

1313 Sherman Street Denver, CO 80203

P (303) 866-3441 F (303) 866-4474 John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Kirk Russell, P.E., Chief

Finance Section

DATE: January 26-27, 2015 Board Meeting

AGENDA ITEM: 17a. Financial Matters - Construction Fund and Severance Tax PBF

Annual CWCB Water Project Loan Review

#### (This is for information only and no action is necessary)

A presentation will be made to update the Board on Projects that have recently been completed or are in the Design and Construction phase. A full list of these Projects is provided as a Director's Report.

Attached is the 2014 CWCB Small Projects Report which is submitted to the General Assembly each January via the Agriculture, Livestock and Natural Resources Committee as required by C.R.S. 37-60-122(b).



### **Colorado Water Conservation Board**

CONSTRUCTION FUND
AND
SEVERANCE TAX
PERPETUAL BASE FUND

# 2014 SMALL PROJECT LOAN REPORT



Colorado Water Conservation Board Department of Natural Resources

January 15, 2015

#### **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 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 2014.

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 18 new loan projects under \$10,000,000 approved by the CWCB in calendar year 2014. The total loan value is approximately \$20.6 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 12, 2015



Department of Natural Resources

1313 Sherman Street, Room 718 Denver, CO 80203

January 12, 2015

The Honorable Senator Jerry Sonnenberg
Chair, Senate Agriculture, Livestock and Natural Resources Committee

The Honorable Representative Edward Vigil Chair, House Agriculture, Livestock and Natural Resources Committee

Re: 2014 Small Project Loan Report

Construction Fund and Severance Tax Perpetual Base Fund

Dear Senator Sonnenberg and Representative Vigil,

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 2014 calendar year. The report will be presented to the CWCB at the January 26, 2015 meeting.

The report will be posted on the web at <a href="www.leg.state.co.us">www.leg.state.co.us</a> and on the CWCB website <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 Capitol Building. Paper copies of the Report will be made available upon request.

If you have questions or need additional copies of the report, please contact Mr. Gaspar Perricone, Legislative Liason, at 303-866-3311 x8664.

Sincerely,

James Eklund, Director

Colorado Water Conservation Board



#### Colorado Water Conservation Board Small Project Loans - Construction and Severance Tax Funds For Calendar Year 2014

	Date			Amount	<b>Funding Source</b>		
Item	Approved	Sponsor	Project	Approved	*	County	Basin
1	01/27/14	Big Elk Meadows Association	Emergency Raw Water Storage Repair Project	\$ 1,515,000	ST	Boulder/Larimer	South Platte
2	01/27/14	Boxelder Basin Regional Stormwater Authority	County Road 52 Improvements Project	\$ 818,000	CF	Larimer	South Platte
3	05/22/14	Ephrain Ditch Company	Conejoes Confluence Project	\$ 101,000	CF	Rio Grande	Rio Grande
4	05/22/14	Farmers Pawnee Canal Company	Diversion Structure Replacement Project	\$ 2,067,470	CF	Logan	South Platte
5	05/22/14	Fulton Irrigation Ditch Company	Diversion Structure Rehabilitation Project	\$ 2,027,070	CF	Adams	South Platte
6	05/22/14	Louden Irrigating Canal and Reservoir Company	Emergency Diversion Structure and Ditch Repair	\$ 161,600	ST	Larimer	South Platte
7	05/22/14	Northern Colorado Water Conservancy District	Granby Hydropower Project	\$ 5,135,183	ST	Grand	Colorado
8	05/22/14	Sanford Canal Company	Conejoes Confluence Project	\$ 101,000	CF	Rio Grande	Rio Grande
9	05/22/14	Sylvan Dale Ranch, LLP	Emergency Irrigation Pond Excavation	\$ 105,171	ST	Larimer	South Platte
10	05/22/14	Prairie Ditch Company	Plaza Project Phase 3: Prarie Ditch Implementation Project	\$ 131,300	CF	Rio Grande	Rio Grande
11	07/17/14	St. Vrain and Left Hand Conservancy District	Emergency Rock'N WP Ranch Lake No. 4 Repair Project	\$ 4,545,000	ST	Boulder	South Platte
12	07/17/14	Upper Platte and Beaver Canal Company	Hospital Road Recharge Facility & Bridge Widening Project	\$ 190,890	CF	Morgan	South Platte
13	09/11/14	Sterling Irrigation Company	Emergency Sterling Ditch Rehabilitation Project	\$ 101,000	ST	Logan	South Platte
14	11/20/14	Town of Bennett	Wells #3 and #6 Replacment Project	\$ 1,600,000	CF	Adams/Arapahoe	South Platte
15	11/20/14	Las Animas Consolidated Canal	Repair & Replacement of the LACC Spillway Structure	\$ 400,200	ST	Bent	Arkansas
16	11/20/14	Platte Valley Irrigation Company	Sand Hill Lake Outlet Works Rehabilitation	\$ 820,000	ST	Weld	South Platte
17	11/20/14	Supply Irrigating Ditch Company	Emergency Supply Irrigating Ditch Repair Project	\$ 321,000	ST	Boulder	South Platte
18	11/20/14	West Reservoir and Ditch Company	West Reservoir and Ditch Poutlet Repair Project	\$ 471,577	ST	Delta	Gunnison
		Total Small Project Loans Approved in 2014		\$ 20,612,461	]		

<sup>\*</sup> Indicates weather the funding source is from Constrcution Fund (CF) or Severance Tax Fund (ST)

C150391

**Project Name:** Emergency Raw Water Storage

Repair Project

**Drainage Basin/ District:** South Platte / 4

**Total Project Cost:** \$1,900,000

**Type of Borrower:** Middle-Income Municipal

**CWCB Loan:** \$1,515,000

(with 1% service fee)

**Project Type:** Reservoir Rehabilitation

Water Source: West Fork of the Little

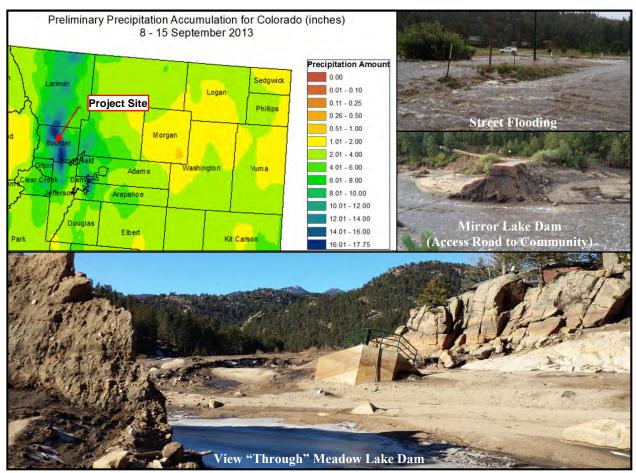
Thompson River

**Funding Source:** Severance Tax PBF

Water Storage: 108 AF

**Interest Rate:** 2.75% **Term:** 30-years

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. Measured rainfall in and around Big Elk Meadows exceeded the 1,000-year Average Recurrence Interval for rainfall. Flow along the West Fork reached historic levels and resulted in the destruction of all five dams; both flow monitoring stations; the community's access road (CR-47); the majority of interior roads; and the water, power, and telephone services. The purpose of this project is to restore the community's water supply by reconstructing the five dams and two monitoring stations.



**Borrower:** Boxelder Basin Regional County: Larimer

Stormwater Authority

**Drainage Basin/ District:** South Platte / 3 **Water Source:** Boxelder Creek

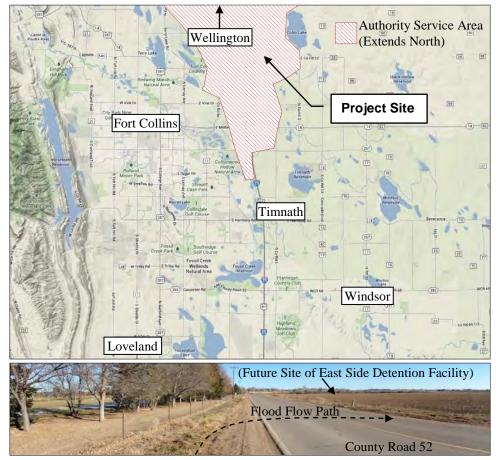
**Total Project Cost:** \$1,850,000 **Funding Source:** Construction Fund

**Type of Borrower:** Middle Income Municipal **Average Annual Diversion:** N/A

CWCB Loan: \$818,100 Interest Rate: 2.50% Term: 15 years

(with 1% service fee) (Reduced from 2.75% for middle income municipal)

The Boxelder Basin Regional Stormwater Authority was formed in 2008, through an IGA between Fort Collins, Larimer County, and Wellington, to facilitate the construction of regional stormwater improvements to reduce the threat of flooding and remove areas from the FEMA floodplain in the Boxelder Creek basin. The County Road 52 Improvement Project will be completed in conjunction with the Authority's East Side Detention Facility (CWCB Loan Contract C150352) and Larimer and Weld Canal Crossing Structure (CWCB Loan Contract C150353). This Project will install box culverts under County Road 52 to reduce roadway overtopping in a 100-year storm event. Altogether, these projects are expected to reduce downstream flows in Boxelder Creek from over 7,000 cfs to less than 2,400 cfs during a 100-year storm event.



**Borrower:** The Ephraim Ditch Company County: Rio Grande

**Project Name:** Ephraim Diversion and **Project Type:** Ditch Rehabilitation

Headgate Rehabilitation

**Drainage Basin/ District:** Rio Grande / 22 **Water Source:** Conejos River

**Total Project Cost:** \$201,500 **Funding Source:** Construction Fund,

WSRA Grants

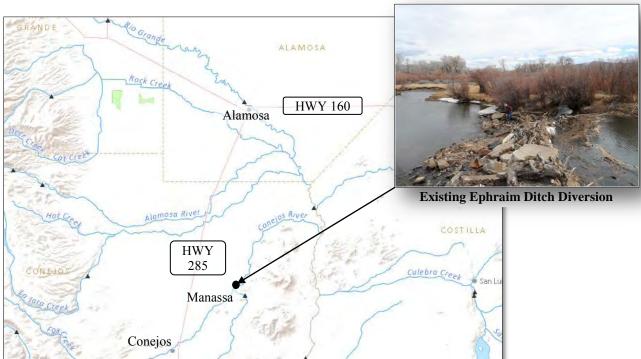
**Type of Borrower:** Agricultural **Average Annual Diversion:** 4,100 AF

CWCB Loan: \$101,000 Interest Rate: 1.75% Term: 30-years

(with 1% service fee)

The Ephraim Ditch Company formed in 1883 and incorporated in 1927 as a Mutual Ditch Company. Its diversion is located on the Conejos River just below the confluence with the San Antonio River and a service area covering approximately 5,000 irrigated acres. The purpose of this Project is to address the need for a well-designed diversion structure that will reduce maintenance, improve water management efficiencies, and allow for the accurate control of compact-entitled waters. The core of the Ephraim Ditch diversion structure has been washed away over time, contributing to decades of limited diversion to irrigators and potential over payment to the Compact. Currently irrigators divert their water right by piling debris such as tree trunks or cinderblocks to act as the diversion dam. This Project will remove and replace the diversion and headgate structure and install automated headgates and five gauging stations. Construction is expected to start around July 2015.

This Project is one of three projects collectively known as the Conejos River System Confluence Management Project, managed by the Conejos Water Conservancy District. The District has taken a proactive "whole river" system approach to water management and, over the past few years, has improved the efficiency and stability of many diversions, developed real-time water management data, and studied the effects on return flows from irrigated areas from groundwater withdrawals. The Confluence Management Project will extend this whole river strategy to the Confluence, specifically to the Sanford Canal, Ephraim Ditch, and East Bend Ditch.



C150394

**Borrower:** Farmers Pawnee Canal Company County: Logan

Project Name: Diversion Structure Replacement Project Type: Diversion Structure

**Project** 

**Drainage Basin/ District:** South Platte / 64 **Water Source:** South Platte River

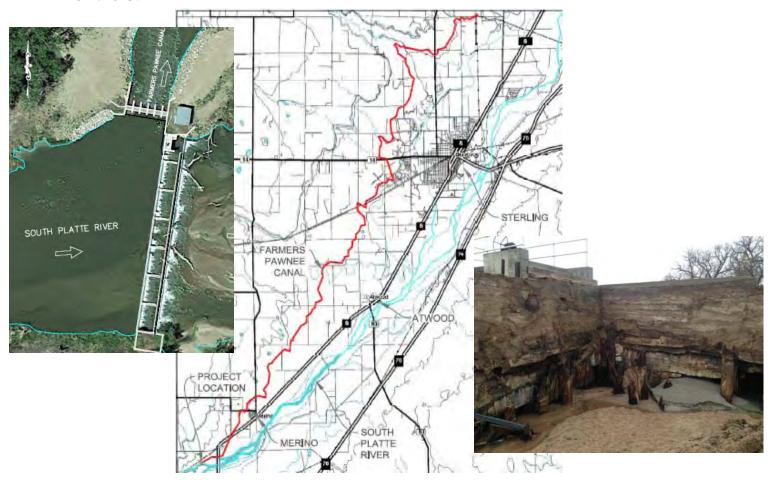
**Total Project Cost:** \$2,047,000 **Funding Source:** Construction Fund

**Type of Borrower:** Agricultural **Average Annual Diversion:** 27,956 AF

**CWCB Loan:** \$2,067,470 **Interest Rate:** 1.75% **Term:** 30 years

(with 1% service fee)

The Company provides irrigation water to a 10,000 acre service area, extending from one mile south of Merino to four miles north of Sterling along the west side of the South Platte River. The Company's diversion structure is 218-foot long rollover diversion dam that spans the width of the river. Adjacent to the dam is the Company's 40-foot canal headgate structure. Both structures were originally built in 1926. After the September 2013 flood, the river began to undermine the structures. Attempts to repair the structures with additional steel sheet piling and concrete were not successful and the undermining worsened. The Company intends to rebuild the diversion dam and canal headgate. Replacement of the diversion dam provides the Company with an opportunity to utilize an improved design and alleviate an ongoing maintenance issue of sand accumulation within the canal. Construction is expected to occur in the fall/winter of 2014/2015.



C150399

**Borrower:** Fulton Irrigation Ditch Company County: Adams

**Project Name:** Diversion Structure Rehabilitation **Project Type:** Diversion Rehabilitation

Project

**Drainage Basin/ District:** South Platte / 2 **Water Source:** South Platte River

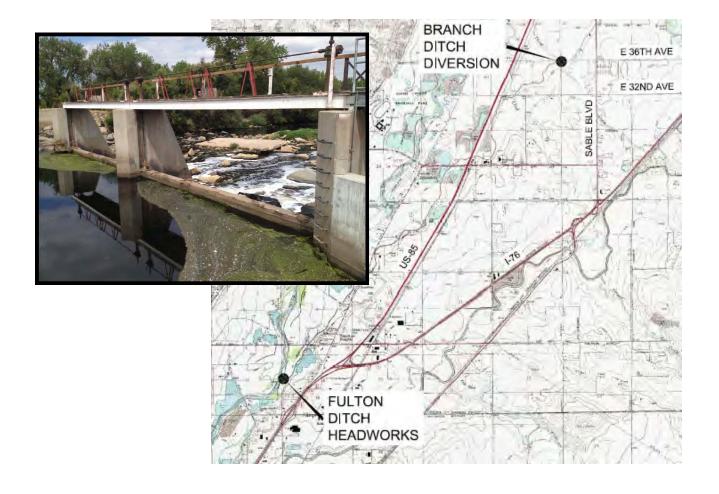
**Total Project Cost:** \$2,230,000 **Funding Source:** Construction Fund

**Type of Borrower:** Blended **Average Annual Diversion:** 29,684 AF

**CWCB Loan:** \$2,027,070 **Interest Rate:** 2.45% **Term:** 30-years

(with 1% service fee)

The purpose of the Project is to replace the Company's South Platte River diversion gates and rehabilitate the existing trash rack. The Project will also include the reconstruction of the Branch Ditch Diversion Structure on the Fulton Ditch. The Company diverts South Platte River water near 100th Ave. in Commerce City to a 38,000 acre service area. Sago pond weed in the South Platte River has escalated and is beginning to obstruct the flow of water through the existing trash rack. Construction is expected to occur in the fall/winter of 2014/2015.



C150398

**Borrower:** Louden Irrigating Canal

and Reservoir Company

**Project Name:** Emergency Diversion Structure

and Ditch Repair

**Drainage Basin/ District:** South Platte / 4

**Total Project Cost:** \$215,000 **Funding Source:** Severance Tax PBF

**Type of Borrower:** Blended **Average Annual Diversion:** 8,000 AF

CWCB Loan: \$161,600 Interest Rate: 2.70% Term: 30-years

(with 1% service fee) (25% Ag, <1% Low, 61% Mid, 8% High, 6% Com)

**County**: Larimer

**Project Type:** Ditch Rehabilitation

Water Source: Big Thompson River

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged, including the Company's river diversion. The ditch was diverting water as the September storm started. As the flood progressed, the headgates could not be safely reached for operations. Water overtopped the headgate structure by at least 4 feet resulting in damage to the headgate and ditch system. The first 3,000 feet of the ditch were totally filled with silt and debris. The ditch breached back to the river in two places and undercutting caused slides that threatened the ditch. Phase 1 will clean and rebuild the ditch and service road, and salvage the existing headgates to ensure general operation for the 2014 irrigation season. Phase 2 will replace the existing headgates with gates that are safer, more accurate, and capable of remote operation.



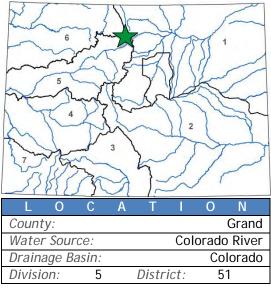


#### **Granby Hydropower Project**

Northern Colorado Water Conservancy District
November 2014 Board Meeting

LOAN DETA	A I L S					
Project Cost:	\$5,669,340					
CWCB Loan (with Service Fee):	\$5,135,183					
Loan Term and Interest Rate: 30 Years @ 2.0 %						
Funding Source: Severance Tax Perpetual Base Fund						
BORROWER	TYPE					
Hydropower						
пуагороwer						
PROJECT DE	T A I L S					
	T A I L S Hydroelectric					

Northern Water Hydropower Water Activity Enterprise a government -business owned by the Northern Colorado Water Conservancy District is applying for a loan for the construction of the Granby Hydropower Project. The Project is located at the existing Colorado - Big Thompson Project Granby Dam and will utilize the existing releases to the Colorado River without changing the flow regime.



The hydro station will use the minimum streamflow obligations and a portion of additional releases to generate power through a 1.2-megawatt facility. The Project is being performed under the U.S. Bureau of Reclamation's Lease of Power Privilege (LOPP) process. Power generated will be purchased by Mountain Parks Electric, Inc. per a 30-year Power Purchase Agreement (PPA). The anticipated Project schedule is to finalize the LOPP and PPA by end of 2014. Construction will occur in the summer/fall of 2015 and is expected to be operational by the summer of 2016.



C150401

**Borrower:** The Sanford Canal Company County: Rio Grande

**Project Name:** Sanford Diversion and **Project Type:** Ditch Rehabilitation

Headgate Rehabilitation

**Drainage Basin/ District:** Rio Grande / 22 **Water Source:** Conejos River

**Total Project Cost:** \$213,000 **Funding Source:** Construction Fund,

WSRA Grants

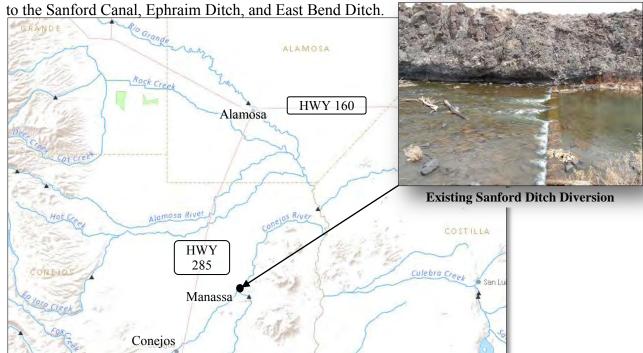
**Type of Borrower:** Agricultural **Average Annual Diversion:** 4,000 AF

CWCB Loan: \$101,000 Interest Rate: 1.75% Term: 30-years

(with 1% service fee)

The Sanford Canal Company was incorporated in 1892 as a "Colorado Water Company" and later became a Mutual Ditch Company in 1912. Its diversion is located on the Conejos River just below the confluence with the San Antonio River and has a service area covering approximately 3,000 irrigated acres. The purpose of this Project is to address the need for a well-designed diversion structure that will reduce maintenance, improve water management efficiencies, and allow for the accurate control of compact-entitled waters. The core of the Sanford Canal diversion structure has been washed away over time, contributing to decades of limited diversion to irrigators and potential over payment to the Compact. Currently irrigators divert their water right by piling debris such as tree trunks or cinderblocks to act as the diversion dam. This Project will remove and replace the diversion and headgate structures and install automated headgates and four gauging stations. Construction is expected to start by September 2014.

This Project is one of three projects collectively known as the Conejos River System Confluence Management Project, managed by the Conejos Water Conservancy District. The District has taken a proactive "whole river" system approach to water management and over the past few years have improved the efficiency and stability of many diversions, developed real-time water management data, and studied the effects on return flows from irrigated areas from groundwater withdrawals. The Confluence Management Project will extend this whole river strategy to the Confluence, specifically



C150392

**Borrower:** Sylvan Dale Ranch, LLLP **County**: Larimer

Excavation

**Drainage Basin/ District:** South Platte / 4 **Water Source:** Big Thompson River

**Total Project Cost:** \$104,130 Funding Source: Severance Tax PBF

**Type of Borrower:** Agricultural **Average Annual Diversion:** 166 AF

(with 1% service fee)

The Ranch has been owned and operated by the Jessup family since 1946 as both a guest ranch and a working ranch encompassing 3,200 acres in the foothills at the mouth of the Big Thompson Canyon, seven miles west of Loveland. There are 160 irrigated acres of alfalfa-hay pastures. Hay is harvested off these pastures in June and, during the rest of the year, the pastures are grazed by the Ranch's grass-fed cattle herd. The Ranch owns two adjoining ponds next to Big Thompson River. The ponds, which were silted in during the September 2013 flood, are fed by springs and drain into the river just above the George Rist Ditch diversion. The Ranch pumps water out of the ponds to irrigate pastures located immediately south of the ponds. Between 142 and 190 acre-feet are used per season, using two center pivots. Without these ponds, there is no means to irrigate the pastures. The purpose of this project is to excavate the silt from the ponds. Construction is scheduled for late spring 2014.



**Borrower:** The Prairie Ditch Company County: Rio Grande

**Project Name:** Plaza Project Phase 3: **Project Type:** Ditch Rehabilitation

Prairie Ditch Implementation Project

**Drainage Basin/ District:** Rio Grande / 20 **Water Source:** Rio Grande River

**Total Project Cost:** \$975,000 **Funding Source:** Construction Fund,

WSRA Grants

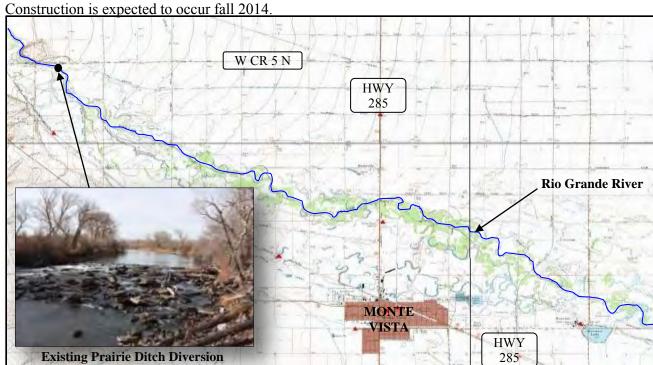
**Type of Borrower:** Agricultural **Average Annual Diversion:** 16,000 AF

CWCB Loan: \$131,300 Interest Rate: 1.25% Term: 10-years

(with 1% service fee)

The Prairie Ditch Company is a Mutual Ditch Company formed in 1887. The Prairie Ditch diversion structure and headgate is located seven miles northwest of Monte Vista, Colorado on the Rio Grande River and has a service area of approximately 23,000 acres. The diversion and headgates were constructed in the early 1900s and was most recently reworked in 1962. They are now deteriorating, presenting a growing concern the diversion structure may soon completely wash out. Both the diversion and headgate were highlighted as river rehabilitation priorities in a 2001 study titled "Rio Grande Headwaters Restoration Project." The study analyzed the condition of riparian habitats and structures along a 91-mile reach of the Rio Grande from the town of South Fork to Alamosa and triggered a more localized effort known as the Plaza Project.

The Plaza Project is a multi-phased project intended to improve the health and function of the Rio Grande River in the Sevenmile Plaza area through stream bank restoration, wetland restoration, and the replacement of aging and inefficient diversion and headgate structures. Phase 1 was a planning phase and identified several diversion and headgate structures in need of replacement. Phase 2 (McDonald Ditch Implementation Project) was the Plaza Project's first implementation project and was funded in part with a CWCB Loan and WSRA grant. Phase 3 is the second implementation project and the subject of this loan request. Project Tasks include the final engineering design and construction of the new Prairie Ditch diversion and headgate, as well as stream bank stabilization, monitoring, outreach, and education.



Borrower: St. Vrain and Left Hand Water

Conservancy District

Project Name: Emergency Rock'n WP Ranch

Lake No. 4 Repair Project

Drainage Basin: South Platte

Total Project Cost: \$9,000,000

Type of Borrower: Blended

CWCB Loan: \$4,545,000 (with 1% service fee)

County: Boulder

Project Type: Reservoir Rehabilitation

Water Source: St. Vrain Creek

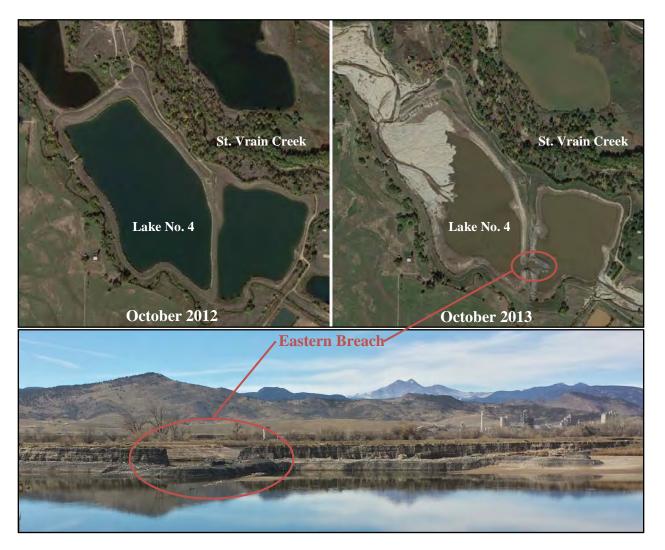
Funding Source: Severance Tax Perpetual

Base Fund

Average Annual Augmentation: 200 AF Preserved Water Supply Storage: 600 AF Interest Rate: 3.2% Term: 30-years

(Ownership: 93% High Municipal, 7% Commercial)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the District's Rock'n WP Ranch Lake No. 4. During the flood, St. Vrain Creek breached in over four locations above the Lake. The unlined gravel pits above the Lake were flooded, causing their earthen embankments to fail, sending flood water into the Lake. The Lake filled and eventually overtopped, breaching its eastern embankment. The purpose of the Project is to repair the Lake to resume its use as a water augmentation reservoir by the District. Boulder County is a co-owner of the Lake. As the County and the District are public agencies, it is expected that FEMA will reimburse 75% of the Project Cost and the State's Public Assistance Program will cover 12.5% under their respective emergency programs. The remaining cost of repairs will be evenly split with Boulder County.



Borrower: Upper Platte & Beaver Canal Company County: Morgan

Project Name: Hospital Road Recharge Facility and Project Type: Augmentation

Bridge Widening Project

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

District: Division 1, District 1

Type of Blended Average Annual Diversion:

Borrower: 35,000 Acre-feet

(with 1% service fee) Rate:

The Upper Platte & Beaver Canal Company desires funding to construct an augmentation pond, and, at a separate location, to widen an existing access bridge at their primary diversion along the South Platte River. The augmentation pond will enable better retiming of return flows to the river by virtue of its further location from the river than existing augmentation ponds operated by the Company. The widening of the access bridge will allow improved function and safety crossing the canal for ongoing maintenance needs.





#### **Emergency Sterling Ditch Rehabilitation Project**

Sterling Irrigation Company September 2014 Board Meeting

LOAN DET	A I L S
Project Cost:	\$123,250
CWCB Loan (with Service Fee):	\$101,000
Loan Term and Interest Rate:	10 Years @ 1.50%
Funding Source: Severance Tax	Perpetual Base Fund
BORROWER	TYPE
Agriculture Municipal	Commercial
100% 0% Low - 0% Mid - 0%	High 0%
PROJECT DE	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	

L O C A T I O N

County: Logan

Water Source: South Platte River

Drainage Basin: South Platte

Division: 1 District: 64

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's ditch. Floodwaters entered the ditch resulting in breaches and significant sedimentation. Construction crews repaired

the breaches and removed sand from the channel enabling the Company to divert its water right during the 2014 irrigation season, irrigating approximately 7,400 acres. No additional flood related repairs are expected to occur.





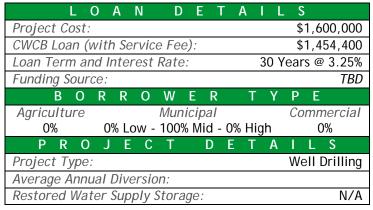
### Wells #3 and #6 Replacement Project

**Town of Bennett** 

South Platte

1

November 2014 Board Meeting



The Town of Bennett provides water to its 2,500 residents from the Denver, Upper Arapahoe and Lower Arapahoe, and Laramie-Fox Hills aquifers. A recent study reveiled the need to address operational reliability, efficiency, and safety of the Town of Bennett's Well #3 and Well #6. The Town currently has nine wells. The replacement of

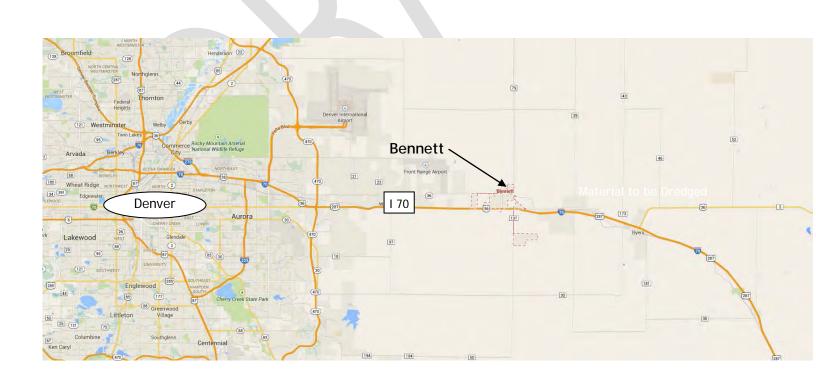
Adams & Arapahoe County: Water Source: Groundwater

District:

Drainage Basin:

Division:

wells #3 and #6 will provide the Town with additional supply to meet demands and needed redundancy in its water supply system. Both wells need to be replaced due to the age of the existing wells. The construction schedule is to be determined.

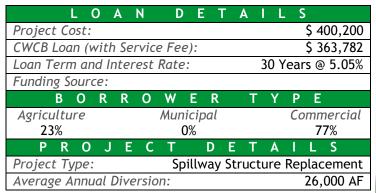




### Repair & Replacement of the Las Animas Consolidated Canal Spillway Structure

Las Animas Consolidated Canal Company

November 2014 Board Meeting



The Las Animas Consolidated Canal Company and the Consolidated Extension Canal Company were formed in the mid-1870s and together have continuously operated to irrigate 8,300 acres of land in the vicinity of Las Animas, Colorado. A significant, localized thunderstorm

LOCATIONCounty:BentWater Source:Arkansas RiverDrainage Basin:ArkansasDivision:2District:17

occurred during the night in April 2014, which created heavy runoff which flowed into the canal downstream of the main canal headgate through several uncontrolled and ungaged tributaries. These flows exceeded the capacity of the existing spillway structure at the river return, caused the structure to be overtopped and undermined, and resulted in catastrophic failure of the existing structure. While temporary measures have been put in place to keep the ditch in operation, a long-term solution is being sought. The Company is seeking to replace the spillway structure with an improved and modernized structure similar to the original design, but with additional control and safety measures to allow automated canal operations, including response to similar flooding conditions in the future. Modernization of this structure will improve routine canal operations and safety, in addition to mitigating future canal failure risk.



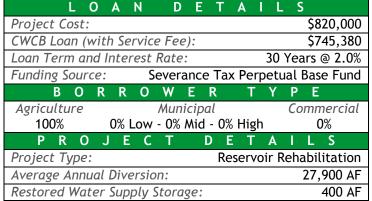


#### Sand Hill Lake Outlet Works Rehabilitation

Drainage Basin:

Division:

Platte Valley Irrigation Company November 2014 Board Meeting



L O C A T I O N

County: Weld

Water Source: South Platte River, C-BT

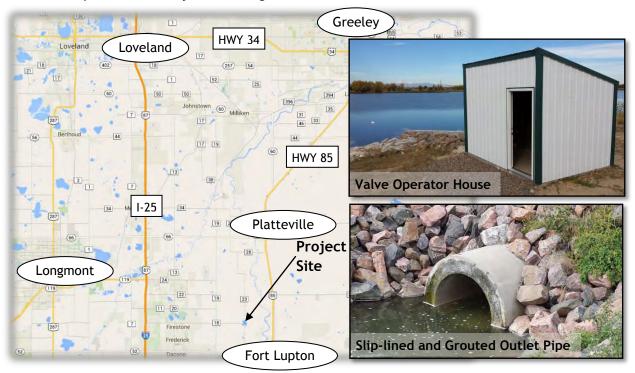
District:

South Platte

2

The Platte Valley Irrigation Company provides raw water for the irrigation of approximately 14,800 acres of agricultural land extending from Platteville to approximately 28 miles east along Highway 85.

In January 2014, the Company was in the process of replacing the 48" gate in the outlet of Sand Hill Reservoir. During construction a sink hole developed in the dam around the outlet structure, prompting an emergency response from the Company and the SEO's Dam Safety Branch. The Project team, in close coordination with the SEO, developed a project approach for the completion of the rehabilitation of the outlet structure. The Project was completed in May 2014 and the SEO issued an acceptance of construction in July 2014. Due to the emergency nature of the Project, and the need to get the reservoir back online for the irrigation season, the Company temporarily funded the Project using cash funds previously raised for an upcoming reservoir construction project. The Company is seeking this CWCB loan to provide final Project financing.

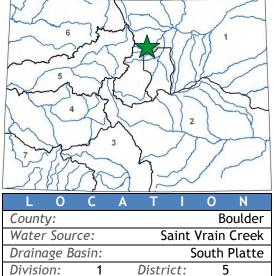




#### **Emergency Supply Irrigating Ditch Repair Project**

Supply Irrigating Ditch Company November 2014 Board Meeting

LOAN DET	A I L S
Project Cost:	\$321,000
CWCB Loan (with Service Fee):	\$324,210
Loan Term and Interest Rate:	27 Years @ 2.25%
Funding Source: Severance Tax	Rerpetual Base Fund
BORROWER	TYPE
Agriculture Municipal	Commercial
86% 0% Low - 5% Mid - 7%	High 2%
PROJECT DE	TAILS
Project Type:	Ditch Rehabilitation
Average Annual Diversion:	4,650 AF



During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's ditch system. Floodwaters destroyed the diversion dam, caused heavy sedimentation in the ditch, and damaged 750 LF of ditch.

Temporary repairs were completed in order to allow the Company to divert a portion of its water rights during the 2014 irrigation season. The Company has received approval of its Project Worksheet from FEMA to fund a portion of the permanent repairs. This loan will cover the remaining cost associated with the repairs and provide upfront funding for the FEMA reimbursement funds. Construction is scheduled to be complete prior to the 2015 irrigation season.

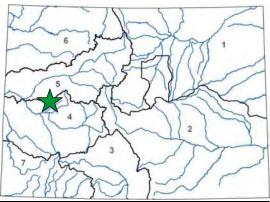




#### West Reservoir And Ditch Outlet Repair Project

West Reservoir and Ditch Company
November 2014 Board Meeting

LOAN DET	AILS
Project Cost:	\$ 471,577
CWCB Loan (with Service Fee):	\$248,378
Loan Term and Interest Rate:	30 Years @ 2%
Funding Source:	
BORROWER	TYPE
Agriculture Municipal	Commercial
100% 0%	0%
PROJECT D	ETAILS
Project Type:	Outlet Rehabilitation
Average Annual Diversion:	604 AF



The West Reservoir and Ditch Company operates West Reservoir No. 1, providing water seven miles eastward via Wakefield Ditch to Wakefield Mesa. The water is available for livestock as it traverses east Oak Mesa, and irrigates approximately 600 acres of hay and pasture. The

current landowners use the Oak Mesa Reservoir and Ditch water for spring irrigation, and, when those flows are exhausted, use the West Reservoir flows for mid-summer to fall irrigation. The West Reservoir was improved in the early 1950s, but is now under a storage restriction order from the Office of the State Engineer due to deterioration of the outlet pipe. This project will include a low-level outlet sized to meet SEO release requirements, an outlet stilling basin structure downstream of the dam for energy dissipation, and an intake structure for a manually-operated slide gate and trash racks. Construction is scheduled for Spring of 2015.

