#### STATE OF COLORADO

# **Colorado Water Conservation Board Department of Natural Resources**

1313 Sherman Street, Room 721 Denver, Colorado 80203 Phone: (303) 866-3441 Fax: (303) 866-4474 www.cwcb.state.co.us



January 12, 2010

Bill Ritter, Jr. Governor

Senator Mary Hodge Chair, Senate Agriculture, Natural Resources and Energy Committee James B. Martin DNR Executive Director

Representative Randy Fischer Chair, House Agriculture, Livestock and Natural Resources Committee Jennifer L. Gimbel CWCB Director

Dan McAuliffe CWCB Deputy Director

Re: Colorado Water Conservation Board Small Project Loans for 2009 from the Construction Fund and Severance Tax Trust Fund Perpetual Base Account – Final Report

Dear Senator Hodge and Representative Fischer,

Pursuant to Section 37-60-122(b) of the C.R.S. we are submitting the attached written determination of the basis for all loans authorized by the Colorado Water Conservation Board (CWCB) under \$10,000,000 during the past calendar year 2009. The report was completed by CWCB staff on January 12, 2010 and will be presented at the Colorado Water Conservation Board Meeting January 27, 2010 at the Hilton Garden Inn, Tech Center, 7675 East Union Avenue, Denver, Colorado.

Copies of the report will be available for distribution from the CWCB and the report will also be available on the CWCB web-site <a href="www.cwcb.state.co.us">www.cwcb.state.co.us</a>. A copy of the report has been submitted to the Legislative Library, Room 029 of the State Capital Building. Under your direction, we are prepared to present copies of the report to your committee members and others.

If you have questions or need additional copies of the report, please contact Mr. Tim Feehan of the CWCB staff at 303-866-3441 ext. 3211.

Sincerely,

Jennifer Gimbel, Director

Colorado Water Conservation Board

#### **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

#### **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 15<sup>th</sup> of each year to the Colorado General Assembly describing the basis of all Construction Fund and Severance Tax Trust Fund Perpetual Base Account loans authorized by the CWCB under \$10,000,000. This report fulfills the CWCB reporting obligations for those small project loans for calendar year 2009.

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 17 new loan projects under \$10,000,000 approved by the CWCB in calendar year 2009. The Board also approved loan increases to 3 previously approved projects. The total loan value of the 20 projects was over \$28,000,000.

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

#### Colorado Water Conservation Board Small Project Loans For Calendar Year 2009

	Date			Amount			
Item	Approved	Sponsor	Project		Approved	County	Basin
		Construction Fund					
1	01/27/09	The Water Supply and Storage Company	Grand River Ditch and Lluver Reservoir Outlet Project	\$	843,350	Larimer & Weld Adams, Denver,	South Platte
2	03/17/09	South Metro Water Supply Authority	Water Supply Pipeline Capacity Acquisition Project	\$	5,090,400	Arapahoe & Douglas	South Platte
3	05/19/09	Town of Gypsum	LEDE Ditch and Reservoir Upgrade Project	\$	2,689,731	Eagle	Colorado River
4	05/19/09	Town of Dillon	Old Dillon Reservoir Enlargement Project	\$	1,515,000	Summit	Colorado River
5	05/19/09	Joseph W. Bowles Reservoir Company	Bowles No. 1 Dam Rehabilitation	\$	1,703,870	Jefferson	South Platte
6	05/19/09	North Sterling Irrigation District	North Sterling Reservoir Dam and Spillway Improvement Project	\$	1,094,840	Logan	South Platte
7	05/19/09	Snowmass Water and Sanitation District	Ziegler Reservoir Water Management System Construction	\$	1,952,805	Pitkin	Colorado River
8	07/21/09	Farmers Reservoir and Irrigation Company	Milton Reservoir and Barr Lake Improvements Project	\$	3,535,000	Adams & Weld	South Platte
9	09/15/09	Fort Morgan Reservoir and Irrigation Company	Fort Morgan Pipeline Project	\$	1,494,800	Morgan	South Platte
10	09/15/09	Lake Canal Reservoir Company	South Gray Reservoir Rehabilitation & Gray No. 3 Breach Project	\$	393,900	Larimer & Weld	South Platte
11		Raymond Dairy, Inc.	Raymond Ditch Reconstruction Project	\$	95,950	Mesa	Colorado River
12		Riverside Ditch and Allen Extension Company	Riverside Ditch Phaased Canal Improvements Project	\$	186,345	Chaffee	Arkansas River
13	11/18/09	WRCC, Inc.	Cobb Lake Inlet Structure Project	\$	1,301,890	Larimer & Weld	South Platte
		Total Small Project Loans Approved in 2009 From Construction Fund		\$	21,897,881		
		Severance Tax Trust Fund Perpetual Base Account					
1	01/27/09	Park Center Water District	Park Center Well Redrilling Project	\$	1,010,000	Fremont	Arkansas
2	03/17/09	Deuel and Snyder Improvement Company	River Sand Gate Structure Project	\$	90,900	Morgan	South Platte
3		Riverside Reservoir and Land Company	Riverside Reservoir Emergency Spillway Construction	\$	2,838,100	Weld	South Platte
4	05/19/09	Huerfano-Cucharas Irrigation Company	Cucharas Reservoir Rehabilitation	\$	1,622,060	Pueblo & Huerfano	Arkansas
5	09/15/09	Bull Creek Reservoir, Canal & Power Company	Increase to Bull Creek Reservoir No. 4 Enlargement & Reha	\$	244,218	Mesa	Colorado River
6		Boulder White Rock Ditch and Reservoir Company	Increase to Panama Reservoir Outlet Project (Pump Station ]		434,104	Boulder & Weld	South Platte
7	11/18/09	Supply Irrigating Ditch Company	Increase to Knouth Reservoir Rehabilitation	\$	610,040	Boulder	South Platte
		Total Small Project Loans Approved in 2009 From Severance Tax			6,849,422		
		Grand Total - Small Project Loans in 2009		\$	28,747,303		

**Borrower:** Water Supply & Storage Company County: Larimer, Weld

**Project Name:** Grand River Ditch Project and

Kluver Reservoir Outlet Project

**Drainage Basin:** South Platte

**Total Project Cost:** \$928,000

**Type of Borrower:** Agricultural-Municipal

(Low-Mid-High) Blend

**Loan Amount:** \$843,350 (Including 1% fee)

Project Type: Ditch Rehabilitation

Water Source: Colorado River (Transbasin)

Cache la Poudre River

**Funding Sources:** CWCB

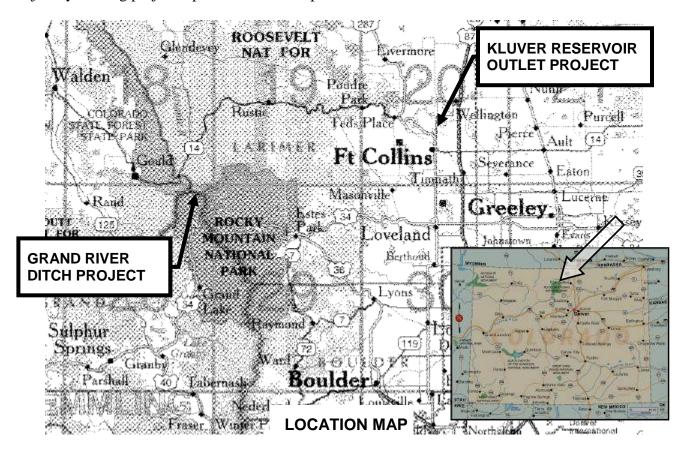
**Average Delivery:** Project = 18,000AF/yr

Total = 55,500AF/yr

**Interest Rate:** 3.70% **Term:** 30 years

The Company is applying for a loan for two repair projects within its delivery system. The Grand River Ditch Project is located is located in Rocky Mountain National Park near the Continental Divide at 10,200 feet near La Poudre Pass. The Ditch is a collection ditch for transbasin water diverted into La Poudre Pass Creek. The water is diverted again into the Larimer County Canal which delivers about 18,000AF of the Company's 55,500AF annual delivery. In 2003, the Ditch failed and temporary pipes were installed to restore flows quickly. A long term repair was delayed pending a final settlement with the NPS's claim against the Company for damages caused by the breach. Design and construction are scheduled for summer/fall of 2009.

The Kluver Reservoir Outlet Project is located in Larimer County between Kluver Lake and Reservoir #4. Travis Road is a County road which passes over the outlet ditch. The retaining walls have begun to fail and the road surface is partially undermined. The Company and the County are jointly funding project repair costs of the repair. Construction scheduled for the summer of 2008.



**Borrower:** South Metro Water Supply Authority County: Adams, Denver, Arapahoe,

Project Name: Water Supply Pipeline Capacity

Project Type: Pipeline

Acquisition Project

**Drainage Basin:** South Platte

**Total Project Cost:** \$25,700,000 **Funding Sources:** Construction Fund

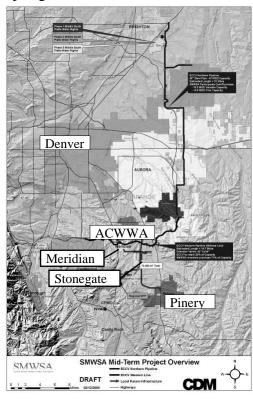
**Type of Borrower:** Municipal (High-Income) **Average Delivery:** 10,750 acre-feet\*

\*Loan Applicants only

Water Source: South Platte River

Loan Amount: \$5,090,400 (including 1% service fee) Interest Rate: 4.5% Term: 30 years

South Metro Water Supply Authority (Authority) is made up of 13 independent water providers that serve communities in the southern area of metro Denver. Currently, the Authority members rely mainly on groundwater aquifers to supply the area's M&I needs. Because this source is nonrenewable, members have been working to identify new supplies of water and opportunities to share resources and infrastructure to reduce dependence on groundwater. The Authority intends to acquire capacity in the East Cherry Creek Valley Water and Sanitation District (ECCV) Northern Supply Pipeline (Pipeline) as a means to convey renewable water supplies, recapture consumable return flows, and increase operational flexibility. The Pipeline is a 48-inch steel pipe that runs from Barr Lake to ECCV's service area (located to the east of Cherry Creek Reservoir). The capacity is 47 million gallons/day (mgd). The Pipeline is a regional transmission line and will deliver water both to storage reservoirs and directly to Authority members who will then deliver the water through their distribution systems. The Authority is acquiring a total of 31.98 mgd of excess capacity from ECCV. The four members seeking funding from the CWCB will be acquiring 6.55 mgd of this total capacity. Final purchase and operating agreements are still under negotiation. It is expected that the purchase will take place in late spring 2009.



**Location Map** 

**Borrower:** Town of Gypsum County: Eagle

**Project Name:** LEDE Ditch & Reservoir **Project Type:** Reservoir Rehabilitation

Upgrade Project

**Drainage Basin:** Colorado River **Water Source**: Gypsum Creek

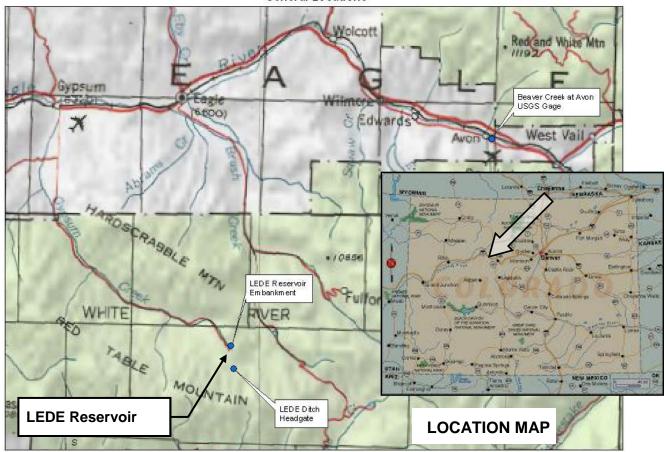
**Total Project Cost:** \$3,162,000 **Funding Sources:** Construction Fund

**Type of Borrower:** High Income Municipal **Average Delivery:** 1,200 AF **New Storage:** 254 AF

**Loan Amount:** \$2,689,731 (Including 1% fee) **Interest Rate:** 4.5% **Term:** 30 years

The Town of Gypsum purchased the LEDE Ditch and LEDE Reservoir water rights in 2006. The original water rights are decreed for irrigation uses, and provide storage for up to 947 AF in the reservoir. The Reservoir was built to a capacity of 431 AF. The Town seeks to increase capacity to 685 AF in order to accommodate continued agricultural irrigation, and for future water supplies to the Town. This upstream storage is required to assist in managing Gypsum Creek water rights calls and dry year operations. The reservoir storage will become even more important as the Town's population continues to increase. The Town wishes to repair and improve the reservoir to utilize its potential, and to protect valuable senior storage rights in the reservoir. The reservoir is located in the headwaters of Gypsum Creek, south of Gypsum within the White River National Forest. Design and permitting is expected to occur in 2009/2010 with pipeline construction starting in late 2009 and dam construction starting in 2011.

#### **General Locations**



**Borrower:** Town of Dillon County: Summit

Project Name: Old Dillon Reservoir Enlargement Project Type: Reservoir Enlargement

**Drainage Basin:** Colorado River Water Source: Salt Lick Gulch

**Total Project Cost:** \$6,315,000 Total Cost **Funding Sources:** Construction Fund

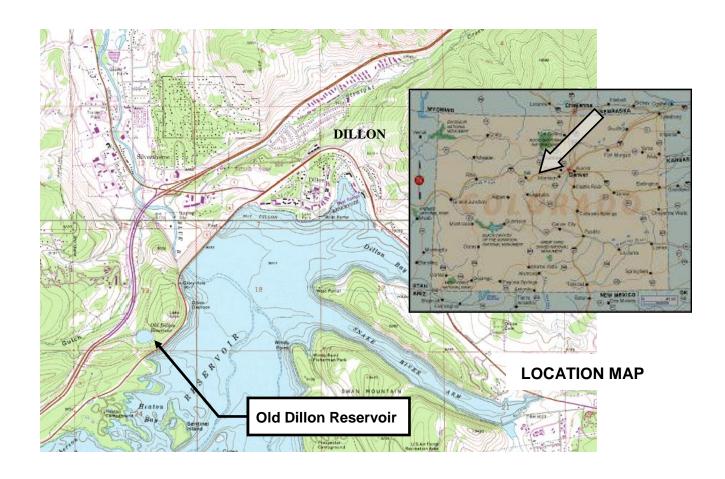
\$1,667,000 Town's Portion

**Type of Borrower:** Municipal Middle Income **Average Delivery:** 321 AF

**New Storage:** 109 AF (Restricted + New)

**Loan Amount:** \$1,515,000 (Including 1% fee) **Interest Rate:** 4.0% **Term:** 30 years

The Town of Dillon is applying for a loan to participate in the enlargement of the Old Dillon Reservoir. In 2004, the Town, Summit County and Town of Silverthorne signed an agreement to enlarge the reservoir. The Town's participation cost is approximately 27% of the construction costs and 20% of the Engineering costs. The Town and the County initiated a feasibility study in 1995. The Reservoir was originally constructed as a 46 AF raw water storage reservoir filled via the Dillon Ditch, which diverts from Salt Lick Gulch. The Reservoir site is southwest of the Dillon Reservoir Dam. In the summer of 2008, the SEO issued an order to drain the Reservoir due to concerns over the integrity of the north dam. The Reservoir is currently not available for storage. Permitting is underway and construction of the enlargement is scheduled to occur in 2010.



Borrower: Joseph W. Bowles Reservoir Company County: Jefferson

Project Name: Bowles Reservoir No. 1 Dam Rehab Project Type: Reservoir Rehabilitation

**Drainage Basin:** South Platte Water Source: Bear Creek

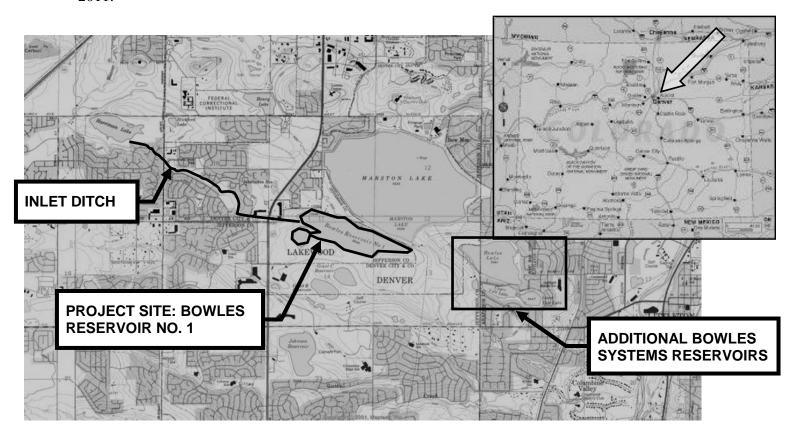
**Total Project Cost:** \$1,874,000 **Funding Sources:** Construction Fund

**Type of Borrower:** Blended Ag & Municipal **Average Delivery:** 900 AF

& Commercial

**Loan Amount:** \$1,703,870 (Including 1% fee) **Interest Rate:** 4.65% **Term:** 30 years

The Joseph W. Bowles Reservoir Company (Company) owns and operates Bowles No. 1 Reservoir, located in the southwest metropolitan area of Denver. The Company was formed in 1906 and currently has 50 shareholders who use the water for golf courses, parks, open space, and some individual ranches for irrigation water. The Company is applying for a loan to implement several repairs to correct dam-safety deficiencies and improve the long-term performance of Bowles No. 1 Dam and to rehabilitate the deteriorating reservoir inlet ditch. The dam rehabilitation includes widening the crest, reconstructing the upstream slope, and installing a seepage collection and toe drain system on the downstream slope. Work on the inlet ditch includes removing trees, reconstructing the ditch cross section and alignment, placing slope protection in high erosion areas, and installing a flow control pipe that will provide for discharge of excessive ditch flows into an existing spillway and drainage structure. The Company plans on submitting the final design to the SEO by February 2010 and beginning construction in August 2010 with completion by February 2011.



**Borrower:** North Sterling Irrigation District County: Logan

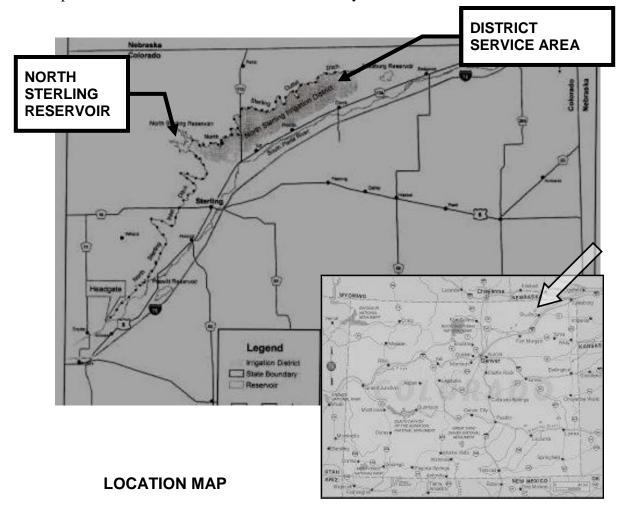
**Drainage Basin:** South Platte Water Source: South Platte River

**Total Project Cost:** \$1,240,450 **Funding Sources:** Construction Fund

**Type of Borrower:** Agricultural **Average Delivery:** 59,654 AF

**Loan Amount:** \$1,094,840 (Including 1% fee) **Interest Rate:** 2.25% **Term:** 20 years

The District is applying for a loan to construct its Dam and Spillway Improvement Project (Project). The District owns and operates the North Sterling Reservoir (Reservoir) located in Logan County and provides stored and direct flow water to landowners within the District's 40,917 acre service area. The District service area begins just east of the North Sterling Reservoir approximately 15 miles northwest of Sterling, Colorado and extends east to just northeast of Crook, Colorado. The Reservoir faces the possibility of a storage restriction from the State Engineer's Office without the construction improvements to the current spillway and the dam. In order to retain full storage capacity, the District intends to enlarge the existing spillway, raise the dam crest, and install a seepage collection system at the Reservoir. Construction is expected to take place in the summer/fall of 2009 with a 90 day construction window.



**Borrower:** Snowmass Water & Sanitation Dist. **County**: Pitkin

Management System

**Drainage Basin:** Colorado River **Water Source**: Snowmass Creek

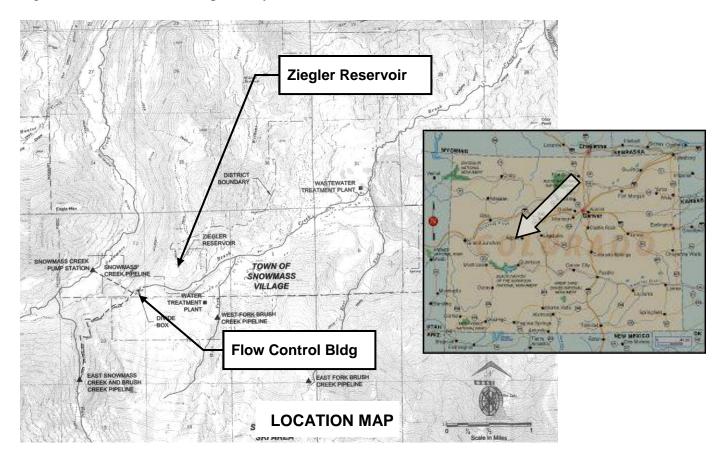
**Total Project Cost:** \$2,149,000 **Funding Sources:** Construction Fund

**Type of Borrower:** High Income Municipal **Average Delivery:** 1,800 AF

Loan Amount: \$1,952,805 (Including 1% fee) Interest Rate: 4.25% Term: 20 years

**Reduced from:** 4.5% at 30-yr

The District is requesting a loan to construct a new delivery system which includes the construction of a pump house, approximately 1,400 ft of pipe, construction of a flow control building, installation of telemetry and electric power. The District diverts water for treatment from East Snowmass Creek and East Snowmass Creek Spring, Brush Creek and Snowmass Creek. The District presently does not have a useable raw water storage facility, but purchased Ziegler Reservoir (aka Lake Deborah) in 2008 for the express purpose of improving system reliability by expanding the reservoir from its current 57 AF to approximately 225 AF. The District currently serves approximately 3,500 full time residents and during the winter ski season an additional 10,000 to 12,000 residents. To regulate flows and provide a supply during times of diminished stream flows, a system to divert water to and pump water from the reservoir is required. This Project will help the District to deliver water to utilize Ziegler reservoir as well as serve for the planned expansion of the reservoir. Final Design is near complete and construction is scheduled to begin in this summer and completed by the end of 2010.



**Borrower:** Farmers Reservoir and Irrigation Co. County: Adams & Weld

**Project Name:** Milton Reservoir and Barr Lake **Project Type:** Reservoir Spillway and Outlet

Improvements Works

**Drainage Basin:** South Platte Water Source(s): Beebe Seep Canal / Platte

Valley Canal / O'Brian Canal

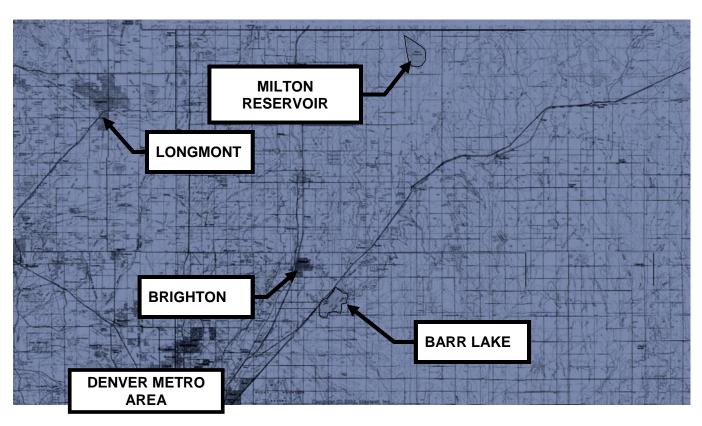
**Total Project Cost:** \$3,884,000 **Funding Sources:** Construction Fund

**Type of Borrower:** Blended Ag & Municipal **Average Delivery:** 125,000 AF

& Commercial

**Loan Amount:** \$3,535,000 (Including 1% fee) **Interest Rate:** 3.7% **Term:** 30 years

Farmers Reservoir and Irrigation Company operates a ditch and reservoir system extending 3,500 square miles along the Front Range corridor, from Golden to Kersey, Colorado. The system consists of four major reservoirs (Standley Lake, Marshall Lake, Barr Lake and Milton Reservoir) numerous smaller reservoirs, and approximately 400 miles of diversion and delivery canals. This loan request specifically relates to work to be completed at Milton Reservoir and Barr Lake. The Company intends to complete the following three projects: Milton Reservoir Outlet Works (replacing the upstream outlet gate structure and a portion of the piped outlet works), Milton Spillway (enlarging the existing spillway), and Barr Lake Spillway (enlarging the existing spillway and raising the perimeter dike). These projects have been submitted to the SEO for review. The Company expects to construct these projects between September 2009 and January 2011.



**LOCATION MAP** 

**Borrower:** Fort Morgan Res. & Irrigation Co. County: Morgan

**Project Name:** Pipeline Project **Project Type:** Augmentation/Pipeline Const.

**Drainage Basin:** South Platte **Water Source(s)**: South Platte River

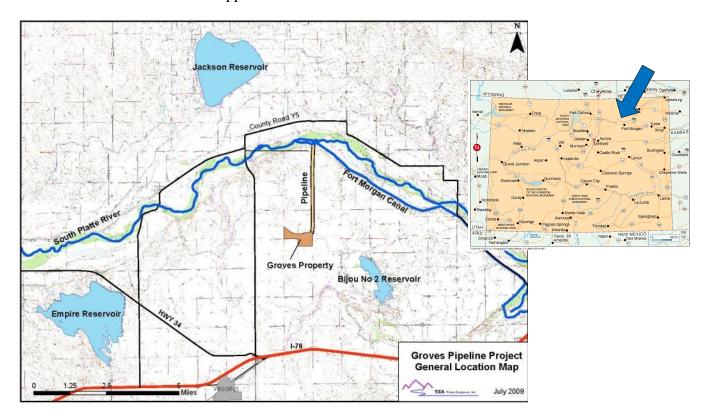
**Total Project Cost:** \$2,388,500 **Funding Sources:** Construction Fund

**Type of Borrower:** Blended (Ag & Municipal **Average Diversions:** 37,058 AF

& Commercial)

**Loan Amount:** \$1,919,000 \$1,494,800 (Including 1% fee) **Interest Rate:** 2.9% **Term:** 30 years

The Company operates a ditch system that serves surface water to approximately 15,000 acres of irrigated land between Weldona and Brush, and operates a recharge and augmentation plan that provides augmentation water for approximately 90 irrigation wells. In addition, the Company has an operational agreement with Groves Farms, LLC, which is a family farming corporation also located in Morgan County, for a recharge/augmentation plan. The Company, with Groves Farms, has designed a plan to re-divert and re-time augmentation credits from the Company's more senior recharge projects at certain times when they are not needed for direct augmentation use, and to divert water under new junior water rights when available for recharge and augmentation use. The Project involves installing one 24" pipe from the River extending three miles to recharge ponds on Groves Farms' land; installing two pumps to pump water from the River through the pipeline; installing one augmentation well and pumping equipment near Groves' ponds to pump ground water back to the South Platte River; and installing seven recharge/augmentation ponds (with a surface area of approximately 95 acres) on Groves Farms' land. The Project will be completed within 12-18 months after loan approval.



**Borrower:** Lake Canal Reservoir Company **County**: Larimer and Weld

& Gray No. 3 Breach

**Project Name:** South Gray Reservoir Rehab. **Project Type:** Reservoir Rehabilitation

**Drainage Basin:** South Platte River Water Source: Box Elder Creek

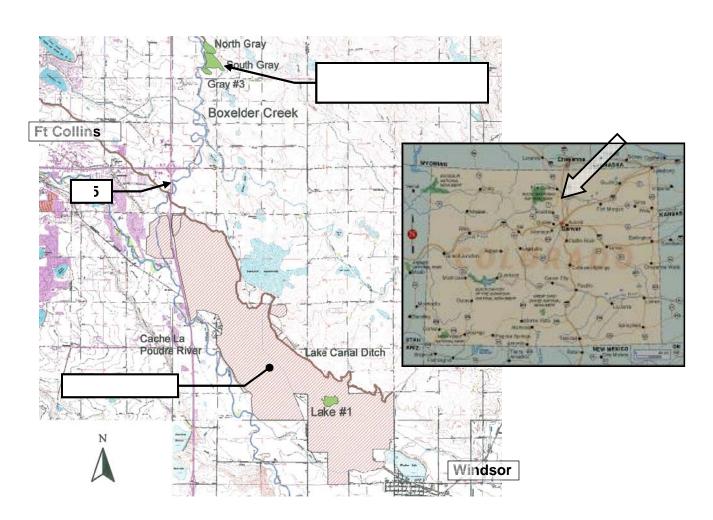
**Total Project Cost:** \$433,000 **Funding Sources:** Construction Fund

**Type of Borrower:** Blended Agricultural **Details:** 1,120 AF Stored

Municipal & Commercial 165 AF Recovered

**Loan Amount:** \$393,900 (Including 1% fee) **Interest Rate:** 3.15% **Term:** 30 years

The Lake Canal Reservoir Company is requesting a CWCB loan for reservoir improvements that include: 1) the installation of toe drains on the South Gray dam 2) the breaching of Gray No. 3 dam including erosion protection and access road realignment. The Project is necessary to address a SEO Dam Safety hazard and avoid the potential for a reservoir storage restriction. The South Gray Reservoir dam has excessive seepage along a major portion of the dam. The Reservoir Company desires to preserve the storage right on this reservoir and is interested in adding a toe drain or other seepage measures to ensure the safety of the dam. Gray Reservoir No. 3 is restricted to zero storage by the SEO due to the poor condition of the dam and outlet works. The Reservoir Company has received a court decree allowing the storage to be moved to other locations. Project design is expected to be done in early 2010 and construction is projected for the fall/winter 2010.



**Borrower:** Raymond Dairy, Inc. County: Mesa

**Project Name:** Raymond Ditch Reconstruction **Project Type:** Ditch Piping for Salinity Control

Drainage Basin: Colorado Water Source(s): Raymond Ditch & Grand

Valley Canal

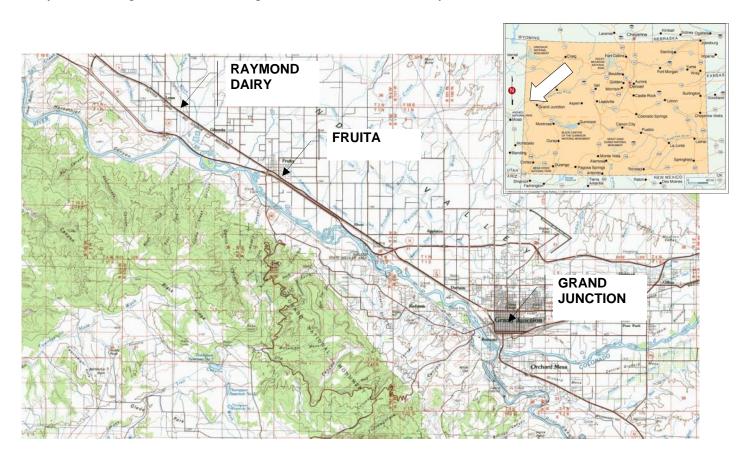
**Total Project Cost:** \$95,000 **Funding Sources:** Construction Fund

**Type of Borrower:** Agricultural **Average Delivery:** 386 AF

**Loan Amount:** \$63,950 (Initial loan \$95,950) **Interest Rate:** 2.5% **Term:** 20 years

(Including 1% fee)

The Raymond Dairy, Inc. is located just northwest of Fruita, Colorado and is owned by Robert and Helen Raymond. The Raymond Ditch has a capacity of 3.5 cfs and is used to carry irrigation water to approximately 125 acres of field crops for dairy cattle. This Project involves replacing 2,400 feet of the ditch, and installing new head gates and punch plates. This Project will decrease ditch seepage; thereby improving the environment by reducing salt leaching into the Colorado River. NRCS has provided planning and design engineering services for this work. The total project cost is \$95,000. The Borrower has been approved for a grant from NRCS that will cover approximately 33% of the cost of the Project. Construction is scheduled for the fall of 2009. Proposed CWCB funding consists of an initial loan from CWCB for \$95,950 that will be reduced by the NRCS grant. The remaining \$63,950 will become a 20-year CWCB Loan.



**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

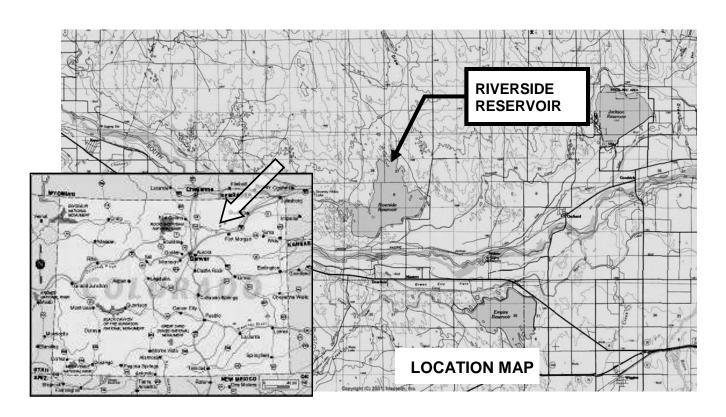
Perpetual Base Account

**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.



#### Water Project Loan Program - Project Data

Borrower: WRCC, Inc. County: Larimer, Weld

Project Name: Cobb Lake Inlet Structure Project Type: Reservoir Rehabilitation

Drainage Basin: South Platte Water Source: Cache La Poudre

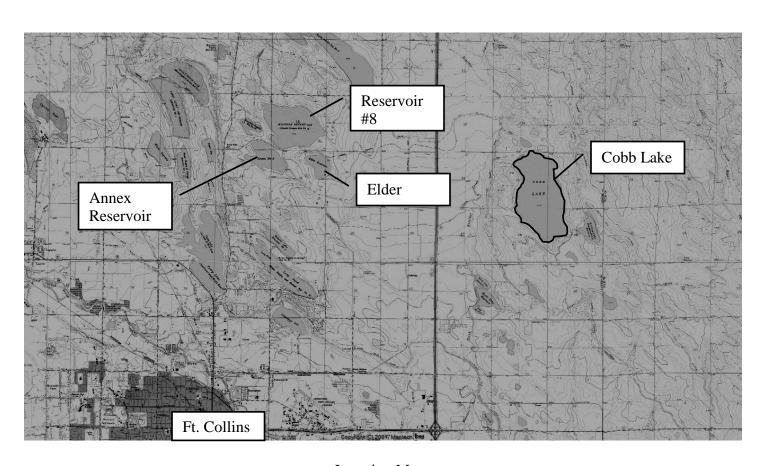
**Total Project Cost:** \$1,433,000 **Funding Sources:** Construction Fund

**Type of Borrower:** Blended **Average Delivery:** 35,000 acre-feet

(Ag & Middle Income Municipal)

CWCB Loan: \$1,301,890 (Including 1% fee) Interest Rate: 2.85% Term: 30 years

WRCC, Inc. (Company) owns and operates six storage reservoirs in Larimer and Weld Counties including Cobb Lake (Reservoir). The inlet ditch to the Reservoir has been badly eroded over time and vertical degradation has resulted in very steep ditch side slopes that are a safety concern. The inlet structures were built in the early 1900s and have been patched over the years; however, they are to the point where they could be subject to sudden catastrophic failure. If this inlet failed, the Reservoir could not be filled. The Company intends to reconstruct the exising inlet structures ditch to address both the safety and possible failure issues. Construction is expected to take place in early 2010 with completion by May 2010.



Location Map

**Borrower:** Park Center Water District County: Fremont

Project Name: Well Redrilling Project Project Type: Well Drilling

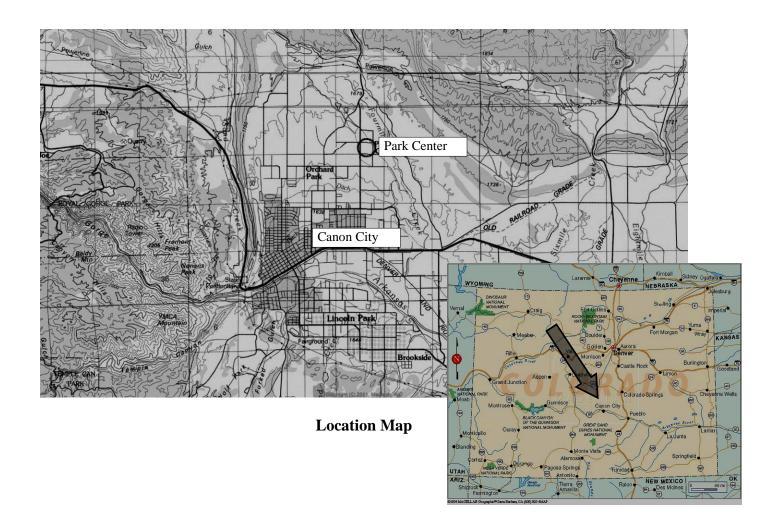
**Drainage Basin:** Arkansas Water Source: Nontributary Well

**Total Project Cost:** \$1,500,000 **Funding Sources:** District & CWCB

**Type of Borrower:** Municipal (Low Income) **Average Diversion:** 400 acre-feet

**Loan Amount:** \$1,010,000 (including 1% service fee) **Interest Rate:** 3.5% **Term:** 30 years

Park Center Water District (District) is located in Fremont County on the north side of Canon City. The District was formed in 1968 to supply drinking water to area residents. The primary source of this water is a well owned by the Bureau of Land Management (BLM) and leased by the District. The District has leased this well for forty years and has a first right of refusal to renew the lease when the current contract expires in 2021. In the spring of 2008, the 3,216 foot deep well developed a leak. The BLM and District had a contractor inspect the well and it was determined that leaks existed at 10 feet below the surface and at depths as great as 2,400 feet. The District decided the most cost effective solution is to redrill the well. The redrilling is expected to begin in February 2009 with completion by the end of March.



**Borrower:** Deuel and Snyder Improvement Company County: Morgan

**Project Name:** River Sand Gate Structure Project **Project Type:** Diversion Structure

Rehabilitation

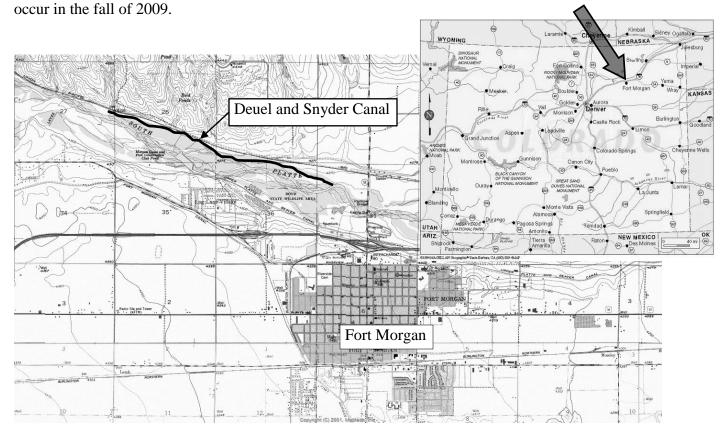
**Drainage Basin:** South Platte Water Source: South Platte River

**Total Project Cost:** \$100,000 **Funding Sources:** Severance Tax

**Type of Borrower:** Agricultural **Average Diversion:** 4,590 acre-feet

**Loan Amount:** \$90,900 (including 1% service fee) **Interest Rate:** 2.5% **Term:** 30 years

The Deuel and Snyder Improvement Company (Company) provides irrigation water to a 1,650 acre service area located in Morgan County. The Company operates a sand gate located on a South Platte River diversion structure. The sand gate is a vent section through the concrete rollover wall which is boarded up when the Company needs to divert water. Boards must be removed during the winter to allow excess sand (which builds up in front of the Company's diversion point) to wash down river. Currently, in order to remove boards and open the gate, a Company employee must walk several yards along the crest of the rollover wall to reach the sand gate. There is not a walkway or handrail for safety. Because this is a major safety concern for the Company, it evaluated alternatives to both improve the safety conditions for its employees and more efficiently operate the gate. The Company has chosen to replace the existing board gates with a new radial gate. Construction is expected to



**Location Map** 

#### Water Project Loan Program - Project Data

**Borrower:** Riverside Ditch & Allen Extension Co. County: Chaffee

Project Name: Phased Canal Improvements Project Type: Ditch Rehabilitation

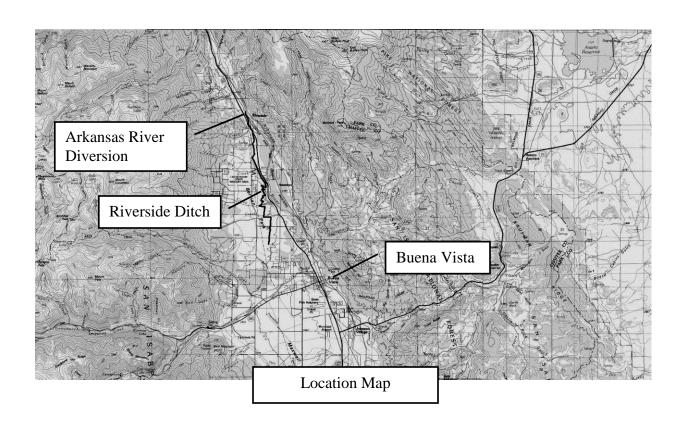
**Drainage Basin:** Arkansas River

**Total Project Cost:** \$205,000 **Funding Source:** Construction Fund

**Type of Borrower:** Agricultural **Average Diversion:** 3,250 acre-feet

**CWCB Loan:** \$186,345 (Including 1% fee) **Interest Rate:** 2.75% **Term:** 30 years

The Riverside Ditch and Allen Extension Company (Company), located near Buena Vista, owns and operates the Riverside Ditch (canal) that provides irrigation water to a 450 acre service area within Chaffee County. A significant portion of the Company's structures along the 125 year old canal are aged and in need of repair or replacement. The Company intends to complete a number of phased improvements to the canal that include: repairs to the river diversion; lining of portions of the canal to reduce seepage; installation of canal monitoring using SCADA equipment; phreatophyte removal; repair/replacement of aging headgates; and installation of standardized flumes. The proposed improvements would benefit the shareholders by improving overall canal efficiency, thereby increasing the consistency of shareholder headgate deliveries. These improvements will also benefit the Company through increased operator safety. Improvements are expected to be completed between the winter of 2009 and spring of 2012.



**Borrower:** Huerfano-Cucharas Irrigation Co. **County:** Pueblo/ Huerfano

Project Name: Cucharas Reservoir Rehabilitation Project Type: Reservoir Rehabilitation

**Drainage Basin:** Arkansas **Water Source**: Cucharas River

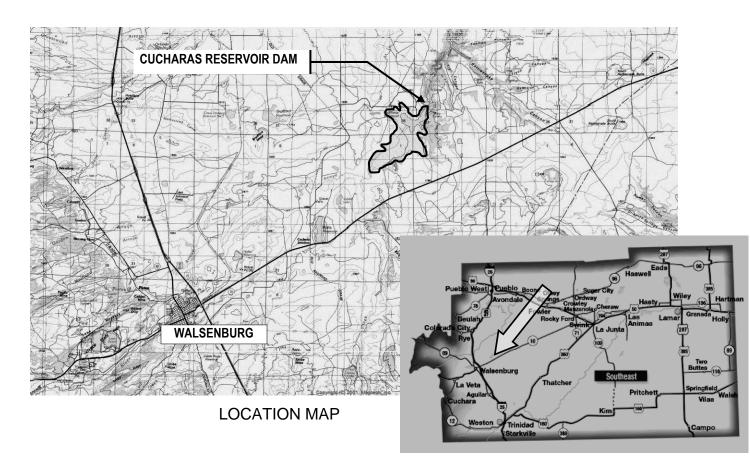
**Total Project Cost:** \$1,784,000 **Funding Sources:** STTFPBA

**Type of Borrower:** Agricultural **Average Delivery:** 3,000 acre-feet

New Storage: 7,500 AF (Restricted)

**Loan:** \$1,622,060 (Including 1% fee) **Interest Rate:** 2.5% **Term:** 30 years

The Huerfano-Cucharas Irrigation Company (Company) provides irrigation water to farmers in the Arkansas valley. The Company was organized in 1944 and currently has 47 shareholders. The Company owns and operates the Cucharas Reservoir, located east of Walsenburg. The dam is a 145-foot high rock fill dam that has undergone several enlargements since the original construction in 1914. The reservoir has a capacity of 35,395 acre-feet. A storage restriction has been in place since 1988 with a deadline of October 1, 2010, imposed by the SEO either to rehabilitate the existing dam, replace it with a new dam or a zero no-storage restriction will be imposed followed by an order to breach the dam and remove the hazard it represents. The Company plans to rehabilitate the existing dam to allow a reduced level (7,500 AF) of storage. The Project involves lowering the spillway, replacing outlet gates, installing a satellite monitoring system, and updating a new Emergency Action Plan. Pending SEO plan approval, project construction is expected to begin during the winter of 2009/2010.



#### CWCB Construction Loan Program PROJECT DATA SHEET

Borrower: Bull Creek Res. Canal & Power Co. County: Mesa

Project Name: Res. No. 4 Rehabilitation/Enlarge Project Type: Reservoir Rehabilitation

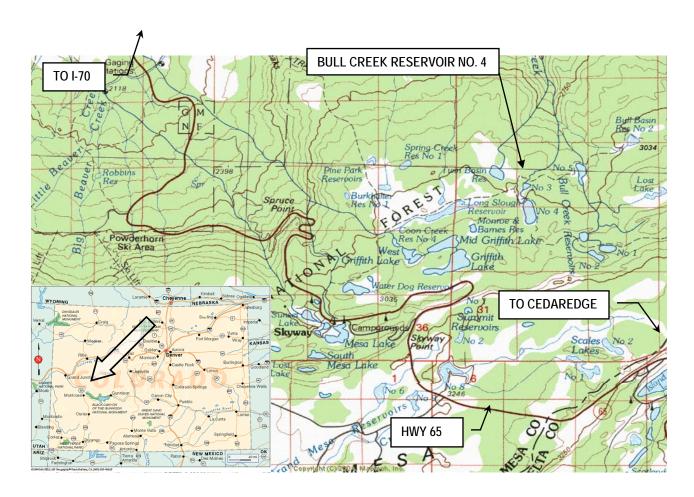
**Drainage Basin:** Colorado River **Water Source:** Bull Creek

**Total Project Cost:** \$1,602,000 Funding Sources: CWCB & Company

Type of Borrower: Agricultural Company Delivery: 900 acre-feet

Loan Amount: \$1,456,218 Interest Rate: 2.5% Term: 30 years

The Bull Creek Reservoir, Canal and Power Company is located in Mesa, Colorado, and has a service area of approximately 800 acres. The Company operates the Bull Creek Reservoirs that provide irrigation water to shareholders. The Company plans to repair and enlarge Reservoir No. 4. This will remove the current restriction on the reservoir and provide additional storage necessary to store the Company's decreed rights. The Company has a Stipulation and Agreement with the SEO that requires the Company to repair Reservoir No. 4 in order to avoid abandonment of a portion of the senior water rights. The Project is located on the US Forest Service property and will require a Special Use Permit for access roadway work and dam construction. The reservoir is remote and located at 10,000 feet elevation and will require special mobilization techniques. The Company was approved for a \$244,218 increase at the September 2009 Board Meeting, from its original January 2007 loan authorization, for a new total loan amount of \$1,456,218.



#### Water Project Loan Program - Project Data

**Borrower:** Boulder White Rock Ditch & Res Company County: Boulder/Weld

**Project Name:** Panama Reservoir Outlet **Project Type:** Reservoir Pump Station

**Drainage Basin:** South Platte Water Source: Boulder Creek

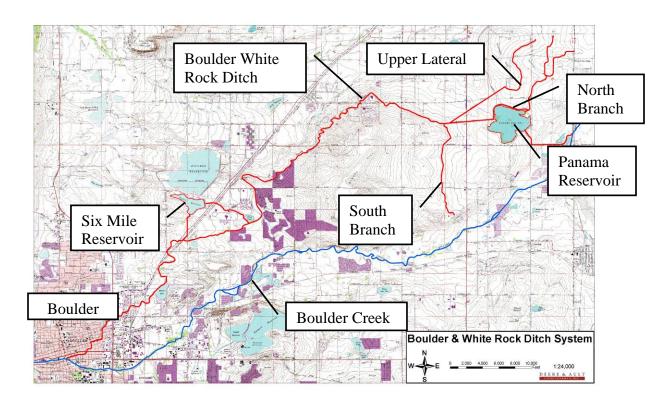
**Total Project Cost:** \$3,151,895 **Funding Sources:** CWCB, Company

**Type of Borrower:** 52% Ag. / 48% High-Income Muni / **Average Diversion:** 12,000 acre-feet

<1% Municipal

CWCB Loan: \$2,864,164 (Including 1% fee) Interest Rate: 3.45% Term: 30 years

The Boulder White Rock Ditch and Reservoir Company (Company) delivers irrigation water to land in Boulder and Weld Counties. It diverts water from Boulder Creek in downtown Boulder through the Boulder White Rock Ditch and stores water in two of its facilities: Six Mile Reservoir and Panama Reservoir. Due to recent operational changes, the Company no longer exchanges water with nearby ditches and needs to improve the flexibility in its own system to meets its shareholder's needs. The Company intends to build a reservoir pump station at the Panama Reservoir outlet in order to use water stored in the reservoir that is unable to be accessed through the existing gravity outlet. The Company was approved for a \$434,104 increase at the November 2009 Board Meeting, from its original November 2008 loan authorization, for a new total loan amount of \$2,864,164.



Location Map

#### Water Project Loan Program - Project Data

**Borrower:** Supply Irrigating Ditch Company County: Boulder

**Project Name:** Knouth Reservoir Dam **Project Type:** Reservoir Rehabilitation

Rehabilitation

**Drainage Basin:** South Platte Water Source: St. Vrain Creek

**Total Project Cost:** \$1,666,667 **Funding Sources:** CWCB, Company

**Type of Borrower: Blended** (Ag., Municipal **Aver. Diversion:** 4,800 acre-feet

High Income, Commercial)

**CWCB Loan:** \$1,515,000(Including 1% fee) **Interest Rate:** 2.60% **Term:** 30 years

Supply Irrigating Ditch Company services approximately 8,500 acres of irrigated farmland in Boulder County between Lyons and Mead. Currently the water for irrigation is supplied by a direct flow decree and from the Beaver Park Reservoir (which is approx. 25 miles west of the start of the Supply Ditch near the continental divide). Supply Irrigating Ditch Company is in the process of acquiring a storage decree within Knouth Reservoir in exchange for the rehabilitation of the reservoir. This reservoir will give the Company some system flexibility, as this storage is significantly closer to users than Beaver Park Reservoir. The reservoir improvements include: construction of a spillway, removing vegetation from the embankment of the dam, lining select areas on the upstream dam face with a clay liner, placing riprap along the upstream dam face, enclosing an irrigation ditch within a pipe, and installing dam instrumentation. The Company was approved for a \$610,040 increase at the November 2009 Board Meeting, from its original March 2008 loan authorization, for a new total loan amount of \$1,515,000.

