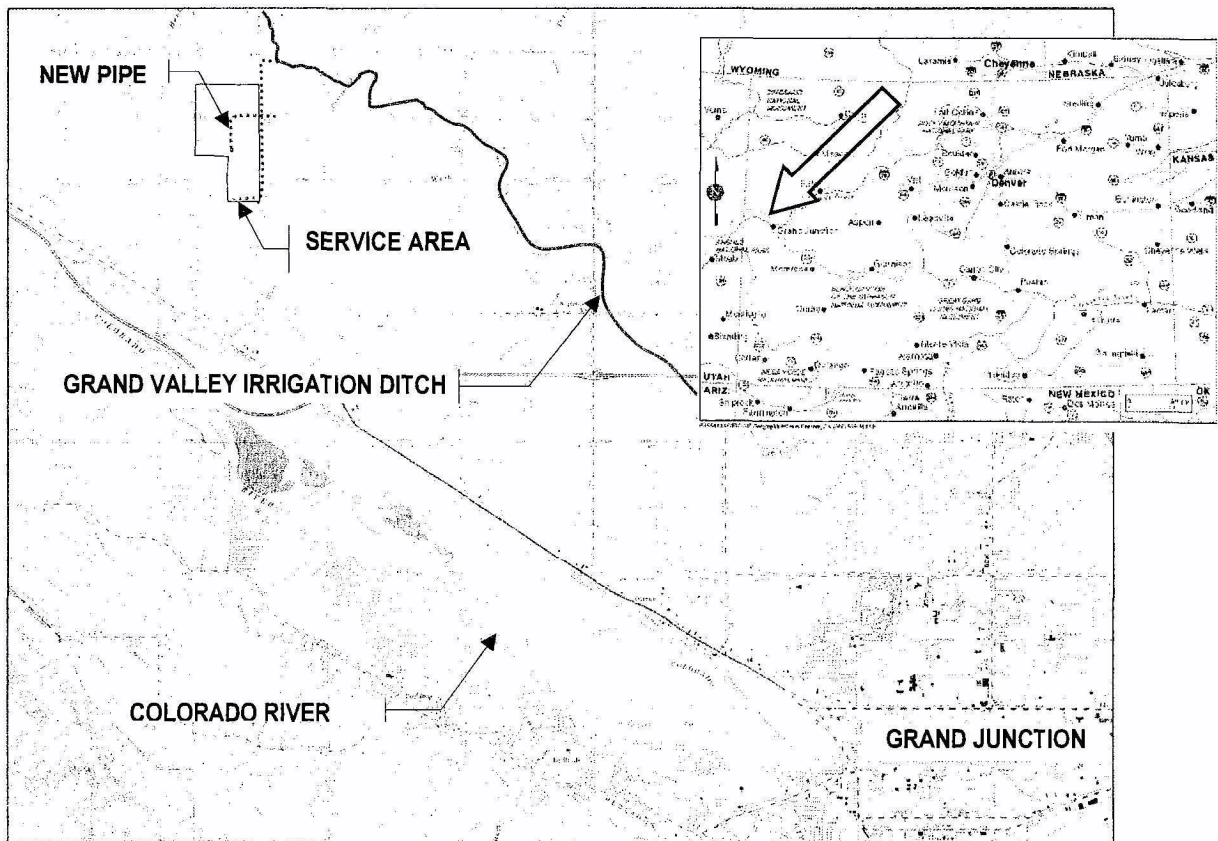
Funding Sources: NRCS, CWCB

Type of Borrower: Agricultural

Average Delivery: 1900 acre-feet

Loan Amount: \$134,000 (Initial loan \$230,000) **Interest Rate:** 2.5% **Term:** 30 years

The Headgate 396 Lateral Corporation is a non-profit corporation established in the State of Colorado in 2005. The Corporation manages the 396 Lateral, which starts at the Grand Valley Irrigation Company's (GVIC) Headgate 396 and delivers agricultural irrigation water to the eleven shareholders in the Corporation. Corporation members own a total of 389 shares of GVIC water. The Headgate is located east of Grand Junction near the intersection of J Road and 21½ Road. The lateral to be piped is approximately 1.3 miles (7000 feet) long and carries approximately 4.3 cfs. The project will install new PVC piping from 12-inch to 6-inch pipe along with metered delivery points at member-owned lands. NRCS has provided planning and design engineering services. The total project cost is \$230,000. A previous phase of the project was completed in the winter of 2005 for \$137,000. This phase is scheduled for the winter of 2006 at a cost of \$230,000. Proposed CWCB funding consists of an initial loan from CWCB for \$230,000 that will be reduced by an NRCS grant of \$96,000 following project completion. The remaining \$134,000 will become a 30-year CWCB Loan.



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LOCATION MAP

Water Project Construction Loan Program - Project Data

Borrower: Platte Valley Irrigation Company

County: Weld

Project Name: Platte Valley Reservoir No. 1

Project Type: New Equalizer Reservoir

Drainage Basin: South Platte

Water Source: Evans Ditch No. 2

Total Project Cost: \$2,628,600

Funding Sources: CWCB, PVIC

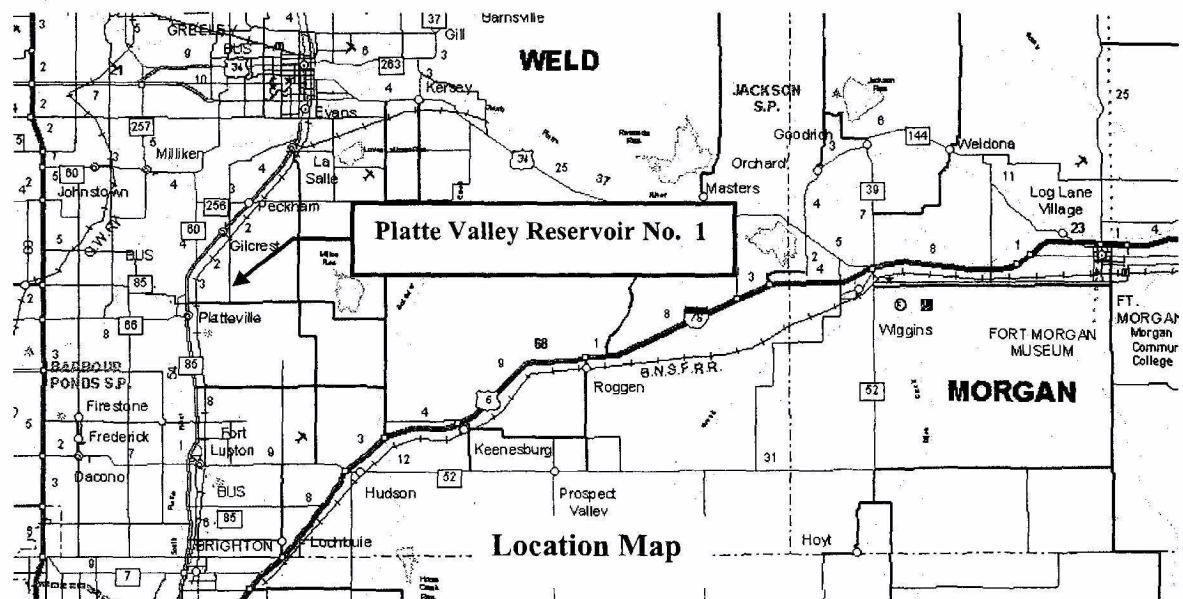
Type of Borrower: Agricultural

Aver. Delivery: 52,401 acre-feet

CWCB Construction Fund Loan: \$2,388,650
(incl. 1% loan fee)

Interest Rate: 2.25% **Term:** 20 years

PVIC is a Colorado mutual ditch company and non-profit corporation serving approximately 14,832 acres of irrigated farm land in Weld County east of Platteville. PVIC diverts water for irrigation from the South Platte River near Fort Lupton and shares a jointly owned headgate with Farmers Reservoir and Irrigation Company (FRICO), as well as about 10 miles of the jointly owned Platte Valley Canal. Flow is divided at a bifurcation structure and PVIC water is carried in the Evans No. 2 Ditch. Average annual diversions are 52,401 acre-feet. PVIC needs an equalizer on the ditch to allow for more efficient management of the water, as well as additional measurement and control structures on their main ditch. They have purchased a 80 acre property to construct a reservoir. PVIC needs to improve the flow measuring capability of various reaches in the ditch, as directed by Water Court, in order to claim recharge credits in their system. The reservoir will have a junior water right for storage of water directed to PVIC's recharge program. In an average year the reservoir is expected to store 300 acre feet, with a 300 acre feet refill. Construction will consist of a 431 acre-foot reservoir with a 14 foot high dam embankment with 10:1 upstream slopes and 3:1 downstream slopes. The reservoir bottom will be lined using clay from the required excavation as necessary to exclude groundwater. The outlet will be a 48 inch RCP, configured to act as the principal spillway. The project also includes relocation of an existing section of Evans No. 2 Ditch below the split from the Platte Valley Canal, modification of the existing bifurcation structure, and construction of three (3) new Parshall Flumes in various reaches of the ditch, as directed by the Water Court.



Water Project Construction Loan Program - Project Data

Borrower: Hope Ditch Company

County: Adams

Project Name: Hope Ditch Company Well

Project Type: Well Replacement

Drainage Basin: South Platte

Water Source: Well – Denver Basin

Total Project Cost: \$170,000

Funding Sources: CWCB, HDC

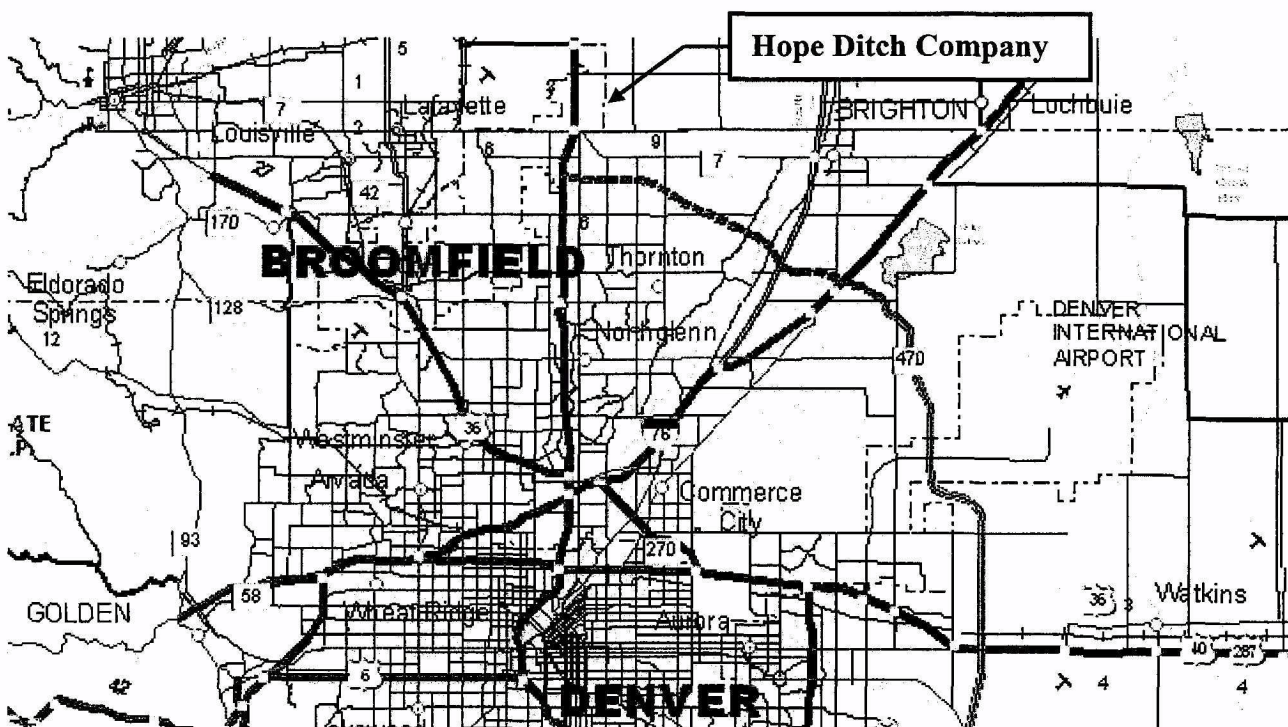
Type of Borrower: Municipal - Middle

Aver. Delivery: 6.5 to 11.5 acre-feet

CWCB Construction Fund Loan: \$153,000

Interest Rate: 3.75% **Term:** 30 years

HDC was organized as a mutual ditch company in 1993 and is a Colorado non-profit corporation in good standing. HDC provides water to a portion of the Wiesner Subdivision in unincorporated Adams County, located near the intersection of York Street and 165th Street. HDC has an existing well (No. 13593-F) drilled in 1969 that serves 23 homes in the subdivision. The well is 950 feet deep and draws water from the Laramie- Fox Hills aquifer of the Denver Basin, before being chlorinated and distributed. The well pipe has significant deterioration with perforations clogging up with corrosion, and as a result HDC has had to haul water in order to meet the demands. The original well permit was for 60 gpm and an allowable annual withdrawal of 97 AF. Yield from the well in 1969 was reported at 30 gpm, but currently the well is producing at less than 7 gpm. The State Engineer's Office (SEO) has issued a replacement well permit No. 13593-F-R, allowing withdrawal of up to 48 acre-feet per year, at a rate not to exceed 30 GPM. The project involves drilling a 950 foot replacement well with steel casing, and installing a new 25 gpm pump and piping for the well and piping and electrical connections to the pump house building. Residents have been using an average of 5000 gallons per month (0.18 AF per yr.) or a total of about 4 AF annually. HDC is projecting average use with the new well of 7500 gallons per month (0.28 AF per yr.) or a total of about 6.5 AF annually. A typical single-family home usage of about 0.5 AF per year. At this typical rate total annual usage for 23 users could be 11.5 AF per year.



Location Map

Water Project Construction Loan Program - Project Data

Borrower: Town of Keenesburg

County: Weld

Project Name: Water System Improvements

Project Type: Pipeline and Well Purchase

Drainage Basin: South Platte

Water Source: Well – Lost Creek Basin

Total Project Cost: \$2,322,200

Funding Sources: CWCB, Town

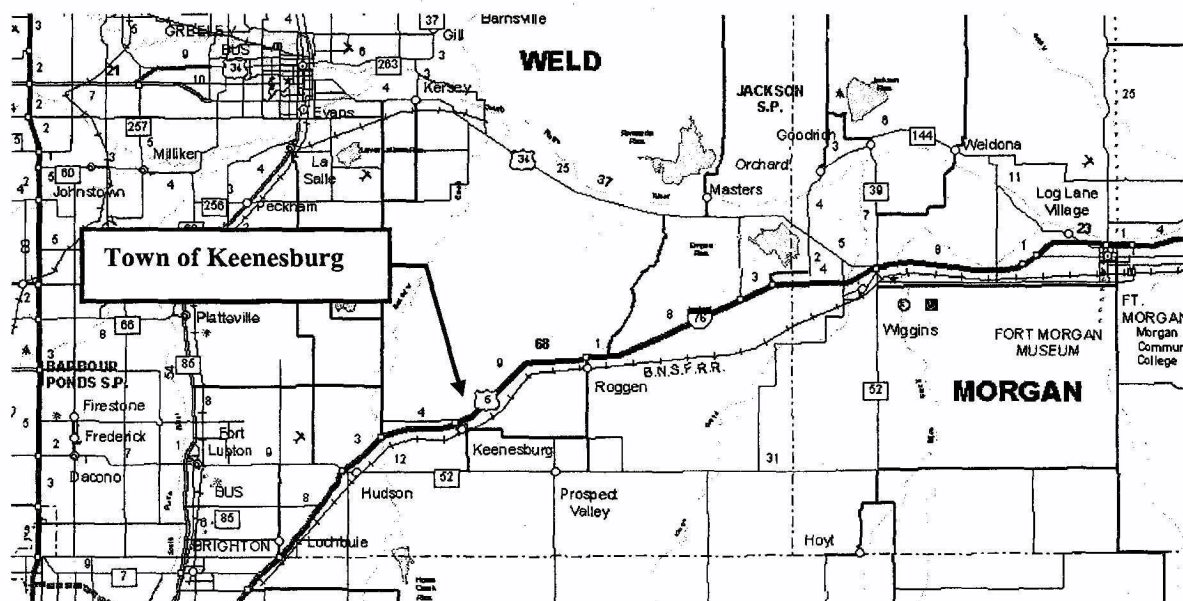
Type of Borrower: Municipal - Middle

Aver. Delivery: 139.6 acre-feet

CWCB Construction Fund Loan: \$1,523,080
(incl. 1% loan fee)

Interest Rate: 3.75% **Term:** 30 years

The Town of Keenesburg is located in Weld County 30 miles north of Denver on I-76. The population is 1100, and the Town currently serves about 461 water taps. The water supply comes from 5 wells that draw water from the Laramie – Fox Hills aquifer, and have a total capacity of 221 acre-feet per year. They are connected directly to the Town's distribution system. There are two major issues associated with the water system – water quality due to high fluorides and sodium, and lack of disinfection contact time. The maximum contaminant level (MCL) for fluoride is 2 mg/l and reported levels in the Town's water wells are 3.1 mg/l. The Laramie Fox-Hills water also has a high Sodium Absorption Ratio (SAR), a ratio used to determine the suitability of the water for use in the irrigation of landscaping. A ratio of less than 10 is suitable for irrigation, and the Town's water has been recorded at a level of 26.9. The Town's well water is pumped directly into the distribution system, which results in some users not receiving proper disinfection contact time. The Town has undertaken a separate project that will allow well water to be pumped to the water storage tank prior to being delivered to distribution. The proposed project with CWCB funds, includes purchase of 139.6 AF of well water rights in the Lost Creek Groundwater Basin, and construction of 5.5 miles of pipeline to the Town. The purpose of the project is to improve the water quality by blending the new water with the existing Laramie-Fox Hills water. Blending the water has been evaluated, and providing a 50%-50% blend of the two waters shows that the SAR ratio drops below 10, and the fluoride level drops to approximately 1.5 mg/l, below the MCL of 2 mg/l.



Location Map

Water Project Construction Loan Program - Project Data

Borrower: Lincoln Park Crooked Ditch Co.

County: Fremont

Project Name: Crooked Ditch

Project Type: Ditch Rehabilitation Project

Drainage Basin: Arkansas

Water Source: South Canon Ditch (Arkansas)

Total Project Cost: \$2,000,000

Funding Sources: CWCB, LPCDC

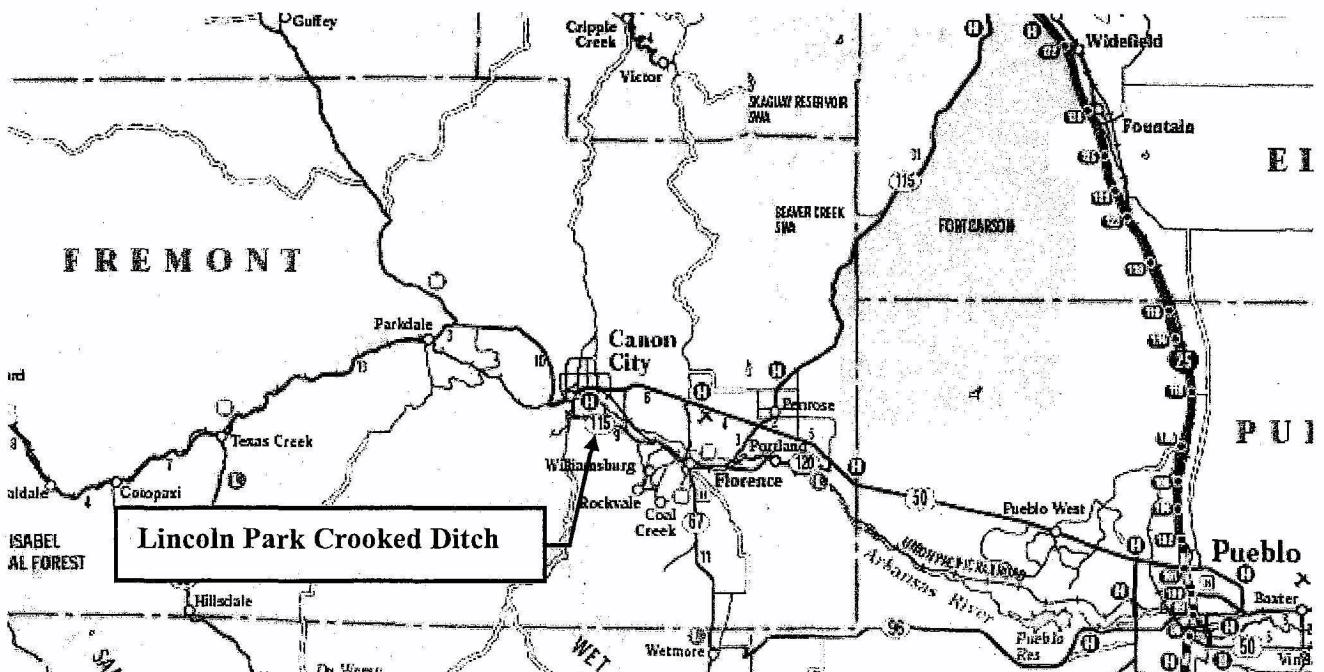
Type of Borrower: Municipal/Low

Aver. Delivery: 1,850 AF

CWCB Construction Fund Loan: \$1,818,000
(incl. 1% loan fee)

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

LPCDC, a Colorado mutual ditch company, provides irrigation water to a 500-acre service area in Lincoln Park, immediately south and adjacent to Canon City, in unincorporated Fremont County. There are 362 shareholders and 3,675 shares of stock. The irrigated acreage in the service area is primarily residential lawns and gardens, hobby farms and pastures. Typical lot and tract sizes are 0.25 to 5+ acres. LPCDC has several senior water rights and diverts from the Arkansas River through the South Canon Ditch. The LPCDC ditch system has several branches totaling 62,220 lineal feet (lf) or about 11.8 miles in length. The ditch consists of 29,075 lf of 36" and 8,540 lf of 24" of concrete pipe, 16,085 lf of 18" concrete/PVC pipe, and 8520 lf of open ditch. The existing, original piping (hand-poured concrete) has deteriorated and there are numerous leaks in the system due to age and wear. The ditch suffers from significant water loss, and the deteriorated pipe poses a threat to property and individuals should the pipe fail. The proposed project involves replacing the most deteriorated piping in the system 30,225 lf with HDPE (High Density Polyethylene) over a two-year period, in order to stop water loss and restore system reliability. The first year will consist of 15,365 lf (10,385 lf – 36"; 4,980 lf – 18"), and will include the vulnerable section along the bluff overlooking the Arkansas River. The second year will consist of 14,860 lf (11,290 lf of 36" pipe replacement, and conversion of 3570 lf of open ditch to 36" pipe.)



Location Map

CWCB Construction Loan Program Project Data Sheet

Borrower: Lazy O Ranch Homeowners Assoc. **County:** Pitkin

Project Name: Secondary Water Supply System **Project Type:** Secondary Water System

Drainage Basin: Colorado River

Water Source: Capitol Creek

Total Project Cost: \$152,258

Funding Sources: HOA, Bank Loan, CWCB

Type of Borrower: Municipal (High Income)

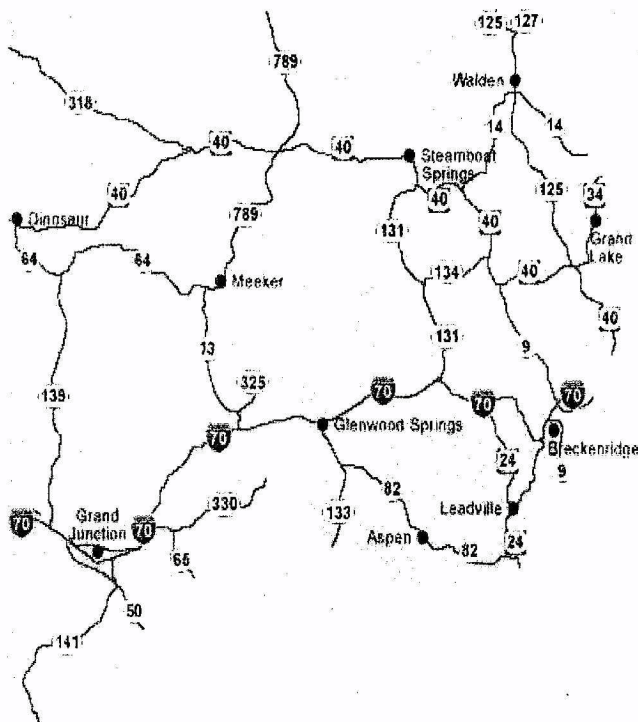
Average Delivery: 13 acre-feet

Loan: \$150,750

Interest Rate: 4.25%

Term: 30 years

The Lazy O Ranch Homeowners Association (LORHOA) is applying for a \$152,258 loan to construct a secondary water system to provide outside irrigation water to 21 home sites within the ranch. The LORHOA was formed in 1987 and is located in Pitkin County. The ranch consists of 1,500 acres, 500 acres of dedicated agricultural land and 900 acres of dedicated wildlife preservation. The remaining 100 acres of the ranch consists of 21 home sites, ranging in size from 2 to 6 acres. Currently, 11 homes have been constructed and all the other remaining home sites have been sold. Each property owner or shareholder owns an equal share of the ranch, to include the 1,400 acres of agricultural land and wildlife preserve. The project consists of installing 7,500 feet of 2-inch to 6 inch PVC pipe, 21 curb stop valves, and 2- 10 horsepower variable speed pumps, with pump house, at a total project cost of \$167,500.



LOCATION MAP