



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street
Denver, CO 80203

P (303) 866-3441

F (303) 866-4474

John Hickenlooper, Governor

Robert W. Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Craig Godbout
Program Manager – Water Supply Reserve Fund Grant Program
Water Supply Planning Section

DATE: September 4, 2018

AGENDA ITEM: 12 (a-n): WSRF Grant Requests

Staff Recommendation – Action Items: WSRF Grant Requests

A summary of staff's recommendation for each WSRF application is provided in the first component of the attached table. If applicable, the table also includes a breakdown of match amounts for applications that include a request for Statewide Account WSRF funds.

Favorable recommendations may be contingent on providing the CWCB with additional information, clarifications, or modifications in the scope of work. Please refer to the Water Activity Summary Sheets contained within this agenda item to find a summary of staff's review and any conditions associated with each recommendation.

Background:

For this agenda item the Board is provided with a brief overview of applications to the Water Supply Reserve Fund (WSRF). Attachments to this memo include:

- Summary spreadsheet detailing funding requests for the basin and statewide accounts;
- Summary spreadsheet displaying current WSRF Balance Summary of Fund Appropriations and Receipts by Fiscal Year, and Fund Distribution by Basin and Statewide Account.
- Water Activity Summary Sheets which provide an overview, discussion, issues/additional needs, and staff recommendation regarding funding, partial funding, or not funding the applications.

Staff's review of the applications involves the following steps:

- 1) Applications are reviewed for completeness based on the information requirements, which are primarily outlined in the Criteria and Guidelines (C&G).
- 2) Applications are reviewed to verify that the water activity meets the eligibility requirements in Section 39-29-108 (III) C.R.S. (C&G, Part 2) and the threshold criteria, which are based on the requirements of Section 39-29-108 (III) C.R.S., and two



sections of the Water for the 21st Century Act (House Bill 1177); Section 37-75-102 and Section 37-75-104(2)(c) (C&G, Part 3). Staff also verifies that the applicant was an eligible entity to receive funding (C&G, Part 2).

- 3) Staff then prepares the Water Activity Summary Sheet which documents the outcome of the review process and contains staff's recommendations.

Water Supply Reserve Fund Balance Summary and Project Status Report:

To provide the Board updates on the status of specific Water Supply Reserve Fund grant applications and projects, staff can provide a status report of the following information upon request:

- List of completed WSRF projects;
- List of WSRF projects in progress; and
- List of WSRF projects in the contracting and procurement process.



COLORADO WATER CONSERVATION BOARD
Water Supply Reserve Fund - Balance Summary
September 1, 2018

9/6/2018

Fund Appropriation and Receipts				
Fiscal Year	Legislative Appropriation	Funds Received	Statewide Account	Basin Account
2006/2007	\$10,000,000	\$10,000,000	\$5,500,000	\$4,500,000
2007/2008	\$6,000,000	\$6,000,000	\$4,200,000	\$1,800,000
2008/2009	\$10,000,000	\$7,000,000	\$4,300,000	\$2,700,000
2009/2010	\$5,775,000	\$5,775,000	\$4,215,750	\$1,559,250
2010/2011	\$6,000,000	\$6,000,000	\$4,380,000	\$1,620,000
2011/2012	\$7,000,000	\$7,000,000	\$4,732,000	\$2,268,000
2012/2013	\$10,000,000	\$7,157,724	\$4,580,943	\$2,576,781
2013/2014	\$10,000,000	\$10,091,639	\$6,458,649	\$3,632,990
2014/2015	\$10,000,000	\$10,000,000	\$6,400,000	\$3,600,000
2015/2016	\$10,000,000	\$9,103,590	\$5,826,298	\$3,277,292
2016/2017	\$0	\$0	\$0	\$0
2017/2018	\$10,000,000	\$1,455,776	\$931,697	\$524,079
2017/2018 CF	\$10,000,000	\$7,000,000	\$4,480,000	\$2,520,000
2018/2019 CF	\$0	\$1,544,884	\$988,726	\$556,158
Interest	N/A	\$2,857,935	\$1,829,078	\$0
Prior Years Interest Adjustment			\$1,028,856	\$0
2014/2015 Interest	N/A	\$ 240,216	\$240,216	\$0
2015/2016 Interest	N/A	\$ 219,458	\$219,458	\$0
2016/2017 Interest	N/A	\$ 223,936	\$223,936	\$0
2017/2018 Interest	N/A	\$ 376,467	\$376,467	\$0
2018/2019 Interest	N/A	\$ 34,559	\$34,559	\$0
TOTAL	\$104,775,000	\$92,081,183	\$60,946,632	\$31,134,551

Note: The WSRF is a Severance Tax "Tier II" program & CF Funding with 40% of funds distributed on July 1, 30% on January 1, and the final 30% on April 1.

In FY 2008/2009 the final 30% installment of \$3,000,000 was not received due to the State's budgetary shortfall.

In January 2012 interest for the program from its inception to date was credited directly to the Statewide Account.

Interest from January 2012 on is regularly calculated by the Treasury and credited to the Statewide Account.

Fund Distribution					
Basin	Approved Basin Grants	Total Basin Funds	Basin Account Balance	Approved State Grants	Statewide Account Balance
Arkansas	\$3,302,534	\$3,459,395	\$156,861	\$10,996,431	
Colorado*	\$3,243,079	\$3,459,395	\$216,316	\$6,283,985	
Southwest *	\$3,115,277	\$3,459,395	\$344,118	\$7,547,244	
Gunnison *	\$2,997,110	\$3,459,395	\$462,285	\$5,728,714	
Metro *	\$2,795,031	\$3,459,395	\$664,364	\$7,364,232	
North Platte	\$2,543,568	\$3,459,395	\$915,827	\$540,942	
Rio Grande*	\$3,398,343	\$3,459,395	\$61,052	\$12,119,690	
South Platte *	\$2,876,575	\$3,459,395	\$582,820	\$7,497,112	
Yampa/White	\$2,350,419	\$3,459,395	\$1,108,976	\$847,969	
TOTAL	\$26,621,936	\$31,134,551	\$4,512,619	\$58,926,319	\$2,020,313
TOTAL APPROVED GRANTS					\$85,548,255

Note: Only includes grants approved by CWCB

* Comments reflect adjustments to balances

Water Supply Reserve Fund Applications for Consideration at the September 2018 CWCB Board Meeting

Agenda Item	Basin	Applicant/Grantee	Name of Water Activity	Basin(s) Account Request	Statewide Account Requests	Total Request	Non-WSRF Cash Match	Non-WSRF In-Kind Match	Non-WSRF Total Match	Statewide Match (Basin & Non-WSRF)	Total Project Costs	Staff Recommendations	PM
12(a)	Gunnison	Surface Creek Ditch and Reservoir Company	Deep Ward Dam Rehabilitation Project	\$50,000	\$190,000	\$240,000	\$141,725	\$0	\$141,725	\$191,725	\$381,725	Staff recommendations approval of up to \$50,000 from the Gunnison Basin Account, and \$190,000 from the Statewide Account.	Rachel Pittinger
12(b)	Gunnison	Tri-County Water Conservancy District & Dallas Creek Water Company, Inc.	Emergency Domestic Water Supply	\$25,000	\$50,000	\$75,000	\$232,000	\$33,000	\$265,000	\$290,000	\$340,000	Staff recommendations approval of up to \$25,000 from the Gunnison Basin Account, and \$50,000 from the Statewide Account.	Rachel Pittinger
12(c)	Arkansas	Beaver Park Water	Upper Canal Lining Removal and Replacement - Phase 2	\$8,000	\$80,000	\$88,000	\$30,000	\$10,000	\$40,000	\$48,000	\$128,000	Staff recommendations approval of up to \$8,000 from the Arkansas Basin Account, and \$80,000 from the Statewide Account.	Ben Wade
12(d)	Arkansas	Lake County	Lake County Derry Flume & Hayden Reservoir Project	\$2,400	\$23,905	\$26,305	\$13,150	\$0	\$13,150	\$15,550	\$39,455	Staff recommendations approval of up to \$2,400 from the Arkansas Basin Account, and \$23,905 from the Statewide Account.	Rachel Pittinger
12(e)	Arkansas	Arkansas River Watershed Collaborative	Monarch Pass Forest and Watershed Health Project	\$37,000	\$366,739	\$403,739	\$1,112,649	\$0	\$1,112,649	\$1,149,649	\$1,516,388	Staff recommendations approval of up to \$37,000 from the Arkansas Basin Account, and \$366,739 from the Statewide Account.	Ben Wade
12(f)	Arkansas	Arkansas River Water Basin Forum	Arkansas Basin Roundtable Website	\$5,240	\$7,860	\$13,100	\$0	\$5,000	\$5,000	\$10,240	\$18,100	Staff recommendations approval of up to \$5,240 from the Arkansas Basin Account, and \$7,860 from the Statewide Account.	Ben Wade
12(g)	YWG	Friends of the Yampa	Yampa River Leafy Spurge Project	\$89,000	\$0	\$89,000	\$42,572	\$34,000	\$76,572	n/a	\$165,572	Staff recommendations approval of up to \$89,000 from the Yampa/White/Green Basin Account	Craig Godbout
12(h)	Southwest	Webber Ditch Company	Webber Ditch Diversion and Piping Project	\$25,000	\$239,400	\$264,400	\$152,000	\$25,200	\$177,200	\$202,200	\$441,660	Staff recommendations approval of up to \$25,000 from the Southwest Basin Account, and \$239,400 from the Statewide Account.	Anna Mauss
12i	Southwest	RiversEdge West	Dolores River Restoration Partnership Maintenance and Monitoring	\$25,000	\$0	\$25,000	\$18,800	\$7,900	\$26,700	n/a	\$51,700	Staff recommendations approval of up to \$25,000 from the Southwest Basin Account	Megan Holcomb
12j	Colorado	Grand Valley Water Users Association	Grand Valley Roller Dam Electrical Upgrade Project	\$60,000	\$0	\$60,000	\$50,000	\$27,080	\$77,080	n/a	\$224,098	Staff recommendations approval of up to \$60,000 from the Colorado Basin Account	Anna Mauss
12(k)	Colorado	Harry Teff	Kendall Reservoir	\$18,900	\$0	\$18,900	\$0	\$10,500	\$10,500	n/a	\$29,400	Staff recommendations approval of up to \$18,900 from the Colorado Basin Account	Megan Holcomb
12(l)	South Platte	Big Thompson Conservation District	Irrigation Water Return Flow Filter Strip	\$6,600	\$0	\$6,600	\$14,300	\$41,435	\$55,735	n/a	\$62,335	Staff recommendations approval of up to \$6,600 from the South Platte Basin Account	Craig Godbout
12(m)	South Platte	Lefthand Watershed Oversight Group	Fish Passage and Education on Left Hand Creek	\$25,000	\$25,000	\$50,000	\$49,165	\$0	\$49,165	\$74,165	\$99,165	Staff recommendations approval of up to \$25,000 from the South Platte Basin Account, and \$25,000 from the Statewide Account.	Craig Godbout
12(n)	Metro	Lower South Platte Water Conservancy District	South Platte Regional Water Development Concept Pre-Feasibility Study	\$77,500	\$195,000	\$350,000	\$40,000	\$80,000	\$120,000	\$275,000	\$470,000	Staff recommendations approval of up to \$77,500 from the South Platte Basin Account, \$77,500 from the Metro Account, and \$195,000 from the Statewide Account	Russell Sands
	South Platte			\$77,500									

<u>Basin</u>	<u>Basin Account Requests</u>	<u>Statewide Account Requests</u>	<u>Total Requests</u>	<u>Current Basin Account Balances</u>	<u>Remaining Basin Acct Balances (if all requests approved)</u>	<u>Current Statewide Account Balance</u>	<u>Remaining Statewide Acct Balance (if all requests approved)</u>
<u>Arkansas Basin</u>	\$52,640	\$478,504	\$531,144	\$156,861	\$104,221		
<u>Colorado Basin</u>	\$78,900	\$0	\$78,900	\$216,316	\$137,416		
<u>Gunnison Basin</u>	\$75,000	\$240,000	\$315,000	\$462,285	\$387,285		
<u>Metro</u>	\$77,500	\$97,500	\$175,000	\$664,364	\$586,864		
<u>North Platte</u>	\$0	\$0	\$0	\$915,827	\$915,827	\$2,020,313	\$842,406
<u>Rio Grande</u>	\$0	\$0	\$0	\$61,052	\$61,052		
<u>Southwest</u>	\$50,000	\$239,400	\$289,400	\$344,118	\$294,118		
<u>South Platte</u>	\$109,100	\$122,500	\$231,600	\$582,820	\$473,720		
<u>Yampa/White/Green</u>	\$89,000	\$0	\$89,000	\$1,108,976	\$1,019,976		
<u>Water Supply Reserve Fund Total Requests</u>	\$532,140	\$1,177,904	\$1,710,044	\$4,512,619	\$3,980,479		

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(a)

Applicant & Grantee: Surface Creek Ditch & Reservoir Company

Water Activity Name: Deep Ward Dam Repair Project

Water Activity Purpose: Multipurpose/Implementation

County: Delta

Drainage Basin: Gunnison

Water Source: Ward Creek

Amount Requested: \$50,000 Gunnison Basin Account
\$190,000 Statewide Account
\$240,000 Total request

Matching Funds: Applicant Match (cash) = \$141,725
 • 59% of Statewide Account request (meets 10% min)
Basin Account Match = \$50,000
 • 26% of Statewide Account request (meets 10% min)
Total Match (Applicant & Basin Account) = \$191,725
 • 80% of Statewide Account request (meets 50% min)

Staff Recommendation:
Staff recommends approval of up to \$50,000 from the Gunnison Basin Account, and \$190,000 from the Statewide Account to help fund the project titled: Deep Ward Dam Repair Project.

Water Activity Summary: WSRF grant funds, if approved, will assist the Surface Creek Ditch and Reservoir Company to rehabilitate the Deep Ward Dam located on the Grand Mesa in order to lift a fill restriction imposed by the State Engineer and preserve 1,710 acre feet of storage for agricultural irrigation, recreational uses, and potential M&I usage. The applicant will fund preliminary engineering, testing, existing topographic site surveying, geotechnical report, final engineering design, a portion of construction costs, construction oversight, post construction documentation, and contingencies. WSRF funding will be expended on the remaining construction costs, construction surveying, and the pay and performance bond. Construction activities include breaching the dam above the outlet pipe, recycling dam material for future placement, and the replacement of the outlet pipe.

Discussion: This effort will assist the Gunnison Basin Roundtable achieve Goal #1 in their Basin Implementation Plan: Protect existing water uses in the Gunnison Basin, and Goal #2: Improve agricultural water supplies to reduce shortages while simultaneously assisting the state reach the goals of maintaining storage and agriculture as highlighted in Chapter 10 of Colorado's Water Plan.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Surface Creek Ditch & Reservoir Company	\$141,725	\$0	\$141,725	Secured
WSRF Gunnison Basin Account	\$50,000	n/a	\$50,000	Secured
Sub-total	\$191,725	\$0	\$191,725	
WSRF Statewide Account	\$190,000	n/a	\$190,000	
Total Project Costs	\$381,725	\$0	\$381,725	

CWCB Project Manager: Rachel Pittinger

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(b)

Co-Applicants: Tri-County Water Conservancy District & Dallas Creek Water Company, Inc.

Grantee: Tri-County Water Conservancy District

Water Activity Name: Emergency Domestic Water Supply

Water Activity Purpose: M&I

County: Ouray

Drainage Basin: Gunnison

Water Source: Various

Amount Requested: \$25,000 Gunnison Basin Account
\$50,000 Statewide Account
\$150,000 Total request

Matching Funds: Applicant Match & 3rd Party (cash & in-kind) = \$265,000
 • 530% of Statewide Account request (meets 10% min)
Basin Account Match = \$25,000
 • 50% of Statewide Account request (meets 10% min)
Total Match (Applicant/3rd Party & Basin Account) = \$290,000
 • 580% of Statewide Account request (meets 50% min)

Staff Recommendation:

Staff recommends approval of up to \$50,000 from the Gunnison Basin Account, and \$190,000 from the Statewide Account to help fund the project titled: Emergency Domestic Water Supply.

Water Activity Summary: WSRF grant funds, if approved, will assist the Tri-County Water Conservancy District and the Dallas Creek Water Company establish an interconnect between their respective domestic water systems for the purpose of creating the capacity to supply one another water in an emergency such as: drought, hazardous material spill, or wildfire suppression. The interconnect would consist of approximately 5,500 lineal feet of 6" diameter class 200 PVC pipe installed within the right-of-way of County Road 1A. WSRF funds would only be used for the installation of the 5,500 lineal feet of pipeline, while other components of the interconnect would consist of two mobile trailer mounted pumps, and the upgrade of five existing pumps in order to increase the flow rate to 35 gpm to serve the Dallas Creek Water Company service area.

Discussion: This effort will assist the Gunnison Basin Roundtable achieve Goal #1 in their Basin Implementation Plan: Protect existing water uses in the Gunnison Basin, and Goal #4: Identify and address municipal and industrial water shortages, while simultaneously assisting the state reach the value of efficient and effective water infrastructure as highlighted in Chapter 10 of Colorado's Water Plan.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Tri-County Water Conservancy District	\$66,000	\$16,500	\$82,500	Secured
Dallas Creek Water Company	\$66,000	\$16,500	\$82,000	Secured
WaterSmart Grant	\$100,000	\$0	\$100,000	Pending
Sub-total	\$232,000	\$33,000	\$265,000	
WSRF Gunnison Basin Account	\$25,000	n/a	\$25,000	Secured
Sub-total	\$257,000	\$33,000	\$290,000	
WSRF Statewide Account	\$50,000	n/a	\$50,000	
Total Project Costs	\$307,000	\$33,000	\$340,000	

CWCB Project Manager: Rachel Pittinger

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(c)

Applicant: Beaver Park Water Incorporated
Water Activity Name: Upper Canal Lining Removal and Replacement – Phase 2
Water Activity Purpose: Agricultural, Municipal/Industrial, Non-consumptive (Recreational)
County: Fremont
Drainage Basin: Arkansas
Water Source: Beaver Creek, Brush Hollow Creek and Brush Hollow Reservoir
Amount Requested/Source of Funds:

\$8,000	Arkansas Basin Account
<u>\$80,000</u>	<u>Statewide Account</u>
\$88,000	Total Grant Request

Matching Funds: Basin Account Match (\$8,000) = 10% of Statewide Account request (meets 10% min);
Applicant's cash & in-kind Match (\$40,000) = 50% of Statewide Account request (meets 10% min);
Total Match (Basin & Applicant Match of \$48,000 = 60% of Statewide Account request (meets 50% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$8,000 from the Arkansas Basin Account; and \$80,000 from the Statewide Account to help fund the project titled: Upper Canal Lining Removal and Replacement Project – Phase 2

Water Activity Summary:

If funded, the objectives of this project are to: continue Phase 2 to remove failed concrete sections of the Beaver Park Water Inc's (BPWI) Upper Canal and replace them with new formed concrete. A total of 4,526 linear feet of canal side has been currently identified by the applicant as being in need of removal and replacement. The applicant is in the process of completing Phase 1, removing and replacing 1,200 linear feet. Approximately 1,150 linear feet is being proposed for replacement in Phase 2.

This canal diverts water under the water rights owned by BPWI from Beaver Creek and supplies water to direct irrigation use for the shareholders of BPWI. The canal additionally delivers water to BPWI's Brush Hollow Reservoir for delivery to BPWI's Lower Canal for direct irrigation use and delivers these waters into storage in Brush Hollow Reservoir for later irrigation use. The BPWI

Upper Canal additionally delivers Beaver Creek waters to the Penrose Water District (PWD). The PWD has a direct water treatment plant intake from the BPWI Upper Canal and diverts and treats these waters daily to supply its domestic and municipal customers.

The total estimated water efficiency savings from this proposed water activity is 1,100 acre-feet/year. Approximately one quarter of this savings would be yielded from the Phase 1 work. The applicant states the water efficiency savings will be used to increase the availability of water supplies to the BPWI, the dependability of water deliveries to the PWD and increase typical storage levels in Brush Hollow Reservoir to the benefit of both the BPWI and wildlife, recreation and fishery interests of the Colorado Parks & Wildlife.

Discussion: The removal and replacement of the canal lining supports Chapter 10 Measurable Objective D: Agriculture Goal in the Colorado Water Plan; *“Maintain Agricultural Viability: Maintain agricultural productivity, support of rural economies and food security”*. By reducing the ditch canal seepage losses, this project helps fulfill the Critical Action: *Support Agricultural Conservation and Efficiency: make it more efficient, resilient and able to reduce water consumption without impacting agricultural productivity*.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of the three subsections of the Eligibility Requirements: General Eligibility, Entity Eligibility, and Water Activity Eligibility.

Eligibility Based on Funding Match Requirements:

The application meets the Statewide Account Matching requirements.

Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRF Application for applicant’s detailed response.

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Beaver Park Water Inc.	\$20,000	\$10,000	\$30,000
Beaver Park Mutual Capital Account	\$5,000	\$0	\$5,000
Penrose Water District	\$5,000	\$0	\$5,000
Sub-total	\$30,000	\$10,000	\$40,000
WSRF Arkansas Basin Account	\$8,000	n/a	\$8,000
WSRF Statewide Account	\$80,000	n/a	\$80,000
Total Project Costs	\$118,000	\$10,000	\$128,000

CWCB Project Manager: Ben Wade

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(d)

Applicant & Program Sponsor: Lake County

Water Activity Name: Lake County Derry Flume & Hayden Reservoir Project

Water Activity Purpose: Implementation; Recreational, Municipal/Industrial

County: Lake County

Drainage Basin: Arkansas

Water Source: Corske Creek & Hayden Reservoir

Amount Requested/Source of Funds: \$2,400 Arkansas River Basin Account
\$23,905 Statewide Account
\$26,305

Matching Funds: Basin Account Match (\$2,400) = 10% of Statewide Account request (Meets 10% min);
Applicant's Cash Match (\$3,150) & In-Kind Match (\$10,000) = 50% of Statewide Account request (Meets 25% min.);
Total Match (Basin & Applicant Match of \$15,550 = 65% of Statewide Account request (meets 50% min). (refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:
Staff recommends approval of up to \$2,400 from the Arkansas River Basin Account and \$23,905 from the Statewide account to help fund the project titled: Lake County Derry Flume & Hayden Reservoir Project

Water Activity Summary:

If funded, the applicant will use grant funds to purchase and install a flume and diversion structure on Corske Creek, high on Mt. Elbert. A telemetry station will also be installed for proper management of the water right. The applicant has partnered with the United States Forest Service (USFS), as the diversion structure is on USFS owned land. Completing the flume and diversion installation will allow the county to utilize the direct flow in their Augmentation Plan and their integrated system outlined in their water decrees.

Grant funds will also be used to complete a bathymetric survey of Hayden Reservoir to be used for storage of future augmentation replacement credits. Hayden Reservoir will remain the recreational asset that it currently is, for residents and tourists alike.

Education and outreach through the implementation of the augmentation plan, will remain a high priority for the county.

Discussion: This project is consistent with the measurable objects set forth in the Colorado Water Plan, such as increasing storage, addressing supply and demand gaps, and strengthening partnerships locally to address watershed health, environment, and recreation sustainability and support.

This project also supports the objectives set forth in the Arkansas River Basin Implementation Plan.

Issues/Additional Needs: None.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and staff has determined it satisfies the Evaluation Criteria outlined in Colorado's Water Plan, Section 9.4. Please refer to Basin Roundtable Chair's Recommendation Letter and the Application for a detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Lake County Board of County Commissioners	\$3,150	\$10,000	\$13,150
WSRF Arkansas Basin_Account	\$2,400	n/a	\$2,400
WSRF Statewide Account	\$23,905	n/a	\$23,905
Total Project Costs	\$29,455	\$10,000	\$39,455

CWCB Project Manager: Rachel Pittinger

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(e)

Applicant & Program Sponsor: Arkansas River Watershed Collaborative

Water Activity Name: Monarch Pass Forest and Watershed Health Project

Water Activity Purpose: Implementation; Non-Consumptive Environmental

County: Chaffee County

Drainage Basin: Arkansas

Water Source: Headwaters of South Arkansas River

Amount Requested/Source of Funds: \$37,000 Arkansas River Basin Account
\$366,739 Statewide Account
\$403,739

Matching Funds: Basin Account Match (\$37,000) = 10% of Statewide Account request (Meets 10% min);
Applicant's In-kind Match (\$1,112,649) = 333% of Statewide Account request (Meets 25% min.);
Total Match (Basin & Applicant Match of \$50,000 = 313% of Statewide Account request (meets 50% min). (refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:
Staff recommends approval of up to \$37,000 from the Arkansas River Basin Account and \$366,739 from the Statewide account to help fund the project titled: Monarch Pass Forest and Watershed Health Project

Water Activity Summary:

If funded, the objectives of this project are to:

- Contract and Mobilize Equipment with Private Party
- Complete Ground Vegetation & Fuel Removal
- Complete Gravel Pit Reclamation and Channel Stabilization
- Complete Streambank Stabilization

The project aims to reduce the extent of the insect infestation and improve forest and watershed health, reduce fuel loading, protect infrastructure and provide for firefighter and public safety by removing trees in a 600-acre steep slope area on Monarch Pass near the headwaters of the Arkansas River. Historically, it has been expensive and unsafe to treat these steep slopes. This proposal aims to solve these issues by introducing new cut-to-length technology and equipment to the State of Colorado that can treat steep slopes at a reduced cost and with minimal environmental disturbance.

Many of Colorado’s most important reservoirs and water infrastructure (such as trans-mountain diversions), are located in areas adjacent to extremely steep slopes. One example the applicant cites would be Clear Creek Reservoir, which has 1,853 acres on the uphill side of the reservoir that could be treated with this technology. Twin Lakes, another critical reservoir, has 3,935 acres that would be suitable for this technology. These slopes have not been mitigated against catastrophic fire in the past due to the cost of treating such steep slopes by helicopter or cable logging. The applicant believes this technology will significantly reduce the cost by ~60% of these other alternatives.

Along with tree removal on steep slopes, the project also includes watershed restoration activities in the drainage where forest treatments will occur, such as stream bank protection, soil amendment, seeding and willow planting, and similar activities. The gravel pit reclamation, Task 3, will work to reduce the sediment load to the headwaters of the South Arkansas River. The barren area and loss of root mass at the gravel pit have caused the creation of several head cut conveyance channels on steep slopes. These conveyance channels increase the amount of sediment to the headwaters which endanger fish and insect populations and can cause a reduction in surface water flows.

If approved, the applicant estimates WSRF funds would be utilized to protect 1,000 linear feet of the South Arkansas River and up to 600 acres of preserved habitat.

Discussion: The applicant states the Colorado Water Plan recognized the issue of fire in Colorado critical watershed. The applicant also cites the Colorado State Forest Service (CSFS) and CWCB report, “Forest Management to Protect Colorado’s Water Resources” as a supplement to the Water Plan addressing the wildfire/watershed issues: *“Science-based forest management can create forest stand conditions that are less susceptible to bark beetle infestations, and also has been shown to reduce hazardous fuels levels linked to wildfire risk and severe fire behavior that can be harmful to watersheds.”*

Issues/Additional Needs: This project, if funded, would be the first of its kind within the Water Supply Reserve Fund program. This particular forest health project does not qualify for Watershed Restoration Program funding as per the Board approved program guidance, funding for forest health projects does not include *“Forest Fuel Reduction Treatments”*.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and staff has determined it satisfies the Evaluation Criteria outlined in Colorado’s Water Plan, Section 9.4. Please refer to Basin Roundtable Chair’s Recommendation Letter and the Application for a detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Upper Arkansas Water Conservancy District	\$48,000	\$0	\$48,000
Chafee County	\$48,000	\$0	\$48,000
Arkansas River Water Collaborative	\$10,000	\$0	\$10,000
Trout Unlimited	\$13,000	\$0	\$13,000

United States Forest Service	\$828,510	\$104,270	\$932,780
WSRF Arkansas Basin_Account	\$37,000	n/a	\$37,000
WSRF Statewide Account	\$366,739	n/a	\$366,739
Total Project Costs	\$1,351,249	\$104,270	\$1,455,519

CWCB Project Manager: Ben Wade

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(f)

Applicant & Program Sponsor: Arkansas River Basin Water Forum (ARBWF)

Water Activity Name: Arkansas Basin Roundtable Website

Water Activity Purpose: Implementation; Education & Outreach

County: Baca, Bent, Chaffee, Cheyenne, Crowley, Custer, El Paso, Elbert, Fremont, Huerfano, Kiowa, Lake, Las Animas, Lincoln, Otero, Pueblo, Prowers, Teller, and Saguache

Drainage Basin: Arkansas

Water Source: N/A

Amount Requested/Source of Funds: \$5,240 Arkansas River Basin Account
\$7,860 Statewide Account
\$13,100 Total Request

Matching Funds: Basin Account Match (\$5,240) = 66% of Statewide Account request (Meets 10% min);
Applicant's In-kind Match (\$5,000) = 63.6% of Statewide Account request (Meets 25% min.);
Total Match (Basin & Applicant Match of \$10,240 = 130% of Statewide Account request (meets 50% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$5,240 from the Arkansas River Basin Account and \$7,860 from the Statewide account to help fund the project titled: Arkansas Basin Roundtable Website
--

Water Activity Summary:

If funded, the objectives of this project are to:

1. Create a central website for the Arkansas Basin Roundtable committees as opposed to separate websites that are currently being used.
2. Utilize a story map to display the work of the Arkansas Basin Roundtable that illustrates its projects, programs, and success stories.
3. Publish Roundtable meeting documents, educational efforts, funding resources and general information on one consolidated website.
4. Develop a user-friendly website that can be managed and updated by the PEPO Coordinator. The Coordinator will be responsible for managing the content of the website to ensure its relevance, reliability, and the timeliness of information.

The applicant has identified a need for an updated and combined Arkansas Basin Roundtable website. Currently, the Arkansas Basin Roundtable has multiple websites that are operated independently. There is also a need for notifications through a joint calendar about events, important dates, etc.

One central website will provide ease for Roundtable members, stakeholders, and interested parties throughout the basin and the state to access the website for information regarding Roundtable business. The proposed website intends to provide the ability to highlight the progress and successes of the Arkansas Basin Implementation Plan (ArkBIP). It will illustrate the ArkBIP identified projects and programs, through a specialized story map, that features projects, data, learning tools, and links to efforts in the Arkansas Basin that are instrumental in informing all interested parties.

The Roundtable meeting minutes, agendas, and presentations will be posted. General information, funding information, outreach and educational efforts, and upcoming events will be available on the website.

This grant will satisfy the need for consistency by using one contractor, to work with the Roundtable committees and management. The requested WSRF funds will be used to consolidate and develop the website. The long-term maintenance will be provided through PEPO's Education Action Plan funding.

Discussion: This project is consistent with the goals stated in the Arkansas Basin Implementation Plan. Section 4.1.4 of the Arkansas Basin Implementation Plan (BIP) states, *“Through various methods of reaching out to the public, PEPO is a catalyst to productive partnerships among community leaders, media outlets, and active citizen groups supporting collaboration across the basin”* (BIP, 163).

The updated website will increase the ease of finding information, which will be reliable and timely. This website serves to do just that as is also stated in Section 4.1.4 of the BIP, *“The PEPO committee must undertake a structured public relations effort to maintain and improve relationships with individuals and organizations who have been engaged to date, while enhancing efforts to educate various stakeholder groups on the purpose and progress of the water planning process in the Arkansas Basin* (BIP, 163).

Issues/Additional Needs: None.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and staff has determined it satisfies the Evaluation Criteria outlined in Colorado's Water Plan, Section 9.4. Please refer to Basin Roundtable Chair's Recommendation Letter and the Application for a detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Arkansas Basin Roundtable Executive Committee	\$0	\$5,000	\$5,000
WSRF Arkansas Basin_Account	\$5,240	n/a	\$5,240
WSRF Statewide Account	\$7,860	n/a	\$7,860
Total Project Costs	\$18,100	\$5,000	\$18,100

CWCB Project Manager: Ben Wade

a Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(g)

Applicant: Yampa River Leafy Spurge Project

Grantee: Friends of the Yampa

Water Activity Name: Yampa River Leafy Spurge Project—Integrated Management & Predictive Modelling—Research Component

Water Activity Purpose: Multipurpose (Env, Rec, Ed & Outreach)/Study

County: Moffat & Routt

Drainage Basin: Yampa/White/Green

Water Source: Yampa River & tributaries

Amount Requested: \$89,000 Yampa/White/Green Basin Account

Matching Funds: Applicant & 3rd Party Match (cash & in-kind) = \$76,572
• 86% of the Basin Account request (meets 10% min)

Staff Recommendation:

Staff recommends approval of up to \$89,000 from the Yampa/White/Green Basin Account to help fund the project titled: Yampa River Leafy Spurge Project—Integrated Management & Predictive Modelling—Research Component.

Water Activity Summary: WSRF grant funds, if approved, will assist the Yampa River Leafy Spurge Project provide information necessary for development of effective and sustainable management programs for riparian environments in the Yampa River Basin. It will support needed scientific work, engage local youth, and build on local knowledge and relationships to protect both agricultural and environmental water uses for the future.

The Yampa River and its associated agricultural water delivery systems are spreading leafy spurge seeds downstream from a large infestation that has occupied floodplain areas between Hayden and Craig for several decades. Since the 2011 high water run-off season, an exponential increase in the leafy spurge population has been observed in riparian habitat along the Yampa River. Riparian habitat quality and agricultural productivity are actively being degraded downstream for 166 miles to the confluence with the Green River. Tributary streams are also affected (e.g., Little Snake River, Fortification Creek, and Milk Creek).

The objectives of this effort are the following:

- Work with stakeholders and the University of Wyoming to develop a robust, publicly available spatial data set documenting the current distribution of leafy spurge in riparian habitat associated with the Yampa River, tributary streams, and irrigation water delivery systems in the Yampa Valley.
- Utilize remote sensing technology to direct and enhance monitoring and mapping efforts.
- Develop a susceptibility model to predict where new leafy spurge invasion is most likely in Moffat and Routt Counties.

- Quantify the current seed load produced by leafy spurge populations in 4 (possibly 5) specific riparian habitats along the Yampa River and associated tributaries.
- Study and evaluate best integrated management practices for reducing cover and seed production of leafy spurge in diverse riparian systems in the Yampa Valley.
- Develop a map of known and potential leafy spurge biological control sites in the Yampa Valley, and work with the Colorado Department of Agriculture to develop kid-friendly monitoring protocols in anticipation of a future adopt-a-spurge-bug-patch program for engagement of local 4-H clubs, school science classes, and other youth organizations, aimed at improving understanding and appreciation for the relationships between the river, associated riparian habitat, agricultural water delivery systems, and invasive weeds.

Discussion: This effort will assist the Yampa/White/Green Basin Roundtable (YWGBRT) achieve the following goals as outlined in the Gunnison Basin Implementation Plan: Goal #2: “Protect and encourage agricultural uses of water in the YWG Basin within the context of private property rights.”; Goal # 5: “Quantify and protect environmental and recreational water uses at locations identified in the non-consumptive needs study for the YWGRT.” While also assisting the YWGBRT achieve Goal #3: “Encourage locally driven collaborative solutions”; and Goal #4: “Increase collaborations and partnerships with other YWG organizations that wish to promote water education” as outlined in the YWGBRT Education Action Plan. In addition, this effort assists Colorado in achieving several goals as outlined in Colorado’s Water plan, such as:

Section 6.6 Environmental and Recreational Projects and Methods “Support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture”, and “Understand, protect, maintain, and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term sustainability and resiliency”; Section 9.5 Outreach, Education and Public Engagement “Colorado’s Water Plan provides technical and financial assistance for high-quality, balanced, and grassroots water education and outreach efforts that inform Coloradoans about issues so that they may engage in determining Colorado’s water future.”

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair’s Recommendation Letter and the WSRF Grant Application for applicant’s detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Moffat County	\$15,000	\$1,500	\$16,500	Secured
Routt County	\$15,000	\$1,500	\$16,500	Secured
University of Wyoming	\$12,572	\$0	\$12,572	Secured
The Nature Conservancy	\$0	\$3,000	\$3,000	Secured
Yampa River Leafy Spurge Project Volunteers	\$0	\$20,000	\$20,000	Secured
BLM – Little Snake Field Office	\$0	\$2,250	\$2,250	Secured
NPS – Dinosaur National Monument	\$0	\$2,250	\$2,250	Secured
CPW – Yampa River State Park & Wildlife Area	\$0	\$1,500	\$1,500	Pending
CDA – Conservation Div/Biological Control Program	\$0	\$2,000	\$2,000	Secured
Sub-total	\$42,572	\$34,000	\$76,572	
WSRF Yampa/White/Green Basin Account	\$89,000	n/a	\$89,000	Secured
Total Project Costs	\$131,572	\$34,000	\$165,572	

CWCB Project Manager: Craig Godbout

**Water Supply Reserve Fund
Water Activity Summary Sheet
Sept 19, 2018
Agenda Item 12(h)**

Applicant & Grantee: Webber Ditch Company

Water Activity Name: Webber Ditch Diversion and Piping Project

Water Activity Purpose: Environmental & Agricultural Implementation

County: Montezuma

Drainage Basin: Mancos

Water Source: Mancos River

Amount Requested: \$25,000 Southwest Basin Account
\$239,400 Statewide Account
\$264,400 Total Grant Request

Matching Funds: Basin Account Match = \$25,000

- 10.4% of statewide request (meets 10% min)

Applicant Match (cash & in-kind) = \$177,200

- 74% of the statewide request (meets 10% min)

Total Match (Basin & Applicant) = \$202,200

- 84.5% of the statewide request (meets 50% min)
- 45.7% of the total project cost of \$441,660

Staff Recommendation:
Staff recommends approval of up to \$25,000 from the Southwest Basin Account and \$239,400 from the Statewide Account to fund the project titled: Webber Ditch Diversion and Piping Project.

Water Activity Summary: WSRF grant funds, if approved, will assist the Webber Ditch Company in taking the first steps to improve the effectiveness and safety of the Webber Ditch irrigation system at diverting, measuring and delivering water to company members. In doing so, the project will position the Company for success at funding and implementing system-wide piping and measurement through Reclamation's Colorado River Salinity Control Program. Specifically, the Webber Ditch Company is requesting WSRF funding to help accomplish construction of two major improvements: (1) to replace the existing diversion and headgate system with an improved structure for diverting, managing and measuring water to be delivered to members, and (2) to replace 2100 feet of corroded corrugated pipe with PVC pipe. The new diversion will allow for fish and sediment passage, while diverting a 1952 priority allocation (37 cfs) out of the Mancos River (just below the confluence of the West and East Mancos Rivers) to irrigate approximately 1632 acres and serve 70 members.

Discussion: As described in the Southwest Roundtable (SWBRT) chair's recommendation letter, this project was supported and recommended for approval on July 11, 2018. As one of two major historic ditches in the Mancos Valley being modernized for efficiency, the project keeps with a number of Colorado's Water Plan goals to meet an agriculture supply gap, maintain agricultural viability, and protect compact entitlements (specifically the Colorado Ute Indian Rights Settlement). The original basin fund request was for \$35,000, but the roundtable held to a limit of \$25,000 to keep with austerity

measures put in place by the roundtable in April 2018 in response to low severance tax funds. The roundtable strongly endorses the project.

Issues/Additional Needs: No additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Webber Ditch Company	\$87,000	\$23,700	\$110,700
Mancos Conservation District	\$0	\$1,500	\$1,500
Southwestern Water Conservation District (<i>pending</i>)	\$65,000	\$0	\$65,000
Subtotal	\$152,000	\$25,200	\$177,200
WSRF Southwest Basin Account	\$25,000	n/a	\$25,000
WSRF Statewide Account	\$239,400	n/a	\$239,400
Totals	\$416,400	\$25,200	\$441,600

CWCB Project Manager: Megan Holcomb

**Water Supply Reserve Fund
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(i)**

Applicant & Grantee: RiversEdge West

Water Activity Name: Dolores River Restoration Partnership Maintenance and Monitoring

Water Activity Purpose: Environmental Implementation

Counties: Dolores, San Miguel, Montrose

Drainage Basin: Dolores

Water Source: Dolores River

Amount Requested: \$25,000 Southwest Basin Account

Matching Funds: Applicant Match (cash & in-kind) = \$26,700

- 107% of the basin request (meets 25% min)
- 51.6% of the total project cost of \$51,700

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Southwest Basin Account to fund the project titled: Dolores River Restoration Partnership Maintenance and Monitoring.
--

Water Activity Summary: WSRF grant funds, if approved, will assist the Dolores River Restoration Partnership (DRRP) in: (1) an active revegetation volunteer project with the Wildlands Restoration Volunteers (WRV) at the boat ramp out of Bedrock, CO and (2) restoration site monitoring (i.e., Rapid Monitoring) within the Tres Rios BLM Field Office. WSRF funding will be used to pay for the WRV volunteer group, project supplies (i.e., containerized plants, caging materials) associated with the volunteer project, four weeks of a Conservation Corps 2-person monitoring strike team, and project coordination cost associated with the two activities. The WRV volunteer group will engage 20 volunteers and cover 10 acres of active revegetation. The Rapid Monitoring will cover 300 acres.

For the last nine years, the DRRP has worked to remove tamarisk on 1,900 acres of the river to improve riparian habitat and restore the overall health of the watershed. To date, 1,849 acres have received initial treatment. Two key components of this project are carrying out active restoration on key sites to ensure native plants replace invasives and monitoring treated sites to treat for tamarisk resprouts and secondary weeds, which can easily dominate a site if unmanaged. These activities comprise the water activity in this project and are integral to the long-term success of this project

Discussion: As described in the Southwest Roundtable (SWBRT) chair's recommendation letter, this project was supported and recommended for approval on July 11, 2018. The project addresses Colorado's Water Plan goal 6.6 to restore riparian dependent plant communities, benefits to boating and the recreational economy and improved resiliency in a critical environmental and recreational area most often referred to as the "lower Dolores River." This work will also additional objectives ranging from enhanced habitat and water quality to community engagement and education. The improvement

of the Bedrock boat ramp through active revegetation will help increase recreational and aesthetic value, encouraging recreationists to visit and enjoy the river. Local jobs for young adults are created through the conservation corps strike team programs, which aligns with the DRRP goal to help foster the next generation of environmental stewards. Rapid monitoring helps the DRRP determine restoration success on sites previously treated for tamarisk and other noxious weeds and is a crucial part of the DRRP's adaptive management strategy to determine effectiveness of treatments/activities and improve upon restoration practices.

Issues/Additional Needs: No additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Walton Family Foundation	\$8,800	\$0	\$8,800
Southwest Conservation Corps BLM Assistance Agreement	\$10,000	\$0	\$10,000
Wildland Restoration Volunteers	\$0	\$7,900	\$7,900
WSRF Southwest Basin Account	\$25,000	n/a	\$25,000
Totals	\$43,800	\$7,900	\$51,700

CWCB Project Manager: Megan Holcomb

**Water Supply Reserve Fund
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(j)**

Applicant & Grantee: Grand Valley Water Users Association
Water Activity Name: Grand Valley Roller Dam Electrical Upgrade Project
Water Activity Purpose: Agricultural Implementation
County: Mesa
Drainage Basin: Colorado
Water Source: Colorado River
Amount Requested: \$60,000 Colorado Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$77,080

- 77.8% of the Basin Account request (meets 25% min)
- 26.8% of the total project cost of \$224,098

Staff Recommendation:

Staff recommends approval of up to \$60,000 from the Colorado Basin Account to help fund the project titled: Grand Valley Roller Dam Electrical Upgrade Project.
--

Water Activity Summary: WSRF grant funds, if approved, will contribute to “Task 1” of the Roller Dam Electrical Upgrade Project which is part of the Grand Valley Water Users Association (GVWUA) and project partners’ Master Plan Phase 2 Dam and Canyon Facilities Master Plan Project. This Project aims to improve an existing water supply system [the Roller Dam and associated Government Highline Canal (GHC)] by improving the electrical and control systems that operate the Roller Dam and GHC diversion structure headgates. Specifically the objectives of this project are to: 1) improve water delivery system operations, capacity and reliability of the Roller Dam and canal headgates; 2) sustain the ecological health of the river; and 3) preserve the agricultural economy of the Grand Valley.

Task 1 will extend the utility system, bury the overhead service lines, replace the service equipment at the dam, and install an on-site standby generator. Other sub-tasks include adding new service entrances at all buildings except the dam tender’s house and new branch circuits and lights in the machine room. Note there are two tasks that make up the overall Electrical Upgrades Project.

The Roller Dam diverts water into the Government Highline Canal for irrigation and hydropower purposes under very senior water rights that collectively make up the “Cameo Call.” The irrigation water is provided to four irrigation entities, which provide irrigation water to approximately 41,000 acres of lands in the Grand Valley. The hydropower water is used to produce hydropower at the Grand Valley Power Plant (GVPP), which has a capacity of approximately 800 cfs and an electrical generation capacity of about 3.5 megawatts (MW). Return flows from the GVPP return to the Colorado River at the head of the 15-Mile Reach, which help maintain flows in that reach for the endangered fish. The existing electrical power systems were installed at the Roller Dam at the time of

construction, nearly 100 years ago. Utility power was not available and the electrical power was provided by on-site generators and stored in batteries.

Discussion: As described in the Colorado Basin Roundtable (BRT) chair's recommendation letter, this project was supported and recommended for approval by the roundtable on May 21, 2018. The CBRT Basin Implementation Plan (BIP) cites the Dam and the Government-Highline Canal, managed by the Grand Valley Water Users Association, as a top concern that addresses directly two of our six BIP themes: Sustaining Agriculture and assure Dependable Basin Water Rights Administration. Continued operations of the Roller Dam supports critical agricultural, non-consumptive, municipal and industrial needs and aligns with the Colorado BIP and other objectives of Colorado's Water Plan, local and regional watershed, and water supply planning efforts, to name a few. This project will improve the operations and reliability of the Roller Dam headgates and rollers and essentially enables everything else that will lead to increased efficiency savings and improve the management of Pre-Compact water rights. The Roundtable recognizes that these water rights are important beyond irrigation with attendant benefits to the environment, recreation and municipal uses not only in the Grand Valley but on the entire mainstem of the Colorado.

Issues/Additional Needs: No additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
GVWUA / Orchard Mesa Irrigation District	\$50,000	\$27,080	\$77,080
Colorado River District	\$50,000	\$0	\$50,000
Other NGO	\$37,018	\$0	\$37,018
WSRF Colorado Basin Account	\$60,000	n/a	\$60,000
Totals	\$197,018	\$27,080	\$224,098

CWCB Project Manager: Anna Mauss

**Water Supply Reserve Fund
Water Activity Summary Sheet
September 19, 2018
Agenda Item 12(k)**

Applicant & Grantee: Kendall Reservoir Company

Water Activity Name: Investigations & Engineering Design of Kendall Reservoir Rehabilitation Improvements

Water Activity Purpose: Environmental, Recreational, and Agricultural Study

Counties: Mesa

Drainage Basin: Colorado

Water Source: Kenny Creek

Amount Requested: \$18,900 Colorado Basin Account

Matching Funds: Applicant Match (cash & in-kind) = \$10,500

- 55.5% of the basin request (meets 25% min)
- 35.7% of the total project cost of \$29,400

Staff Recommendation:
Staff recommends approval of up to \$18,900 from the Colorado Basin Account to fund the project titled: Investigations & Engineering Design of Kendall Reservoir Rehabilitation Improvements.

Water Activity Summary: WSRF grant funds, if approved, will assist Kendall Reservoir Company pursue field and engineering services to develop construction drawings and specifications to rehabilitate the Kendall Reservoir dam and reservoir. The State Engineer's Office conducted an inspection of Kendall Dam in June 2016 and identified recommendations for improving the condition and safety of the structure and extending the useful life of the dam. Conditions observed during the inspection resulted in an overall rating of "unsatisfactory" with the existing storage level of zero storage. The zero storage restriction has since been removed (due to a change in the dam's classification from a jurisdictional dam to a non-jurisdictional dam) however rehabilitation of the reservoir still need to occur to support the agricultural and recreational uses.

Kendall Reservoir (also referred to as Kenney Creek Reservoir) is located on the Grand Mesa in Mesa County Colorado, just south of Vega Reservoir. The reservoir stores approximately 87 acre-feet (AF) of water used primarily for mid-summer application of water to about 250 acres of alfalfa, meadow hay and pasture. This reservoir also supports the US Forest Services' recreational uses. The water rights associated with Kendall Reservoir are owned by both private interests and the US Forest Service. The private water rights owners are the applicants for this grant and hold the easements for reservoir access with the US Forest Service. The Reservoir Company and US Forest Service have a good working relationship and coordinate regularly to maintain access to and condition of the reservoir.

Discussion: As described in the Colorado Basin Roundtable (CBRT) chair's recommendation letter, this project was supported and recommended for approval on July 23, 2018. The reservoir offers agricultural and recreational benefits, both which comport with tenants of the Colorado Roundtable Basin Implementation Plan. The State Engineers Office at one time placed a storage restriction on the dam, which was later modified to allow storage. Nevertheless, the work specified by the State Engineers Office needs to occur, beginning with engineering work supported by the CBRT. The original request for \$37,800 was halved by the CBRT to \$18,900 as an economy move with limited WSRF basin account funds.

Issues/Additional Needs: No additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
USFS	\$0	\$8,200	\$8,200
Kendall Reservoir Company	\$0	\$2,300	\$2,300
WSRF Coloraad Basin Account	\$18,900	n/a	\$18,900
Totals	\$18,900	\$10,500	\$29,400

CWCB Project Manager: Anna Mauss

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(I)

Applicant & Grantee: Big Thompson Conservation District
Water Activity Name: Irrigation Water Return Flow Filter Strip
Water Activity Purpose: Multipurpose/Study & Implementation
County: Larimer
Drainage Basin: South Platte
Water Source: Little Thompson River
Amount Requested: \$6,600 South Platte Basin Account
Matching Funds: Applicant & 3rd Party Match (cash & in-kind) = \$55,735
• 844% of the Basin Account request (meets 10% min)

Staff Recommendation:
Staff recommends approval of up to \$6,600 from the South Platte Basin Account to help fund the project titled: Irrigation Water Return Flow Filter Strip.

Water Activity Summary: WSRF grant funds, if approved, will assist the Big Thompson Conservation District (BTCD) along with Colorado State University and Natural Resources Conservation Service demonstrate the effectiveness of using filter strips to agricultural and industrial entities, as well as other State and Federal agencies. The collaboration wishes to measure water quantity and quality entering the field where a filter strip has been planted to demonstrate the effectiveness and to actually identify the amount of nutrients, sediment and water that comes from several square miles above the river and enters into a growing grass filter. More specifically, WSRF funds will be expended to assist in the purchase of advertising, signage, an information kiosk, pamphlets, brochures, a video report, and to provide workshops that bring attention to their efforts and the resulting benefits.

Discussion: This effort will assist the South Platte Basin Roundtable achieve the goal to *Protect, Maintain, and Improve Conditions of Streams, Lakes, Wetlands, and Riparian Areas to Promote Self-Sustaining Fisheries and Functional Riparian and Wetland Habitat to Promote Long-Term Sustainability* as described in the South Platte Basin Implementation Plan in Section 1.9.7 Environmental and Recreational.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Big Thompson Conservation District	\$8,500	\$800	\$9,300	Secured
Lempka Farms LLC, Inc.	\$0	\$6,435	\$6,435	Pending
Colorado State University	\$25,000	\$15,000	\$40,000	Secured
Sub-total	\$33,500	\$22,235	\$55,735	
WSRF South Platte Basin Account	\$6,600	n/a	\$6,600	Secured
Total Project Costs	\$40,100	\$22,235	\$62,335	

CWCB Project Manager: Craig Godbout

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(m)

Applicant & Grantee: Lefthand Watershed Oversight Group

Water Activity Name: Fish Passage and Education on Left Hand Creek

Water Activity Purpose: Environmental/Recreational/Agricultural & Education and Outreach

County: Boulder

Drainage Basin: South Platte

Water Source: Left Hand Creek

Amount Requested: \$25,000 South Platte Basin Account
\$25,000 Statewide Account
\$50,000 Total request

Matching Funds: Applicant & 3rd Party Match (cash) = \$49,165

- 196% of the Statewide Account request (meets 10% min)

Basin Account Match = \$25,000

- 100% of the Statewide Account request (meets 10% min)

Total Match (Applicant/3rd Party & Basin Account) = \$74,165

- 296% of the Statewide Account request (meets 50% min)

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the South Platte Basin Account; and \$25,000 from the Statewide Account to help fund the project titled: Fish Passage and Education on Left Hand Creek.
--

Water Activity Summary: WSRF grant funds, if approved, will assist the Lefthand Watershed Oversight Group to hire a consultant team to implement a fish passage feasibility study and to support Lefthand Watershed Oversight Group staff in leading the stakeholder outreach and engagement portion of the study, as well as the education initiative. This multi-objective project will address protection/enhancement of the environment and water-based recreation through the fish passage study while also promoting education and outreach about stream connectivity through the education initiative.

This project aims to support education, knowledge sharing, and dialogue about the context of the 28-mile-long Left Hand Creek Watershed as a “working river” in order to better understand, explain, and compare potential solutions for improving fish passage and stream connectivity by:

1. Exploring on-the-ground solutions for restoring stream connectivity in Left Hand Creek to support fish passage and appreciation of the creek while meeting the goals and needs of water owners, and engaging key stakeholders as needed; and
2. Developing an education initiative focused on educating our community about why diversions are needed and the realities and complexities of living on a working river using information learned from (1) above, input from key stakeholders, compelling illustrative educational materials, and digital and social media platforms.

Discussion: This effort will assist the South Platte Basin Roundtable achieve their goals to: Protect and enhance environmental and recreational attributes (S.5.5); Fully recognize the importance of, and support the development of, environmental and recreational projects and multipurpose projects that support water availability for ecologically and economically important habitats and focus areas (1.9.7); Facilitate effective South Platte communications and outreach programs that complement the state's overall program (S.5.9) as outlined in the South Platte Basin Implementation Plan, while also assisting Colorado achieve the Watershed Health, Environment, and Recreation goals (Chapter 10, Section F), and Education, Outreach, and Innovation goals (Chapter 10, Section H) as highlighted in Colorado's Water Plan.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Trout Unlimited	\$10,000	\$0	\$10,000	Pending
Healthy Rivers Fund Grant	\$13,000	\$0	\$13,000	Pending
St. Vrain Left Hand Water Conservancy District	\$5,000	\$0	\$5,000	Secured
DOLA CDBG Disaster Recovery	\$16,165	\$0	\$16,165	Secured
<u>Landowner Donations</u>	<u>\$5,000</u>	<u>\$0</u>	<u>\$5,000</u>	<u>Secured</u>
Sub-total	\$49,165	\$0	\$49,165	
WSRF South Platte Basin Account	\$25,000	n/a	\$25,000	Secured
<u>WSRF Statewide Account</u>	<u>\$25,000</u>	<u>n/a</u>	<u>\$25,000</u>	
Total	\$99,165	\$0	\$99,165	

CWCB Project Manager: Craig Godbout

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
September 18-20, 2018
Agenda Item 12(n)

Applicant & Grantee: Lower South Platte Water Conservancy District

Water Activity Name: South Platte Regional Water Development Concept Feasibility Study

Water Activity Purpose: Multipurpose/Study

County: All or portions of counties comprising the South Platte River Basin

Drainage Basin: South Platte

Water Source: South Platte River

Amount Requested: \$77,500 South Platte Basin Account
 \$77,500 Metro Account
\$195,000 Statewide Account
 \$350,000 Total request

Matching Funds: Applicant & 3rd Party Match (cash & in-kind) = \$120,000
 • 62% of the Statewide Account request (meets 10% min)
 Basin Account Match = \$155,000
 • 79% of the Statewide Account request (meets 10% min)
 Total Match (Applicant/3rd Party & Basin Account) = \$275,000
 • 141% of Statewide Account request (meets 50% min)

Staff Recommendation:

Staff recommends approval of up to \$77,500 from the South Platte Basin Account; \$77,500 from the Metro Account; and \$195,000 from the Statewide Account to help fund the project titled: South Platte Regional Water Development Concept Feasibility Study.

Water Activity Summary: WSRF grant funds, if approved, will assist the Lower South Platte Water Conservancy District (LSPWCD) support the efforts of the Regional Concept Task Force to continue detailed investigation and evaluation of a regional, multi-purpose, multi-benefit water development concept for the South Platte Basin via the South Platte Regional Water Development Concept Feasibility Study (Regional Concept). The Regional Concept envisions multiple storage facilities and additional conveyance capacity strategically positioned throughout the Basin and operationally linked. This infrastructure network would store unappropriated native flow, reusable supplies, water derived from ATMs, and excess augmentation plan water in portions of the Basin where water is most available. This “Concept water” then would be delivered, either directly or by exchange, to specified “demand gateways” to meet diverse municipal, agricultural, environmental and recreational demands.

The proposed Water Activity will advance applicant’s and collaborators’ prior conceptual-level analyses by answering important outstanding questions regarding:

- an organizational structure for the concept;

- development of more precise demand estimates for municipal, agricultural, and environmental purposes by engaging water managers;
- refinements to the Regional Concept based on end-user needs;
- identification of water quality challenges and potential solutions;
- potential project cost estimates

Since 2015, the applicant and collaborators have worked to conceptualize possible “future in-basin multi-use projects” generally outlined in the South Platte Basin Implementation Plan. Collaborators include North Sterling Irrigation District, Northern Colorado Water Conservancy District, St. Vrain-Lefthand Water Conservancy District, Denver Water, Aurora Water, and South Metro Water Supply Authority, each of whom has committed cash and/or in-kind matching resources described in attached letters of support/financial commitments. In addition, LSPWCD and collaborators recently have expanded participation in Regional Concept discussions by establishing a “Regional Concept Task Force”, comprised of over 30 organizations and individuals and supported by both the Metro and South Platte Roundtables.

To date, preliminary modeling and evaluation indicate that the Regional Concept’s potential to address a meaningful portion of the South Platte Basin’s water supply gap is sufficiently high to warrant continue detailed investigation designed to move the Regional Concept down the path toward development. These early positive indications are encouraging. Yet many important issues remain to be investigated and evaluated to move the Regional Concept forward to development. With benefits potentially extending broadly across multiple parties in the South Platte Basin and, for that matter, all of Colorado, the applicant and collaborators believe that WSRF support for this continued investigation and evaluation is warranted. The measurable result of this water activity, therefore, will be a completed evaluation that includes:

- Refined understanding of specific municipal, agricultural, and environmental/recreational water demands that could be met by the Regional Concept, and at what cost.
- Refined understanding of the configuration of infrastructure components and their optimal linked operations that will permit the Regional Concept to meet the broadest possible range of demands.
- A range of options for an organizational/institutional structure best suited to support development and operation of the Regional Concept.
- A plan to expand and enhance public outreach and education efforts to inform and help sustain the Regional Concept’s continued evolution and development

Discussion: This effort will assist the South Platte Basin and Metro Roundtables achieve the following goals to the extent possible; develop multipurpose storage, conveyance, system interconnections and other infrastructure projects to take advantage of limited remaining South Platte supplies and enhance water use efficiencies and supply reliability as identified in Section 1.9.4: South Platte Storage and Other Infrastructure of the South Platte Basin Implementation Plan (SPBIP). In addition, this effort assists the roundtables pursue a “conceptual future in-basin multi-use projects” outlined in the Section 4.6.2 of the SPBIP. Additionally, this effort assists Colorado achieve several goals highlighted in Chapter 10 of Colorado’s Water Plan, such as reducing the projected 2050 municipal and industrial gap from as much as 560,000 acre-feet to zero acre-feet by 2030; to share at least 50,000 acre-feet of agricultural water using voluntary alternative transfer methods by 2030; and

of attaining 400,000 acre-feet of water storage in order to manage and share conserved water and the yield of IPPs by 2050.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Lower South Platte Water Conservancy District	\$3,333	\$10,000	\$13,333	Secured
Prewitt Operating Company/ North Sterling Irrigation District	\$0	\$10,000	\$10,000	Secured
Northern Colorado Water Conservancy District	\$10,000	\$12,000	\$22,000	Secured
St. Vrain-Lefthand Water Conservancy District	\$3,333	\$4,000	\$7,333	Secured
Denver Water	\$10,000	\$22,000	\$32,000	Secured
Aurora Water	\$10,000	\$12,000	\$22,000	Secured
South Metro Water Supply Authority	\$3,334	\$10,000	\$13,334	Secured
Sub-total	\$40,000	\$80,000	\$120,000	
WSRF South Platte Basin Account	\$77,500	n/a	\$77,500	Secured
WSRF Metro Account	\$77,500	n/a	\$77,500	Secured
Sub-total	\$195,000	\$80,000	\$275,000	
WSRF Statewide Account	\$195,000	n/a	\$195,000	
Total Study Costs	\$390,000	\$80,000	\$470,000	

CWCB Project Manager: Russ Sands