

# Colorado Water Conservation Board

CONSTRUCTION FUND  
AND  
SEVERANCE TAX TRUST FUND

## ANNUAL REPORT



Colorado Water Conservation Board  
Department of Natural Resources

December 1999

# CONTENTS

Preface.....	3
1.0 CWCB Overview .....	4
1.1 Mission.....	4
1.2 Board Composition .....	4
1.3 Statutory Responsibilities .....	5
1.4 Customers .....	6
1.5 Business Services.....	6
1.6 Organization.....	7
2.0 CWCB Construction Fund .....	8
2.1 Cash Sources.....	8
2.2 Fund Equity.....	9
2.3 Fish and Wildlife Resources Account.....	10
2.4 Emergency Infrastructure Repair Loan Account .....	11
2.5 Small Project Loan Account .....	12
2.6 Arkansas River Augmentation Loan Account .....	13
2.7 Salinity Control Program Loan Account .....	14
2.8 Litigation Account .....	15
2.9 Colorado River Recovery Program Loan Account.....	15
2.10 Transfer to the Species Conservation Trust Fund.....	15
2.11 Publications Account .....	16
2.12 Authorized Loans from the Construction Fund .....	16
3.0 Severance Tax Trust Fund .....	19
3.1 Cash Sources.....	19
3.2 Operational Account .....	20
3.3 Perpetual Base Account .....	22
4.0 Water Project Construction Loan Program .....	23
4.1 Eligible Projects.....	23
4.2 Construction Fund Criteria .....	23
4.3 Interest Rate Policy .....	24
4.4 Loan Deposits .....	25
4.5 Loan Disbursements.....	26
4.6 Completed Construction Project Loans .....	26
4.7 De-authorized Loans .....	27

5.0 Studies and Investigations.....	29
5.1 Rio Grande Decision Support System Data Collection & Design Continuation...	29
5.2 Satellite Monitoring System Maintenance Continuation.....	30
5.3 Arkansas River Multi-Objective Management Plan Continuation .....	30
5.4 Imaging System for the Construction Fund Project Records.....	30
5.5 South Platte River Decision Support System Feasibility Study .....	30
5.6 Rio Grande Headwaters Restoration Project .....	31
5.7 Arkansas River Basin Water and Storage Needs Assessment – Phase 2.....	31
5.8 Cherry Creek Reservoir Flood Safety Investigation.....	31
5.9 Change in Statutes.....	31

Appendix A - Completed Project Loans

Appendix B - Data for Loan Projects Completed in FY98-99

Appendix C - Data for SB 99-173 Authorized Loan Projects

---

Appendix D - List of De-Authorized Loan Projects

Appendix E - List of Completed Feasibility Studies

## Preface

Fiscal Year 1999 was a year of transition for the State of Colorado. Governor Owens took office in January 1999 and shortly thereafter named Greg Walcher as the Executive Director of the Department of Natural Resources. In February, the new Executive Director appointed me to succeed the late Daries "Chuck" Lile as the Director of the Colorado Water Conservation Board (CWCB). Last spring, I appointed Dan McAuliffe as my Deputy and Mike Serlet as Chief of the CWCB's Water Supply Planning and Finance Program. These changes, together with three new CWCB Board members, newly elected legislative leadership, and a comprehensive performance audit by the Legislative Audit Committee continued to mold the future of the CWCB Construction Fund Loan Program.

Following a 5-year period of significant improvement in the management and financial integrity of the Construction Fund, the September 1998 performance audit suggested continued opportunity to continue business-like administration of this essential program. With the eighteen audit recommendations as a guide, the CWCB completed clarification of several program policies in the areas of feasibility studies, collateral, loan collections, project time limits, and creditworthiness analysis. These policies, together with additional support in project accounting and contract compliance, have provided a new foundation layer to complement an experienced and professional staff.

Despite the aforementioned policy, personnel, and administrative changes influencing the Construction Fund Program, the existing staff maintained its high standard of customer service that has been the hallmark of this very unique program over the recent years. Eighteen projects were completed in FY99 worth more than \$20 million in loans impacting over 80,000 acre feet of water supplies. Additionally, almost \$4 million in project planning and technical studies were funded, and/or commenced, utilizing the resources available from the Construction Fund.

The Severance Tax Trust Fund Perpetual Base Account was needed again this year in supplementing the Construction Fund as a new source of water supply project loan funds. As Colorado grows, our water supply infrastructure will require continual improvement and the potential harm associated with future droughts could increase rapidly. Our initial survey results indicate that fewer than 5% of our communities, irrigation districts, and businesses have a realistic plan for "surviving" a significant, sustained drought. The CWCB is initiating programs to support local basin planning in each watershed and drought planning at the community level. These programs are likely to identify many needs, ranging from education to new projects to river channel restoration, that may depend upon state funding.

The funds available through the Severance Tax Trust Fund accounts are quickly being appreciated by the CWCB and the water community as an important supplement to our Construction Fund as we work with the Governor, the General Assembly, the Colorado Water Congress and many others to meet Colorado's dramatically increasing needs.



Peter H. Evans  
CWCB Director

# 1.0 CWCB Overview

## 1.1 Mission

The Colorado Water Conservation Board was created by the Legislature in 1937 *"for the purpose of aiding in the protection and development of the waters of the state, for the benefit of the present and future inhabitants of the state."* [37-60-102, CRS]

The duty of the Colorado Water Conservation Board (CWCB) is *"to promote the conservation of the waters of the state of Colorado in order to secure the greatest utilization of such waters and the utmost prevention of floods."* [37-60-106(1), CRS]

## 1.2 Board Composition

The Colorado Water Conservation Board is a Type 1 agency within the Department of Natural Resources. The CWCB consists of fifteen members. The Governor appoints eight members from the state's major river basins and one member from the City and County of Denver. All of the appointees are subject to Senate confirmation and serve three year terms. The Executive Director of the Department of Natural Resources is an ex-officio, voting member. The Director of the CWCB, State Engineer, Attorney General, the Commissioner of the Agriculture Department, and the Director of the Division of Wildlife are ex-officio, non-voting members.

To the extent possible, appointments to the Board include persons experienced in water resource management, water project financing, engineering, planning, development of water projects, water law, and irrigated farming, or ranching. No more than five appointees can be members of the same political party.

### 1999 CWCB Members

#### **Eight Major River Basin Members**

North Platte River	Robert O. Burr
South Platte River	William Brown
Arkansas River	Harold E. Miskel
Rio Grande	Lewis H. Entz
San Miguel, Dolores, Animas, and San Juan Rivers	Donald W. Schwindt
Gunnison River	Ray H. Werner
Colorado River Mainstem	Richard Eric Kuhn
Yampa and White Rivers	David H. Smith

#### **One Member from the City and County of Denver**

Patricia Wells

#### **One Ex-Officio Voting Member**

Executive Director, Dept. of Natural Resources

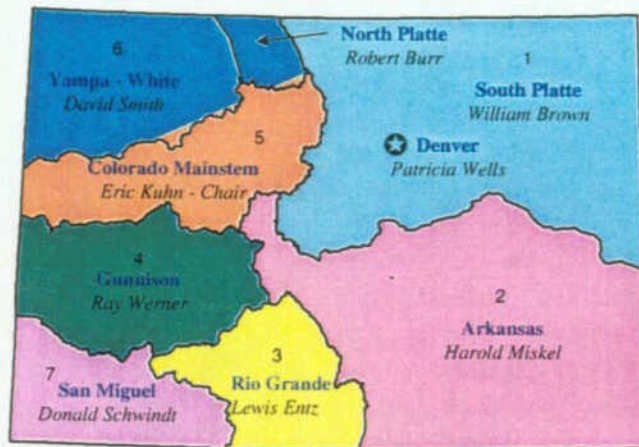
Greg Walcher

### Four Ex-Officio Non-Voting Members

Director, CWCB  
State Engineer  
State Attorney General  
Director, Division of Wildlife  
Commissioner, Agriculture Department

Peter H. Evans  
Hal D. Simpson  
Ken Salazar  
John Mumma  
Don Ament

## 15 CWCB Members



### Voting Ex-Officio

Executive Director DNR  
Greg Walcher

### Non-Voting Ex-Officio

CWCB Director  
Peter Evans  
State Engineer  
Hal Simpson  
Division of Wildlife Director  
John Mumma  
Attorney General  
Ken Salazar  
Commissioner of Agriculture  
Don Ament

### 1.3 Statutory Responsibilities

The CWCB's primary statutory duties and responsibilities are found under CRS, Title 37, Article 60, Water Conservation Board of Colorado, Sections 37-60-101 to 37-60-130, inclusive. Other statutory responsibilities are prescribed by the following:

CRS 24-33-111	Native Species Conservation Trust Fund
CRS 24-65.1-202	Colorado Land Use Act - Criteria
CRS 24-65.1-302	Colorado Land Use Act - Functions
CRS 24-65.1-403	Colorado Land Use Act - Technical Assistance
CRS 25-8-104(2)	Colorado Water Quality Control Act
CRS 30-28-111	County Government - Planning and Building Codes
CRS 31-23-30	Municipal Government - Planning and Zoning
CRS 37-62-10	Upper Colorado River Compact
CRS 37-69-10	Arkansas River Compact
CRS 37-90-11	Colorado Groundwater Management Act
CRS 37-92-102(3)	Water Right Determination and Administration Act
CRS 37-95-106	Colorado Water Resources & Power Development Authority Act
CRS 37-95-107	Colorado Water Resources & Power Development Authority Act
CRS 37-96-103	State Projects Water Conservation in Landscaping Act
CRS 37-97-103	Water Metering Act
CRS 39-30-109(1)(a)(I)	Severance Tax Trust Fund

Furthermore, beginning in 1987 the Executive Director of the Department of Natural Resources (DNR) delegated to the Director of the CWCB the authority to administer his responsibilities under CRS, Title 36, Article 20, Weather Modification Act of 1972.

## **1.4 Customers**

The Board's customers include the General Assembly, the Board members, the Board staff, other state agencies, cities and counties, water user organizations, federal agencies, environmental organizations, and the general public. The Board interacts primarily with the following state agencies:

- Governor's Office
- DNR/Executive Director's Office
- DNR/Division of Water Resources
- DNR/Division of Wildlife
- DNR/Colorado Division of Parks and Outdoor Recreation
- DNR/Colorado Geologic Survey
- Colorado Attorney General's Office
- Colorado Department of Local Affairs
- Colorado Department of Transportation
- Colorado Department of Health
- Colorado Department of Agriculture
- Minerals, Energy and Geology Policy Advisory (MEGA) Board

## **1.5 Business Services**

The CWCB carries out most of its statutory responsibilities through the following major programs:

- Water Supply Planning and Finance Program  
(Formerly – Water Project Construction Loan Program)
- Water Supply Protection Program  
(Formerly – Interstate Streams Investigation Program)
- Flood Protection Program  
(Formerly – Floodplain Management Program)
- Stream and Lake Protection Program  
(Formerly – Instream Flow/Natural Lake Level Program)
- Conservation Planning Program  
(Formerly – Water Conservation Program)
- Water Information Program

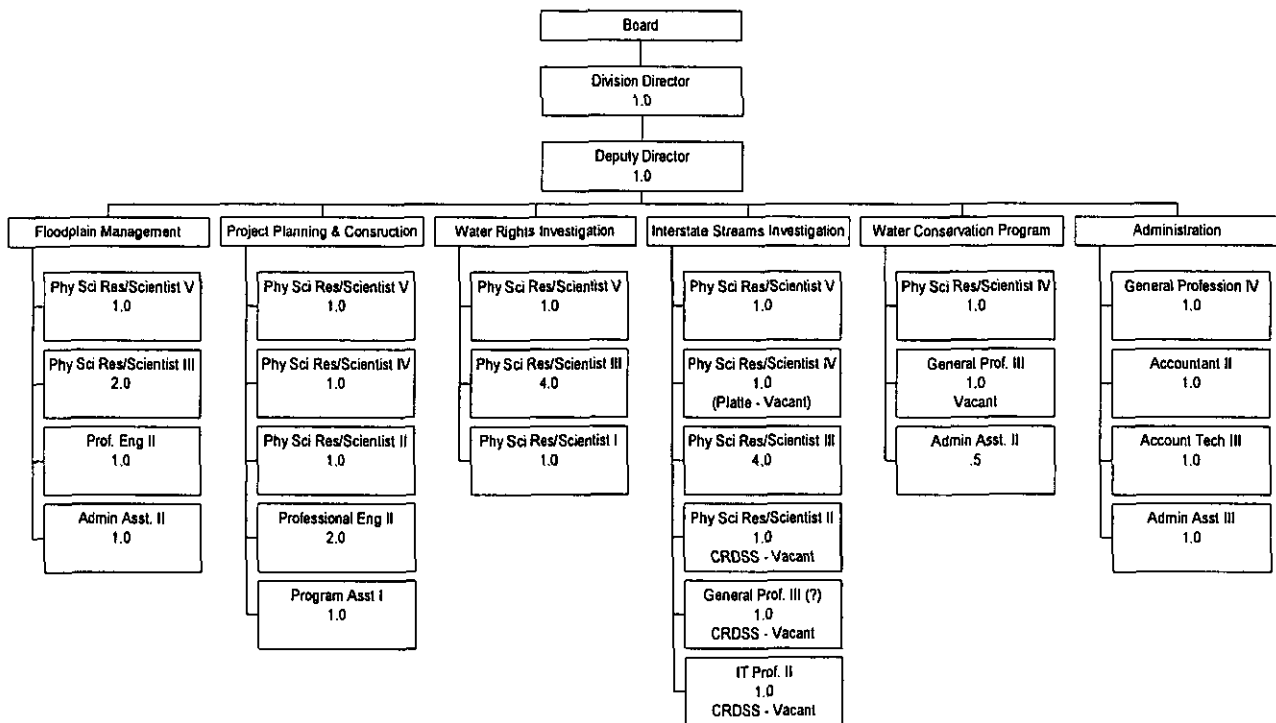
The CWCB also participates actively in the following federal and interstate programs:

- Salinity Control Program
- Endangered Fish and Recovery Implementation Programs
- National Flood Insurance Program
- Glen Canyon Adaptive Management Program

## 1.6 Organization

The staff of the CWCB is organized into five programmatic sections plus management and administration. In FY 1999, there were a total of 34.5 full time positions on the CWCB staff. There were six full-time employees in the Water Supply Planning and Finance Section.

**COLORADO WATER CONSERVATION BOARD**  
 June 30, 1999  
 ACTUAL/PLANNED TITLES  
 34.5 FTES





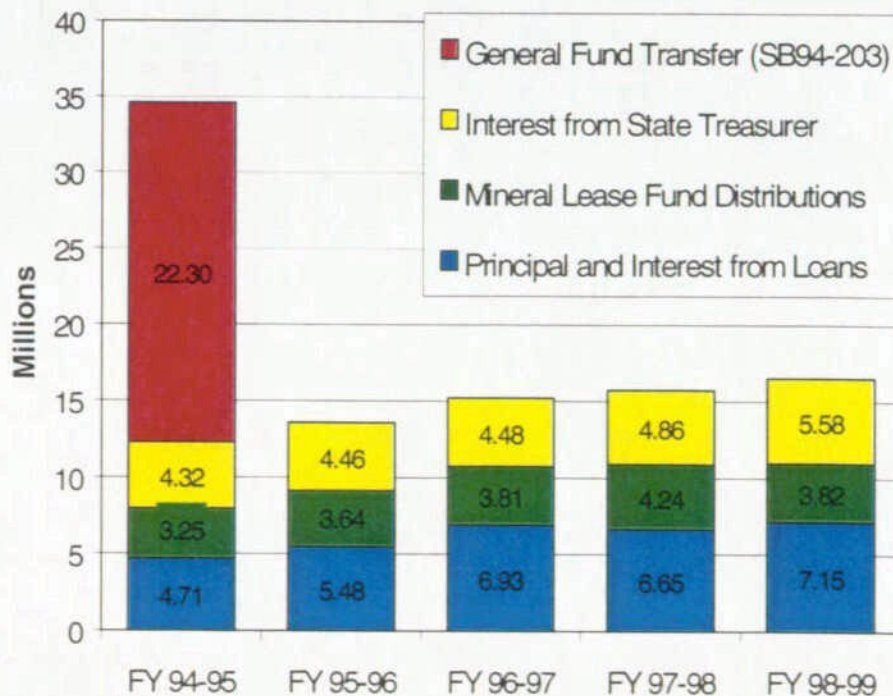
## 2.0 CWCB Construction Fund

### 2.1 Cash Sources

The CWCB Construction Fund was created by the Legislature in 1971 through SB 71-21. As a revolving cash fund, the CWCB Construction Fund has become a reliable source of funding for water resource development projects and studies each year. The Construction Fund is supported by the cash sources listed below. The sum of all cash sources to the Construction Fund in FY 99 was \$16.60 million.

- **Principal and Interest on Loans** - The return of principal and interest in FY 99 was reported by COFRS to be \$7.15 million. This included \$2.88 million in principal and \$4.27 million in interest.
- **Mineral Lease Fund Distributions** - Federal mineral lease revenues from rentals and royalties are distributed to the state in a complex "cascade" formula. The CWCB receives 10-percent of the distribution in the first cut (SB77-35). COFRS reported the CWCB's distribution as \$3.82 million in FY 99.
- **Interest from the State Treasurer** - Cash in the Construction Fund is invested by the State Treasurer and the earned interest accrues to the Construction Fund. In FY 99, the CWCB received \$5.58 million in earned interest.
- **Lease Agreements and Other Sources** - COFRS reported \$29,000 from lease agreements and other sources in FY 99.
- **Occasional General Fund Transfers** - There were no General Fund transfers to the Construction Fund in FY 99.

**CASH SOURCES  
CWCB CONSTRUCTION FUND**



## 2.2 Fund Equity

Fund equity includes the sum of all outstanding project loans and the cash balance in the fund that has been invested by the State Treasurer. The total fund equity reported by the Colorado Financial Reporting System (COFRS) was \$203.7 million on June 30, 1999, the end of FY 98-99.

The \$203.7 million included approximately \$105.8 million in outstanding loan principal receivable from borrowers with completed projects, \$25.9 million in cash funds reserved for projects authorized by the Legislature that are under contract or under construction, \$71.8 million in cash funds reserved in special accounts or for future projects authorized by the Legislature, and \$0.11 million in unreserved cash. The total "cash balance" on June 30, 1999, was \$94.7 million.

**TABLE 1**  
**Colorado Water Conservation Board**  
**Financial Statements FY 98-99**

### Fund Equity

	<u>June 30, 1998</u>	<u>June 30, 1999</u>
Outstanding Loans Receivable	\$106,424,160	\$105,804,198
Reserved for Authorized Projects - Under Contract	19,691,598	25,921,936
Reserved for Authorized Projects - Not Under Contract	72,651,732	71,861,291
Unreserved Cash or "Working Balance"	5,930,252	108,421
	-----	-----
Total Fund Equity on June 30	\$204,697,742	\$203,695,846

### Cash Reserved in Special Accounts

	<u>June 30, 1998</u>	<u>June 30, 1999</u>
Emergency Infrastructure Repair Loan Account	\$ 1,700,570	\$ 1,064,945
Small Projects Loan Account	631,304	1,081,000
Arkansas River Augmentation Plan Loan Account	1,033,827	570,844
Fish and Wildlife Resources Account	4,670,436	1,042,400
Litigation Account	4,000,000	3,000,000
Species Conservation Trust Fund Transfer	1,500,000	1,000,000
Colorado River Recovery Program Loan Account	2,000,000	2,000,000
Salinity Control Program Loan Account	1,000,000	1,000,000
Publications Account	7,809	6,322
	-----	-----
Total	\$ 16,543,946	\$ 10,765,511

### 2.3 Fish and Wildlife Resources Account

In 1987, HB 87-1158 created the Fish and Wildlife Resources Account, also known as the "Mitigation" Account, in the Construction Fund. Procedures for obtaining mitigation grant approval are found under section 37-60-122.2, CRS.

Non-reimbursable expenditures totaling \$5.31 million has been approved by the Board from the Mitigation Account for mitigation plans approved by the Division of Wildlife. These disbursements are listed below.

The COFRS balance in the Fish and Wildlife Resources Account was \$4,670,436 on June 30, 1998. Part XIV (7)(B) of SB 99-215 ("Long Bill") transferred \$378,036 from the Fish and Wildlife Resources Account to be appropriated for use in the Platte River Cooperative Agreement. Also, the Grand Valley Water Management Program (shown in Table 2 below) and the DOW Native Aquatic Species Facility project (table 2 below) has been appropriated but not encumbered by a contract. The balance in COFRS mistakenly did not reflect this reservation of funds. Therefore, the true balance of funds available for further appropriations within the Fish and Wildlife Resources Account was \$1,042,400 on June 30, 1999.

**TABLE 2**  
**Projects Approved by the CWCB from the**  
**Fish and Wildlife Resources Account**

<u>Approved</u>	<u>Grantee - Project</u>	<u>County</u>	<u>Amount</u>
1989	Upper Yampa Water Cons. District - Stagecoach Reservoir	Routt	\$ 400,000
1990	Colorado River Water Cons. District - Wolford Mountain Reservoir	Grand	1,278,828
1997	Grand Valley Water Management Program	Mesa	1,250,000
1997	Division of Wildlife - Native Aquatic Species Facility	Alamosa	2,000,000
1999	State of Colorado - South Platte Cooperative Agreement	S.Platte	378,036
		Total	\$5,306,864

## 2.4 Emergency Infrastructure Repair Loan Account

In 1993 through HB 93-1273, the Legislature authorized the Board to set aside \$2.0 million of Construction Fund money in an account reserved for emergency repair of water resources infrastructure systems to avoid potential economic losses. The money in the account is continuously appropriated to the Board for immediate availability only for emergency repair of water storage systems or water distribution systems. The account is intended to provide flexibility for the Board to make funds available in a timely manner in emergency situations. Section 12 of SB 97-008 effective May 21, 1997 directed the State Treasurer to transfer \$960,000 or so much as necessary from unreserved cash in the Construction Fund to restore the balance in the account to \$2,000,000.

The Board approved 3 emergency loans in FY 94, 2 emergency loans in FY 95, no emergency loans in FY 96, 2 emergency loans in FY 97, 1 in FY 98, and 1 in FY 99. A list of the 10 projects that have been authorized by the Board through the Emergency Infrastructure Repair Account is shown in the following table. The balance in the Emergency Infrastructure Repair Account available for loans was \$1,064,945 on June 30, 1999.

**TABLE 3**  
**Loans Approved by the CWCB from the**  
**Emergency Infrastructure Repair Loan Account**

<u>Date</u> <u>Approved</u>	<u>Borrower/Emergency</u>	<u>County</u>	<u>Approved</u> <u>Amount</u>	<u>Contract</u> <u>Amount</u>
Jul 1993	Summit Reservoir & Irrigation Co. - Repair a slide on the Summit Reservoir Dam and Repair a portion of the Lost Canyon Ditch	Montezuma	\$ 60,000	\$ 33,000
Jan 1994	Windsor Canal and Reservoir Co. - Poudre Valley Canal Slide Repairs	Larimer	300,000	300,000
Feb 1994	Town of Rangely - Raw Water Intake Structure Repairs	Rio Blanco	34,000	34,000
Nov 1994	Castle Pines North Metro District - Rehabilitate Well A-1	Douglas	101,500	100,500
Nov 1995	City of Idaho Springs - Diversion Structure Repairs	Clear Creek	130,000	130,000
Nov 1996	Consolidated Extension Canal Co. - Siphon Rehabilitation	Las Animas	300,000	300,000

Nov 1996	Mancos Water Conservancy District - Feeder Ditch Slide Repair	Montezuma	62,500	62,500
Sep 1997	Julesburg Irrigation District - Diversion Structure Rehabilitation	Logan	590,000	590,000
Jul 1998	Leroux Creek Water Users Association - Carl Smith Reservoir Rehabilitation	Delta	300,000	300,000
May 1999	Model Reservoir & Irrigation Co. - Carl Smith Reservoir Rehabilitation	Las Animas	335,000	335,000
			Totals	\$2,213,000      \$2,185,000

## 2.5 Small Project Loan Account

In 1994 through SB94-029, the General Assembly created the Small Project Loan Account. A total of \$2.0 million was set aside for loans of \$100,000 or less. The CWCB was empowered to authorize these loans at any time during the year without waiting to submit these projects for General Assembly approval during the legislative session.

The Board approved 5 Small Project Account loans in FY 96, 5 Small Projects Account loans in FY 97, 4 Small Project Account loans in FY 98, and 1 in FY 99 totaling \$1,090,700. However, the total amount actually under contract was less, or \$919,000 as listed below. The balance in the Small Project Loan Account available for loans was \$1,081,000 on June 30, 1999.

**TABLE 4**  
**Loans Approved by the CWCB from the**  
**Small Project Loan Account**

<u>Meeting</u> <u>Approved</u>	<u>Borrower</u>	<u>County</u>	<u>Approved</u> <u>Amount</u>	<u>Contract</u> <u>Amount</u>
Jul 1995	Caryl R. Carroll - D&D Wise Dam Rehab. (Additional)	Rio Blanco	\$25,000	\$ 25,000
Jan 1996	The Pagosa Springs Pipeline Co. -	Archuleta	60,000	0
Jan 1996	South Platte Ditch Company - Diversion Structure Rehabilitation	Logan	100,000	100,000
Mar 1996	Bravo Ditch Company - Diversion Structure Rehabilitation	Logan	51,700	40,000

May 1996	Tremont Mutual Ditch Company - Diversion Structure Rehabilitation	Morgan	45,000	45,000
Sep 1996	Decker Lateral Company - Decker Lateral Lining Project	Weld	100,000	100,000
Nov 1996	Excelsior Irrigating Company - Ditch Rehabilitation	Pueblo	100,000	100,000
Mar 1997	Cotton Creek Water Company - Airline Ditch Rehabilitation	Saguache	100,000	100,000
Mar 1997	Farmers Independent Ditch - Ditch Rehabilitation	Weld	55,000	55,000
May 1997	Chipperfield Lane Ditch - Rehab Headgate and Pipeline	Garfield	60,000	60,000
Jul 1997	Smith Irrigation Ditch - Diversion Dam Replacement	Routt	50,000	50,000
Nov 1997	Rodney Prieser Purchase of Horse Cr. Augmentation Water	Lincoln	90,000	90,000
Mar 1998	Boulder and Lefthand Irrigation Co. - Twin Lakes Reservoir Outlet Rehab.	Boulder	50,000	50,000
Mar 1998	Farmers Pawnee Canal Co. - Diversion Structure Rehabilitation	Morgan	29,000	29,000
May 1998	Western Mutual Ditch Company - Diversion Structure Rehabilitation	Weld	75,000	75,000
Jul 1998	Greeley and Loveland Irrigation District - Horseshoe #2 Res. Outlet Rehabilitation	Larimer	100,000	0
			-----	
Totals			\$ 1,090,700	\$ 919,000

## 2.6 Arkansas River Augmentation Loan Account

HB 95-1155 created the Arkansas River Augmentation Loan Account in the Construction Fund, and directed the State Treasurer to transfer \$1.5 million from unreserved cash in the Construction Fund into the account. A short term bridge loan was made to the Lower Arkansas Water Management Association (LAWMA) in FY95-96, but it was fully repaid to the account through the financing package out of the -

Construction Fund to LAWMA authorized in SB 96-124. Section 17 of SB97-008 increased the total amount the Board is authorized to expend from the account to \$3.5 million. Section 18 of SB 99-173 allocated an additional \$2 million to the account, bringing the total the Board is authorized to expend from the account to \$5.5 million. Due to a conflicting interpretation of SB 99-173 (Section 18) by the Department of Natural Resources Controller, the funds were not transferred from the Construction Fund unreserved cash into the account. The FY 2000 Construction Fund Bill will reconcile this conflict by clarifying the SB 99-173 Section 18 language. The unavailability of account funds caused by this conflict has not adversely effected the users of this loan account. The balance of the Arkansas River Augmentation Loan Account available for loans was reported in COFRS to be \$0.57 million on June 30, 1999.

**TABLE 5**  
**Loans Approved by the CWCB from the**  
**Arkansas River Augmentation Loan Account**

<u>Contract Date</u>	<u>Borrower</u>	<u>Counties</u>	<u>Authorized Amount</u>	<u>Contract Amount</u>
Oct 1995	Lower Arkansas Water Bridge Loan	Prowers	\$ 750,000	\$ 750,000
May 1997	Lower Arkansas Water Water Rights Purchase	Prowers	\$2,300,000	\$2,300,000
Sep 1997	Arkansas Groundwater Users Association - Water Rights Purchase	Fremont	\$ 650,000	\$ 590,590
			-----	-----
Totals			\$3,700,000	3,640,590

## 2.7 Salinity Control Program Loan Account

SB97-008 authorized the Board to expend a cumulative total of \$1,000,000 from the Construction Fund for loans to participants in the Colorado River basin Salinity Control Program. Such loans shall be at the terms and conditions the Board determines after review and approval of each potential participant's application. The loan amount shall not exceed 50% of the total cost of constructing any particular salinity control project. No loans have been considered by the Board, and the balance in the account at the end of the fiscal year was \$1,000,000.

## **2.8 Litigation Account**

Section 37-60-121 (2.5) (a), CRS, created the Litigation Account in the Construction Fund. Under certain conditions, the Board is authorized to expend up to \$4.0 million from the Litigation Account for litigation in support of water users whose water supply yield may be diminished as a result of conditions imposed by any federal agency on permits for existing reservoirs located on federal lands. No lawsuits have yet been determined to meet the criteria.

The Litigation Account is not to be confused with the Reserved Rights Litigation Fund created in the State Treasury by the General Assembly in 1982 through SB 82-087. Authority for that fund is found in the statutes at Section 37-60-121.1, CRS. Any interest earned by the Litigation Account is credited equally between the Construction Fund and the Colorado Water Resources and Power Development Authority. Pursuant to SB 99-173, the State Treasurer was directed to transfer \$1,000,000 from the Litigation Account to the Capital Account of the Species Conservation Trust Fund. The balance of the Litigation Account was \$3,000,000 on June 30, 1999.

## **2.9 Colorado River Recovery Program Loan Account**

Section 11 of HB98-1189 created in the State Treasury as part of the CWCB Construction Fund, the Colorado River Recovery Program Loan Account. The purpose of the account is to make loans to the Colorado River and San Juan River Recovery Programs for construction or improvement of certain water related projects in Colorado under agreements with power users of the federal Colorado River Storage Project (CRSP) required to recover the four endangered fish species of the upper Colorado River, including the San Juan River. Loans from the account must be approved by the General Assembly in accordance with Section 37-60-122(1)(b), CRS. The Board shall determine the interest rate and repayment period for each loan. Interest earned in the account is credited to the Construction Fund. The State Treasurer was directed to transfer \$2,000,000 from unreserved funds in the Construction Fund into the account. Furthermore, pursuant to Section 18 of SB 99-173, the State Treasurer was directed to transfer an additional \$5,000,000 from unreserved funds in the Construction Fund into the account. Due to a conflicting interpretation of SB 99-173 (Section 18) by the Department of Natural Resources Controller, the funds were not transferred from the Construction Fund unreserved cash into the account. The FY 2000 Construction Fund Bill will reconcile this conflict by clarifying the SB 99-173 Section 18 language. The unavailability of account funds caused by this conflict has not adversely effected the users of this loan account.

## **2.10 Transfer to the Species Conservation Trust Fund**

Pursuant to HB 98-1006, the State Treasurer was directed to transfer \$1,500,000 from unreserved cash in the CWCB Construction Fund to the newly created Species Conservation Trust Fund. Furthermore, pursuant to SB 99-173, the State Treasurer was



directed to transfer \$1,000,000 from the Litigation Account to the Capital Account of the Species Conservation Trust Fund. Expenditures from the fund are intended to promote conservation of native wildlife species whose populations are declining. The General Assembly initially appropriated \$10 million into the fund from several sources. The Executive Director of the Department of Natural Resources, in consultation with the CWCB and the Colorado Wildlife Commission, must annually prepare a list of programs eligible to receive funding from the fund.

## 2.11 Publications Account

In 1994 through SB94-029, the General Assembly created the Publications Account within the Construction Fund. A starting balance of \$5,000 was transferred into the account. Fees were established by the Board to recover costs for disseminating data and to be able to recover costs for minor expenses such as photocopying. Revenue to the account is now derived mainly from the sale of board meeting notebooks. The publications account has been used to publish documents related to the Stream and Lake Protection Program and a brochure for the Conservation Planning Section. The balance in the account was \$6,322 on June 30, 1999.

## 2.12 Authorized Loans from the Construction Fund

Pursuant to Section 37-60-122(1) (b), CRS, the Colorado Water Conservation Board has recommended annually, and the General Assembly has authorized, loans from the Construction Fund. In FY 1999, the Board recommended seven new loans from the Construction Fund totaling \$12.5 million as shown in the following table. Each loan represents partial funding of the total cost of the projects. The Board's recommendations for loans in 1999 were incorporated into Senate Bill 99-173 that was passed by the General Assembly and signed by Governor Owens on May 24, 1999. More detailed information regarding these loans can be found in Appendix C.

**TABLE 6**  
**Loans Recommended from the Construction Fund in FY 1999**

Priority	Borrower-Project	County	Loan Amount
a	Sterling Irrigation Company - Sterling Ditch No. 1 Diversion & Headgate Rehabilitation	Logan	\$318,583
b	Columbine Ranches Property Owners Association - Purchase of Augmentation Water*	Adams	\$305,250
c	City of Ouray - Skyrocket Creek Deflection Structure Rehabilitation	Ouray	\$25,000

Priority	Borrower-Project	County	Loan Amount
d	Ryan Gulch Reservoir Company - Ryan Gulch Reservoir Dam Rehabilitation	Larimer	\$317,500
e	Leroux Creek Water Users Association - Carl Smith Reservoir Dam Rehabilitation	Delta	\$1,250,000
f	Consolidated Mutual Water Company - Fortune Reservoir Construction	Jefferson	\$10,000,000
g	Pine River Canal Company - Tunnel Hill Project	La Plata	\$243,700
	<b>Total</b>		\$12,460,033

\* Loan to refinance a water project wholly or partially completed.

In FY 1999, the CWCB recommended that the amount to be loaned to four previously authorized projects be increased by a total of approximately \$7.32 million from the Construction Fund as indicated in the following table.

**TABLE 7**  
**Increases in Previously Authorized Loans from the Construction Fund**  
**Recommended by the CWCB in FY 1999**

Borrower-Project	Prior Authority	Prior Amount	Increase	Revised Amount
City of Loveland - Green Ridge Glade Reservoir Enlargement	HB 98-1189	\$2,000,000	\$3,000,000	\$5,000,000
City of Sterling - Pawnee Creek Flood Control Project	HB 98-1189	\$550,000	\$610,000	\$1,160,000
Ute Water Conservancy District - Plateau Creek Pipeline Replacement Project*	SB 88-30	\$8,000,000	\$2,600,000	\$10,600,000
North Poudre Irrigation Company - System Rehabilitation*	HB 98-1189	\$500,000	\$1,107,000	\$1,607,000
<b>Totals</b>		\$11,050,000	\$7,317,000	\$18,367,000

\*Loan to refinance a water project wholly or partially completed.

Loans from the CWCB Construction Fund or the Severance Tax Trust Fund Perpetual Base Account are plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by the engineering cost indices applicable to the types of construction required for each project, or as may be justified by reason of changes in the plans for a project due to differing or unforeseen site conditions, errors or omissions in the plans and specifications, changes instituted by regulatory agencies, or changes in material quantities beyond contract limits.

At its November 1997 Board meeting, the Board adopted a policy that *“the Board and the staff of the CWCB will attempt to maintain an overall, long-term rate of return of no less than 4.0 percent on the aggregate amount of all loans and grants made through the Construction Fund in order to offset the long-run impacts of price inflation and to maintain the integrity of the Fund.”* A procedure was developed based on detailed rate-of-return calculations with the full repayment schedule for each loan and certain simplifying assumptions to provide an estimate of the overall rate of return without unnecessarily complicating the analysis. The analyses of loans and grants included in SB 99-173 indicated an overall rate of return of approximately 4.43 percent for Construction Fund loans only and 1.91 percent for loans and grants.

### 3.0 Severance Tax Trust Fund

The Severance Tax Trust Fund was created in 1978 “...to be perpetual and held in trust as a replacement for depleted natural resources and for the development and conservation of the state’s water resources pursuant to sections 37-60-106 (1) (j) and (1) (l), 37-60-119, and 37-60-122, C.R.S...” The citations refer to the Colorado Water Conservation Board’s Water Project Construction Loan Program supported by the CWCB Construction Fund.

Prior to 1994, all the money transferred to the Severance Tax Trust Fund was appropriated by the General Assembly for other purposes such as capital construction, the federal Uranium Mill Tailings Remedial Action Project (UMTRAP), and to offset General Fund budget shortfalls. Furthermore, the previous law required all interest from investments to revert to the General Fund. Consequently, no water projects were ever financed through the Severance Tax Trust Fund.

In 1996, Senate Bill 96-170 concerning the Severance Tax Trust Fund was signed into law by Governor Romer. SB 96-170 reaffirmed the fund’s original purpose and expanded the use of the fund for “...funding programs that promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water.” The bill also created two new accounts within the fund and made an appropriation for FY 97. The two new accounts are:

- the Operational Account (OPA)
- the Perpetual Base Account (PBA)

The passage of SB 96-170 was due in large part to the efforts of the state Minerals, Energy and Geology Policy Advisory Board which was established in 1995 pursuant to Section 34-20-104, C.R.S. At their July 10, 1996 meeting, the MEGA Board recommended that use of the Severance Tax Trust Fund for water project construction and water planning “give preference to energy impacted areas.”

#### 3.1 Cash Sources

Beginning in 1978, the State of Colorado has collected millions of dollars annually in severance taxes from the production of oil and gas, coal, and minerals (molybdenum, gold, and silver). The oil and gas severance tax rate is based on value of production. The coal severance tax is based on tonnage. The rate was cut by a third in 1988 and is now frozen by TABOR. Molybdenum severance tax is on a cents per ton basis. The rate was cut by 2/3 in 1987.

Total severance tax revenue to the state has swung widely due to variation in the price and tax rate on oil and gas and large tax refunds. Severance tax revenue during calendar year 1999 is shown below.

<u>Source</u>	<u>Revenue</u>
Oil and Gas	\$23,249,000
Coal	10,160,000
Metals	<u>494,000</u>
Total	\$33,903,000

Half of the severance tax revenue goes to local governments via the Energy and Mineral Impact Grant Program and direct distribution to local governments. The other half goes to the state's Severance Tax Trust Fund. Revenue to the Trust Fund is then divided equally between the Operational Account and the Perpetual Base Account. Thus in 1999, \$16,951,000 was distributed to the Severance Tax Trust Fund with half (\$8,476,000) going to the Operational Account and half to the Perpetual Base Account.

### 3.2 Operational Account

One-half of the severance tax receipts credited to the Severance Tax Trust Fund for tax years commencing on and after July 1, 1995, shall be credited to the Operational Account of the Severance Tax Trust Fund. Money in the Operational Account shall be used to fund programs established within the Colorado Oil and Gas Conservation Commission, the Colorado Geological Survey, the Division of Minerals and Geology, and the Colorado Water Conservation Board.

The programs supported by the Operational Account must promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water. The General Assembly may appropriate moneys from the total moneys available in the Operational Account to fund recommended programs as follows:

Colorado Oil and Gas Conservation Commission	45%
Colorado Geological Survey	20%
Division of Minerals and Geology	30%
Colorado Water Conservation Board	5%

For the fiscal years commencing on or after July 1, 1997, the Executive Director of the Department of Natural Resources shall submit with the department's budget request for each fiscal year a list and description of the programs the Executive Director recommends to be funded from the Operational Account. The MEGA Board shall provide advice to the Executive Director on programs or projects that should receive a grant of funds from the Operational Account and shall also review the Executive Director's recommendation before submittal.

In the recent past, the four state agencies and the MEGA Board have proposed using significantly less than the full allotted amount per agency in order to build up the cash reserves in the Operational Account. In FY98 and FY99 the sum of \$100,000 and \$275,000 was appropriated respectively in the Long Bill from the Operational Account for use by the CWCB during the fiscal year. Any unused funds revert back to the Operational Account. The Board's request for a total of \$500,000 in FY00 has been

approved by the General Assembly. The Board has identified specific projects in four general program areas as shown in the following table.

**TABLE 8**  
**Expenditures Recommended by the CWCB from the Operational Account**

<b>CWCB Program</b>	<b>FY98</b>	<b>FY99</b>	<b>FY00</b>
Local Water Planning Program	80,000	135,000	365,000
Water Project Construction Loan Program	15,000	35,000	40,000
Water Resources Data Collection Program	0	40,000	40,000
Floodplain Management Program	0	0	10,000
Office of Water Conservation Program	5,000	65,000	45,000
Totals	\$100,000	\$275,000	\$500,000

The following project expenditures were made for grants approved from the available funds allocated to the CWCB from the FY 99 Operational Account.

**TABLE 9**  
**Grants Expended in FY 98-99 by the CWCB**  
**from Funds available to the CWCB from the Operational Account**

<b>Date</b>	<b>Grantee</b>	<b>Project</b>	<b>County</b>	<b>Amount</b>
FY - 99	Jefferson County	Mountain Groundwater Resources Study	Jefferson	50,000
FY - 99	CWCB	GIS Technical Assistance	Statewide	10,000
FY - 99	Southeastern Colorado Water Conservancy District	Arkansas River Basin Needs Assessment - Phase 2	Arkansas Basin	25,000
FY - 99	Leroux Creek Water Users Association	Carl Smith Dam Rehabilitation Feasibility Study	Delta	5,000
FY - 99	Ryan Gulch Reservoir Company	Ryan Gulch Dam Rehabilitation Feasibility Study	Larimer	2,500
FY - 99	Owl Creek Supply and Irrigation Company	Owl Creek Ditch Rehabilitation Feasibility Study	Weld	5,000
FY - 99	Sterling Irrigation Company	Diversion Structure Rehabilitation Feasibility Study	Logan	1,400

Date	Grantee	Project	County	Amount
FY - 99	CWCB	Stream Gaging Stations	Statewide	40,000
FY - 99	CWCB	Water Conservation Plans / US Bureau of Reclamation	Statewide	20,000
FY - 99	CWCB	Lower Arkansas River Water Quality Study	Arkansas Basin	45,000
			Total	\$203,900

### 3.3 Perpetual Base Account

The moneys in the fund as of July 1, 1995, and one-half of the severance tax receipts credited to the Severance Tax Trust Fund for fiscal years commencing on and after July 1, 1995, shall be credited to the Perpetual Base Account of the Severance Tax Trust Fund and used for state water projects pursuant to sections 37-60-119 and 37-60-122, C.R.S. The authorization and contract for each such project shall require repayment of principal and interest to the Severance Tax Trust Fund and moneys so repaid shall be credited to the Perpetual Base Account of the Severance Tax Trust Fund.

Pursuant to Section 39-29-109 (1) (a) (I), CRS, the Colorado Water Conservation Board recommended, and the General Assembly approved, authorization to provide loans from the Severance Tax Trust Fund Perpetual Base Account totaling \$16.94 million to fund 5 water development projects statewide. These projects are listed in the table below. Each loan represents partial funding of the total cost of the projects. Additional details about these recommended projects may be found in Appendix C.

**TABLE 10**  
**Colorado Water Conservation Board**  
**Loans Authorized from the Severance Tax Trust Fund Perpetual Base Account**

Authority	Borrower-Project	County	Loan Amount
SB97-008	Eagle Park Reservoir Co. - Eagle Park Reservoir Rehabilitation	Eagle	\$4,000,000
HB98-1189	Highland Ditch Company - Foothills Reservoir Dam Rehabilitation	Boulder	\$1,040,000
HB98-1189	City of Fort Morgan - Raw Water Pipeline*	Morgan	\$4,000,000
HB98-1189	Northern Colorado Water Assoc. - Purchase of Wells and Water Rights	Larimer	\$900,000
SB99-173	Ute Water Conservancy Dist. - Plateau Cr. Pipeline Replacement Project*	Mesa	\$7,000,000
		<b>Total</b>	<b>\$16,940,000</b>

\*Loan to refinance a water project wholly or partially completed.

## **4.0 Water Project Construction Loan Program**

### **4.1 Eligible Projects**

Under authority of Section 37-60-119 and 121, CRS, the monies in the Construction Fund are to be used for new storage projects which increase the beneficial consumptive use of Colorado's compact-entitled waters and for the repair and rehabilitation of existing storage and raw water delivery systems. The CWCB may recommend funding of the following types of water projects through this program:

- Construction of new reservoirs or enlargement of existing dams to enhance water supplies and develop Colorado's compact entitlement.
- Rehabilitation of existing dams to meet safety standards and to recover lost storage capacity.
- Repair or construction of water resources infrastructure for agricultural or municipal raw water supply systems including such facilities as diversion structures, canals, ditches, and pipelines.
- Improvements in water management to increase water use efficiency, to maintain or increase water supplies, or to increase beneficial consumptive use.
- Mitigation of impacts on fish and wildlife due to dam construction.
- Improvements in management of information about Colorado's water.

The CWCB does not currently provide funding for municipal water treatment and distribution systems. Up to 5-percent of the Board's annual revenue may be used to finance flood control projects. The costs of acquisition of land and water rights are not eligible for CWCB funding except as part of a project and under certain special conditions.

The CWCB's financial participation in any single project is generally limited to a certain percentage of the total engineering and construction cost of the project. The Board may loan up to 50-percent of the cost of a feasibility study for a water project. The Board's feasibility study loan must be repaid whether a project is constructed or not. Middle and high income municipalities and commercial water users may borrow up to 75-percent of the construction costs of a project. Agricultural and low income municipalities may borrow up to 90-percent of the construction costs of a project.

### **4.2 Construction Fund Criteria**

In 1981 the Legislature adopted criteria for the use of the Construction Fund as set forth in section 37-60-121 (1)(b), CRS. This criteria was changed in 1992 with the passage of SB 92- 87. Actions taken by the Board concerning the construction fund



program have been in compliance with those criteria. In particular, the Board has taken the following steps:

1. From 1981 through 1992, about two-thirds of the Board's cost of the projects recommended were for projects which were expected to increase the beneficial consumptive use of Colorado's compact entitlement.
2. From 1981 through 1994, no applications for flood control projects were accepted by the Board.
3. No applications for domestic water treatment and distribution systems have been accepted by the Board since March, 1981.
4. All feasibility studies initiated by the Board since the adoption of the criteria have included, to the extent deemed necessary: an evaluation of water rights; an evaluation of the engineering and economic feasibility of the project; and an evaluation of the economic, social, and environmental effects.

### **4.3 Interest Rate Policy**

---

At the November Board meeting of each calendar year, the Board sets a standard 30-year lending rate for Construction Fund loans which are to be recommended to the General Assembly in the following year.

From 1973 to 1992, the Board charged a fixed "service charge" of up to 5 percent to all borrowers in accordance with state statutes. These loans typically extended over 40 years. In 1992, the General Assembly (SB92-87) authorized the Board to charge interest at a rate between zero and 7-percent. In May 1993, the Board adopted guidelines for setting the interest rate for a "standard" 30-year loan at 2 percent (200 "basis points") less than the average yield for 30-year U.S. Treasury Bonds for the preceding 12 months.

Lending rates are established for municipal, agricultural, and commercial projects. For municipal projects, lending rates are established for low, medium, and high income service areas based on median household income in the project sponsor's service area. Lending rates for agricultural projects are identical to municipal low income rates. Lending rates for commercial projects are higher than for the other categories.

*For municipal low income areas, where median household income (MHI) is less than 80-percent of the statewide MHI, the lending rate will be 20-percent below the standard rate. For municipal medium income areas, where MHI is between 80 and 110-percent of the statewide MHI, the lending rate will be the standard rate. For municipal high income areas, where the MHI is more than 110-percent of the statewide MHI, the lending rate will be 10-percent above the standard rate.*

For loans with maturities of 20 years or less, but more than 10 years, the rate may be reduced by one quarter of one percent below the 30-year rate for that category of lending.

For loans with maturities of 10 years or less, the lending rate may be reduced by one half of one percent below the 30-year rate for that category.

In November 1997, the Board changed the rate setting procedure to be based on the average yield for the 30-year "A" Municipal Bond for the preceding 12 months. The Board adopted the following interest rates for standard loans recommended to the General Assembly in the respective years of the table.

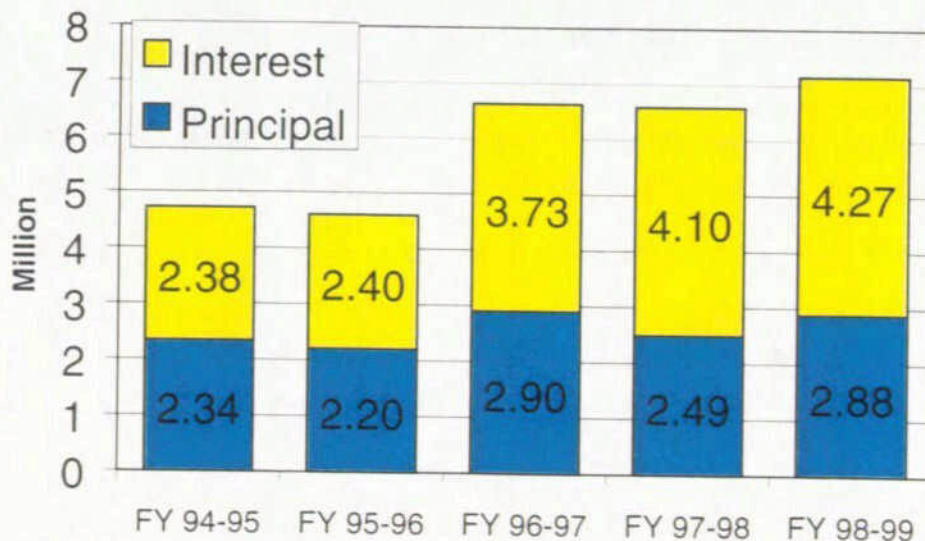
**TABLE 11  
CWCB 30-Year Lending Rates**

Type of Loan	1973-92	1993-95	1996	1997	1998	1999
Agricultural	5.00%	4.00%	4.25%	3.75%	4.00%	3.75%
Municipal - Low	5.00%	4.00%	4.25%	3.75%	4.00%	3.75%
Municipal - Middle	5.00%	5.00%	5.25%	4.75%	5.00%	4.75%
Municipal - High	5.00%	5.50%	5.75%	5.25%	5.75%	5.25%
Commercial	5.00%	5.50%	5.75%	5.25%	6.25%	5.75%

#### 4.4 Loan Deposits

A total of \$7.15 million was received in loan deposits in the calendar months of FY 99. Of this amount, \$2.88 million was return of principal and \$4.27 million was interest. The following bar chart shows annual deposits from FY94 through FY99.

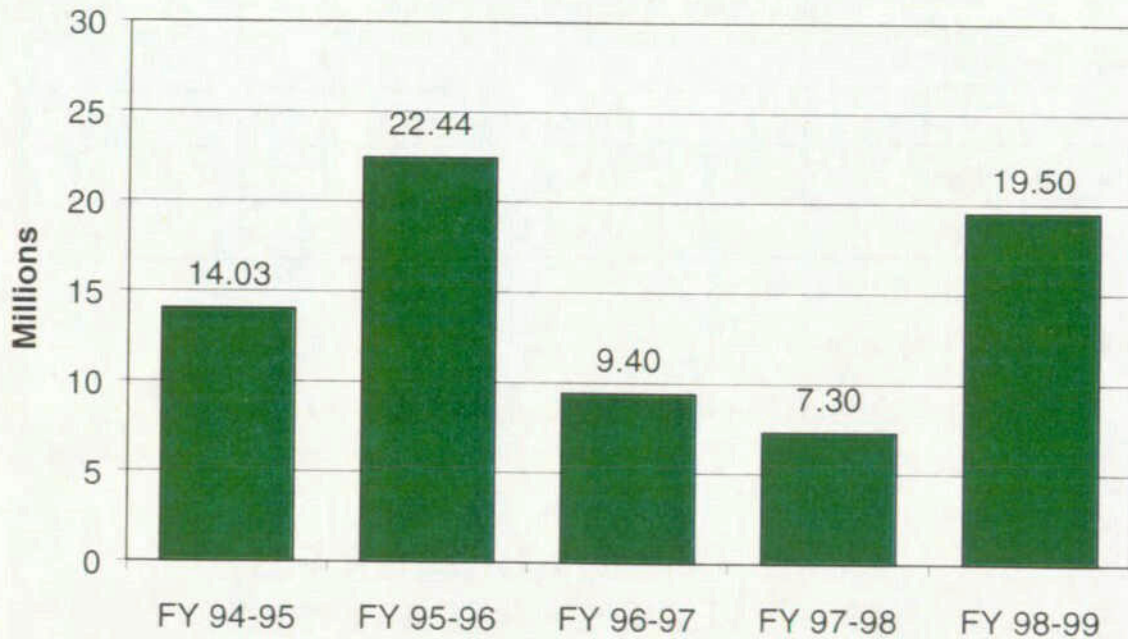
### CWCB CONSTRUCTION FUND ANNUAL LOAN REPAYMENTS



#### 4.5 Loan Disbursements

A total of \$19.5 million in disbursements from the Construction Fund were made for construction projects, non-reimbursable projects, and investigations in the calendar months of FY 99. The following bar chart shows annual disbursements from FY94 through FY99.

### CWCB Construction Fund ANNUAL LOAN DISBURSEMENTS



#### 4.6 Completed Construction Project Loans

The CWCB Construction Fund was established by the General Assembly in 1971 to provide low interest, long-term loans to water users for the development of water projects. The first project was completed in 1977. By the end of FY98, the fund provided over \$144 million in loan financing for 190 water projects. A list of the completed projects financed through loans from the Construction Fund is shown in Appendix A.

Sixteen CWCB Construction Fund loans representing over \$20.12 million, as shown in the following table, were completed in FY 99. Additional details about these completed project loans are located in Appendix B.

**TABLE 12**  
**Project Loans Completed in FY 99**

<b>Borrower – Project</b>	<b>Authority</b>	<b>County</b>	<b>Water Div.</b>	<b>Loan Amount</b>	<b>Date Completed</b>
Chipperfield Lane Ditch Company - Chipperfield Lane Ditch Rehabilitation	SPLA May 97	Garfield	5	41,011	07/01/98
Town of Morrison - Raw Water Pipeline Rehabilitation	HB 95-1155	Jefferson	1	334,053	07/22/98
Hawkeye Lateral Ditch Company - Hawkeye Lateral Ditch Rehabilitation	SB 97-008	Mesa	5	154,113	08/17/98
Rodney Prieser - Water Rights Purchase / Horse Cr. Basin	SPLA Nov 97	Lincoln	2	90,000	09/15/98
Eagle Park Reservoir Company - Eagle Park Res. Rehabilitation / Purchase	SB 96-153	Eagle	5	7,492,520	09/16/98
Farmers Pawnee Canal Company - Diversion Structure Rehabilitation	SPLA Mar 98	Logan	1	22,250	09/23/98
Agricultural Ditch and Reservoir Co. - Ag Ditch / Welch Ditch Improvements	SB 97-008	Jefferson	1	300,000	10/31/98
Town of Georgetown - Water Rights Purchase	SB 96-153	Clear Creek	1	190,000	12/28/98
Left Hand Ditch Company - Left Hand Valley Res. Spillway/Outlet	HB 95-1155	Boulder	1	560,000	01/13/99
Durkee Ditch Company - Durkee Ditch Pipeline Project	SB 97-008	Delta	4	95,000	03/09/99
Western Mutual Ditch Company - Check Dam Rehabilitation Project	SPLA May 98	Weld	1	100,000	03/10/99
Greeley and Loveland Irrigation Co. - Equalizer Dam Rehabilitation	HB 98-1189	Larimer	1	308,000	05/07/99
Buffalo Mutual Irrigation Company - Diversion Structure Rehabilitation	SB 97-008	Prowers	2	453,250	06/14/99
City of Fort Morgan- Southern Supply Line Extension	HB 98-1189	Morgan	1	8,000,000	06/29/99
Town of Johnstown - Lone Tree Pipeline Reconstruction	SB 94-029	Larimer	1	1,948,932	06/30/99
Wamsley Cattle Company - Pole Mountain Dam Rehabilitation	HB 93-1273	Jackson	6	34,036	06/30/99
			Total	\$20,123,165	

#### **4.7 De-Authorized Loans**

Authorized projects which show no activity may be de-authorized to allow new projects to proceed, especially those that may have a better chance of coming to fruition. If an appropriation has not been encumbered within two years after legislative approval, the Board staff will work with the project sponsor to determine if the project can go

forward or if it should be de-authorized. After a project has been completed, the remaining unspent, but still encumbered, funds are de-authorized as soon as possible.

The Board recommended, and the General Assembly approved, twelve loans totaling \$14.35 million that were de-authorized in FY99.

**TABLE 13**  
**Colorado Water Conservation Board**  
**Loans De-authorized in FY 98-99**

<b>Borrower-Project</b>	<b>Prior Authority</b>	<b>Prior Amount</b>	<b>Amount Deauthorized</b>	<b>Amount Remaining</b>
City of Broomfield - Great Western Dam Rehabilitation	HB 95-1155	\$3,000,000	\$3,000,000	\$0
San Miguel Water Conservancy District - Phase 2 Project	HB 85-1042	\$7,500,000	\$7,500,000	\$0
Lone Cone Reservoir	HB 85-1042	\$1,012,500	\$1,012,500	\$0
Melvin L. Thiebaud - Eureka Dam No. 1 Rehab and Enlargement	HB 95-1155	\$18,750	\$18,750	\$0
Pine River Irrigation Company	SB 92-87	\$190,000	\$190,000	\$0
Town of New Castle - Raw Water Pipeline Rehabilitation	SB 96-153	\$266,500	\$266,500	\$0
City of Greeley - Twin Lakes Dam Rehabilitation	HB 98-1189	\$787,500	\$787,500	\$0
Purgatoire River Water Conservancy District - Trinidad Project Refinance	HB 98-1189	\$1,000,000	\$1,000,000	\$0
Leroux Creek Water Users Association - Rehabilitate and/or enlarge four reservoirs	HB 95-1155	\$150,000	\$150,000	\$0
Highline Buzzard Ditch Company - Convert Ditch to Pipeline	SB 94-029	\$50,000	\$50,000	\$0
Ortiz Ditch Company - Rehabilitate Ortiz Diversion Structure	HB 95-1155	\$20,000	\$20,000	\$0
City of Fort Lupton - Drill New Municipal Wells	HB 95-1155	\$354,000	\$354,000	\$0
<b>Totals</b>		\$14,349,250	\$14,349,250	\$0

## 5.0 Studies and Investigations

From time to time over the years, the Board has recommended, and the General Assembly has approved, the use of the Construction Fund to support a number of non-reimbursable (grant) studies, investigations, and projects. In FY 99, the Board recommended 8 non-reimbursable studies and projects totaling \$3.99 million. These grant recommendations, which were incorporated into SB 99-173 and passed by the General Assembly, are listed in the table below.

**TABLE 14**  
**Colorado Water Conservation Board**  
**1999 Grant Recommendations**

Grantee – Project	County	Amount
CWCB and State Engineer - Rio Grande Decision Support System Data Collection & Design Continuation	basinwide	3,158,380
State Engineer - Satellite Monitoring System Maintenance Continuation	statewide	120,000
CWCB - Arkansas River Multi-Objective Management Plan Continuation	basinwide	40,000
CWCB - Imaging System for the Construction Fund Project Records	statewide	270,000
CWCB and State Engineer - South Platte River Decision Support System Feasibility Study	basinwide	100,000
San Luis Valley Water Conservancy District - Rio Grande Headwaters Restoration Project	basinwide	200,000
Southeastern Colorado Water and Storage Needs Assessment Enterprise - Arkansas River Basin Water and Storage Needs Assessment Phase 2	basinwide	25,000
CWCB - Cherry Creek Reservoir Flood Safety Investigation	Arapahoe	75,000
Total		\$3,988,380

### 5.1 Rio Grande Decision Support System Data Collection and Design Continuation

The Board recommended an appropriation of \$2,983,380 during FY 99-00 to the Division of Water Resources and the CWCB for the continued development of the Rio Grande Decision Support System (RDGSS). The Board also appropriated an additional \$175,000 for 2.5 FTE's to support project management and well data quality checking. The project is estimated to cost up to \$5.0 million over 3 years including \$3.5 million for data collection and \$1.5 million for design. The Board originally recommended an -

appropriation of up to \$2,000,000 during FY98-99 to the Division of Water Resources and the CWCB to collect data, manage the design of the system, develop the necessary databases, models, and user tools, and to acquire, operate, and maintain the associated hardware and software.

## **5.2 Satellite Monitoring System Maintenance Continuation**

The Board recommended up to \$120,000 be appropriated to the State Engineer to continue systematic renovation of stream gaging stations and replace "data collection platforms" in the statewide satellite monitoring system. This system gathers streamflow data from selected gaging stations and makes it available to water supply managers and other interested parties. This request is for the sixth year of a ten-year replacement program.

## **5.3 Arkansas River Multi-Objective Management Plan Continuation**

In 1996, the Board was authorized to expend up to \$150,000 through SB 96-124 to contract with the Corps of Engineers to investigate problems related to flooding on the Arkansas River and to develop a multi-objective management plan to mitigate future flood losses and improve channel conveyance. In 1997, the Board recommended that an additional \$50,000 from the Construction Fund be appropriated for groundwater analysis, mapping, surveys, and collection of field data. In 1999 the Board recommended an additional \$40,000 from the Construction Fund be appropriated for continuation of the study initiative. The continuation of the study would be for the Upper Reach extending upstream from John Martin Reservoir to the Otero/Pueblo County line.

## **5.4 Imaging System for the Construction Fund Project Records**

The Board recommended up to \$270,000 be appropriated for the participation in the Department of Natural Resources Technology Initiative – Electronic Document Imaging System. Participation in this project would fulfill the filing and record keeping recommendations outlined in the State Auditor's performance audit of the Construction Fund Loan Program. The system will include all hardware and software necessary for the CWCB staff to scan and index paper documents for efficient future retrieval and use. The overall goal of the project is to establish a day-forward and back-file imaging system in order to improve file accessibility and protect against loss.

## **5.5 South Platte River Decision Support System Feasibility Study**

The CWCB recommended an appropriation of up to \$100,000 to the Board to initiate a feasibility of the design, implementation and long-term maintenance of a decision support system for the South Platte river basin. The scope of the study will be developed by a technical advisory committee, in consultation with the Board, consisting of water users interested in the South Platte basin. The funds authorized are to be used to

retain a consultant to prepare the study and report the results to the Technical Advisory Committee and the Board.

## **5.6 Rio Grande Headwaters Restoration Project**

The Board recommended up to \$200,000 be appropriated to assist the San Luis Valley Water Conservancy District in initiating a detailed cooperative planning investigation of the Rio Grande River from the southern Alamosa County line to the town of South Fork in Rio Grande County. The purpose of the investigation is to evaluate the feasibility of various river restoration projects, to improve channel conveyance capacity, reduce vulnerability to flood damages, improve water diversion, restore riparian habitat, and facilitate delivery of interstate compact commitments. The scope of work for the planning investigation will be developed by the Board in consultation with a technical advisory committee consisting of water users interested in the Rio Grande basin.

## **5.7 Arkansas River Basin Water and Storage Needs Assessment - Phase 2**

The Board recommended to the General Assembly the authorization of \$25,000 to the Southeastern Water and Storage Needs Assessment Enterprise to assist in the development of a storage options plan as part of Phase 2 of the Arkansas River Basin Water and Storage Needs Assessment. The assessment includes analyzing various alternatives to address future storage demands in the Arkansas River basin. Alternatives to be considered are interruptible supply agreements or water banking as a means to provide water to cities during periods of drought, as well as various means to slow the trend of drying agricultural lands caused by Arkansas Valley water right transfers.

## **5.8 Cherry Creek Reservoir Flood Safety Investigation**

The CWCB recommended an appropriation of up to \$75,000 to match non-state funding of a technical evaluation and public review of probable maximum precipitation and probable maximum flood values associated with the Cherry Creek Reservoir. The Study will be conducted in cooperation with the National Weather Service, the U.S. Army Corps of Engineers, and other state and local government agencies.

## **5.9 Change in Statutes**

The Board recommended the state statutes be amended to create a new account in the Construction Fund for the purpose making small grants to help pay the costs of preparing water project feasibility studies. This amendment was approved by the General Assembly and included in Sec. 37-60-122.7 CRS. The account was created as a permanent account defined by the remaining balance in the account at the end of the any fiscal year shall remain in the account and not revert to the Colorado Water Conservation Board Construction Fund.



**APPENDIX A**

**Completed Project Loans**

# Colorado Water Conservation Board

## Water Project Construction Loan Program

### Completed Projects by CWCB through FY 1999

	<u>Project Name</u>	<u>Borrower</u>	<u>County</u>	<u>Div</u>	<u>Amount Loaned</u>	<u>Date Completed</u>
1	Allenspark Water Project	Allenspark Water & San. District	Boulder	1	200,001	10/01/77
2	Lake Canal	Gray Lakes Reservoir Company	Larimer	1	160,000	06/21/79
3	Cache La Poudre Reservoir Dam Rehabilitation	Cache La Poudre Reservoir Co.	Larimer	1	880,000	07/02/79
4	Rico Water Supply System	Town of Rico	Dolores	7	80,000	09/14/79
5	Delta Water System	City of Delta	Delta	4	450,000	10/11/79
6	Dove Creek Water System	Town of Dove Creek	Dolores	7	400,000	02/15/80
7	Trinchera Canal Lining	Trinchera Irrigation Company	Costilla	3	251,689	05/28/80
8	Hayden Water Supply System	Town of Hayden	Routt	6	300,000	11/17/80
9	Irrigation System & Water Rights (1)	Beaver Park Water, Inc.	Fremont	2	1,500,000	01/07/81
10	Limon Water Supply System	Town of Limon	Lincoln	2	750,000	02/02/81
11	Ridgeway Water Supply System	Town of Ridgeway	Ouray	4	175,000	02/10/81
12	Rio Grande Reservoir Dam Emgency Int. Rep.	San Luis Valley Irrigation District	Hinsdale	3	90,000	07/28/81
13	Yamcolo Dam	Upper Yampa Water Cons. District	Routt	6	1,500,000	10/09/81
14	Eagle Water System	Town of Eagle	Eagle	5	250,000	10/19/81
15	Lower Latham Canal	Lower Latham Ditch Company	Weld	1	20,000	11/01/81
16	Fort Morgan Diversion Dam	Ft. Morgan Reservoir & Irrig. District	Morgan	8	19,000	11/01/81
17	Diversion Dam, Ditch, Pipeline, & Irrigation System	Big Thompson Ditch Company	Larimer	1	193,170	02/01/82
18	Farmers Irrig. Diversion Dam and Canal	Farmers Irrig. Ditch & Reservoir Co.	Larimer	1	109,000	02/01/82
19	Prospect Dam Repairs	Henrylyn Irrigation District	Weld	1	653,000	07/29/82
20	Walden Water Supply System	Town of Walden	Jackson	8	450,000	07/29/82
21	Ute WCD Pipeline and Storage Tank	Ute Water Conservancy District	Mesa	5	985,000	08/16/82
22	Irrigation System, Brush Hollow Dam, etc. (2)	Beaver Park Water, Inc.	Fremont	2	350,000	09/04/82
23	Winter Park Water Supply System	Winter Park Water & San. District	Grand	5	900,000	09/10/82
24	Terrace Reservoir Dam Outlet Rehabilitation	Terrace Irrigation Company	Conejos	3	608,600	09/22/82
25	Highland Lake Lateral 1	Farmers Extension Ditch Company	Weld	1	150,000	10/02/82

	<b>Project Name</b>	<b>Borrower</b>	<b>County</b>	<b>Div</b>	<b>Amount Loaned</b>	<b>Date Completed</b>
26	Nunn Water Supply System	Town of Nunn	Weld	1	209,000	11/18/82
27	Silt Water Supply System	Town of Silt	Garfield	5	300,000	11/18/82
28	Morrison Water Supply System	City of Morrison	Jefferson	1	350,000	02/28/83
29	Hudson Water Supply System	Town of Hudson	Weld	1	217,000	03/09/83
30	Hotchkiss Water Supply System	Town of Hotchkiss	Delta	4	60,000	03/31/83
31	Rifle Water Supply System	City of Rifle	Garfield	5	300,000	03/31/83
32	Farmers Irrigation Ditch Co. Diversion Dam	Farmers Irrigation Ditch Company	Larimer	1	63,000	04/11/83
33	Horsecreek Dam Repairs	Henrylyn Irrigation District	Adams/Weld	1	260,000	06/30/83
34	Jackson Gulch Diversion Dam Repair	Mancos Water Conservancy District	Montezuma	7	81,362	07/01/83
35	Blue River Domestic Water Supply	Blue River Water District	Summit	5	1,200,000	07/26/83
36	Rangley Water Supply System	Town of Rangely	Rio Blanco	6	150,000	08/03/83
37	Maxwell Creek Dam & Raw Water Pipeline	Brook Forest Water District	Jefferson	1	164,500	08/09/83
38	Trinidad Water Supply System	City of Trinidad	Las Animas	2	465,000	08/17/83
39	Bancroft Water Delivery System	Kelton Heights Water & San. District	Jefferson	1	441,306	08/29/83
40	Irrigation System, Ditch Lining, & Pipeline (3)	Beaver Park Water, Inc.	Fremont	2	276,750	09/02/83
41	Cedar Mesa Reservoir Dam Spillway	Cedar Mesa Ditch & Reservoir Co.	Delta	4	12,000	10/17/83
42	Highland Lake Lateral 2	Farmers Extension Ditch Company	Weld	1	220,000	01/24/84
43	Cabin Reservoir Dam Reconstruction	Town of Palisade	Mesa	5	1,000,000	03/07/84
44	Canon City Water System	City of Canon City	Fremont	2	231,000	03/26/84
45	Maxwell Creek Dam, II	Brook Forest Water District	Jefferson	1	130,500	03/29/84
46	Ute Water Cons. District Water Supply System	Ute Water Conservancy District	Mesa	5	7,987,500	04/18/84
47	Parachute Water Supply System	Town of Parachute	Garfield	4	250,000	05/03/84
48	Fruita Water Supply System, I	Town of Fruita	Mesa	5	214,700	05/03/84
49	Sedgwick-Sand Draws Land Acquisition	Sedgwick-Sand Draws WCD	Sedgwick	1	33,000	05/08/84
50	Rio Grande Reservoir Enlargement	San Luis Valley Irrigation District	Hinsdale	3	515,000	06/18/84
51	Basalt Water Supply System	Town of Basalt	Eagle	5	226,975	07/01/84
52	Starkville Water Supply System	Town of Starkville	Las Animas	2	200,000	09/06/84
53	Beeman Diversion Dam Improvments	Beeman Irrigation Company	Weld	1	92,512	09/28/84
54	Manitou Springs Water Supply System	Town of Manitou Springs	El Paso	2	1,200,000	10/17/84
55	Kern Reservoir Dam Repairs	Kern Reservoir and Ditch Company	Weld	1	123,000	10/29/84
56	Fruita Water Supply System, II	Town of Fruita	Mesa	5	607,864	12/02/84
57	Ridges Water Supply and Irrigation System	Ridges Metro District	Mesa	5	1,916,092	12/02/84
58	Wellington Water Supply System	Town of Wellington	Larimer	1	1,140,000	12/19/84
59	Fossil Creek Reservoir Dam Rehab.	North Poudre Irrigation Company	Larimer	1	1,331,704	04/17/85

	<b>Project Name</b>	<b>Borrower</b>	<b>County</b>	<b>Div</b>	<b>Amount Loaned</b>	<b>Date Completed</b>
60	Buckeye Reservoir Dam Rehabilitation	Paradox Valley Water Cons. District	Montrose	4	100,000	08/15/85
61	Harper Lake Dam	City of Louisville	Boulder	1	1,588,271	10/28/85
62	Larkspur Water System	Larkspur Homeowners Association	Douglas	1	219,000	12/10/85
63	Granby Water Supply System	Town of Granby	Grand	5	405,000	12/17/85
64	Highland Lake Lateral 4	Farmers Extension Ditch Company	Weld	1	177,500	06/01/86
65	Hertha Reservoir Dam Enlargement	Handy Ditch Company	Larimer	1	363,450	07/01/86
66	Basalt Water Supply Storage Tank	Town of Basalt	Eagle	5	221,107	07/01/86
67	Highland Lake Lateral 3	Farmers Extension Ditch Company	Weld	1	177,500	08/18/86
68	Highland Lake Lateral 5	Farmers Extension Ditch Company	Weld	1	230,000	09/01/86
69	Beaver Park Water Irrigation System, Pipeline, & Dit	Beaver Park Water, Inc.	Fremont	2	125,000	03/01/87
70	North Poudre Dam #15 Rehabilitation	North Poudre Irrigation Company	Larimer	1	1,152,908	05/11/87
71	Highland Lake Lateral 6	Farmers Extension Ditch Company	Weld	1	300,000	01/06/88
72	Stewart Ditch	Stewart Ditch and Reservoir Co.	Delta	4	157,133	01/29/88
73	Buckeye Reservoir	Paradox Valley Water Cons. District	Montrose	4	150,000	03/24/88
74	Grandview Siphon	Grandview Irrigation Ditch Company	Fremont	2	195,279	09/22/88
75	Overland Reservoir Dam Rehabilitation	Overland Ditch and Reservoir Co.	Delta	4	850,000	11/30/88
76	Rio Grande Reservoir Dam Outlet Rehabilitation	San Luis Valley Irrigation District	Hinsdale	3	526,087	12/07/88
77	Repurchase of USBR Loan - Grand Valley Water Us	Grand Valley Water Users	Mesa	5	100,000	12/31/88
78	Cortez Water Supply Pipeline	Dolores Water Conservancy District	Montezuma	7	1,244,142	01/03/89
79	Repurchase of USBR Loan - Uncompahgre Valley	Uncompahgre Valley WUA	Delta/Mt	4	2,060,805	05/01/89
80	Repurchase of USBR Loan - Overland Ditch & Res.	Overland Ditch and Reservoir Co.	Delta	4	541,947	06/01/89
81	Repurchase of USBR Loan - North Poudre Irrig. Co.	North Poudre Irrigation Company	Larimer	1	164,321	06/05/89
82	Fuchs Dam Spillway	Fuchs Ranches	Rio Grande	3	59,120	07/28/89
83	Repurchase of USBR Loan - Orchard Mesa Irrig. Co.	Orchard Mesa Irrigation Company	Mesa	5	762,771	08/01/89
84	Repurchase of USBR Loan - City of Ft. Collins	City of Ft. Collins	Larimer	1	2,425,343	09/01/89
85	Repurchase of USBR Loan - Orchard City Irrig. Co.	Orchard City Irrigation Company	Delta	4	48,935	09/01/89
86	Ish Dam Repairs	Ish Reservoir Company	Boulder	1	17,000	11/15/89
87	Highland Lake Lateral 7	Farmers Extension Ditch Company	Weld	1	350,000	12/06/89
88	Summit Dam Repairs	Summit Reservoir and Irrigation Co.	Montezuma	7	26,383	03/14/90
89	Clark Lake Dam Rehabilitation	North Poudre Irrigation Company	Larimer	1	404,502	05/17/90
90	Beaver Park Water Irrigation System & Ditch Lining (	Beaver Park Water, Inc.	Fremont	2	125,000	07/09/90
91	Juniata Pipeline	City of Grand Junction	Mesa	5	195,930	08/25/90
92	Stagecoach Reservoir Dam	Upper Yampa Water Cons. District	Routt	6	7,900,000	09/19/90
93	Highline-Buzzard Ditch Co. Irrigation Pipeline	Highline-Buzzard Ditch Company	Mesa	5	65,000	11/16/90

	<b>Project Name</b>	<b>Borrower</b>	<b>County</b>	<b>Div</b>	<b>Amount Loaned</b>	<b>Date Completed</b>
94	Meadow Creek Dam	Michigan River Conservancy District	Jackson	8	1,103,200	02/21/91
95	Continental Reservoir Rehabilitation	Santa Maria Reservoir Company	Hinsdale	3	96,500	04/06/91
96	Santa Maria Reservoir Rehabilitation	Santa Maria Reservoir Company	Mineral	3	357,500	04/06/91
97	Bauer Reservoir No. 1 Dam Improvements	Bauer Lake Water Company	Montezuma	7	80,851	05/06/91
98	Lone Cabin Reservoir Dam Repair	Lone Cabin Ditch and Reservoir Co.	Delta	4	92,700	06/24/91
99	Douglas Dam Spillway and Repairs	Windsor Reservoir Company	Larimer	1	752,000	06/25/91
100	Morrison Consolidated Ditch	Town of Morrison	Jefferson	1	80,000	07/10/91
101	Comanche Dam Rehabilitation	City of Greeley	Larimer	1	1,100,000	10/15/91
102	Gurley Dam Repairs	Farmers Water Development Co.	San Miguel	7	828,401	11/07/91
103	Onion Valley Dam Repairs	Fruitland Irrigation Company	Delta/Mt/Gu	4	168,549	12/03/91
104	Coon Creek Reservoir No. 1 & 2 Dam Repairs	Coon Creek Reservoir & Ditch Co.	Mesa	5	55,000	04/09/92
105	Handy (Welch) Reservoir Dam Repairs	Handy Ditch Company	Larimer	1	304,000	05/01/92
106	North Poudre Dam #2 Rehabilitation	North Poudre Irrigation Company	Larimer	1	340,551	05/08/92
107	McCall Lake Spillway and Repairs	City of Longmont	Boulder	1	214,454	05/12/92
108	Upper Beaver Brook # 3A Dam Spillway & Enlargem	Lookout Mountain Water District	Clear Creek	1	600,000	07/18/92
109	Barnes Meadow Dam Spillway & Repairs	City of Greeley	Larimer	1	313,424	09/18/92
110	Union Avenue Boat Chute	Colorado Water Conservation Board	Arapahoe	1	1,328,000	05/21/93
111	Sanchez Dam Repairs, Phase 1	Sanchez Ditch and Reservoir Co.	Costilla	3	200,000	07/01/93
112	Clinton Reservoir (Municipal Portion)	Clinton Ditch & Reservoir Company	Summit	5	615,000	08/13/93
113	Clinton Reservoir (Ski Area Note)	Clinton Ditch & Reservoir Company	Summit	5	4,120,000	08/13/93
114	Platoro Reservoir Purchase	Conejos Water Conservancy District	Conelos	3	450,000	10/01/93
115	Sedgwick Sand Draws WCD Phase II & III Flood Co	Sedgwick-Sand Draws Watershed WCD	Sedgwick	1	130,027	11/01/93
116	Elmwood Lateral Ditch Rehabilitation	Elmwood Lateral Ditch Company	Mesa	5	80,000	09/01/94
117	Mountain Home Reservoir Rehabilitation	Trinchera Irrigation Company	Costilla	3	611,478	09/15/94
118	Summit Reservoir Dam and Ditch Repair	Summit Reservoir and Irrigation Co.	Montezuma	7	33,000	11/01/94
119	Poudre Valley Canal Slide Repair	Windsor Canal and Reservoir Co.	Larimer	1	300,000	12/01/94
120	Rangely Raw Water Intake Rehabilitation	Town of Rangely	Rio Blanco	6	34,000	01/10/95
121	Monument Well No. 2 Replacement	Town of Monument	El Paso	2	94,000	02/01/95
122	Alamosa Creek Canals and Laterals	Terrace Irrigation Company	Conejos	3	1,650,000	04/15/95
123	New Cache La Poudre Irrig. Co. Diversion Structure	New Cache La Poudre Irrigating Co.	Larimer	1	450,000	05/01/95
124	Loloff Lateral Ditch Replacement	Loloff Lateral Ditch Company	Weld	1	71,500	05/01/95
125	Town of Erie Flood Control Levee	Town of Erie	Weld	1	498,512	05/01/95
126	North Poudre Reservoirs 5 & 6 Rehabilitation	North Poudre Irrigation Company	Larimer	1	1,761,096	06/01/95
127	Lower Hay-Bretherton Ditch Lining Project	Lower Hay-Bretherton Ditch Group	Rio Blanco	6	20,000	06/01/95

	<b>Project Name</b>	<b>Borrower</b>	<b>County</b>	<b>Div</b>	<b>Amount Loaned</b>	<b>Date Completed</b>
128	Castle Pines North Metro District Well A3 Rehabilitat	Castle Pines North Metro District	Douglas	1	100,500	06/30/95
129	Kings Row Home Owners Association Underground	Kings Row Home Owners Association	Garfield	5	75,000	09/01/95
130	Military Park Reservoir Rehabilitation	Military Park Reservoir Co.	Delta	4	29,515	10/15/95
131	Town of Silt Irrigation System	Town of Silt	Garfield	5	400,000	11/01/95
132	Ute WCD Colorado River Pumping Station	Ute Water Conservancy District	Mesa	5	400,000	11/01/95
133	Rapid Creek Res. No. 1 and No. 2 Dam Rehabilitatio	Lloyd Ranch Limited Partnership	Mesa	5	100,000	11/01/95
134	DD&E Wise Dam Rehabilitation	Caryl Carol	Rio Blanco	6	50,000	11/01/95
135	S. Platte Ditch Diversion Structure Rehabilitation	South Platte Ditch Co.	Logan	1	100,000	06/01/96
136	Town of Erie Southern Pipeline Project	Town of Eire	Weld	1	1,544,000	06/01/96
137	Rainbow Park Ditch Rehabilitation	Rainbow Park Water Company	Fremont	2	64,919	06/01/96
138	Wolford Mountain Reservoir (Ritchard Dam)	Colorado River Water Conservation District	Grand	5	16,256,000	06/01/96
139	Worster Dam Rehabilitation	Divide Canal and Reservoir Co.	Larimer	1	665,000	06/15/96
140	Appleton Ditch Rehabilitation	Appleton ML 350 Ditch Co., Inc.	Mesa	5	53,000	06/18/96
141	Morgan County Quality Water District	Hay Gulch Well Field Purchase	Weld	1	3,000,000	07/09/96
142	City of Greeley Peterson Lake Dam Rebuild	City of Greeley	Larimer	1	644,236	09/01/96
143	Tremont Ditch Diversion Structure Rehabilitation	Tremont Mutual Ditch Co.	Morgan	1	45,000	09/01/96
144	LAWMA Well Augmentation Feasibility Study (1)	Lower Arkansas Water Management Assoc.	Prowers	2	65,000	10/24/96
145	Castle Pines Well Rehabiliotation	Castle Pines North Metro District	Douglas	1	255,804	12/01/96
146	City of Greeley Hourglass Res. Rehabilitation	City of Greeley	Larimer	1	206,351	01/01/97
147	City of Ft. Morgan Southern Pipeline Project	City of Fort Morgan	Weld	1	5,500,000	01/01/97
148	Fort Lupton Southern Pipeline Project	City of Fort Lupton	Weld	1	4,233,000	01/01/97
149	Town of Hudson Southern Pipeline Project	Town of Hudson	Weld	1	1,273,000	01/01/97
150	Alsbury Dam Rehabilitation	West Divide Water Conservancy District	Mesa	5	70,000	01/01/97
151	Norwood Raw Water Reservoir	Town of Norwood	San Miguel	7	950,000	01/01/97
152	Bravo Ditch Diversion Structure Rehabilitation	Bravo Ditch Company	Logan	1	39,099	03/01/97
153	Purgatoire River Siphon Rehabilitation	Consolidated Extension Canal Co.	Bent	2	229,431	03/10/97
154	Mutual Mesa Ditch Lateral Rehabilitation	Orchard Mesa Irrigation District	Mesa	5	861,827	05/01/97
155	Vouga Reservoir Dam Rehabilitation	Vouga Reservoir Association	Saguache	4	600,000	05/08/97
156	LAWMA X-Y Ranch and Water/Manvel Shares Purc	Lower Arkansas Water Management Assoc.	Prowers	2	3,688,368	05/28/97
157	Julesburg Res. Dam No. 4 Rehabilitation	Julesburg Irrigation District	Sedgwick	1	325,000	06/01/97
158	Ignatio Outside Irrigation System	Town of Ignacio	La Plata	7	180,000	06/01/97
159	Brush Hollow Dam Rehabilitation	Beaver Park Water Company	Fremont	2	975,000	06/30/97
160	Stagecoach Reservoir Purchase	Upper Yampa Water Cons. District	Routt	6	2,000,000	07/30/97
161	River Oaks Raw Water Irrigation System	River Oaks on the Roaring Fork Homeowne	Eagle	5	16,000	08/15/97

	<u>Project Name</u>	<u>Borrower</u>	<u>County</u>	<u>Div</u>	<u>Amount Loaned</u>	<u>Date Completed</u>
162	Excelsior Diversion Structure Rehab., Phase 1	Excelsior Irrigating Company	Pueblo	2	100,000	08/21/97
163	Sanchez Dam Outlet Tower Rehabilitation	Sanchez Ditch and Reservoir Company	Costilla	3	335,000	09/03/97
164	Lyons Intake Structure Rehabilitation	Town of Lyons	Boulder	1	226,980	09/09/97
165	Jackson Gulch Res. Inlet Canal Rehabilitation	Mancos Water Conservancy District	Montezuma	7	62,500	09/09/97
166	Chicago Creek Res. Outlet Rehabilitation	City of Idaho Springs	Clear Creek	1	130,000	09/10/97
167	Beaver Creek Dam Rehabilitation	Beaver Reservoir Company	Gunnison	4	373,000	11/01/97
168	Smith Ditch Diversion Structure and Pipeline	Smith Ditch, Inc.	Routt	6	50,000	12/12/97
169	Aumentation Water Feasibililty Study	Arkansas Ground Water Users Association	Pueblo	2	25,000	12/15/97
170	Weldon Valley Canal Diversion Structure Rehabilitati	Weldon Valley Canal Company	Weld	1	181,889	02/20/98
171	Purchase of Augmentation Water	Arkansas Ground Water Users Association	Pueblo	2	590,590	03/05/98
172	Farmers Independent Ditch Rehabilitation	Farmers Independant Ditch Co.	Weld	1	37,586	04/29/98
173	Decker Lateral Ditch Lining Project	Decker Lateral Ditch Company	Weld	1	100,000	05/22/98
174	Chipperfield Lane Ditch Co.	Chipperfield Lane Ditch Rehabilitation	Garfield	5	41,011	06/01/98
175	Poudre Valley Canal & Cobb Lake Pipeline Rehabilit	Windsor Reservoir and Canal Co.	Weld/Larimer	1	569,000	06/17/98
176	Raw Water Pipeline Rehabilitation	Town of Morrison	Jefferson	1	334,053	07/22/98
177	Hawkeye Lateral Ditch Co.	Hawkeye Lateral Ditch Rehabilitation	Mesa	5	154,113	08/17/98
178	Water Rights Purchase / Horse Creek Basin	Rodney Prieser	Lincoln	2	90,000	09/15/98
179	Eagle Park Reservoir Rehabilitation / Purchase	Eagle Park Reservoir Company	Eagle	5	7,492,520	09/16/98
180	Farmers Pawnee Canal Co.	Diversion Structure Rehabilitation	Logan	1	22,250	09/23/98
181	Agricultrual Ditch and Reservoir Co.	Ag Ditch/Welch Ditch Improvements	Jefferson	1	300,000	10/31/98
182	Water Rights Purchase	Town of Georgetown	Clear Creek	1	190,000	12/28/98
183	Left Hand Valley Res. Spillway/Outlet	Left Hand Ditch Company	Boulder	1	560,000	01/13/99
184	Durkee Ditch Co.	Durkee Ditch Pipeline Project	Delta	4	95,000	03/09/99
185	Check Dam Rehabilitation Project	Western Mutual Ditch Company	Weld	1	100,000	03/10/99
186	Equalizer Dam Rehabilitation	Greeley and Loveland Irrigation Co.	Larimer	1	308,000	05/07/99
187	Buffalo Mutual Irrigation Co.	Diversion Structure Rehabilitation	Prowers	2	453,250	06/14/99
188	Southern Supply Line Extension	City of Fort Morgan	Morgan	1	8,000,000	06/29/99
189	Lone Tree Pipeline Reconstruction	Town of Johnstown	Larimer	1	1,948,932	06/30/99
190	Pole Mountain Dam Rehabilitation	Wamsley Cattle Company	Jackson	6	34,036	06/30/99
	<b>TOTAL</b>	<b>190 Project Loans</b>			<b>\$143,657,162</b>	

**APPENDIX B**

**Data for Loan Projects Completed in FY98-99**



## CHIPPERFIELD LANE DITCH, INC. – CHPPRFLD LANE DITCH REHABILITATION



Looking toward the Multa Trina Ditch at the New 4-bay Concrete Division Box

### Project Description

This \$55,000 project from the 1998 Small Project Loan Account is the construction of 10,000 feet of pipeline replacing an existing open ditch in poor condition. The project also consisted of re-construction of the existing headgate structure and a new division box at the Multa Trina Ditch. The Glenwood Springs office of the Natural Resources Conservation Service prepared the project design. Project construction commenced November 1, 1997 by the Ditch Company's own forces. The project was completed in May 1998 with substantial completion on June 1, 1998.

### Project Data

**Sponsor:** Chipperfield Lane Ditch, Inc.      **County:** Garfield      **River:** Dry Hollow Creek

**Terms of Loan:** \$41,011.94 @ 3.75% for 30 yrs.      **Substantial Completion Date:** June 1, 1998

**Design Engineer:** Natural Resources Conservation Service – Glenwood Springs Office

**Construction Contractor:** Chipperfield Lane Ditch, Inc. Members

**Design Criteria:**      10,000 lineal feet – 8 inch diameter PVC pipe  
                                 1 – 8 ft x 12 ft x 4 ft 4-bay Concrete Division Box

**Annual Volume of Water Delivered by the Project:** 220 ac.ft.

## TOWN OF MORRISON – RAW WATER PIPELINE REHABILITATION



**The 16" HDPE Transmission Line Encased in a 22" Steel Pipe Suspended Above Bear Creek**

### Project Description

This \$445,000 project was the construction of a new raw water grit chamber and transmission line replacing a similar functionally obsolete facility for the Town of Morrison in Jefferson County. The project consisted of a new concrete grit chamber at the Bear Creek diversion structure and construction of approximately 900 feet of Ductile Iron and HDPE transmission pipeline along a precarious canyon wall. McLaughlin Water Engineers, Inc. of Denver prepared the project design that was constructed by J.R. Walton Construction Co. of Indian Hills, Colorado commencing October 1, 1997. Construction was completed in May 1998 with substantial completion on July 22, 1998.

### Project Data

**Sponsor:** Town of Morrison      **County:** Jefferson      **River:** Bear Creek

**Terms of Loan:** \$334,053 @ 5.0% for 30 yrs.      **Substantial Completion Date:** July 22, 1998

**Design Engineer:** McLaughlin Water Engineers, Inc. – Denver, Colorado

**Construction Contractor:** J.R. Walton Construction Company, Inc. – Indian Hills, Colorado

**Design Criteria:**      720 ft. - 16" dia. ductile iron pipe (buried)  
                                 180 ft. - 16" dia. HDPE pipe encased in 22" dia. steel pipe (suspended)  
                                 44 ft.x 8 ft. by 10 ft. deep reinforced concrete grit chamber

**Annual Volume of Water Delivered by the Project:** 625 ac.ft.

## SAN LUIS WATER CONSERVANCY DIST – GROUNDWATER RECHARGE PROJECT



### **Groundwater Recharge Basin Northeast of Del Norte**

#### **Project Description**

This \$90,000 project was the study of a groundwater recharge operation for the San Luis Water Conservancy District in Alamosa County northeast of Del Norte. The project consisted of diverting ditch water into three shallow (1-3 feet) recharge basins and construction of several observation wells in order to document the effect the project had on the area's groundwater levels. Davis Engineering Service, Inc. of Del Norte prepared the project design that was constructed by Cooley Brothers, Inc. of Mosca, Colorado commencing in May 1993. The study data was analyzed and presented in a final report to the CWCB August 10, 1998.

#### **Project Data**

**Sponsor:** San Luis Water Conservancy District      **County:** Alamosa      **River:** Rio Grande

**Terms of Loan:** \$45,000 Grant @ 50% project cost      **Substantial Completion Date:** Aug.10,1998

**Design Engineer:** Davis Engineering Service, Inc. – Del Norte, Colorado

**Construction Contractor:** Cooley Brothers, Inc. – Mosca, Colorado – (Recharge Basins)  
Bureau of Reclamation (Well drilling)

**Design Criteria:**      3 – Project Recharge Basins  
                                 15 – Observation Wells  
                                 16 – Cost Share Recharge Sites (Closed Basin Area)

**Annual Volume of Water Delivered by the Project:** N/A

## HAWKEYE LATERAL DITCH COMPANY - HAWKEYE LATERAL DITCH REHAB.



**Delivery of the 36 in. Reinforced Concrete Pipe**

### Project Description

This \$490,000 project was the construction of approximately 13,000 linear feet of PVC and RCP pipeline, with new headgate and appurtenances, replacing an existing open concrete lined ditch in poor condition for the Hawkeye Lateral Ditch Company in Mesa County northeast of Fruita. The Grand Junction Office of the Natural Resource Conservation Service prepared the project design that was constructed by M. A. Concrete Construction, Inc. of Grand Junction, Colorado commencing November 7, 1997. Construction was completed in May 1998 with substantial completion on August 17, 1998.

### Project Data

**Sponsor:** Hawkeye Lateral Ditch Co.    **County:** Mesa    **River:** Colorado via Grand Valley Canal

**Terms of Loan:** \$154,113 @ 3.75% for 30 yrs.    **Substantial Completion Date:** Aug. 17, 1998

**Design Engineer:** Natural Resource Conservation Service - Grand Junction, Colorado

**Construction Contractor:** M.A. Concrete Construction, Inc. - Grand Junction, Colorado

**Design Criteria:**    1,800 ft. – 36 in. dia. reinforced concrete pipe (RCP)  
                              11,415 ft. – 3 in. to 27 in. dia. poly-vinyl-chloride (PVC) pipe  
                              23 each – 6 in. to 12 in. gate valves

**Annual Volume of Water Delivered by the Project:** 1,260 ac.ft.

## FARMERS PAWNEE CANAL CO. – DIVERSION STRUCTURE REHABILITATION



**Placement of the Sheet Piling Along the Upstream Face of the Diversion Structure**

### Project Description

This project was the rehabilitation of the Farmers Pawnee Canal Company's diversion and headgate structure on the South Platte River. The project included the installation of sheet piling and construction of a concrete toe wall. The project restores damage caused by the July 1997 Pawnee Creek flood and protects the benefit of irrigation water to about 10,000 acres of cropland. The project was designed by the NRCS, Sterling office and constructed by R&R International, Inc. of Denver. Construction commenced March 16, 1998 and was completed April 15, 1998. Project documentation was received for substantial completion on September 23, 1998.

### Project Data

**Sponsor:** Farmers Pawnee Canal Company    **County:** Logan    **River:** South Platte River

**Terms of Loan:** \$22,250 @3.5% for 10 yrs    **Substantial Completion Date:** Sept 23,1998

**Design Engineer:** Natural Resource Conservation Service – Sterling, Colorado Office

**Construction Contractor:** R&R International, Inc. – Denver, Colorado

**Design Criteria:** Length = 288 ft    Sheet Piling = 5,532 sq.ft.    Concrete Toe Wall = 44 cu.yd

**Annual Volume of Water Delivered by the Project:** 28,000 ac.ft.

## AGRICULTURAL DITCH & RES. CO. – AG DITCH/WELCH DITCH IMPROVEMENTS



**The Agricultural Ditch Pump Station at Colfax Avenue and Orchard Drive**

### Project Description

This \$400,000+ project, located in Jefferson County east of Green Mountain, abandoned portions of the Welch Ditch by construction of a dropout structure on the Welch Ditch to the Ag Ditch, and a pump station/pipeline to lift water from the Agricultural Ditch back to the Welch Ditch. Several landslide areas along the Welch Ditch that continued to create high maintenance and water delivery problems for the company necessitated the project. Mountain States Engineering Associates, Inc. of Lakewood prepared the project design. The pipeline, constructed by T. Lowell Construction, Inc. of Castle Rock, and the pump station and dropout-structure, constructed by Jennison Construction Co. of Littleton, commenced November 3, 1997 were completed in July 1998. Project documentation was received for substantial completion on October 31, 1998.

### Project Data

**Sponsor:** Agricultural Ditch & Res. Co.      **County:** Jefferson      **River:** Clear Creek

**Terms of Loan:** \$300,000 @ 5.25% for 30 yrs      **Substantial Completion Date:** Oct. 31, 1998

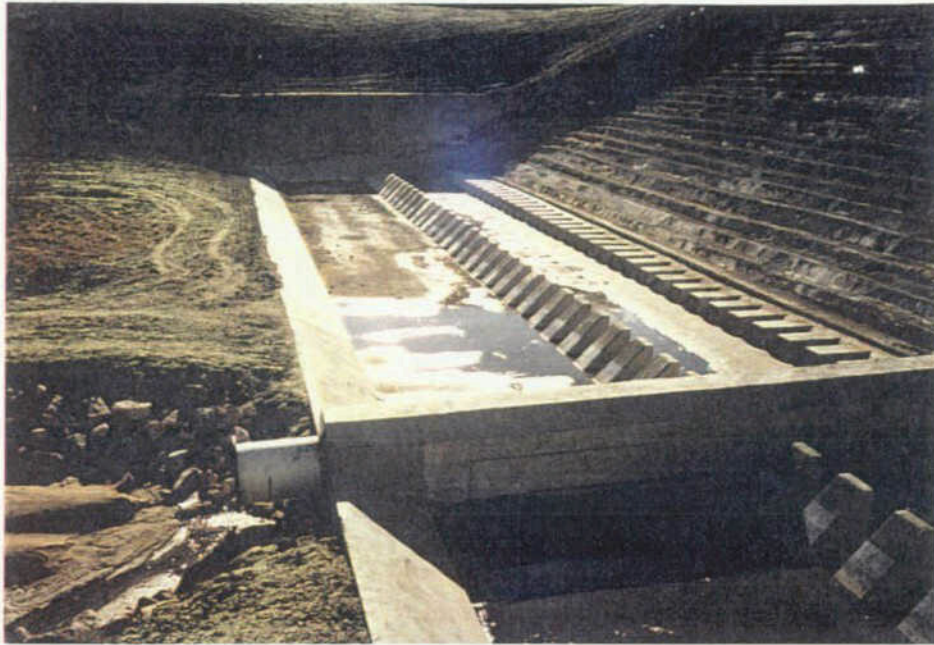
**Design Engineer:** Mountain States Engineering Associates, Inc. – Lakewood, Colorado

**Construction Contractors:** T. Lowell Construction, Inc. – Castle Rock, Colorado (pipeline)  
Jennison Construction Company, Inc. – Littleton, Colorado

**Design Criteria:** Pipeline Length = 5,000 ft. of various dia. PVC pipe  
Pump Station = 3 – 75 HP pump motors      Dropout Pipe = 36 in. CMP

**Annual Volume of Water Delivered by the Project:** 1,000 ac.ft.

## LEFT HAND DITCH CO. – LEFT HAND VALLEY RES. SPILLWAY/OUTLET REHAB.



The Concrete Stilling Basin and Outlet Pipe at the Bottom of the RCC Spillway

### Project Description

This project is the result of the State Engineer's order to increase the spillway capacity of the Left Hand Valley Reservoir in order to comply with dam safety rules and regulations regarding downstream structures. The project includes the replacement of the current spillway with a larger roller compacted concrete (RCC) spillway and concrete stilling basin. Rocky Mountain Consultants of Longmont, CO completed the permitting process, design engineering and preparation of construction contract documents. The construction contract was awarded to Gears, Inc. of Crested Butte, CO., commenced September 1, 1998 and was completed in January 1999.

### Project Data

**Sponsor:** Left Hand Ditch Company, Inc.    **County:** Boulder    **River:** Left Hand Creek

**Terms of Loan:** \$560,000.00 @ 4.0% for 30 yrs.    **Substantial Completion Date:** Jan. 13, 1999

**Design Engineer:** Rocky Mountain Consultants, Inc. – Longmont, Colorado

**Construction Contractor:** Gears, Inc. – Crested Butte, Colorado

**Design Criteria:**    Dam Height = 51.25 ft.    Dam Crest Elev. = 5,359.5 ft.  
Spillway Crest Elev. = 5,351.5 ft.    Reservoir Capacity = 2,814 ac.ft.  
Spillway Type = Stepped Roller Compacted Concrete

**Annual Volume of Water Delivered by the Project:** 1,624 ac.ft.

## DURKEE DITCH COMPANY – DURKEE DITCH PIPELINE PROJECT



**The Owner and Design Engineer Inspecting the Polyethylene Pipe**

### Project Description

This project was the construction of 3,500 linear feet of 36 inch diameter polyethylene (PE) pipe and appurtenant inlet and outlet structures, replacing an open irrigation ditch. The extremely flat grade of the ditch resulted in algae growth which reduced the flow carrying capacity of the ditch. The Delta and Grand Junction Offices of the Natural Resource Conservation Service designed the project that was constructed by K.C. Equipment and Construction Company of Delta, CO. The project was built in two phases commencing in September 1997 and was substantially completed in March 1999.

### Project Data

**Sponsor:** Durkee Ditch Company, Inc.      **County:** Delta      **River:** Currant Creek

**Terms of Loan:** \$95,000 @ 3.75% for 30 yrs.      **Substantial Completion Date:** Mar. 9, 1999

**Design Engineer:** Natural Resource Conservation Service – Delta and Grand Junction Offices

**Construction Contractor:** K.C. Equipment and Construction Company – Delta, Colorado

**Design Criteria:**      Length of Pipe = 3,500 linear ft.  
                                 Pipe Diameter = 36 in.  
                                 Type of Pipe = Black Corrugated Polyethylene (PE)

**Annual Volume of Water Delivered by the Project:** 2,000 ac.ft.



## WESTERN MUTUAL DITCH CO. – CHECK DAM REHABILITATION PROJECT



Looking D/S at the Check Dam Along the Side-Channel West of the Main Channel Diversion

### Project Description

This project is the construction of a side-channel check dam west of the Western Mutual Ditch Company's main diversion structure on the South Platte River west of Platteville. The structure is designed to back up side-channel water during low flows, re-directing it toward the ditch head-gates located on the opposite bank of the river's main channel. The project was designed by Rocky Mountain Consultants of Longmont, CO. and constructed by Kemp & Hoffman, Inc. of Northglenn, CO. After a lengthy right-of-way and access dispute with the adjacent property owner the project commenced in January 1999 and was completed in March 1999.

### Project Data

**Sponsor:** Western Mutual Ditch Company    **County:** Weld    **River:** South Platte River

**Terms of Loan:** \$100,000 @ 3.75% for 20 yrs    **Substantial Completion Date:** Mar. 10, 1999

**Design Engineer:** Rocky Mountain Consultants, Inc. – Longmont, Colorado

**Construction Contractor:** Kemp & Hoffman, Inc. – Northglenn, Colorado

**Design Criteria:**    Length of Check Dam = 120 feet  
                                 Height of Check Dam = 7 feet  
                                 Type of Dam = Steel Sheet Piling with Treated Timber Flashboards

**Annual Volume of Water Delivered by the Project:** 20,000 ac. ft.

## GREELEY & LOVELAND IRRIGATION CO. – EQUALIZER DAM REHABILITATION



Looking Down/Stream from the Dam at Emergency Spillway/5-Bay Outlet Gate Structure

### Project Description

This \$385,000 project was the rehabilitation of the Greeley & Loveland Irrigation Company's Equalizer Reservoir located east of Loveland. The project included replacement of the dam outlet gate with a new structure, which incorporated both the outlet gate and a spillway. The existing dam embankment was also raised almost four feet. ECI Consultants, Inc. of Englewood prepared the construction plans and specifications with the construction contract awarded to Schmuesor and Associates, Inc. of Wheatridge, CO. Construction commenced on November 16, 1998, was completed in early March 1999, with Substantial Completion on May 7, 1999.

### Project Data

**Sponsor:** Greeley & Loveland Irrigation Co.    **County:** Larimer    **River:** Big Thompson River

**Terms of Loan:** \$308,000 @ 4.21% for 30 yrs.    **Substantial Completion Date:** May 7, 1999

**Design Engineer:** ECI Consultants, Inc. – Englewood, Colorado

**Construction Contractor:** Schmuesor and Associates, Inc. – Wheatridge, Colorado

**Design Criteria:**    Length of Dam Crest = 2,600 ft.  
                              Volume of Reservoir = 1,700 ac.ft.  
                              Outlet Gate = 5 – 4 ft. x 4 ft. slide gates  
                              100 - Year Emergency Spillway = 20 ft. long x 9 ft. high

**Annual Volume of Water Delivered by the Project:** 885 ac.ft.

## BUFFALO MUTUAL IRRIGATION CO-DIVERSION STRUCTURE REHABILITATION



**The Ditch Company Officers Operating Their New Headgates**

### Project Description

This \$600,000 project was the re-construction of the Buffalo Mutual Irrigation Company's diversion structure and headgate on the Arkansas River in Prowers County 17 miles east of the City of Lamar. The existing steel and wood dam and headgate had been in place for more than 50 years and was structurally deficient. Wright Water Engineers of Denver, Colorado completed project design and preparation of construction contract documents. The construction contract was awarded to TLM Constructors, Inc. of Swink, Colorado and construction commenced September 21, 1998. The project was completed in June 1999.

### Project Data

**Sponsor:** Buffalo Mutual Irrigation Company      **County:** Prowers      **River:** Arkansas River

**Terms of Loan:** \$453,250 @ 3.75% for 30 yrs.      **Substantial Completion Date:** June 14, 1999

**Design Engineer:** Wright Water Engineers – Denver, Colorado

**Construction Contractor:** TLM Constructors, Inc. – Swink, Colorado

**Design Criteria:**      Length of Overflow Diversion Structure = 200 feet  
                                 Diversion Headgate = 3 – 5 ft. x 6 ft. slide gates  
                                 Headgate Flushing Structure = 1 – 6 ft. x 4 ft. slide gate

**Annual Volume of Water Delivered by the Project:** 17,560 ac.ft.

## TOWN OF JOHNSTOWN – LONE TREE PIPELINE RECONSTRUCTION PROJECT



Placement of the 16 inch Diameter - Ductile Iron Pipeline

### Project Description

This \$2,700,000 project includes the replacement of 11 miles of open ditch with a 14-16 inch pipeline from Lonetree Reservoir to the Town of Johnstown's water treatment plant including a booster station at the reservoir and connection facilities at the treatment plant. PRC Environmental Management, Inc. of Denver designed the project. The construction contract was awarded to Hall-Irwin Construction Co. (pipeline) of Greeley and B.T. Construction, Inc. (pump station/electrical) of Broomfield August 6, 1996. Construction commenced in early October 1996 and was completed in May 1998. Project documentation and final accounting delayed substantial completion until June 30, 1999.

### Project Data

**Sponsor:** Town of Johnstown      **County:** Larimer/Weld      **River:** Big Thompson River

**Terms of Loan:** \$1,948,932.60 @ 4% for 30 yrs.      **Substantial Completion Date:** June 30, 1999

**Design Engineer:** PRC Environmental Management, Inc. – Denver, Colorado

**Construction Contractor:** Hall-Irwin Construction, Inc. – Greeley, Colorado  
B.T. Construction, Inc. – Broomfield, Colorado

**Design Criteria:**      Length of Pipeline = approx. 11 miles  
                                 Pipeline diameter = 14 – 16 inch  
                                 Pipeline Material = Ductile Iron Pipe

**Annual Volume of Water Delivered by the Project:** 2,200 ac.ft.

## WAMSLEY CATTLE COMPANY – POLE MOUNTAIN DAM REHABILITATION



**Excavation and Grading Work from the Dams Right Abutment**

### Project Description

This small dam rehabilitation project commenced in March 1994 by the owners of the Wamsley Cattle Company. The project consisted of replacing the reservoir's outlet structure and flattening the dam's upstream slope. Smith Geotechnical Engineering (SGE) of Ft. Collins completed the project design. The project was constructed under the supervision of SGE and the State Engineer's Office by the owner's own forces. The owner completed the work after several years of effort between ranching, farming and construction. The State Engineer's Office recently approved the reservoir's filling plan and substantial completion was June 30, 1999.

### Project Data

**Sponsor:** Wamsley Cattle Company      **County:** Jackson      **River:** Off-Stream Drainage

**Terms of Loan:** \$34,036.41 @ 3% for 40 yrs.      **Substantial Completion Date:** June 30, 1999

**Design Engineer:** Smith Geotechnical Engineering – Ft. Collins, Colorado

**Construction Contractor:** Wamsley Cattle Company Owners – Coalmont, Colorado

**Design Criteria:**  
Dam Height = 115 feet  
Length of Crest = 782 feet  
Outlet = 280 ft. long - 24 inch diameter steel pipe  
Ave. U/S slope = 4:1      Ave. D/S slope = 2.2:1

**Annual Volume of Water Delivered by the Project:** 1,905 ac.ft.

**APPENDIX C**

**Data for SB99-173 Authorized Loan Projects**

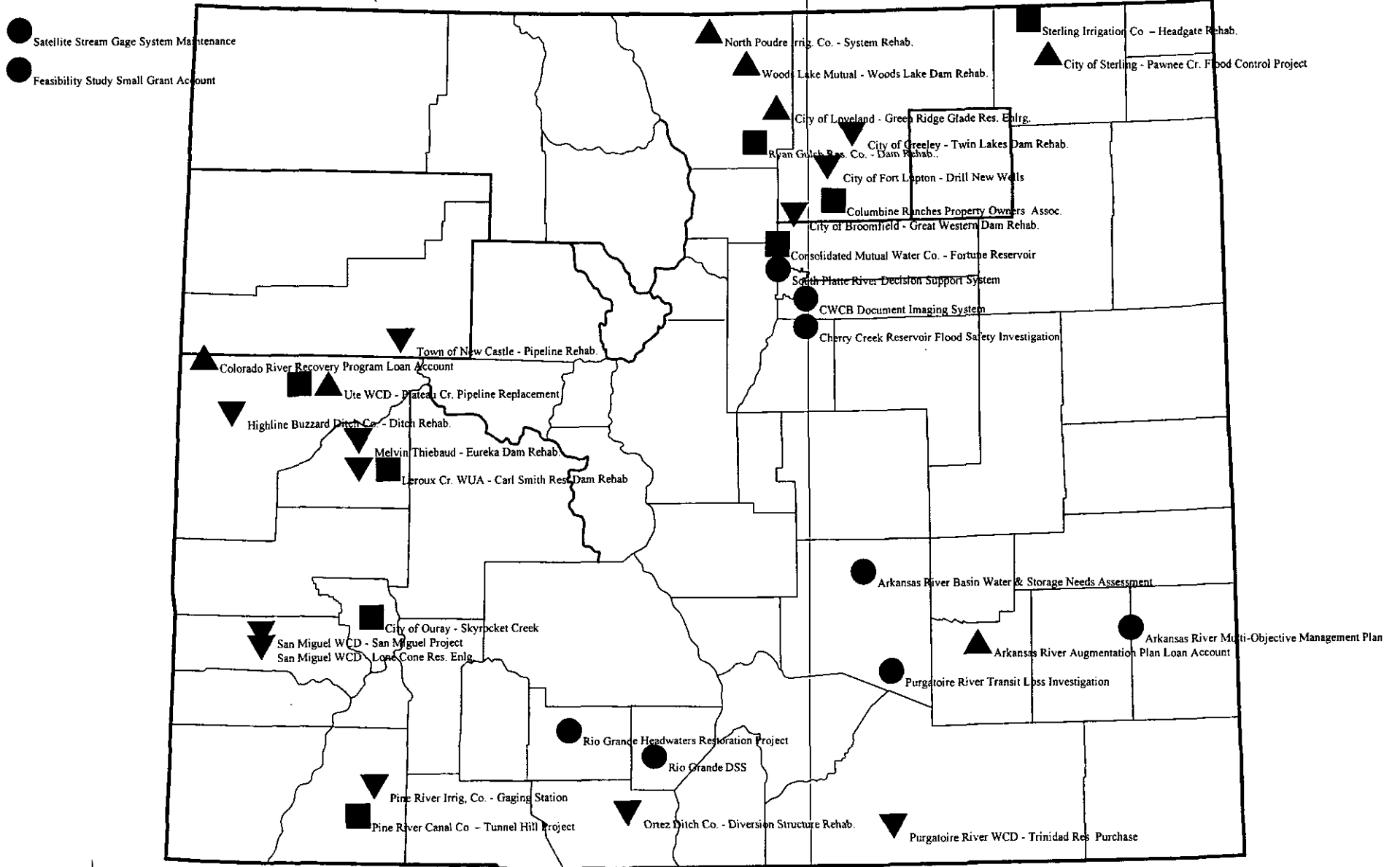
## SB99-173 At A Glance

Section	Title/Purpose	Amount
1	Seven New Project Loan Authorizations from the CWCB Construction Fund	\$12,460,033
2	One New Project Loan Authorization from the Severance Tax Trust Fund Perpetual Base Account	7,000,000
3	Increases to Four Prior Authorized Loans	7,317,000
4	Decreases to Twelve Prior Authorized Loans	(14,349,250)
5	Rio Grande Decision Support System Development for Years 2 & 3 plus 2.5 FTE for Project Management and Data Checking	2,983,380 175,000
6	Satellite Monitoring System Maintenance Continuation	120,000
7	Arkansas River Multi-Objective Management Plan Continuation	40,000
8	Imaging System for Construction Fund Project Files	270,000
9	South Platte River Decision Support System Feasibility Study	100,000
10	Rio Grande Headwaters Restoration Project Planning Study	200,000
11	Arkansas River Basin Water and Storage Needs Assessment, Phase II	25,000
12	Expanded Purpose for the Purgatoire River Transit Loss Investigation (HB95-1155)	60,000
13	Creation of a Feasibility Study Small Grant Account	200,000
14&15	Corrects Name of Source of Money for Transfer of Funds to the Species Conservation Trust Fund	1,000,000
16	Cherry Creek Reservoir Flood Safety Investigation	75,000
17	Continue Implementation of Local, Regional, and Statewide Water Planning Studies	225,000
18	Arkansas River Augmentation Plan Loan Account, and Colorado River Recovery Program Loan Account—Additional Increases	2,000,000 5,000,000
19	Safety Clause	0

# Colorado Water Conservation Board SB 99-173, Water Project Construction Bill

March 24, 1999

Statewide



New Loan Authorization

Loan Increase

Loan Decrease

Non-Reimbursable Project



## Water Project Construction Loan Program-Project Data

**Borrower:** Sterling Irrigation Company

**Project Name:** Sterling No. 1 Diversion and Headgate      **Project Type:** Rehabilitation

**County:** Logan      **Drainage Basin:** South Platte      **Water Source:** South Platte

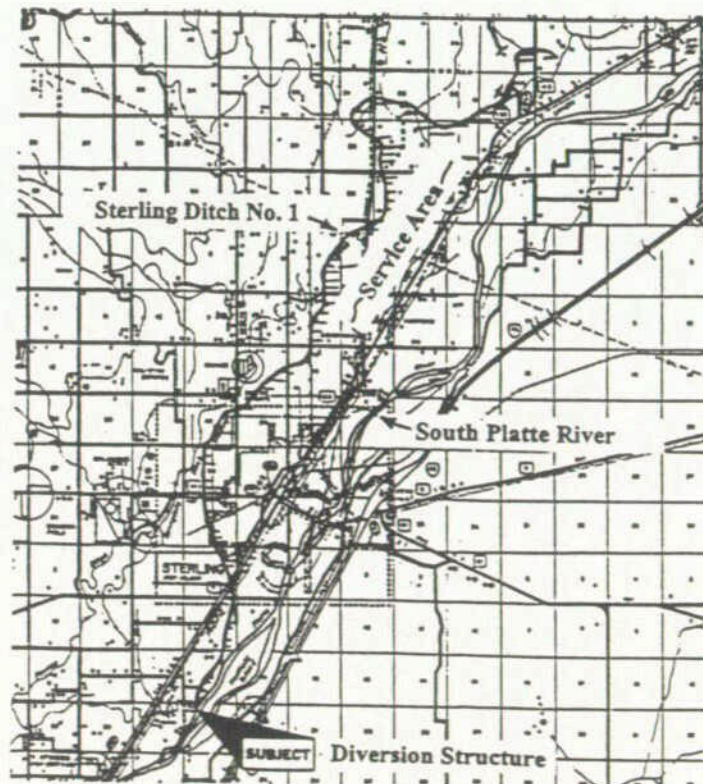
**Total Project Cost:** \$353,981      **Funding Sources:** Company and CWCB

**Type of Borrower:** Agricultural      **Median Household Income:** N/A

**CWCB Loan:** \$318,583      **Interest Rate:** 3.75%      **Term:** 30 years

**CWCB Grant:** \$1,400      **Annual Volume of Water delivered:** 23,563 acre-feet

The Sterling No. 1 diversion and headgate is located 8 miles southwest of Sterling, on the South Platte River. The Sterling Irrigation Company operates the diversion and supplies water to 88 shareholders for irrigation within the 7,400-acre service area. The diversion and headgate are in poor condition and the Company plans to rehabilitate them in 1999. The average annual volume diverted is 23,563 acre-feet. The Sterling Irrigation Company is a mutual ditch company and a nonprofit corporation registered in the State of Colorado. Jack Odor P.E. of G.A.S.P. has been retained by the Company, and has completed the feasibility study. Proposed funding for the project consists of a CWCB loan for \$318,583, and \$35,400 from the Company. A \$1,400 CWCB grant from the Severance Tax Operational Account and \$1,400 from the Company will fund the feasibility study.



Location Map

## Water Project Construction Loan Program-Project Data

**Borrower:** Columbine Ranches Property Owners Association

**Project Name:** Purchase of Augmentation Water      **Project Type:** Water Purchase

**County:** Adams      **Drainage Basin:** South Platte      **Water Source:** South Platte

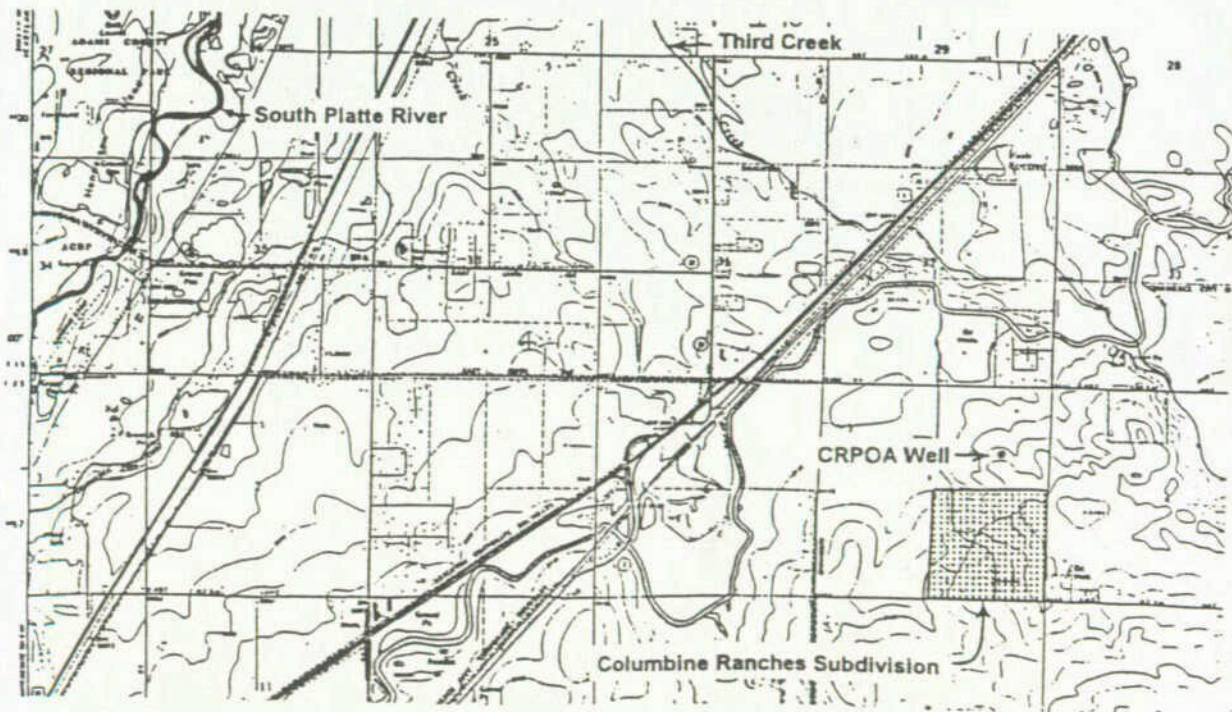
**Total Project Cost:** \$405,000      **Funding Sources:** Association and CWCB

**Type of Borrower:** Municipal      **Median Household Income:** \$30,522

**CWCB Loan:** \$305,250      **Interest Rate:** 4.75%      **Term:** 30 years

**Annual Volume of Water delivered:** 120 acre-feet

Columbine Ranches Subdivision is located 14 miles northeast of Denver, near Barr Lake. The Columbine Ranches Property Owners Association supplies water to subdivision residents for irrigation, stock watering, and fire protection. The well that supplies this water has a junior water right (1962) and can not be pumped unless its consumptive use is replaced. The annual volume pumped is 120 acre-feet, and the consumptive use is 84 acre-feet. The Association plans to purchase senior water rights that are suitable for augmentation. The Columbine Ranches Property Owners Association is a nonprofit corporation registered in the State of Colorado. The Association has 54 members and a service area of 160 acres. Robert A. Longenbaugh, P.E. has been retained by the Association, and has completed the feasibility study. The Columbine Ranches Property Owners Association plans to purchase the needed senior water rights in 1999. Proposed funding for the project consists of a CWCB loan for 75% of the cost, with the Association funding the remainder. The Association will fund the cost of the feasibility study.



Location Map

## Water Project Construction Loan Program-Project Data

**Borrower:** City of Ouray, Parks Enterprise Fund

**Project Name:** Skyrocket Creek Deflection Structure Rehab.    **Project Type:** Rehabilitation

**County:** Ouray    **Drainage Basin:** Uncompahgre    **Water Source:** Skyrocket Creek

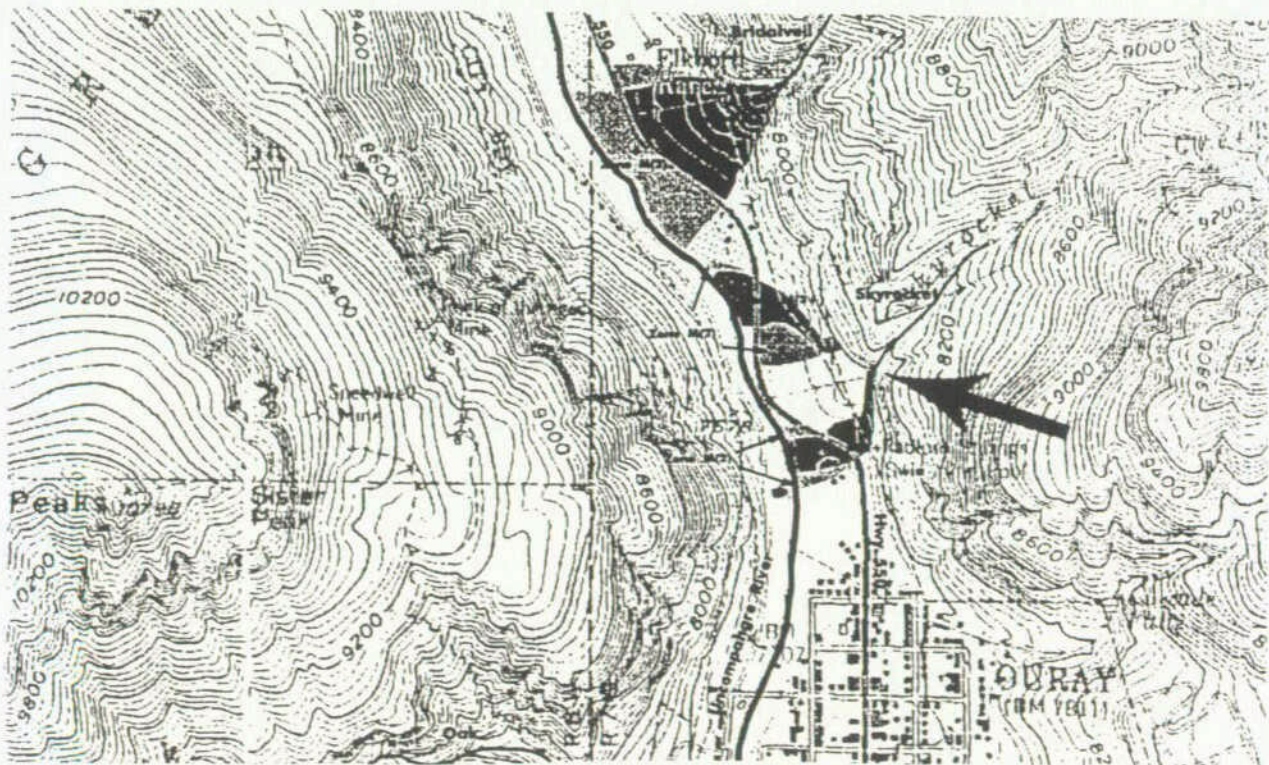
**Total Project Cost:** \$133,450    **Funding Sources:** City, Corps, DOLA and CWCB

**Type of Borrower:** Municipal    **Median Household Income:** \$28,158

**CWCB Loan:** \$25,000    **Interest Rate:** 3.75%    **Term:** 20 years

**Annual Volume of Water delivered:** acre-feet

The purpose of the project is to upgrade and improve an existing deflection structure on Skyrocket Creek so that it can handle regularly occurring and extreme flood and/or debris flows from the steep watershed area above the city. The existing structure, which was built in 1929 from stones and mortar, has served a very useful purpose in the past but is now considered to be at structural risk due to its age. The proposed project will bring the system up to acceptable engineering standards, and will help to protect the City's citizens, businesses, visitors, and infrastructure. Feasibility studies have been completed by Mussetter Engineering, Inc. in 1997 and Ayres Associates in December 1997.



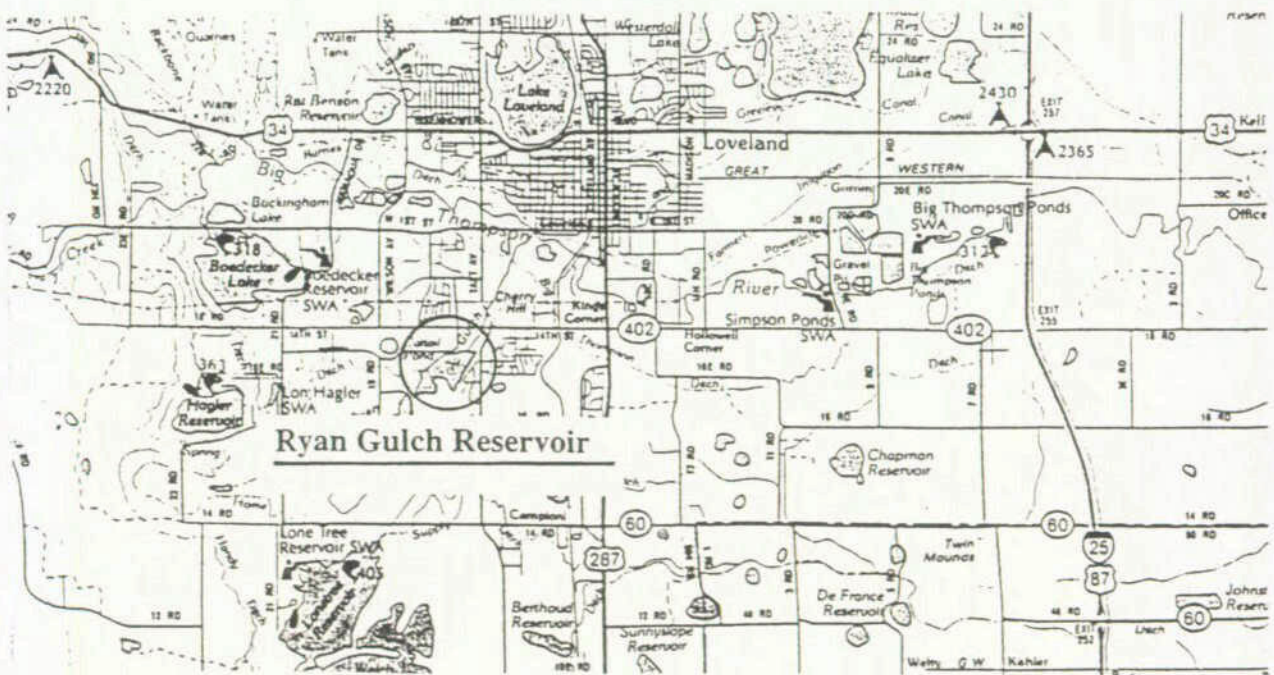
Location Map

## Water Project Construction Loan Program-Project Data

<b>Borrower:</b>	Ryan Gulch Reservoir Company		
<b>Project Name:</b>	Ryan Gulch Reservoir Dam Rehabilitation	<b>Project Type:</b>	Rehabilitation
<b>County:</b>	Larimer	<b>Drainage Basin:</b>	South Platte
		<b>Water Source:</b>	Ryan Gulch
<b>Total Project Cost:</b>	\$428,500	<b>Funding Sources:</b>	Company and CWCB
<b>Type of Borrower:</b>	Agricultural	<b>Median Household Income:</b>	N/A
<b>CWCB Loan:</b>	\$317,500	<b>Interest Rate:</b>	4.25%
		<b>Term:</b>	30 years

**Annual Volume of Water delivered:** 331 acre-feet

Ryan Gulch Reservoir has an estimated storage capacity of 976 acre-feet at the spillway crest but is currently restricted to 645 acre-feet due to inadequate spillway capacity. The project involves the construction of a new spillway on the left abutment of the dam with adequate capacity to pass the 100-year inflow design flood. Completion of the project is expected to allow the use of full storage capacity in the reservoir.

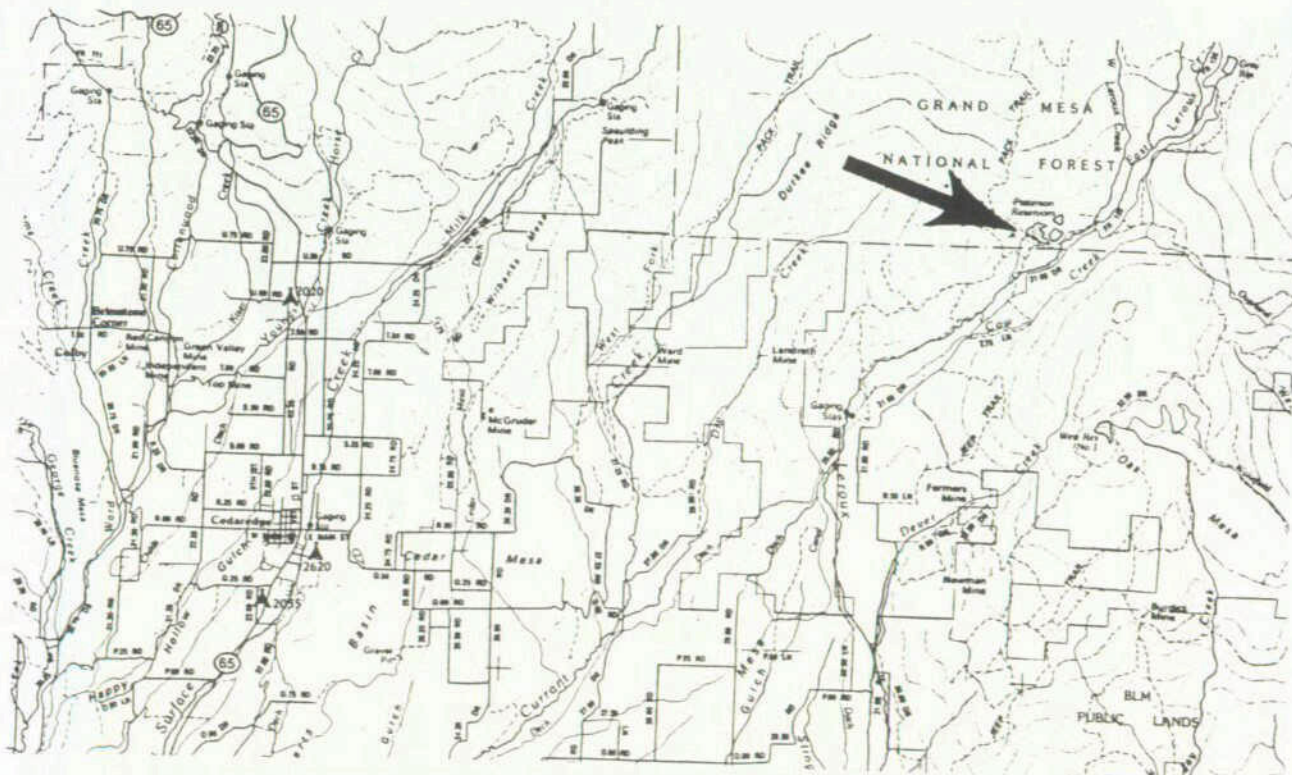


Location Map

## Water Project Construction Loan Program-Project Data

<b>Borrower:</b>	Leroux Creek Water Users Association		
<b>Project Name:</b>	Carl Smith Reservoir Dam Rehabilitation	<b>Project Type:</b>	Rehabilitation
<b>County:</b>	Delta	<b>Drainage Basin:</b>	Gunnison
		<b>Water Source:</b>	Leroux Creek
<b>Total Project Cost:</b>	\$1,389,048	<b>Funding Sources:</b>	Association and CWCB
<b>Type of Borrower:</b>	Agricultural	<b>Median Household Income:</b>	N/A
<b>CWCB Loan:</b>	\$1,250,000	<b>Interest Rate:</b>	3.75%
		<b>Term:</b>	30 years
<b>CWCB Grant:</b>	\$5,000	<b>Annual Volume of Water delivered:</b>	800 acre-feet

The dam will be rehabilitated to maintain the existing storage capacity of about 800 acre-feet. The breach resulting from the May 1998 failure in a portion of the embankment will be filled, the dam crest will be reshaped and the downstream slope will be reduced to 2.5 to 1.0 by placing a considerable amount of fill material on the downstream face of the dam. In addition, rip rap protection will be placed on the upstream face, a toe drain and drainage blanket will be installed as well as a new 18-inch diameter outlet conduit. The spillway will be reshaped to pass the Probable Maximum Flood.



Location Map

## Water Project Construction Loan Program-Project Data

**Borrower:** Consolidated Mutual Water Company

**Project Name:** Fortune Reservoir **Project Type:** New Storage

**County:** Jefferson **Drainage Basin:** South Platte **Water Source:** Clear Creek

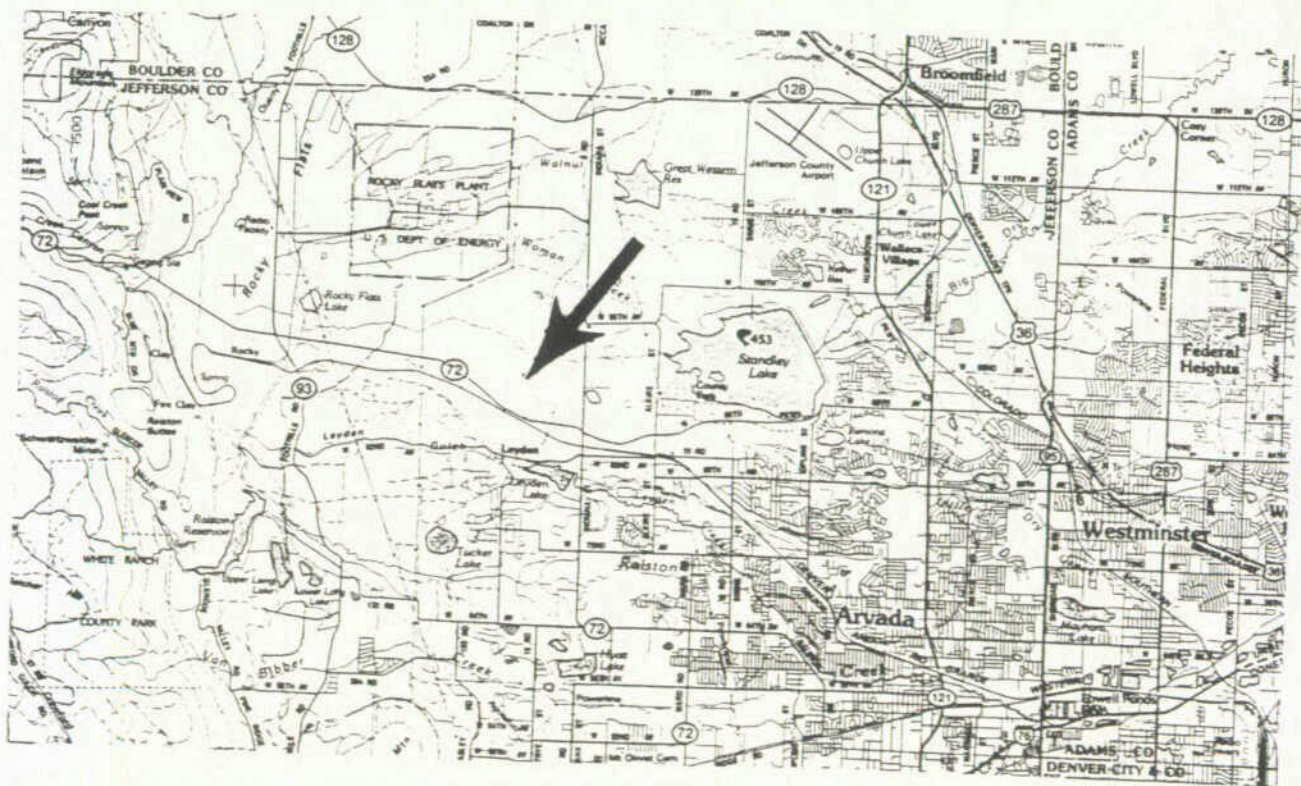
**Total Project Cost:** \$21,585,000 **Funding Sources:** Company and CWCB

**Type of Borrower:** Municipal **Median Household Income:** \$34,000

**CWCB Loan:** \$10,000,000 **Interest Rate:** 4.75% **Term:** 10 years

**Annual Volume of Water delivered:** 9,000 acre-feet

The project involves the construction of a 9,000 acre-foot reservoir with a 105 foot-high, zoned earth embankment; an emergency spillway capable of passing the Probable Maximum Flood; and a 30-inch diameter inlet/outlet pipeline. The reservoir will be hydraulically connected with the rest of the Company's Maple Grove raw water system through 5 1/2 miles of new pipeline. Geotechnical and hydrologic investigations as well as final project design have been completed. The State Engineers Office is currently reviewing the design documents.



Location Map

## Water Project Construction Loan Program-Project Data

**Borrower:** Pine River Canal Company

**Project Name:** Tunnel Hill Project      **Project Type:** Rehabilitation

**County:** La Plata      **Drainage Basin:** San Juan      **Water Source:** Pine River

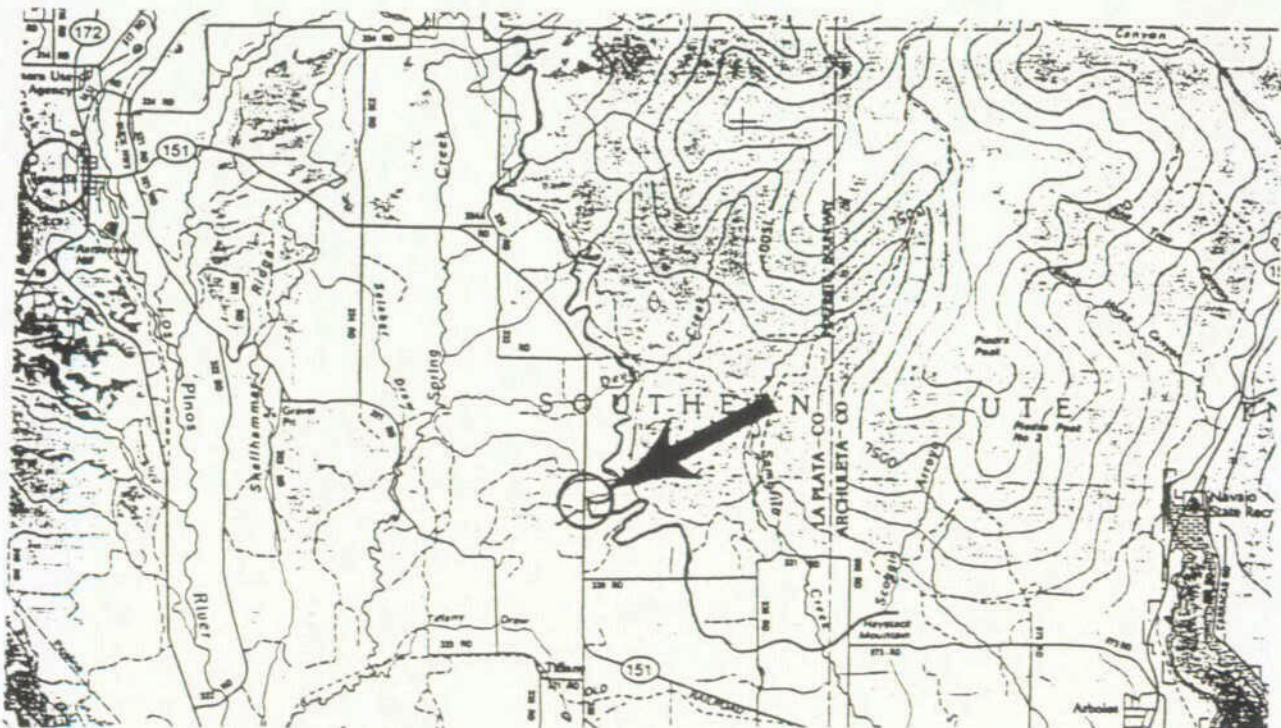
**Total Project Cost:** \$325,550      **Funding Sources:** Company and CWCB

**Type of Borrower:** Agricultural      **Median Household Income:** N/A

**CWCB Loan:** \$243,700      **Interest Rate:** 3.50%      **Term:** 20 years

**Annual Volume of Water delivered:** 71,400 acre-feet

The Pine River Canal Company tunnel hill project is located 8 miles southeast of Ignacio, adjacent to State Highway 151. The Company operates the canal and supplies water to 215 shareholders for irrigation within the 13,377-acre service area. The tunnel is in poor condition and the Company plans to replace it with a new pipeline structure in 1999. The average annual volume diverted is 53,000 acre-feet. The Pine River Canal Company is a mutual ditch company and a nonprofit corporation registered in the State of Colorado. Gary Jennings of the La Plata County NRCS has drafted the feasibility study. Proposed funding for the project consists of a CWCB loan for \$243,700, a grant in amount of \$26,550 from the Natural Resources Conservation Service, and \$56,282 from the Company.



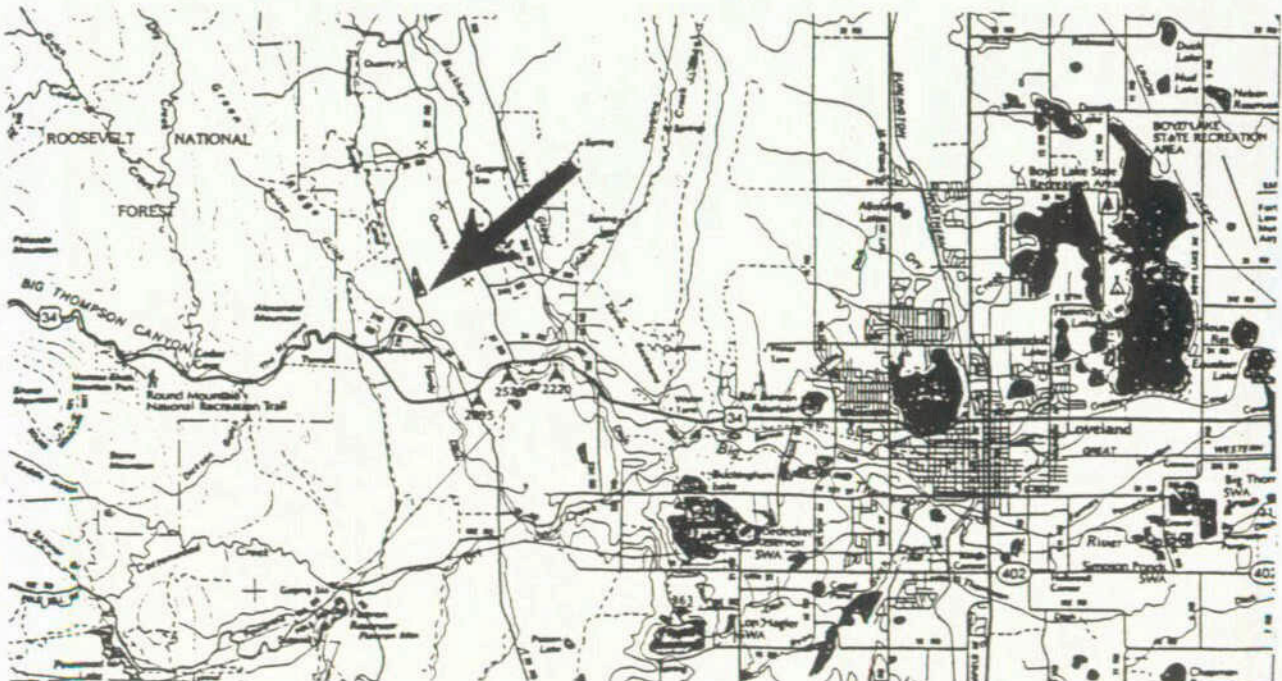
Location Map

## Water Project Construction Loan Program-Project Data

<b>Borrower:</b>	City of Loveland		
<b>Project Name:</b>	Green Ridge Glade Reservoir Enlargement	<b>Project Type:</b>	Enlargement
<b>County:</b>	Larimer	<b>Drainage Basin:</b>	South Platte
		<b>Water Source:</b>	Big Thompson
<b>Total Project Cost:</b>	\$20,000,000	<b>Funding Sources:</b>	City, Authority, and CWCB
<b>Type of Borrower:</b>	Municipal	<b>Median Household Income:</b>	\$30,548
<b>1998 CWCB Loan:</b>	\$2,000,000	<b>Interest Rate:</b>	4.75%
		<b>Term:</b>	10 years
<b>1999 CWCB Loan:</b>	\$3,000,000	<b>Interest Rate:</b>	4.25%
		<b>Term:</b>	10 years

**Annual Volume of Water delivered:** 6,000 acre-feet

The City of Loveland is proposing to expand it's existing Green Ridge Glade Reservoir from a capacity of 600 acre-feet to 6,000 acre-feet. Green Ridge Glade is an off-channel reservoir located about seven miles west of Loveland. The project will include raising the existing earth embankment dam and replacing the existing intake tower, outlet works, and spillway as well as relocating an existing county road in the reservoir area. The expanded reservoir will provide emergency storage, drought protection, and better management of the City's water supplies. Feasibility studies were completed in August 1986, January 1988, and October 1997.



Location Map

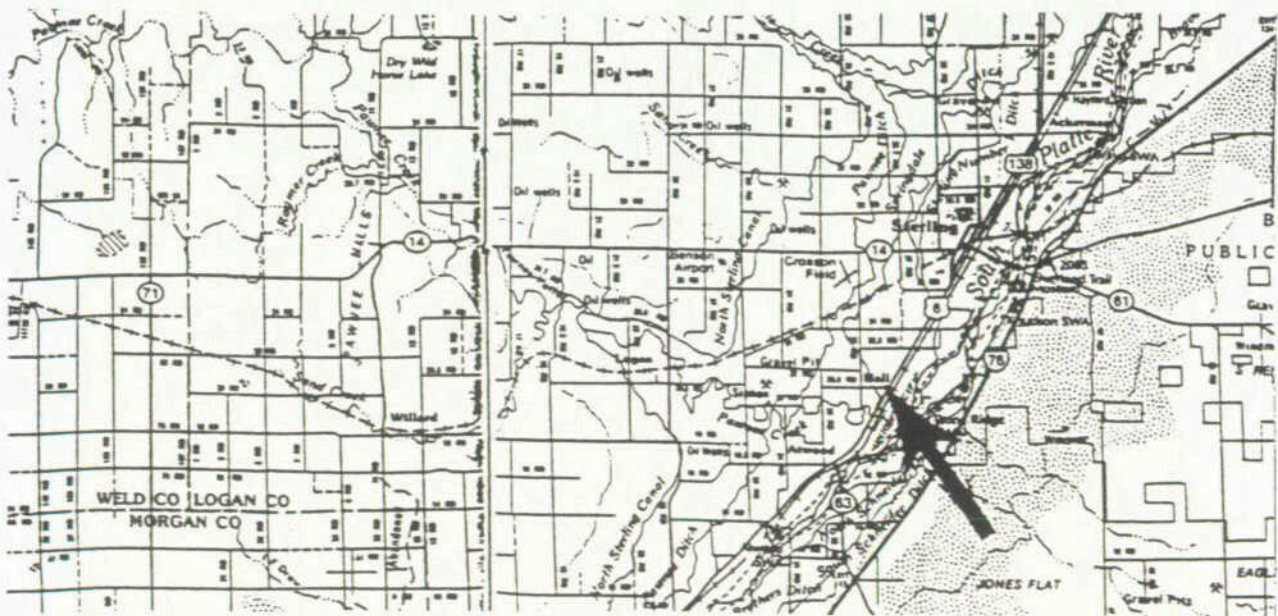


## Water Project Construction Loan Program-Project Data

<b>Borrower:</b>	City of Sterling		
<b>Project Name:</b>	Pawnee Creek Flood Control Project	<b>Project Type:</b>	Flood Control
<b>County:</b>	Logan	<b>Drainage Basin:</b>	South Platte
		<b>Water Source:</b>	Pawnee Creek
<b>Total Project Cost:</b>	\$3,000,000	<b>Funding Sources:</b>	City and CWCB
<b>Type of Borrower:</b>	Municipal	<b>Median Household Income:</b>	\$20,189
<b>1998 CWCB Loan:</b>	\$550,000	<b>Interest Rate:</b>	3.75%
<b>1999 CWCB Loan:</b>	\$685,000	<b>Interest Rate:</b>	3.50%
		<b>Term:</b>	20 years
		<b>Term:</b>	20 years

**Annual Volume of Water delivered:** N/A

Pawnee Creek drains an area of 645 square miles in Logan County and is tributary to the South Platte River southwest of the City of Sterling. The overflows from floods on Pawnee Creek flooded the community in 1935, 1965, and 1997. The city's business sector was completely inundated during the July 30-31, 1997 flood event. Approximately 1,400 homes and the entire business district in the southern half of the community are in the 100-year floodplain from Pawnee Creek overflows. ICON Engineering, Inc. of Denver completed a reconnaissance level study in June 1997. The proposed project consists of levees, improved channel hydraulic conveyance systems, bridge modifications, and floodwalls designed to provide 100-year flood protection. The project plan is under review to evaluate the flood characteristics from a flood of the same magnitude as the 1997 flood. The total cost of the project is estimated at \$4,040,000. Funding sources include the city's capital improvement fund (\$750,000), a FEMA hazard mitigation grant (\$1,165,000), Logan County in kind services (\$150,000), the Union Pacific Railroad (\$375,000), Colorado Department of Transportation (\$550,000), CWCB Construction Fund in 1998 (\$550,000), and CWCB Construction Fund in 1999 if needed (\$500,000).



Location Map

## Water Project Construction Loan Program-Project Data

**Borrower:** Ute Water Conservancy District

**Project Name:** Plateau Creek Pipeline Replacement Project      **Project Type:** Rehabilitation

**County:** Mesa      **Drainage Basin:** Colorado      **Water Source:** Plateau Creek

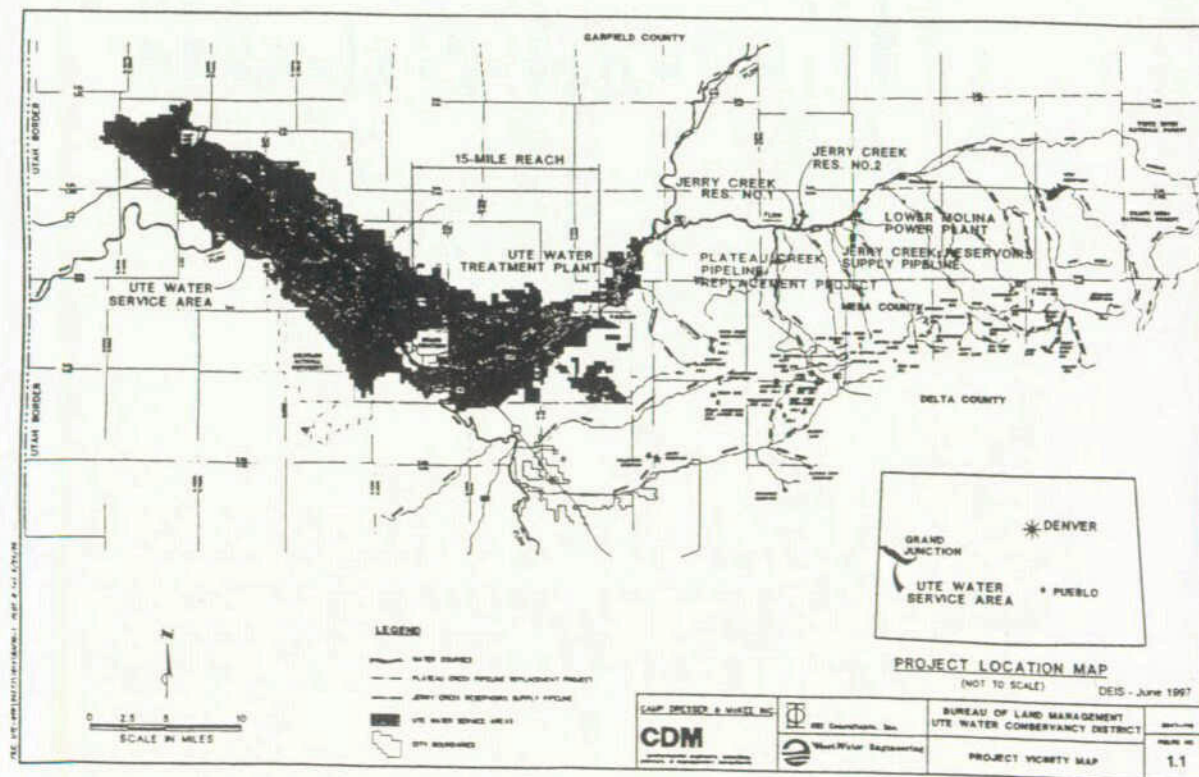
**Total Project Cost:** \$32,855,000      **Funding Sources:** District, Authority, and CWCB

**Type of Borrower:** Municipal      **Median Household Income:** \$23,700

1988 CWCB CF Loan: \$8,000,000      **Interest Rate:** 5.00%      **Term:** 30 years  
 1999 CWCB CF Loan: \$2,600,000      **Interest Rate:** 3.75%      **Term:** 30 years  
 CWCB Sev Tax Loan: \$7,000,000      **Interest Rate:** 3.75%      **Term:** 30 years

**Annual Volume of Water delivered:** acre-feet

The District is proposing to replace its existing Plateau Creek Pipeline with a new line from Jerry Creek Reservoirs to the Ute Water Treatment Plant near Palisade. The preliminary design includes 11.3 miles of 48-inch diameter pipe and 4.1 miles of 54-inch diameter pipe. There are a total of 13 creek crossings and a new, 3,250-foot long tunnel near the confluence of Plateau Creek and the Colorado River. Additional tunnel options are presently under consideration. The project is currently under design by Camp Dresser & McKee. The first phase of construction is scheduled to begin in February 1999 and completion is expected to take two years.



Location Map

## Water Project Construction Loan Program-Project Data

**Borrower:** North Poudre Irrigation Company

**Project Name:** System Rehabilitation **Project Type:** Dam Rehab.

**County:** Larimer **Drainage Basin:** S. Platte **Water Source:** Cache La Poudre

**Total Project Cost:** \$1,896,960 **Funding Sources:** Company and CWCB

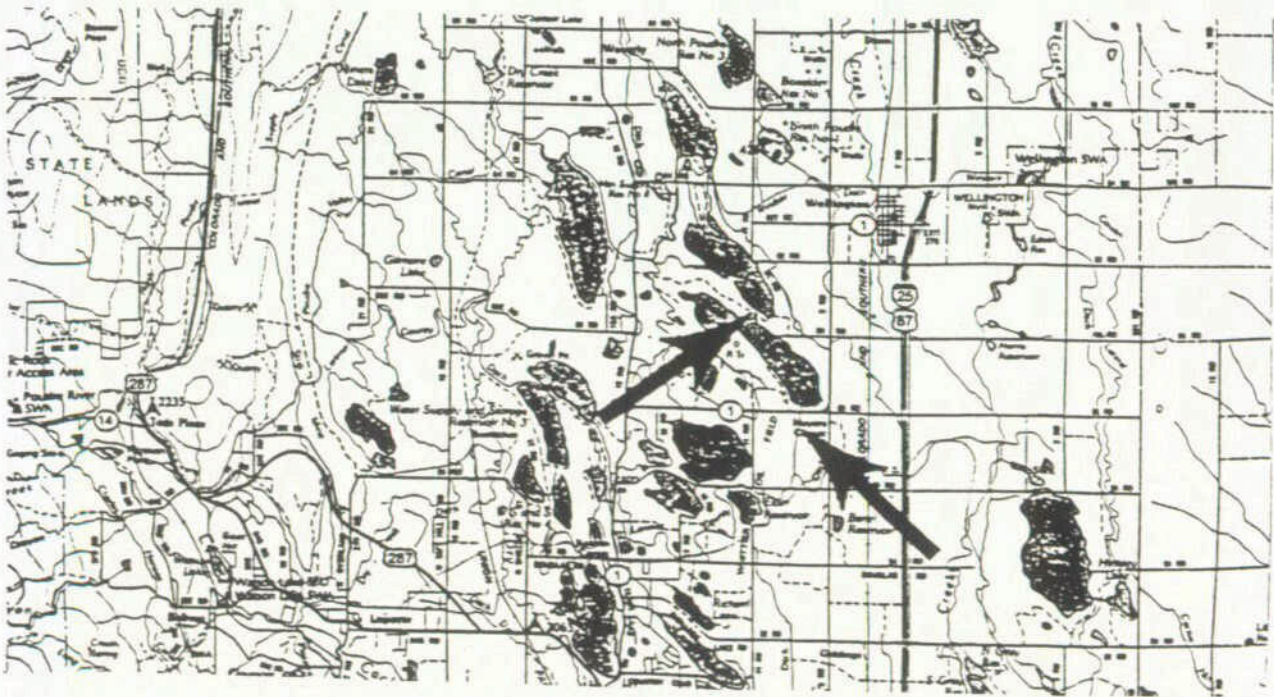
**Type of Borrower:** Municipal/Ag **Median Household Income:** N/A

**1998 CWCB Loan:** \$ 500,000 **Interest Rate:** 4.03% **Term:** 20 years

**1999 CWCB Loan:** \$1,107,000 **Interest Rate:** 4.04% **Term:** 20 years

**Annual Volume of Water delivered:** 200 acre-feet

This project is located in Larimer County, 10 miles north of Fort Collins. The borrower is an agricultural irrigation company serving 685 shareholders within a 30,000-acre service area. The project is needed because North Poudre Reservoir #5 has an inadequate spillway, and because two company ditches are eroding badly, threatening adjacent farmland and county roads. Smith Geotechnical Engineers has completed the feasibility study and initial design. The project will consist of constructing an emergency spillway and placing two open ditches with pipe. Construction is scheduled to start in March of 1998 and be completed by October 1998. Funding sources include a CWCB loan and a special assessment of the shareholders.



Location Map

**APPENDIX D**

**List of De-Authorized Loan Projects**

**Colorado Water Conservation Board  
Water Project Construction Loan Program  
De-authorized Loans**

<u>Applicant/Borrower</u>	<u>Project</u>	<u>County</u>	<u>Amount</u>
<b><u>Projects Deauthorized in 1999(SB99-173)</u></b>			
City of Broomfield	Great Western Dam Rehabilitation	Jefferson	3,000,000
San Miguel Water Conservancy District	Phase 2	San Miguel	7,500,000
San Miguel Water Conservancy District	Lone Cone Reservoir	San Miguel	1,012,500
Melvin L. Thiebaud	Eureka Dam No. 1 Rehab. & Enlargement	Delta	18,750
Pine River Irrigation Company	Pine River Gaging Station	La Plata	190,000
Town of New Castle	Raw Water Pipeline Rehabilitation	Garfield	266,500
City of Greeley	Twin Lakes Dam Rehabilitation	Larimer	787,500
Purgatoire River Water Conservancy District	Trinidad Project Refinance	Las Animas	1,000,000
Leroux Creek Water Users Association	Rehabilitate and/or Enlarge Four Reservoirs	Delta	150,000
Highland Buzzard Ditch Company	Convert Ditch to Pipeline	Mesa	50,000
Ortiz Ditch Company	Rehabilitate Ortiz Diversion Structure	Conejos	20,000
City of Fort Lupton	Drill New Municipal Wells	Weld	<u>354,000</u>
			\$14,349,250
<b><u>Projects Deauthorized in 1998 (HR 98-1189)</u></b>			
Dolores Water Conservancy District	Dolores Project Residual Account	Montezuma	5,617,392
Rio Grande Water Conservancy District	Ditches and Drains	Rio Grande	250,000
Town of Oak Creek	Sheriff Reservoir Spillway Enlargement	Routt	300,000
Wadley Farms Homeowners Association	Wadley Dams No. 1, 2, & 3 Rehabilitation	Adams	500,000
Cedar Mesa Ditch Company	Cedar Mesa Reservoir Outlet Rehabilitation	Delta	10,500
Lateral 35 Association	Rehabilitate Lateral	Mesa	35,000
City of Walsenburg	Martin Lake Enlargement and Rehabilitation	Huerfano	86,000
Goodhue Ditch and Reservoir Company	Goodhue Ditch Rehabilitation	Boulder	<u>19,000</u>
			6,817,892
<b><u>Projects Deauthorized in 1997 (SB 97-000)</u></b>			
Meyering Livestock Co.	Hyannis Peak Reservoir	Jackson	425,000
Redlands Water & Power Co.	Redlands Rehabilitation	Mesa	420,000
Bull Basin Res. & Irrig Co.	Bull Basin Res. No. 2 Outlet Rehab.	Mesa	25,000
Lower Clear Creek Ditch Co.	Diversion Dam Rehab.	Adams	60,000
Colorado Agricultural Ditch Co.	Diversion Dam Rehab.	Adams	60,000
Buckeye Lateral Ditch Association, Inc.	Ditch Rehabilitation	Larimer	<u>440,000</u>
			1,430,000
<b><u>Projects Deauthorized in 1996 (SB 96-153)</u></b>			
Town of Elizabeth	New 2,100 foot Arapahoe Well	Elbert	437,250
City of Salida	Raw Water Pipeline	Chaffee	553,000
Pagosa Area Water and Sanitation District	Hidden Valley Reservoir	Archuleta	500,000
Morgan County Quality Water District	NCWCD Pipeline/Hay Gulch Wells	Morgan	<u>1,260,000</u>
			2,750,250
<b><u>Projects Deauthorized in 1995 (HB 95-1155)</u></b>			
City of Broomfield (partial deauthorization)	Great Western Dam Rehabilitation	Jefferson	1,600,000
Mesa Linda Property Owners Association	Mesa Linda Irrigation System	La Plata	<u>32,000</u>
			1,632,000
<b><u>Projects Deauthorized in 1994 (SB 94-029)</u></b>			
Bauer Lakes Water Co. (close account)	Bauer No. 1 Res. Dam Rehab.	Montezuma	7,149
Blaine Lateral Ditch Company	Blaine Lateral	Weld	155,000
Clinton Ditch and Reservoir Company (close account)	Clinton Reservoir Residual	Summit	550,000
Florida Canal Company	Florida Farm Irrigation Project	La Plata	260,000
Kern Reservoir and Ditch Company (close account)	Kern Reservoir Dam Rehab.	Weld	40,033
Town of Lochbuie	Lake Henry Dam Rehab.	Weld	100,000
Spring Creek Extension Ditch Company	Spring Creek Inverted Siphon	La Plata	46,000
Colorado Water Conservation Board (close account)	White River Study Residual	Rio Blanco	<u>30,000</u>
			1,188,182
<b><u>Projects Deauthorized in 1993 (HB 93-1273)</u></b>			
Mancos WCD	Jackson Gulch Diversion Dam Repair Residual	Montezuma	43,638
Ridges Metro District	Ridges Water Supply and Irrig. System	Mesa	922,109
Town of Oak Creek	Flood Emergency - Diversion and Sett. Pond	Routt	144,000
North Poudre Irrig. Co.	Clark Lake Dam Rehab.	Larimer	72,058
Florida Water Conservancy District	Lemon Dam Rehab.	La Plata	162,900
Montezuma Valley Irrigation Company	Moonlight Lateral Rehab.	Montezuma	100,000
Wisconsin Ditch Company	Reinforced Concrete Siphon (with SCS)	Moffat	16,500
City of Louisville	Louisville Reservoir Rehab. and Enlargement	Boulder	1,690,000
Clinton Ditch and Reservoir Company	Part of Clinton Reservoir Residual	Summit	3,115,000
Town of Ene	Keystone Reservoir	Weld	<u>1,050,000</u>
			7,316,205
<b><u>Projects Deauthorized in 1992 (SB 92-87)</u></b>			
Greeley-Loveland Irrigation Company	Lake Loveland Outlet Works Repairs	Weld	250,000
Town of Frederick	Raw Water Conveyance System	Weld	1,315,000
City of Grand Junction (close account)	Juniata Pipeline Project	Mesa	54,069
Canon Heights Irrigation Company	Canal Rehabilitation	Fremont	65,000
Ish Reservoir Company (close account)	Ish Dam Repairs	Boulder	<u>19,000</u>
			1,703,069

**Colorado Water Conservation Board  
Water Project Construction Loan Program  
De-authorized Loans (Continued)**

**Projects Deauthorized in 1991 (HB 91-1006)**  
Durango West Metro District Nos. 1 and 2

Durango West Water Transmission Line	La Plata	408,000
--------------------------------------	----------	---------

**Projects Deauthorized in 1990 (SB 90-41)**

Town of Hotchkiss (close account)  
Town of Basalt (close account)  
Kellon Heights Water and San. Dist. (close account)  
Town of New Castle  
Beeman Irrigation Ditch and Milling Co. (close account)  
North Poudre Irrigation Co. (close account)  
Town of Ene  
City of Louisville (close account)  
Minnesota Canal and Reservoir Co.

Hotchkiss Water Supply System Improvements	Delta	510,000
Basalt Water Supply System	Eagle	151,918
Bancroft Water Delivery System	Jefferson	11,693
Domestic Water Supply Project	Garfield	250,000
Beeman Diversion Dam Improvements	Weld	17,488
Fossil Creek Reservoir Dam Rehab.	Lanmer	725,296
Keystone Dam	Weld	1,845,000
Harper Lake Dam Repairs	Boulder	192,729
Monument (now Minnesota) Reservoir	Gunnison	<u>397,080</u>
		3,901,204

**APPENDIX E**

**List of Completed Feasibility Studies**

**Colorado Water Conservation Board  
Water Project Construction Loan Program  
Feasibility Study Status Report**

<u>Applicant/Borrower</u>	<u>Project</u>	<u>County</u>	<u>CWCB Feas. Study Contract Amount</u>	<u>Engineer</u>
<b>Feasibility Studies Completed in FY 1997-98</b>				
AGUA	Augmentation Plan Feasibility Study	7 counties	25,000	Rocky Mountain Consultants
Appleton ML 350 Ditch Co., Inc.	Rehabilitate Ditch with SCS/ASCS	Mesa	0	CWCB Staff
Chipperfield Lane Ditch Co.	Headgate and Pipeline	Garfield	0	CWCB Staff with NRCS
City of Fort Morgan	Southern Water Supply Project	Morgan	0	Gronning/Montgomery Wats
City of Loveland	Greenridge Glade Reservoir Enlargement	Larimer	50,000	Woodward-Clyde
Cotton Creek Ditch Co.	Pipeline	Saguache	0	CWCB Staff with NRCS
Decker Lateral Co.	Decker Lateral Rehabilitation	Weld	0	CWCB Staff
Durkee Ditch Co.	Headgate Rehab. and Pipeline	Delta	0	CWCB Staff
Excelsior Irrigating Co.	Excelsior Ditch Rehabilitation	Pueblo	0	KLH Engineers
Farmers Independent Ditch	Ditch Rehabilitation	Weld	0	CWCB Staff with NRCS
Farmers Pawnee Canal	Diversion Structure Rehab.	Logan	2,928	Farnsworth & Polk
Greeley and Loveland Irrig. Co.	Storage and Dist. System Rehab.	Weld	10,000	ECI
Hawkeye Lateral Ditch Co.	Headgate Rehab. and Pipeline	Mesa	0	CWCB Staff
Morgan County Quality Water District	Southern Water Supply Project	Morgan	0	George Underwood, P.E.
River Oaks of the Roaring Fork POA	Raw Water Irrigation System	Eagle	0	CWCB Staff
South Platte Lower River Group	Lower South Platte Water Resources Investigation	several	0	NCWCD Staff
Town of Georgetown	Water Rights Purchase Feasibility	Clear Creek	0	McLaughlin Water Engineer
Town of Palisade	Replace Cottonwood Creek Pipeline	Mesa	9,500	WestWater/Hydrosphere
Vallecito Water Co.	Treated Water Distribution System	La Plata	0	Harris Water Engineering
Weldon Valley Ditch Co.	Diversion Structure Rehabilitation	Weld	0	CWCB Staff
Wood Lake Mutual Water & Irrig. Co.	Woods Lake Dam Rehabilitation	Weld	3,000	Smith Geotechnical
Ute Water Conservancy District	Plateau Creek Pipeline EIS	Mesa	0	Camp Dresser & McKee
<b>Feasibility Studies Completed in FY 1998-99</b>				
City of Idaho Springs	Idaho Springs Reservoir Rehabilitation	Clear Creek	0	Parsons Engineering
Columbine Ranches Property Owners Assoc.	Purchase Water Rights	Adams	0	R. Longenbaugh, P.E.
Chatfield South Water District	Purchase Water Rights	Douglas	0	Mulhem WRE, Inc.
Division of Wildlife	Native Aquatic Species Facility	Alamosa	0	CWCB Staff/Fish-Pro
Greeley & Loveland Irrigation Co.	Horseshoe Dam Rehabilitation	Weld	23,400	ECI
Groundwater Appropriators of the South Platte	Sedgewick Reservoir	Sedgewick	5,000	Tuttle Applegate
Highland Ditch Company	Foothills Reservoir Rehabilitation	Boulder	3,000	Smith Geotechnical
Julesburg Irrigation District	Julesburg Reservoir Enlargement	Logan/Sedg	5,000	W. W. Wheeler/Kumar & As
Julesburg Irrigation District	Harmony Ditch Diversion Structure Rehab.	Logan	0	Zoyiopoulos & Assoc.
Leroux Creek Water Users Association	Carl Smith Reservoir Dam Rehabilitation	Delta	5,000	Smith Geotechnical
Loveland, City of	Green Ridge Glade Reservoir--2nd Financing	Larimer	0	Woodward-Clyde
Lower Arkansas Water Management Assn.	Second Purchase of Water Rights	Prowers	65,000	Helton & Williamsen
North Poudre Irrigation Co.	System Rehabilitation	Larimer	1,000	Smith Geotechnical
Owl Creek Supply & Irrigation Co.	Rehabilitate Ditch Structures	Weld	5,000	Smith Geotechnical
Pine River Canal Co.	Tunnel Hill Project	La Plata	0	NRCS Durango
Pinon Mesa Ranches Comm. Assoc.	Raw Water System	La Plata	5,000	CWCB Staff/RIM
Purgatoire River Water Conservancy Dist.	Trinidad Project Refinance	Las Animas	0	CWCB Staff
Riverside Reservoir and UVD	Riverside Res. Spillway Rehab. & Land Purchase	Weld	2,500	W. W. Wheeler
Rodney Preisser	Purchase Augmentation Water	Lincoln	0	HRS Water Consultants
Ryan Gulch Reservoir Co.	Dam Rehabilitation	Larimer	5,000	Boyle Engineering
South Platte Lower River Group	Tamarack Project	Logan	0	NCWCD Staff
Southwest Water Conservancy District	Small Dam Site Reconnaissance	several	4,559	Harris Water Engineering
Sterling Irrigation Company	Diversion Rehabilitation	Logan	1,400	GASP
USBR/US Fish & Wildlife Service	Grand Valley Water Management Project	Mesa	0	USBR
Ute Water Conservancy Dist.	Plateau Creek PL Replcmt.-2nd Financing	Mesa	0	CWCB Staff/CDM
Western Mutual Ditch Co.	Rehabilitate Diversion Structure	Weld	5,000	Rocky Mountain Consultants