

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Ben Wade & Dori Vigil

Water Supply Planning Section

DATE: March 2, 2022

**AGENDA ITEM:** Agenda 25 a-l, Water Supply Reserve Fund, Grant Funding

Recommendations

#### Staff Recommendation - Action Items: WSRF Grant Requests:

A summary of staff's recommendation for each WSRF application are provided in the first component of the attached table.

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
- 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 Grant Guidelines.
- 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**

# STIMULUS FUND (HB1260) - Balance Summary Water Supply Reserve Fund MARCH 2022

Fund Appropriation and Receipts					
	Legislative		Statewide		
Fiscal Year	Appropriation	Funds Received	Account	Basin Account	
FY2021-2022	\$5,000,000	\$5,000,000	\$3,200,000	\$1,800,000	
TOTAL	\$5,000,000	\$5,000,000	\$3,200,000	\$1,800,000	

	Fun	d Distribution	า		
	Approved Basin	Total Basin	Basin Account	Approved State Sta	tewide Account
Basin	Grants	Funds	Balance	Grants	Balance
Arkansas	\$32,500	\$200,000	\$167,500	\$43,000	
Colorado	\$19,800	\$200,000	\$180,200	\$40,000	
Southwest	\$8,600	\$200,000	\$191,400	\$0	
Gunnison	\$69,500	\$200,000	\$130,500	\$49,833	
Metro	\$58,164	\$200,000	\$141,836	\$91,500	
North Platte	\$200,000	\$200,000	\$0	\$4,833	
Rio Grande	\$0	\$200,000	\$200,000	\$0	
South Platte	\$50,750	\$200,000	\$149,250	\$70,458	
Yampa/White	\$172,750	\$200,000	\$27,250	\$66,000	
TOTAL	\$612,064	\$1,800,000	\$1,187,936	\$365,624	\$2,834,376
TOTAL APPROVED GRANT	S				\$977,688

Note: Only includes grants approved by CWCB

Fund Total Requests
3/2/2022

Water Supply Reserve

\$769,163 \$2,500,349 \$3,269,512

\$1,187,936

\$418,773

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(a)

**Applicant & Grantee:** Arkansas Groundwater & Reservoir Association

Water Activity Name: West Pueblo Reservoir Project (WPRP)

Water Activity Purpose: Agricultural & Municipal/Industrial - Implementation

County: Pueblo County

Drainage Basin: Arkansas River

Water Source: West Pueblo Reservoir

Amount Requested: \$84,110 Arkansas Basin Account

\$756,994 Statewide Account \$841,104 Total Request

Matching Funds: Basin Account Match = \$84,110

• 11.11% of statewide request (meets 10% min) Applicant & 3rd Party Match = \$869,424 (cash)

• 113.4% of the statewide request (meets 10% min)

Total Match (Basin request & Applicant Match) = \$953,534

• 125% of the statewide request (meets 50% min)

#### Staff Recommendation:

Staff recommends approval of up to \$84,110 from the Arkansas Basin Account and up to \$756,994 from the Statewide Account to help fund the project: West Pueblo Reservoir Project (WPRP)

Water Activity Summary: The West Pueblo Reservoir Project (WPRP) involves the design and construction of inlet and outlet conveyance appurtenances at a former gravel pit mining operation in Pueblo County. The reservoir is currently lined with a compacted clay embankment and has an available storage volume of nearly 1,230 Acre-Feet (AF). However, the reservoir can only be filled at the present time using pumps, and water from the reservoir cannot be released to the river, if needed for augmentation purposes.

The preferred inlet alternative involves a connection to a gravity-driven, raw water pipeline currently owned and operated by Pueblo Board of Water Works (PBWW). Constructing inlet works to the reservoir would involve the construction of approximately 311 Linear Feet (LF) of 24-Inch High Density Polyethylene (HDPE) pipe to convey a planned 30 Cubic Feet per Second (CFS) to fill the reservoir.

The preferred outlet alternative is to construct a pumping station to deliver water to the river as needed. The pumping station will deliver water at a maximum rate of 20 CFS. Anticipated energy costs from this facility are about \$7,000 per year, at about \$7.00 per AF or \$0.02 per KWH.

If approved, WSRF funds would be used to fund the design and construction of the inflow and pump station.

**Discussion:** This project supports the goals of the Colorado Water Plan and the Arkansas Basin Roundtable Implementation plan by enhancing the use of waters for augmentation in the basin and providing a permanent and sustainable storage vessel that will ensure that water secured for augmentation is not at risk of spill from Pueblo Reservoir, which would result in the loss and waste of this water. Additionally, this project supports multipurpose objectives in the basin and helps support recreation purposes as well as provides an example of collaboration and cooperation between municipal and agricultural interests in the Arkansas River Basin.

Issues/Additional Needs: No issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Arkansas Groundwater & Reservoir Association	\$869,424	\$0	\$869,424	Secured
Sub-Total Matching Funds	\$869,424	\$0	\$869,424	
WSRF Arkansas Basin Account	\$84,110	\$0	\$84,110	Secured
WSRF Statewide Account	\$756,994	\$0	\$756,994	
Sub-Total WSRF Funds	\$841,104	\$0	\$841,104	
Total Project Costs	\$1,710,825	\$0	\$1,710,528	

CWCB Project Manager: Rachel Pittinger

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(b)

**Applicant & Grantee:** Upper Arkansas Conservation District

Water Activity Name: Sunnyside Irrigation Ditch Rehabilitation

Water Activity Purpose: Agricultural - Implementation

County: Chaffee County

Drainage Basin: Arkansas River

Water Source: Arkansas River & Sunnyside Park Ditch

**Amount Requested:** \$12,730 Arkansas Basin Account

\$114,570 Statewide Account \$127,300 Total Request

Matching Funds: Basin Account Match = \$12,730

• 11.11% of statewide request (meets 10% min)

**Applicant & 3rd Party Match** = \$501,500 - \$440,000 (cash)

& \$61,500 (In-kind)

• 437% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$514,230

• 448% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$12,730 from the Arkansas Basin Account and up to \$114,570 from the Statewide Account to help fund the project: Sunnyside Irrigation Ditch Rehabilitation

Water Activity Summary: The Sunnyside Park Ditch serves 17 shareholders including several large ranches irrigating 780 acres and impacting over 10,000 acres of land. The ditch runs along two miles of the Arkansas River, through two growing subdivisions and is clearly visible from two major highways making it an accessible, visible demonstration site for Integrated Watershed Management Planning (IWMP) activities.

This project was chosen based on need due to the ditch experiencing leakage issues and is increasingly difficult to maintain due to housing developments along the ditch as well as willingness and readiness of major shareholders to participate in IWMP activities. Ditch shareholders have participated in grant writing, feasibility planning, agriculture community outreach and the NRCS EQIP application process for this project.

If approved, WSRF funds will be used to match funds obtained through Chaffee Common Ground, NRCS-EQIP and Colorado State Conservation Board (CSCB) for implementation of this ditch rehabilitation project which entails laying 2,800 feet of pipe, installing water control structures and seeding disturbed areas.

The applicant continues to lead IWMP activities in the Upper Arkansas Watershed and will continue to present this proposal as a demonstration site and an example of stakeholder collaboration, natural resource conservation practice, and support for sustaining agriculture.

**Discussion:** This project supports the goals of the Colorado Water Plan and the Arkansas Basin Roundtable Implementation plan by improving irrigation efficiency, reducing loss and improving safety conditions in the project area. Additionally, this project supports and Integrated Watershed Planning process and is being utilized as a way of "sharing lessons, principles, and practices in ways that foster collaboration between basins and disciplines-encouraging effective project implementation and on the ground actions."

Issues/Additional Needs: No issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Chaffee Common Ground	\$100,000	\$0	\$100,000	Secured
NRCS - EQIP	\$340,000	\$0	\$340,000	Secured
Sunnyside Park Ditch Shareholders	\$7,250	\$7,250	\$14,500	Secured
CSCB	\$25,000	\$0	\$25,000	Secured
AgWater Network	\$22,000	\$0	\$22,000	Secured
Sub-Total Matching Funds	\$494,250	\$7,250	\$501,500	
WSRF Arkansas Basin Account	\$12,730	\$0	\$12,730	Secured
WSRF Statewide Account	\$114,570	\$0	\$114,570	
Sub-Total WSRF Funds	\$127,300	\$0	\$127,300	
Total Project Costs	\$621,550	\$7,250	\$628,800	

CWCB Project Manager: Rachel Pittinger

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(c)

**Applicant & Grantee:** Center for Snow and Avalanche Studies

Water Activity Name: Colorado Dust on Snow Project

Water Activity Purpose: Agricultural, Education & Outreach, Municipal/Industrial

Nonconsumptive (Environmental & Recreational) -

Implementation

County: Multiple Counties across Mountainous Regions

**Drainage Basin:** Statewide

Water Source: N/A

**Amount Requested:** \$15,000 Arkansas Basin Account

\$15,000 Colorado Basin Account \$15,000 Gunnison Basin Account \$15,000 Metro Basin Account \$15,000 Rio Grande Basin Account \$15,000 South Platte Basin Account \$15,000 Southwest Basin Account

\$15,000 Yampa/White/Green Basin Account

\$120,000 Statewide Account \$240,000 Total Request

Matching Funds: Basin Account Match = \$120,000

100% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$274,000 (cash)
228% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$304,000

• 253% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$15,000 from the Arkansas Basin Account, up to \$15,000 from the Colorado Basin Account, up to \$15,000 from the Gunnison Basin Account, up to \$15,000 from the Metro Basin Account, up to \$15,000 from the Rio Grande Basin Account, up to \$15,000 from the South Platte Basin Account, up to \$15,000 from the Southwest Basin Account, up to \$15,000 from the Yampa/White/Green Basin Account and \$120,000 from the Statewide Account to help fund the project: Colorado Dust on Snow Project

**Water Activity Summary:** The applicant states the Colorado Dust-on-Snow Project is an applied science effort on behalf of the Colorado water community. The Senator Beck Study Basin (SBB) is the "sentry site" for dust-on-snow monitoring but the Project spans multiple basins throughout the Colorado Mountains:

- Park Cone
- Red Mountain
- Spring Creek
- Wolf Creek
- Hoosier
- Grizzly Peak (Loveland)
- Berthoud Summit
- Willow Creek
- Rabbit Ears
- McClure
- Grand Mesa

In addition to dust presence, severity and location in the snowpack, project collected data includes other variables (i.e. Snow Water Equivalent) essential to water professionals and streamflow forecasting. Timely updates describe conditions, by major watershed, and predict the influence on snowmelt timing/rates.

SBB is located between 11,000'-13,500' (higher than any SNOTEL) and has three meteorological stations and stream gage. Unique measurements allow assessment of the snowpack energy budget to forecast near-term melt rates.

The applicant believes the project addresses multiple purposes: Dust-on-snow, snowpack, and meteorological information collected is unique to their organization. The applicant states that no other entity is collecting this kind of information and making it available to Colorado water managers (environmental, storage, conservation, and recreation), researchers, and public.

If approved, funding will be used for field work, data collection and reporting.

**Discussion:** All of the approving Basins have stated this project aligns with goals in their respective Basin Implementation Plans. The applicant states this project aligns with multiple Water Plan goals by providing monitoring and reporting on snowpack that will help water resource management for municipalities, agricultural producers as well as helping to meet some conservation goals.

Issues/Additional Needs: No issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Center for Snow & Avalanche Studies	\$274,000	\$0	\$274,000	Secured
Sub Total Matching Funds	\$274,000	\$0	\$274,000	
WSRF Arkansas Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Colorado Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Gunnison Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Metro Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Rio Grande Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF South Platte Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Southwest Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Yampa/White/Green Basin Account	\$15,000	\$0	\$15,000	Secured
WSRF Statewide Account	\$120,000	\$0	\$120,000	
Sub Total WSRF Funds	\$240,000	\$0	\$240,000	
Total Project Costs	\$514,000	\$0	\$514,000	

CWCB Project Manager: Andrew Rickert

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(d)

**Applicant & Grantee:** Orchard City Irrigation District

Water Activity Name: Fruitgrowers Dam Outlet Gates Improvement Project
Water Activity Purpose: Agricultural, Nonconsumptive (Environmental), Other -

Implementation

County: Delta

**Drainage Basin:** Gunnison River

Water Source: Fruitgrowers Reservoir

Amount Requested: \$50,000 Gunnison Basin Account

\$100,000 Statewide Account \$150,000 Total Request

Matching Funds: Basin Account Match = \$50,000

50% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$465,400 (cash)
465% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$515,400

• 515% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$50,000 from the Gunnison Basin Account and up to \$100,000 from the Statewide Account to help fund the project: Fruitgrowers Dam Outlet Gates Improvement Project

Water Activity Summary: The applicant has partnered with the US Bureau of Reclamation, who owns the Fruitgrowers Reservoir, to plan for upgrades to the control gates which release water from the reservoir and partition the water as it leaves the reservoir. The applicant serves 590 irrigation users on approximately 2,760 acres of farmland in Orchard City.

This project will install the infrastructure needed for increased gate control efficiency. The existing outlet and portioning gates are old and worn. The planned improvements include replacing control gates with one low maintenance, long service life, standard gate valve and two triple offset butterfly valves, installing a Supervisory Control and Data Acquisition (SCADA) control house with electrical power and ventilation, computer, and software to be used for water management.

This project will: Modernize an irrigation dam and reservoir that have been in use continuously since 1937; Replace old and worn gates; Increase the reliability of water supplies in the irrigation reservoir water; Improve infrastructure that makes future SCADA projects possible; and continue to provide bird habitat and birdwatching activities.

If approved, these grant funds will be used for engineering, permitting, construction oversight by the Bureau of Reclamation, construction costs, coffer dam, and associated materials costs. The project will be designed and supervised by the US Bureau of Reclamation Western Colorado Area Office. The applicant states these upgrades will result in 4,450 acre feet of existing storage preserved.

**Discussion:** The project aligns with the goals of the Water Plan and the Gunnison Basin Implementation Plan by addressing aging agricultural infrastructure, identifying multipurpose projects that would preserve storage within the Basin as well as preserving habitat for migratory birds and a recreational bird watching area.

**Issues/Additional Needs:** The applicant is planning to apply for a CWCB Loan in the future and has identified the loan as match for this proposal. If approved, CWCB Staff will wait to contract this project until all matching funds have been secured. No additional issues or 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 Sources/Match	Cash	In-Kind	Total	Status
CO River Dist. Community Funding Partnership	\$225,000	\$0	\$225,000	Secured
CWCB Loan	\$240,400	\$0	\$240,400	Pending
Sub-Total Matching Funds	\$465,400	\$0	\$465,400	
WSRF Gunnison Basin Account	\$50,000	\$0	\$50,000	Secured
WSRF Statewide Account	\$100,000	\$0	\$100,000	
Sub-Total WSRF Funds	\$150,000	\$0	\$150,000	
Total Project Costs	\$615,400	\$0	\$615,400	

**CWCB Project Manager:** Matt Stearns

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(e)

**Applicant & Grantee:** Town of Olathe

Water Activity Name: Water Meter & Water Conservation

Water Activity Purpose: Municipal/Industrial, Education & Outreach -

Implementation

County: Montrose

**Drainage Basin:** Gunnison River

Water Source: Uncompaghre River, East Fork Dry Creek & West Fork Dry

Creek

Amount Requested: \$25,000 Gunnison Basin Account

\$157,403 Statewide Account \$150,000 Total Request

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

15.8% of statewide request (meets 10% min)

Applicant & 3rd Party Match = \$185,587.50 (\$150,600

cash & \$34,987.50 ln-kind)

• 118% of the statewide request (meets 40% min)

Total Match (Basin request & Applicant Match) =

\$210,587.50

• 133% of the statewide request (meets 50% min)

#### Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Gunnison Basin Account and up to \$157,403 from the Statewide Account to help fund the project: Water Meter & Water Conservation

Water Activity Summary: The Town of Olathe has a current population of approximately 1,850 people. Olathe has a diverse population and is classified as a Disadvantaged Community (DAC) by DOLA. The Town is a member of Project 7 and purchases treated water from Project 7. The Town provides for the storage and distribution of the treated water. The Town serves approximately 570 residential and 74 commercial taps. CWCB approved a Water Efficiency Plan for the Town in 2019 to implement water efficiency programs & measures to avoid water demands exceeding their Project 7 allocation.

The Town has estimated about a 25% gap between water purchased and water sold (unaccounted for water). The Town has been working to install meters on all connections including public facilities to try to account for all the water that is purchased from Project 7. The project will upgrade 30 plus year old manual read water meters. As meters age they typically read more slowly. The Town believes this is likely the cause of a significant amount of the unaccounted for water and is also could be resulting in lost revenue.

If approved, WSRF funds will be used to purchase and install new water meters which would help reduce the difference of purchased and sold water. Using newer and more sophisticated meters will allow customers to have a better picture of their water usage. That coupled with outreach by the Town with information about community specific ways to conserve and be more efficient with water use is expected to result in a modest reduction of 10-20 acre feet per year in consumptive use.

**Discussion:** The project aligns with the goals of the Gunnison Basin Implementation Plan by identifying and addressing municipal water shortages, maintaining and modernizing critical water infrastructure and educating residents regarding critical water resources.

Issues/Additional Needs: No issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Town of Olathe	\$150,600	\$34,987.50	\$185,587.50	Secured
Sub-Total Matching Funds	\$150,600	\$34,987.50	\$185,587.50	
WSRF Gunnison Basin Account	\$25,000	\$0	\$25,000	Secured
WSRF Statewide Account	\$157,403	\$0	\$157,403	
Sub-Total WSRF Funds	\$182,403	\$0	\$182,403	
Total Project Costs	\$333,003	\$34,987.50	\$367,990.50	

**CWCB Project Manager:** Kevin Reidy

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(f)

Applicant & Grantee: Trout Unlimited

Water Activity Name: Stewart Ditch Diversion Improvement Project

Water Activity Purpose: Agricultural, Nonconsumptive (Environmental &

Recreational) - Implementation

County: Delta

**Drainage Basin:** Gunnison River

Water Source: North Fork River Gunnison River

**Amount Requested:** \$40,000 Gunnison Basin Account

\$100,000 Statewide Account \$140,000 Total Request

Matching Funds: Basin Account Match = \$40,000

40% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$465,400 (cash)
465% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$515,400

• 515% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$40,000 from the Gunnison Basin Account and up to \$100,000 from the Statewide Account to help fund the project: Stewart Ditch Diversion Improvement Project

**Water Activity Summary:** This project will achieve multiple goals and objectives by repairing and improving in-river push-up dam and diversion infrastructure used by the Stewart Ditch on the North Fork of the Gunnison. The tasks related to this effort have been supported by CWCB funds that have provided site survey, hydraulic modeling of concepts and engineered plans.

The proposed project will build upon on-going engineering and modeling efforts by constructing a new rock dam in the river and replace antiquated and deficient irrigation diversion infrastructure.

This project will provide immediate improvements to the river channel that will benefit fish, including native fish, as well as recreational water users. Improving and replacing the diversion infrastructure will support more than 240 water user who rely on the Stewart Ditch for irrigation of nearly 2,600 acres near the Town of Paonia. These improvements will improve operations for the water users by reducing labor related to operating the diversion and down-ditch screens. New diversion infrastructure will also improve water use efficiency and protect the ditch from overtopping.

**Discussion:** The project aligns with the goals of the Water Plan and the Gunnison Basin Implementation Plan by addressing aging agricultural infrastructure, identifying multipurpose projects that would preserve storage within the Basin as well as preserving habitat for migratory birds and a recreational bird watching area.

Issues/Additional Needs: No issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Colorado Department of Agriculture	\$50,000	\$0	\$50,000	Secured
Colorado River Water District	\$200,000	\$0	\$200,000	Secured
CWCB Water Plan Grant	\$170,000	\$0	\$170,000	Pending
Stewart Ditch & Reservoir Company	\$3,000	\$22,000	\$25,000	Secured
Trout Unlimited	\$6,000	\$40,000	\$46,000	Secured
US Fish & Wildlife Service	\$68,000	\$0	\$68,000	Pending
Western Slope Conservation Center	\$8,000	\$0	\$8,000	Secured
Sub-Total Matching Funds	\$505,000	\$62,000	\$567,000	
WSRF Gunnison Basin Account	\$40,000	\$0	\$40,000	Secured
WSRF Statewide Account	\$100,000	\$0	\$100,000	
Sub-Total WSRF Funds	\$140,000	\$0	\$140,000	
Total Project Costs	\$707,000	\$62,000	\$769,000	

CWCB Project Manager: Andrea Harbin-Monahan

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(g)

**Applicant & Grantee:** Arapahoe County

Water Activity Name: Arapahoe County Water Supply Study

Water Activity Purpose: Municipal/Industrial, Education & Outreach - Study

County: Arapahoe

**Drainage Basin:** South Platte

Water Source: Surface & Groundwater within County boundary

**Amount Requested:** \$25,000 Metro Basin Account

\$50,000 South Platte Basin Account

\$50,000 Statewide Account \$125,000 Total Request

Matching Funds: Basin Account Match = \$75,000

150% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$163,000 (cash)
217% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$238,000

• 476% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Metro Basin Account, up to \$50,000 from the South Platte Basin Account and up to \$50,000 from the Statewide Account to help fund the project: Arapahoe County Water Supply Study

Water Activity Summary: If approved, the applicant would use WSRF funds to retain a consultant to conduct a Water Supply Study that covers 623 square miles of urban and rural unincorporated areas of Arapahoe County in collaboration with water providers and with community input. The study's purpose is to provide a comprehensive review of current water demand and supply and an evaluation of demand, supply, groundwater, and other water resources to 2050. The study will identify approaches for water demand management, water efficiency, and water conservation. The primary objective is to ensure that the County's land-use decisions balance the efficient use of limited water supplies with the needs of new residents and industry.

The chosen consultant will help the County update a water study completed in 2001. Since 2001, unprecedented growth in the county in addition to a drying climate has put pressure on water providers to find additional water supplies. The 2001 water study was intended to project through a 20-year period, which has now expired. An updated Comprehensive Plan, approved in 2018, outlined new policies for proof of water supply and water conservation. The study would update data from the 2001 water study, provide an analysis of water supply

and demand, identify alternatives to groundwater reliance, and provide recommendations for new County policies and regulations. Once completed, the County will provide approximately 97,000 residents, property owners and developers with educational information regarding the County's water supply and projected water needs.

**Discussion:** The Water Supply Study will help implement the goals and measurable outcomes identified in Colorado's Water Plan and the South Platte Basin Implementation Plan (BIP). This project is aligned with several goals in both plans that focus on coordinating and integrating land-use and water planning. The primary goal of the project is to ensure that land-use decisions are made based on balancing the efficient use of limited water supplies with the needs of residents and future development to have a reliable water supply.

Issues/Additional Needs: No other issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Arapahoe County	\$163,000	\$0	\$163,000	Secured
Sub-Total Matching Funds	\$163,000	\$0	\$163,000	
WSRF Metro Basin Account	\$25,000	\$0	\$25,000	Secured
WSRF South Platte Basin Account	\$50,000	\$0	\$50,000	Secured
WSRF Statewide Account	\$50,000	\$0	\$50,000	
Sub Total	\$125,000	\$0	\$125,000	
Total Project Costs	\$288,000	\$0	\$288,000	

**CWCB Project Manager:** Kevin Reidy

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(h)

Applicant & Grantee: Colorado Trout Unlimited

Water Activity Name: Lower South Boulder Creek - Watershed Restoration

Ditch Structure Automation Demonstration Project

Water Activity Purpose: Agricultural, Education & Outreach,

Municipal/Industrial, Nonconsumptive (Environmental) -

Implementation

County: Boulder

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

Amount Requested: \$22,000 Metro Basin Account

\$22,000 South Platte Basin Account

\$123,000 Statewide Account \$167,000 Total Request

Matching Funds: Basin Account Match = \$44,000

35.7% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$163,000 (cash)
217% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$238,000

• 476% of the statewide request (meets 50% min)

#### Staff Recommendation:

Staff recommends approval of up to \$22,000 from the Metro Basin Account, up to \$22,000 from the South Platte Basin Account and up to \$123,000 from the Statewide Account to help fund the project: Lower South Boulder Creek - WSR Ditch Structure Automation Demonstration Project

Water Activity Summary: This proposal is a multi-phase effort for South Boulder Creek win Boulder County on the ~9 miles from Eldorado Springs to the Boulder Creek confluence. This stretch is notable both as a working river delivering water to many water users and for its extensive public recreational access and potential environmental value for native species.

This proposal focuses on progressing engineering designs, permitting and installation for automated and networked ditch head-gate operations. This project was identified during the on-going Watershed Restoration Phase I (WSR PH 1) project through collaboration between the Phase 1 project team and New Dry Creek Carrier (NDCC).

Seven ditch companies and a storage location receive water from NDCC. The Cities of Boulder and Lafayette have significant ownership in NDCC. If approved, WSRF funds will be used for contractors to provide needed professional services in support of developing

designs and material requirements to upgrade gates, repair degraded components, and add automated gate actuators, flow gauges, and supporting network and software components. All efforts have been and will continue to be in partnership with local stakeholders including municipal, ditch companies, and private landowners.

The applicant plans to promote the project to other interested parties to demonstrate the feasibility and efficiency gains of automation and networked ditch head-gate operations.

**Discussion:** The proposal aligns with the Water Plan and the South Platte Basin Implementation Plan goals to improve agricultural operations and water management efficiency, reduce safety hazards, include more stakeholders in their process, as well as improving habitat and watershed resiliency.

Issues/Additional Needs: No other issues or 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 Sources/Match	Cash	In-Kind	Total	Status
City of Boulder	\$5,000	\$20,000	\$25,000	Secured
New Dry Creek Carrier Ditch	\$97,000	\$15,000	\$112,000	Secured
Trout Unlimited	\$0	\$8,000	\$8,000	Secured
Sub-Total Matching Funds	\$102,000	\$0	\$163,000	
WSRF Metro Basin Account	\$22,000	\$0	\$25,000	Secured
WSRF South Platte Basin Account	\$22,000	\$0	\$50,000	Secured
WSRF Statewide Account	\$123,000	\$0	\$50,000	
Sub Total	\$167,000	\$0	\$125,000	
Total Project Costs	\$269,000	\$43,000	\$312,000	

CWCB Project Manager: Andrea Harbin-Monahan

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(i)

Applicant & Grantee: Colorado Rio Grande Restoration Foundation

Water Activity Name: Conejos River Partnership Project - Phase 1b

Water Activity Purpose: Agricultural, Nonconsumptive (Environmental) & Other -

Implementation

County: Conejos

**Drainage Basin:** Rio Grande

Water Source: Conejos River

**Amount Requested:** \$33,000 Rio Grande Basin Account

\$297,000 Statewide Account \$330,000 Total Request

Matching Funds: Basin Account Match = \$33,000

11% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$340,000 (cash)
114% of the statewide request (meets 40% min)

Total Match (Basin request & Applicant Match) = \$373,000

• 125% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$33,000 from the Rio Grande Basin Account, and up to \$297,000 from the Statewide Account to help fund the project: Conejos River Partnership Project - Phase 1b

Water Activity Summary: Aging irrigation infrastructure and degraded riparian and aquatic habitat are significant issues affecting Conejos River water users as well as the health of the river system. High maintenance diversion structures are often incapable of efficiently diverting water, particularly during low streamflow. Poorly functioning and inefficient headgates put a strain on water users and managers who rely on accurate diversions. In many cases, diversion infrastructure adversely affects aquatic and riparian habitats by disrupting natural sediment regimes, increasing bank erosion and floodplain disconnection, and creating barriers to fish passage.

If approved, WSRF funds would assist in rehabilitating and enhancing diversion infrastructure and surrounding river channels through the following activities: replacement of diversion structures and headgates; automation of headgates; enhancement of aquatic habitat; and streambank stabilization and riparian restoration.

This project will improve diversion efficiency and reduce maintenance, allowing water managers to administer water rights and meet Rio Grande Compact water delivery requirements more efficiently.

Additionally, the applicant believes these activities will enhance water quality by reducing sediment input and improve aquatic habitat by creating refugia during low flow conditions. Finally, the project will help ensure the Conejos River continues to support the farmers, ranchers, riparian and aquatic species, and communities who rely on its proper function.

**Discussion:** The proposal aligns the Rio Grande Basin Implementation Plan by addressing agricultural, environmental and water administration needs facing the Basin. The project also aligns with Water Plan goals by meeting community and agricultural water needs and balancing the needs of the environment and recreation.

Issues/Additional Needs: No other issues or 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 Sources/Match	Cash	In-Kind	Total	Status
CO Department of Agriculture Drought Resilience	\$150,000	\$0	\$150,000	Secured
Colorado Housing & Finance Authority	\$60,000	\$0	\$60,000	Secured
Conejos Water Conservancy District	\$15,000	\$0	\$15,000	Secured
Ditch Landowner Contributions	\$20,000	\$0	\$20,000	Secured
North American Wetland Conservation Act	\$50,000	\$0	\$50,000	Secured
Sangre de Cristo National Heritage Area	\$20,000	\$0	\$20,000	Secured
Trinchera Blanca Foundation	\$25,000	\$0	\$25,000	Pending
Sub-Total Matching Funds	\$340,000	\$0	\$340,000	
WSRF Rio Grande Basin Account	\$33,000	\$0	\$33,000	Secured
WSRF Statewide Account	\$297,000	\$0	\$297,000	
Sub Total	\$330,000	\$0	\$330,000	
Total Project Costs	\$670,000	\$0	\$670,000	

CWCB Project Manager: Rachel Pittinger

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(j)

**Applicant & Grantee:** San Luis Valley Water Conservancy District

Water Activity Name: Shaw Reservoir Rehabilitation Project

Water Activity Purpose: Municipal/Industrial, Nonconsumptive (Environmental) -

Implementation

County: Mineral

**Drainage Basin:** Rio Grande

Water Source: Shaw Reservoir

**Amount Requested:** \$40,000 Rio Grande Basin Account

\$302,600 Statewide Account \$342,600 Total Request

Matching Funds: Basin Account Match = \$40,000

13% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$342,600 (cash)
113% of the statewide request (meets 40% min)

Total Match (Basin request & Applicant Match) = \$382,600

• 126% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$40,000 from the Rio Grande Basin Account, and up to \$302,600 from the Statewide Account to help fund the project: Shaw Reservoir Rehabilitation Project

Water Activity Summary: The project includes rehabilitation of the Shaw Reservoir feeder ditch and headgate, upgrading the reservoir outlet works, lining the outlet pipe, and adding automated measurement and controls. The ditch and headgate were damaged in the West Fork Complex Fire. The applicant states this project will protect the ability for this precompact reservoir and recreation asset remain full a majority of the time and operate safely with greater flexibility. The applicant has partnered with the Bureau of Land Management, Mineral County, and Trout Unlimited.

If approved, the WSRF funds will be used in Task 3 to upgrade the reservoir outlet works and line the outlet pipe. The project would help preserve 680 acre feet of existing storage and improve 500 feet of piping.

**Discussion:** The proposal aligns the Rio Grande Basin Implementation Plan goals of maintaining healthy watersheds, keep the agricultural industry vibrant and resilient and comply with state statutes and compact entitlements while keeping water administration flexible, adaptive and creative.

Issues/Additional Needs: No other issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Mineral County	\$33,000	\$0	\$33,000	Secured
San Luis Valley Water Conservancy District	\$309,600	\$0	\$309,600	Secured
Sub-Total Matching Funds	\$342,600	\$0	\$342,600	
WSRF Rio Grande Basin Account	\$40,000	\$0	\$40,000	Secured
WSRF Statewide Account	\$302,600	\$0	\$302,600	
Sub Total	\$342,600	\$0	\$342,600	
Total Project Costs	\$685,200	\$0	\$685,200	

CWCB Project Manager: Cole Bedford

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(k)

**Applicant & Grantee:** Pagosa Area Water and Sanitation District

Water Activity Name: Snowball Water Treatment Plant Replacement

Water Activity Purpose: Municipal/Industrial - Implementation

County: Archuleta

**Drainage Basin:** San Juan River Basin

Water Source: San Juan River

Amount Requested: \$18,680 Southwest Basin Account

\$168,120 Statewide Account \$186,800 Total Request

Matching Funds: Basin Account Match = \$18,680

11% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$1,956,200 (cash)
1,163% of the statewide request (meets 40% min)
Total Match (Basin request & Applicant Match) =

\$1,974,880

• 1,174% of the statewide request (meets 50% min)

#### Staff Recommendation:

Staff recommends approval of up to \$18,680 from the Southwest Basin Account and \$168,120 from the Statewide Account to help fund the project: Snowball Water Treatment Plant Replacement

Water Activity Summary: The applicant was recently inspected under the Colorado Department of Public Health and Environment's (CDPHE) Disinfection Outreach and Verification Effort (DOVE). While CDPHE has not yet issued a formal DOVE determination letter, the existing Snowball Water Treatment Plant was identified as non-compliant with Colorado's Surface Water Treatment Rule (SWTR) during this effort. Per Regulation 11, Section 11.8(3)(b)(i)(A), the water provider must maintain disinfection treatment sufficient to ensure that the total treatment processes, including filtration and disinfection, achieve 99.9% treatment of Giardia lamblia cysts and 99.99% treatment of viruses, as determined by the department.

The existing design utilizing Microfloc Trident units offers limited removal credit for Giardia lamblia under this calculation and hinders the applicant's ability to comply with current and projected disinfection requirements. A Sanitary Survey, was conducted in June 2021 by CDPHE in which the department inspector concurred with the DOVE findings and informed PAWSD the DOVE team will be

providing additional information regarding the department's evaluation process under separate letter.

PAWSD is proactively seeking to address the limitations of the existing Snowball Water Treatment Plant in meeting the current and projected SWTR requirements, as well as, expand the treatment capacity to best utilize the 5 cfs pre-Compact water right by proposing a multiphase project to design and construct a new Snowball WTP. If approved, WSRF funds would be used to fund the final phase (91-100%) of engineering and design of the Water Treatment Plant.

**Discussion:** According to the Southwest Basin Roundtable approval letter, the proposed project helps meet the Southwest Basin Implementation Plan Measurable Goals or Outcomes by providing safe drinking water to Southwest Colorado's citizens and visitors.

Issues/Additional Needs: No issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Pagosa Area Water & Sanitation District	\$1,956,200	\$0	\$1,956,200	Secured
Sub Total Matching Funds	\$1,956,200	\$0	\$1,956,200	
WSRF Southwest Basin Account	\$18,680	\$0	\$18,680	Secured
WSRF Statewide Account	\$168,120	\$0	\$168,120	
Sub Total WSRF Funds	\$186,800	\$0	\$186,800	
Total Project Costs	\$2,143,000	\$0	\$2,143,000	

**CWCB Project Manager:** Matt Stearns

Water Supply Reserve Fund Water Activity Summary Sheet March 15-16, 2022 Agenda Item 25(I)

**Applicant & Grantee:** Town of Pagosa Springs

Water Activity Name: Recreational & Ecological Enhancement of the San Juan

River - Yamaguchi South

Water Activity Purpose: Municipal/Industrial, Nonconsumptive (Environmental &

Recreational) - Implementation

County: Archuleta

**Drainage Basin:** San Juan River Basin

Water Source: San Juan River

**Amount Requested:** \$16,618 Southwest Basin Account

\$149,562 Statewide Account \$166,180 Total Request

Matching Funds: Basin Account Match = \$16,618

11% of statewide request (meets 10% min)
Applicant & 3rd Party Match = \$476,040 (cash)
318% of the statewide request (meets 40% min)

**Total Match** (Basin request & Applicant Match) = \$492,658

• 329% of the statewide request (meets 50% min)

# Staff Recommendation:

Staff recommends approval of up to \$16,618 from the Southwest Basin Account and \$149,562 from the Statewide Account to help fund the project: Recreational & Ecological Enhancement of the San Juan River - Yamaguchi South

Water Activity Summary: The San Juan River forms the "foundational infrastructure" for the Town of Pagosa Springs local recreational and economic tourism-based activities including boating, fishing, trails, and bird watching. While downtown Pagosa Springs currently offers a variety of recreation opportunities, river access is restricted.

If approved, WSRF funds will be used for installing various new and/or improved river access points (graded/gravel boat ramp, wading/swimming holes), channel features (sand bars, whitewater wave, riffles and pools) along the banks of Yamaguchi South to enhance recreation options at various river flows, reduce access conflicts, create geomorphology more resilient to hydrological and sediment deposition changes, install channel and streambank shaping, create diverse aquatic habitat that support cold water trout and native fish populations in the face of drought and climate change, and will also improve the water irrigation system for Yamaguchi Park including a new in-stream rock diversion

structure with headgate and an open water delivery ditch to an adjacent wetland pond that would be used for irrigation water storage and wetland pond habitat.

**Discussion:** The proposed project helps meet the Southwest Basin Implementation Plan Measurable Goals or Outcomes by maintaining protecting and enhancing recreational values and economic values and improving the condition and natural function of streams. The project also aligns with environmental and recreation goals and objectives of the Water Plan.

**Issues/Additional Needs:** If approved, the applicant must secure match funding prior to contracting. No other issues or 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 Sources/Match	Cash	In-Kind	Total	Status
Town of Pagosa Springs	\$96,000	\$0	\$96,000	Secured
Archuleta County	\$10,000	\$0	\$10,000	Secured
Southwest Water Conservation District	\$30,000	\$0	\$30,000	Secured
Trout Unlimited	\$3,000	\$0	\$3,000	Secured
Friends of the Upper San Juan	\$750	\$0	\$750	Secured
The Nature Conservancy	\$3,180	\$0	\$3,180	Secured
Weminuche Audobon	\$750	\$0	\$750	Secured
CWCB Water Plan Grant Env/Rec	\$332,360	\$0	\$332,360	Pending
Sub Total Matching Funds	\$476,040	\$0	\$476,040	
WSRF Southwest Basin Account	\$16,618	\$0	\$16,618	Secured
WSRF Statewide Account	\$149,562	\$0	\$149,562	
Sub Total WSRF Funds	\$166,180	\$0	\$166,180	
Total Project Costs	\$642,220	\$0	\$642,220	

CWCB Project Manager: Andrea Harbin-Monahan