



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: May 7, 2018

AGENDA ITEM: 29 (a-g): WSRF Grant Requests

Staff Recommendation - Action Item: WSRF Funding Disbursement

Funding for the Water Supply Reserve Fund in fiscal year 2017/2018 was complicated by issues with severance tax revenue and refunds related to the BP supreme court case decision. The WSRF received an initial installment of \$1,455,116 on July 1, 2017, and then did not receive any other severance tax revenue for the remainder of the fiscal year.

Since the Board had anticipated much lower severance tax revenues for this fiscal year, the 2017 CWCB Projects Bill included a \$10,000,000 transfer from the loan program to the WSRF. These funds were disbursed following the regular schedule in the WSRF Criteria and Guidelines for the July and January installments, 40% and 30% respectively. Due to significant issues with severance tax revenues and refunds from January 2018 to present, the final 30%, or \$3,000,000, was not disbursed.

Subsequently, HB18-1338 passed, which directs the \$1,455,116 originally received by the WSRF on July 1, 2017 to be refunded back to the severance tax operational fund to assist in meeting a critical shortfall of funding for Tier 1 severance tax programs. In addition, this year's CWCB Projects Bill (SB18-218) also passed, which includes a transfer of \$2,000,000 from the loan program to the WSRF for fiscal year 2018/2019. To provide clarity on the timing of the fund disbursement for the WSRF program and basin roundtables staff recommends board approval of the following disbursement schedule:

Disbursement Description	Amount	Recommended Disbursement Timing	Recommended Disbursement % (July '18 to June '19)
2017 Projects Bill - last 30%	\$3,000,000	July 1, 2018	44%
HB 18-1338 Sev Tax Refund	-\$1,455,116	July 1, 2018	
2018 Projects Bill - first 50%	\$1,000,000	January 1, 2019	28%
2018 Projects Bill - last 50%	\$1,000,000	April 1, 2019	28%
TOTAL FUNDING July '18 to June '19	\$3,544,884		



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
May 2018

5/7/2018

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
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		\$ 269,878	\$269,878	\$0
TOTAL	\$104,775,000	\$90,395,151	\$59,816,758	\$30,578,392

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	\$3,397,599	\$95,065	\$10,996,431	
Colorado*	\$3,075,579	\$3,397,599	\$322,020	\$6,283,985	
Southwest *	\$3,115,277	\$3,397,599	\$282,322	\$7,547,244	
Gunnison *	\$2,981,110	\$3,397,599	\$416,489	\$5,728,714	
Metro	\$2,845,031	\$3,397,599	\$552,568	\$7,639,232	
North Platte	\$2,325,968	\$3,397,599	\$1,071,631	\$540,942	
Rio Grande*	\$3,311,995	\$3,397,599	\$85,604	\$12,119,690	
South Platte *	\$2,926,575	\$3,397,599	\$471,024	\$7,772,112	
Yampa/White	\$2,350,419	\$3,397,599	\$1,047,180	\$847,969	
TOTAL	\$26,234,488	\$30,578,392	\$4,343,904	\$59,476,319	\$340,439
TOTAL APPROVED GRANTS					\$85,710,807

Note: Only includes grants approved by CWCB

* Comments reflect adjustments to balances

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

Agenda Item	Basin	Applicant	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
29(a)	Gunnison	Keh-Land Company	Kehmeier Reservoir Dam Riprap	\$5,000	\$0	\$5,000	\$5,500	\$0	\$5,500	n/a	\$10,500	Staff recommendations approval of up to \$5,000 from the Gunnison Basin Account.	Craig Godbout
29(b)	Gunnison	Lake Fork Valley Conservancy	Nellie Creek Toilet Retrofit	\$11,000	\$0	\$11,000	\$16,150	\$9,000	\$25,150	n/a	\$36,150	Staff recommendations approval of up to \$11,000 from the Gunnison Basin Account.	Craig Godbout
29(c)	North Platte	Jackson County Water Conservancy District	North Platte Basin Airborne Cloud Seeding Project	\$150,000	\$0	\$150,000	\$50,000	\$69,500	\$119,500	n/a	\$269,500	Staff recommendations approval of up to \$150,000 from the North Platte Basin Account.	Joe Busto
29(d)	Rio Grande	Terrace Reservoir Company Inc	Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I	\$15,000	\$0	\$15,000	\$5,000	\$0	\$5,000	\$20,000	\$20,000	Staff recommends approval of up to \$15,000 from the Rio Grande Basin Account.	Megan Holcomb
29(e)	Colorado	Jerry Eller	Antelope Reservoir Rehabilitation	\$30,000	\$0	\$30,000	\$15,000	\$15,000	\$30,000	\$60,000	\$60,000	Staff recommends approval of up to \$30,000 from the Colorado Basin Account.	Megan Holcomb
29(f)	Colorado	Book Cliff, Southside and Mount Sopris Conservation Districts	Agriculture Water Plan for Garfield County	\$100,000	\$0	\$100,000	\$92,000	\$115,000	\$207,000	\$307,000	\$330,000	Staff recommends approval of up to \$100,000 from the Colorado Basin Account.	Megan Holcomb
29(g)	Colorado	Roaring Fork Conservancy	Roaring Fork Watershed Interactive Information System	\$37,500	\$0	\$37,500	\$4,500	\$5,000	\$9,500	\$47,000	\$50,000	Staff recommends approval of up to \$37,500 from the Colorado Basin Account.	Megan Holcomb

Subtotal

\$348,500 \$0 \$348,500

<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 Account Balances (if all requests approved)</u>	<u>Current Statewide Account Balance</u>	<u>Remaining Statewide Account Balance (if all requests approved)</u>
<u>Arkansas Basin</u>	\$0	\$0	\$0	\$95,065	\$95,065		
<u>Colorado Basin</u>	\$167,500	\$0	\$167,500	\$322,020	\$154,520		
<u>Gunnison Basin</u>	\$16,000	\$0	\$16,000	\$416,489	\$400,489		
<u>Metro</u>	\$0	\$0	\$0	\$552,568	\$552,568		
<u>North Platte</u>	\$150,000	\$0	\$150,000	\$1,071,631	\$921,631	\$340,439	\$340,439
<u>Rio Grande</u>	\$15,000	\$0	\$15,000	\$85,604	\$70,604		
<u>Southwest</u>	\$0	\$0	\$0	\$282,322	\$282,322		
<u>South Platte</u>	\$0	\$0	\$0	\$471,024	\$471,024		
<u>Yampa/White/Green</u>	\$0	\$0	\$0	\$1,047,180	\$1,047,180		
<u>Water Supply Reserve Account Total Requests</u>	\$348,500	\$0	\$348,500	\$4,343,904	\$3,995,404		

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
May 23-24, 2018
Agenda Item 29(a)

Applicant & Grantee: Keh-Land Company
Water Activity Name: Kehmeier Reservoir Dam Riprap
Water Activity Purpose: Agricultural/Implementation
County: Delta
Drainage Basin: Gunnison
Water Source: Bonita Creek
Amount Requested: \$5,000 Gunnison Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$5,500
• 110% of the Basin Account request (meets 10% min)

Staff Recommendation:
Staff recommends approval of up to \$5,000 from the Gunnison Basin Account to help fund the project titled: Kehmeier Reservoir Cam Riprap

Water Activity Summary: WSRF grant funds, if approved, will assist the Keh-Land Company to place approximately 5,640 square feet of new riprap on the face of the existing dam to eliminate erosion. Fill material will be placed on the crest of the dam and graded to a uniform elevation per the dam inspection report.

Project objectives:

- Stop wave erosion on the face of Kehmeier Dam
- Return the crest of the dam to optimal configuration
- Obtain an unconditional Full Storage rating from the Colorado Department of Water Resources
- Guard the water rights of the reservoir

Discussion: As pointed out in the Gunnison Basin Chair's recommendation letter accompanying application, this project assists the Gunnison Basin Roundtable in meeting Goals 1, 2, 3 and 8 of the Gunnison Basin Implementation Plan.

In addition, this effort helps the state achieve several of the Measurable Objectives of Colorado's Water Plan, such as meeting Agricultural needs as outlined in Chapter 6.3.4, 6.5.2, and 10.3.

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>
Keh-Land Company	\$5,500	\$0	\$5,500	Secured
WSRF Gunnison Basin Account	\$5,000	n/a	\$5,000	Secured
Total	\$10,500	\$0	\$10,500	

CWCB Project Manager: Craig Godbout

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
May 23-24, 2018
Agenda Item 29(b)

Applicant & Grantee: Lake Fork Valley Conservancy
Water Activity Name: Nellie Creek Toilet Retrofit
Water Activity Purpose: Implementation: Environmental/Recreation/M&I/Education & Outreach
County: Hinsdale
Drainage Basin: Gunnison
Water Source: Nellie Creek
Amount Requested: \$11,000 Gunnison Basin Account
Matching Funds: Applicant & 3rd Party Match (cash & in-kind) = \$25,150
• 228% of the Basin Account request (meets 10% min)

Staff Recommendation:

Staff recommends approval of up to \$11,000 from the Gunnison Basin Account to help fund the project titled: Nellie Creek Toilet Retrofit

Water Activity Summary: WSRF grant funds, if approved, will assist the Lake Fork Valley Conservancy District retrofit an existing restroom at the Nellie Creek Trailhead, which is a very popular trail and attracts a high number of hikers. The US Forest Service has closed this restroom several years ago due to a failure to compost and the inability properly dispose of human waste. Subsequently, the waste collection vault has ruptured, leaking human waste into Nellie Creek. The existing waste collection vault and human waste will be removed, the site cleaned-up, and a new restroom installed.

Discussion: As pointed out in the Gunnison Basin Chair's recommendation letter accompanying application, this project assists the Gunnison Basin Roundtable in meeting Goals 1, 5, 6 and 8 of the Gunnison Basin Implementation Plan.

In addition, this effort helps the state achieve several of the Goals of Colorado's Water Plan, such as meeting Environmental and Recreational needs as outlined in Chapter 6.6 and Water Resource Management and Protection as outlined in Chapter 7.

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>
Upper Gunnison Water Conservancy District	\$13,650	\$0	\$13,650	Pending
Hinsdale County	\$500	\$0	\$500	Pending
US Forest Service	\$2,000	\$8,000	\$10,000	Pending
Lake Fork Valley Conservancy District	\$0	\$1,000	\$1,000	Secured
Sub-total	\$16,150	\$9,000	\$25,150	
WSRF Gunnison Basin Account	\$11,000	n/a	\$11,000	Secured
Total	\$27,150	\$9,000	\$36,150	

CWCB Project Manager: Craig Godbout

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
May 23-24, 2018
Agenda Item 29(c)

Applicant & Grantee: Jackson County Water Conservancy District
Water Activity Name: North Platte Basin Airborne Cloud Seeding Project
Water Activity Purpose: Multipurpose
County: Jackson
Drainage Basin: North Platte
Water Source: Atmosphere
Amount Requested: \$150,000 North Platte Basin Account
Matching Funds: Applicant & 3rd Party Match (cash & in-kind) = \$119,500
• 80% of the Basin Account request (meets 10% min)

Staff Recommendation:

Staff recommends approval of up to \$150,000 from the North Platte Basin Account to help fund the project titled: North Platte Basin Airborne Cloud Seeding Project.
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Water Activity Summary: WSRF grant funds, if approved, will assist the Jackson County Water Conservancy District to provide operational monies for a cooperative airborne cloud seeding project that is an extension into the North Platte Basin of the Wyoming Water Development Office cloud seeding project in the Sierra Madre/Medicine Bow Mountains of southern Wyoming. This cloud seeding program is planned for a period of three years, however depending on weather conditions and number of flights could be extended for an additional period of time. Aerial seeding will occur upwind of the target watershed along a path perpendicular to the wind direction, at distances related to the storm wind velocities and ice crystal growth times. Cloud seeding would be temporarily suspended or curtailed when snowpack snow water equivalent thresholds are exceeded, during emergencies in the target area and when high avalanche hazard levels warrant suspension. The additional snowpack is good for Colorado but thresholds are set on snow water equivalents to ensure the snowpack in a water shed stays within the realm of natural variability for the local climate.

Discussion: As pointed out in the application, this project assists the Gunnison Basin Roundtable in meeting the Goals of the North Platte Basin Implementation Plan as outlined in Section 7.1.

In addition, this effort helps the state achieve water supply Goals of Colorado's Water Plan, as outlined in Chapter 4, page 4-18.

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>
Jackson County Water Conservancy District	\$50,000	\$12,000	\$62,000	Secured
CWCB Weather Modification Program (Target/Control Evaluation)	\$0	\$30,000	\$30,000	Secured
CWCB Weather Modification Program (Radiometer)	\$0	\$27,500	\$27,500	Secured
Sub-total	\$50,000	\$69,500	\$119,500	
WSRF Gunnison Basin Account	\$150,000	n/a	\$150,000	Secured
Total	\$200,000	\$69,500	\$269,500	

CWCB Project Manager: Joe Busto

**Water Supply Reserve Fund
Water Activity Summary Sheet
March 27, 2018
Agenda Item 29(d)**

Applicant & Grantee: Terrace Irrigation Company, Inc.
Water Activity Name: Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I
Water Activity Purpose: Agricultural & Environmental Implementation
County: Conejos
Drainage Basin: Alamosa
Water Source: Alamosa River
Amount Requested: \$15,000 Rio Grande Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$5,000

- 33% of the statewide request (meets 25% min)
- 25% of the total project cost of \$20,000

Staff Recommendation:

Staff recommends approval of up to \$15,000 from the Rio Grande Basin Account to fund the project titled: Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I.
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Water Activity Summary: WSRF grant funds, if approved, will assist Terrace Irrigation Company in hiring an Engineering firm that specializes in reservoir tunnel pipelines to perform an inspection of the existing outlet works pipe in the dam at the Terrace Reservoir and prepare an analysis describing alternatives to mitigate corrosion. The October 23, 2017 State Engineer's inspection report described that heavy corrosion was observed in the existing 48-inch diameter steel outlet pipe. The report also stated that, based on ultrasonic testing performed by Water Works Irrigation for Terrace Irrigation Company, the pipe has substantially deteriorated since it was installed in 1979.

An engineering firm will be hired to perform an inspection of the existing outlet works pipe and prepare a report describing conceptual alternatives to mitigate the corrosion. Observations of the outlet works pipe will be documented and up to three concept alternatives to repair the pipe corrosion will be provided. Concept construction costs for the three alternatives will be provided for comparison purposes which will help form a basis for planning and future work.

Terrace Irrigation Company, Inc. is the owner of Terrace Reservoir which was built in the early 1900's on the main stem of the Alamosa River. At that time it was the largest earthen dam in the U.S at 15,182 acre-feet. The company is a 501-C-12 nonprofit irrigation corporation with approximately 24 shareholders and about 9,000 acres of farmland under irrigation.

Discussion: As described in the Rio Grande Roundtable chair's recommendation letter, this project was supported and recommended for approval on March 13, 2018. This project assists in satisfying Colorado's Water Plan Critical Goals and Actions as identified in Chapter 10.3, *D. Agriculture*, by improving Colorado's aging agricultural infrastructure, particularly where improvements provide multiple benefits. Terrace Reservoir is used to store water for agricultural irrigation uses, instream flow water, municipal and commercial augmentation water, and a Colorado Parks and Wildlife conservation pool for fish and recreational fishing.

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>
Alamosa La Jara Water Conservancy District	\$5,000	\$0	\$5,000
WSRF Rio Grande Basin Account	\$15,000	n/a	\$15,000
Totals	\$20,000	\$0	\$20,000

CWCB Project Manager: Megan Holcomb

**Water Supply Reserve Fund
Water Activity Summary Sheet
May 24, 2018
Agenda Item 29(e)**

Applicant & Grantee: Jerry Eller

Water Activity Name: Antelope Reservoir Rehabilitation

Water Activity Purpose: Agricultural Implementation

County: Grand

Drainage Basin: Colorado

Water Source: Antelope Creek

Amount Requested: \$30,000 Colorado Basin Account

Matching Funds: Applicant Match (cash & in-kind) = \$29,600

- 99% of the Basin Account request (meets 25% min)
- 50% of the total project cost of \$59,200

Staff Recommendation:

Staff recommends approval of up to \$30,000 from the Colorado Basin Account to help fund the project titled: Antelope Reservoir Rehabilitation.

Water Activity Summary: WSRF grant funds, if approved, will help the Eller family make repairs to Antelope Reservoir. Located about 12 miles north of Kremmling, the reservoir stores approximately 350 acre-feet and is located on public land with water rights belonging to the applicant. The Eller family operates a cattle and haying operation in Grand County just north of Wolford Mountain Reservoir. Antelope Creek Reservoir (350 acre-feet) is its main water source for irrigation.

A 2014 state dam inspection found a number of items at the reservoir that required action. Follow up video inspection of the outlet pipe found a significant amount of rust, requiring a repair of the pipe. Due to state dam inspector requirements, any outlet pipe repair must be designed by a dam engineer. The scope of the project includes: (1) engineering and construction observation, (2) repair of 170 feet of 24 inch outlet piping, likely by cure in place pipe (CIPP) lining, (3) replacement of stem casing that operates the head-gate valve on the outlet pipe, and (4) earthworks on the dam including scarping repair, vegetation removal, and crest grading. The pipe lining is the major component of the project, requiring a specialized contractor and engineering to meet the state dam inspector requirements.

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 March 26, 2018. This project assists in satisfying Colorado's Water Plan Critical Goals and Actions as identified in Chapter 10.3, D. Agriculture. Colorado's Water Plan states that agriculture viability is a priority (pg. 6-127, CWP); this project will ensure irrigation water supply for our hay meadow for many decades with minimal maintenance. If the project is not completed the reservoir is at risk for failure or being classified as 'No Storage'. Therefore, completion of the project also aligns with the BRT's goal to reduce agriculture water shortages (pg. 6-139, CWP). This project is also a good candidate for

funding from the WSRF grant because the Statewide Water Supply Initiative recognizes that the ability of agriculture water users to address their water needs is often limited by their financial capabilities (SWSI ES-41).

The project is the most efficient and effective way for the ranch to ensure steady irrigation and water supply through dry summer months. While both Colorado's Water Plan and the BIP reference the needs for increased storage from new dams, they also support rehabilitation of existing infrastructure, noting that rehabilitating existing reservoirs provide more options and are typically more economical than new storage projects. A secondary benefit comes from maintaining a more consistent flow in Antelope creek. Because Antelope reservoir is filled during high spring run-off and returns more water to Antelope creek later in the summer, a more steady flow is maintained in antelope creek than if the reservoir was not in place. In turn, this should help in managing the flow into and out of Wolford Mountain Reservoir.

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>
Sole Proprietor	\$14,600	\$0	\$14,600
Colorado River District	\$15,000	\$0	\$15,000
Sub-total	\$29,600	\$0	\$29,600
WSRF Colorado Basin Account	\$30,000	n/a	\$30,000
Totals	\$59,600	\$0	\$59,600

CWCB Project Manager: Megan Holcomb

**Water Supply Reserve Fund
Water Activity Summary Sheet
May 24, 2018
Agenda Item 29(f)**

Applicant & Grantee: Bookcliff, Southside, and Mount Sopris Conservation Districts

Water Activity Name: Agriculture Water Plan for Garfield County

Water Activity Purpose: Agricultural Planning Study

County: Garfield, with small parts of Mesa, Eagle, and Rio Blanco

Drainage Basin: Colorado

Water Source: Waters diverted from the Colorado main stream and tributaries from Glenwood Canyon to DeBeque Colorado

Amount Requested: \$100,000 Colorado Basin Account

Matching Funds: Applicant Match (cash & in-kind) = \$230,000

- 230% of the Basin Account request (meets 25% min)
- 70% of the total project cost of \$330,000

Staff Recommendation:
Staff recommends approval of up to \$100,000 from the Colorado Basin Account to help fund the project titled: Agriculture Water Plan for Garfield County.

Water Activity Summary: WSRF grant funds, if approved, will help three Conservation Districts, Bookcliff, Southside, and Mount Sopris (“the Districts”), study a number of important topics related to consumptive water use planning. The area of study will be the Middle Colorado Watershed, primarily in Garfield County, including the waters diverted from the main stream of the Colorado River and the tributaries from Glenwood Canyon to DeBeque Colorado. The focus will be on agriculture consumptive use water and may include other consumptive water users including the towns and industries around Glenwood Springs, New Castle, Silt, Rifle, Parachute, and DeBeque. The study will identify and inventory water quality and quantity problems, and provide guidance to water users in the proper treatment of resources and infrastructure. The plan will include how funding, technical assistance, and other help can be obtained.

The long-term goal of the Colorado River Consumptive Use Plan is to ensure the ability of agriculture to produce food and fiber for the local, regional, national and world population. The need for reliable inventory of information about the water supply, needs, infrastructure usability and condition, related resource availability and condition, and methods of irrigation are needed to help make informed decisions primarily by the water rights owner, and other decision makers. The inventories to be conducted will be determined by the consumptive use community including cities, towns, and agriculture during the public relationship meetings during the beginning of the project.

The project objective is to determine the supply of water necessary to meet the needs of consumptively used water, and to determine if structural practices and management practice will improve water delivery to meet any shortages or gaps in the supply and demand of water. The Districts’ goals are similar to those of the Colorado Basin Implementation Plan, as follow:

- Reduce agriculture water shortages
- Minimize potential for transfer of agriculture water rights to municipal uses
- Develop incentives to support agricultural production
- Increase education among the agriculture community and general public about Colorado River Basin water issues

Discussion: As described in the Colorado basin roundtable chair's recommendation letter, this project was supported and recommended for approval by the roundtable on March 26, 2018. Colorado's Water Plan and the Colorado Basin Implementation Plan prescribed the preparation of stream management plans (also referred to as integrated watershed management plans) to assist in the planning and development of water resources. This work will be done in parallel, and complimentary to the Middle Colorado Watershed Council's "Integrated Water Management Plan" study which received WSRF and Watershed Restoration Grant funding in March 2018. The Colorado Basin Roundtable sees this agriculture analysis as providing a first-time, full comprehensive understanding of a currently understudied segment of the Colorado River.

The planning objectives and tasks in this project proposal were prepared with Colorado's Water Plan goals in mind. Each of the Conservation Districts have in their "Long-Range Plan" a section on water quality and quantity; this project helps to meet those long-term goals. The Districts are working to provide an unbiased format that land and water right owners can express their water needs, infrastructure needs, and planning needs without concern regarding adverse impacts from participating in the process or loss of their water rights. This area has about 57,000 acres of irrigated land producing alfalfa, grass hay and few acres garden crops. Historically many acres of corn for silage and sugar beets have been produced. The area is under urban development pressure as well as pressure from oil and gas development.

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>
Bookcliff Conservation District	\$20,000	\$25,000	\$45,000
Mount Sopris Conservation District	\$20,000	\$25,000	\$45,000
South Side Conservation District	\$20,000	\$25,000	\$45,000
Garfield County Farm Bureau	\$5,000	\$0	\$5,000
Holy Cross Cattleman Association	\$1,000	\$0	\$1,000
Garfield County Commissioners	\$20,000	\$0	\$20,000
Ditch owners and others	\$0	\$33,000	\$33,000
Natural Resources Conservation Service	\$0	\$30,000	\$30,000
Grand River Ditch	\$2,000	\$0	\$2,000
West Divide Water Conservancy District	\$1,000	\$0	\$1,000
Sub-total	\$92,00	\$138,000	\$230,000
WSRF Colorado Basin Account	\$100,000	n/a	\$100,000
Totals	\$192,000	\$138,000	\$330,000

CWCB Project Manager: Megan Holcomb

**Water Supply Reserve Fund
Water Activity Summary Sheet
March 24, 2018
Agenda Item 29(g)**

Applicant & Grantee: Roaring Fork Conservancy
Water Activity Name: Roaring Fork Watershed Plan Interactive Information System
Water Activity Purpose: Education & Outreach Implementation
County: Pitkin, Eagle, Garfield, and Gunnison
Drainage Basin: Colorado
Water Source: N/A
Amount Requested: \$37,500 Colorado Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$12,500

- 33% of the Basin Account request (meets 25% min)
- 25% of the total project cost of \$50,000

Staff Recommendation:

Staff recommends approval of up to \$37,500 from the Colorado Basin Account to help fund the project titled: Roaring Fork Watershed Plan Interactive Information System.
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Water Activity Summary: WSRF grant funds, if approved, will help create a web-based interactive map and information system for the Roaring Fork Watershed. This effort builds upon the digital database and map generated in Tasks 2 and 3 of the Integrated Water Management Planning Framework Project, also sponsored by the Colorado River Basin Roundtable. The interactive map will include information specific to the Roaring Fork Watershed with the addition of data that identifies and provides background for the specific action items detailed in the Roaring Fork Watershed Plan Update. The purpose of this project is to create a place to house information about the Roaring Fork Watershed that is easy to access and filter so that every user, from grade school students to the seasoned-scientist, can peruse research and recommended actions regarding a particular stretch of river, sub-basin, or watershed-wide. Displayed information will include: watershed locations linked to technical, hydrologic, and geophysical data; documented issues; areas of concern; and recommended projects. WSRF funds will be used to create the web-based interactive information system and to gather preferences from stakeholders and the public about information to be shared. This interactive information system will facilitate a better understanding of watershed dynamics and renewed momentum towards implementation of projects recommended by the Roaring Fork Watershed Plan.

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 January 22, 2017. This project assists in satisfying Colorado's Water Plan Critical Goals and Actions as identified in Chapter 10.3, H. Education, Outreach, and Innovation. Implementation of the Roaring Fork Watershed Plan (RFPW) is one of the top three priority projects identified in the Colorado BRT's Basin Implementation Plan (BIP) for the Roaring Fork Subbasin (Section 4, page 132, Table 18), and thus, a high priority of Colorado's Water Plan. There are over 200 action items within the RFPW

that, if implemented, could accomplish many goals within each of the six themes of the BIP and Colorado's Water Plan. However, currently, those action items are only uncovered and understood if one decides to read the Roaring Fork Watershed Plan, a 145-page document and associated 250 item spreadsheet accessed through a link on the Roaring Fork Conservancy's website. The outcome of this project would place those action items at the forefront of thought as one peruses an interactive map of the Roaring Fork Watershed. For instance, if a fly-fisherman wondered where native cutthroat trout populations exist in the Roaring Fork Watershed, they could find it on this map; they would also notice that a project was done in 2012 by Colorado Parks and Wildlife and the United States Forest Service to protect that particular population of native cutthroat trout.

Issues/Additional Needs: Applicant has identified 100% of funding sources, but without letters confirming match funds. Staff will work cooperatively with the grantee to ensure enough funding is secured for project success, prior to contracting. Staff will assist grantee in developing a project budget and schedule that meets the needs of the applicant and State Controller's Office.

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>
Roaring Fork Conservancy	\$0	\$5,000	\$5,000
Pitkin County Healthy Rivers and Streams Fund	\$4,500	\$0	\$4,500
Eagle County	\$2,000	\$0	\$2,000
Garfield County	\$1,000	\$0	\$1,000
Sub-total	\$7,500	\$5,000	\$12,500
WSRF Colorado Basin Account	\$37,500	n/a	\$37,500
Totals	\$45,000	\$5,000	\$50,000

CWCB Project Manager: Megan Holcomb