

Department of Natural Resources

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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Ben Wade & Dori Vigil

Water Supply Planning Section

DATE: May 2, 2023

AGENDA ITEM: Agenda 25 a-g, 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

Water Supply Reserve Fund (WSRF) Grant Program and Public Education Participation & Outreach (PEPO) Grant Program Balance Summaries

	CURR	RENT WSRF GRANT BA	ALANCE & PEPO CONTI	RACT BY BASIN		
Basin	Starting Balance October 1	Stimulus*	Native Funds	CWCB Approved	Spending Needed**	PEPO Contract***
Arkansas	\$1,000,000	\$0	\$833,805	\$0	\$383,805	Approved
Colorado	\$1,000,000	\$0	\$380,476	\$0	\$0	Approved
Gunnison	\$1,000,000	\$0	\$759,302	\$0	\$309,302	Approved
Metro	\$1,000,000	\$0	\$805,500	\$0	\$355,500	Approved
North Platte	\$1,000,000	\$0	\$929,172	\$0	\$479,172	Available
Rio Grande	\$1,000,000	\$0	\$910,000	\$0	\$460,000	Approved
South Platte	\$1,000,000	\$0	\$511,000	\$0	\$61,000	Approved
Southwest	\$1,000,000	\$0	\$614,332	\$0	\$164,332	Approved
Yampa-White-Green	\$1,000,000	\$0	\$406,038	\$0	\$0	Approved
		CURRENT PEPO G	RANT REMAINING BAL	ANCES		
PEPO Coordinator Funds Remaining	\$25,000					
Statewide PEPO Grants	\$775,000					
Total Basin Funds (WSRF & PEPO)	\$6,949,625					
		CURRENT WSRF ST	TATEWIDE ACCOUNT BA	ALANCE		
Statewide WSRF Reserve	\$8,316,391					
Statewide WSRF Grants****	\$6,704,527					
Total Statewide Funds	\$15,020,918					

^{*}Time sensitive funds need to be allocated by CWCB Board by May 2023 Meeting.

^{**}Spending needed is necessary spending by end of current fiscal year in order to receive full annual allocation.

^{***25,000} PEPO Contract for Basin PEPO Coordinator submission status

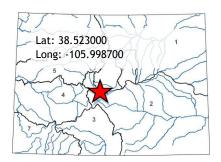
^{****} The first WSRF Statewide Grant application deadline is December 1, 2022.



Data Collection Network Upgrade & Expansion Upper Arkansas Water Conservancy District

May 2023 Board Meeting - 25a

Water Supply Reserve Grant Application



LOCATION

Counties: Chaffee, Custer, Fremont

Drainage Basin: Arkansas

DETAILS	
Total Project Cost:	\$200,896
Total WSRF Grant Request:	\$130,582
Arkansas Basin Account Request:	\$50,225
Statewide Account Request:	\$80,357
Recommended Amount:	\$130,582
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$70,314
Project Type(s): Construction/Implementation	
Water Use Type: Municipal	
Statewide Category: Drought Resiliency	
Measurable Result: 14 Updated data collection	platforms for

continued water measurements for use throughout the district, basin & state; 3 new data collection platforms

The applicant has an extensive network of data collection platforms to measure streams, tributaries, and reservoirs that are used to operate their blanket augmentation decrees. The National Oceanic and Atmospheric Administration (NOAA) Geo-stationary Operational Environmental Satellite West Data Collection System has changed the Certification Standard requirement stating that all CS1 transmitters must be replaced with CS2 transmitters that use less bandwidth when sending data by the end of May 2026. Due to these new rules, the applicant is requesting WSRF to help update its aging infrastructure on the existing 14 DCP stations with new transmitters and new data loggers to continue receiving accurate data and maintain compliance with NOAA's updated standard.

In addition to updating the existing data collection platforms, the applicant is requesting WSRF funds to assist in expanding its network and install three new data collection platforms at the following locations: Thompson Ditch, Wenke Pond, and the Silver Creek Ronk Augmentation Station. Each data collection platform will consist of equipment housing, a discharge measurement control structure, data logging and transmission equipment, a grounding system, and a solar system. One will be in Custer County and the other two in northern Chaffee County. The new data sets from each side of the applicant's district will allow water supplies to be more accurately measured, tracked through the delivery system, and distributed, resulting in more efficient water use and drought response.

The project aligns with goals of the Arkansas Basin Implementation Plan.

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

Funding Recommendation: Staff recommends approval of up to \$50,225 from the Arkansas Basin Account and up to \$80,357 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Airborne Snow Observatory Snow Mapping in the Colorado River System - Water Years 2023 & 2024 Colorado River Water Conservation District

May 2023 Board Meeting - 25b

Water Supply Reserve Grant Application



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DETAILS	
Total Project Cost:	\$462,270.47
Total WSRF Grant Request:	\$241,770.47
Colorado Basin Account Request:	\$241,770.47
Recommended Amount:	\$241,770.47
Other CWCB Funding:	\$0
Other Funding Amount:	\$145,500
Applicant Match:	\$75,000
Project Type: Other - Planning	
Major Water Use Type: (None listed)	
Measurable Result: 500,000 Coloradoans im	pacted by

LOCATION Counties: Eagle, Garfield, Grand, Mesa, Pitkin, Summit Drainage Basin: Colorado

engagement activity & impacted by incorporating watersaving actions into land use planning

The applicant has proposed a multi-year project that will help expand and sustain the Airborne Snow Observatory flights to measure snowpack within the Colorado River system.

Matching funds will help support two Water Year 2023 snow survey flights during the spring in the Fryingpan and Upper Roaring Fork watersheds. If approved, WSRF funds will help fund Water Year 2024 flights for continued support for the Roaring Fork and Fryingpan program. Funding will also provide support for program expansion into other Colorado Basin watersheds.

These projects, enabled in part by snow-free baseline data funded by the CWCB, and with strong support and financial contributions from other local water entities, will provide an inventory of the mountain snowpack that supplies the majority of runoff in the Roaring Fork River and other primary headwaters snowmelt sources of the Colorado River system.

This improved snowpack inventory capacity supports the six Colorado Basin Roundtable Basin wide Themes, Strategies, and Goals.

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

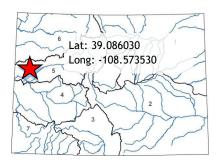
Funding Recommendation: Staff recommends approval of up to \$241,770.47 from the Colorado Basin Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



ML 260 Piping Project Grand Valley Irrigation Company

May 2023 Board Meeting - 25c

Water Supply Reserve Grant Application



LOCATION
County: Mesa
Drainage Basin: Colorado

DETAILS	
Total WSRF Project Cost:	\$466,070
Total WSRF Grant Request:	\$189,950
Colorado Basin Account Request:	\$48,000
Statewide Account Request:	\$141,950
Recommended Amount:	\$189,950
Other CWCB Funding:	\$0
Other Funding Amount:	\$40,000
Applicant Match:	\$236,120
Project Type(s): Design & Construction	
Water Use Type: Agricultural	
Statewide Category: Aging Infrastructure	
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Measurable Result: \$10,500 & 45 acre-feet efficiency savings per year; 2,997 Coloradoans impacted by incorporating water saving actions into land use planning; 50 Coloradoans impacted by engagement activity.

The applicant, Grand Valley Irrigation Company, owns and operates the mainline 260 lateral in the City of Grand Junction, most of which is already piped. There is an approximately 3,540-foot stretch of the lateral that is an aging concrete, trapezoidal ditch. If approved, WSRF funds would be used to cover the cost for the bulk of materials needed to complete the project: 24" PVC pipe, fittings, manholes, and fill material.

The applicant is hoping to achieve the following project objectives:



- 1) Reduce maintenance as the ditch is 50-60 years old with "significant" degradation. The applicant states most of the ditch is cracked permitting seepage loss and root growth. Piping the ditch reduces the monthly need to remove silt & roots as well as concrete work to patch the ditch during the wintertime.
- 2) Improve water quality the applicant believes piping the ditch would help eliminate silt and debris that affects the shareholder's pumps.
- 3) Ensure public safety the risk of drowning or injury due to the open channel will be reduced once the ditch is enclosed.
- 4) Conserve water the applicant estimates 45 acre feet of water is currently lost to seepage each year.
- 5) Reducing the salt load on the Colorado River the applicant estimates piping the ditch will prevent approximately 153 tons of salt from entering the river each year.

This project aligns with the Colorado Basin Implementation Plan.

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

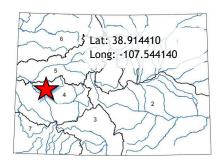
Funding Recommendation: Staff recommends approval of up to \$48,000 from the Colorado Basin Account and up to \$141,950 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Stewart Mesa Canal Diversion Modification & Restoration Trout Unlimited - Denver

May 2023 Board Meeting - 25d

Water Supply Reserve Grant Application



LOCATION
County: Delta
Drainage Basin: Gunnison

DETAILS			
Total Project Cost:	\$391,975		
Total WSRF Grant Request:	\$305,000		
Gunnison Basin Account Request:	\$39,198		
Statewide Account Request:	\$265,802		
Recommended Amount:	\$305,000		
Other CWCB Funding:	\$0		
Other Funding Amount:	\$86,975		
Applicant Match:	\$0		
Project Type(s): Construction/Implementation			
Water Use Type: Agricultural			
Statewide Category: Aging Infrastructure			
Measurable Result: 15,000 linear feet of restore	d or		
protected length of stream; 4 acres of restored or preserved			
habitat; and 665 feet of canal improved.			

The applicant states the proposed project meets the identified criteria for Statewide Account grant request for aging infrastructure that aims to secure and repair irrigation diversion structures. If approved, WSRF funds will be used to aid in water conveyance and delivery to agricultural users and replace the current impaired headgate and in-channel diversion. While the overall project cost is over \$1 million, the WSRF total project cost to help fund construction & project management is \$391,975. The CWCB Board also awarded a Water Plan grant and a WSRF grant in 2021 for this project.

The Stewart Mesa Canal Diversion is currently a 1,200-foot-long push-up dam and an undersized and antiquated headgate. The existing dam structure elevates water to allow for diversion at low flows. At high flow the river breaks through rock and cobble dam and overtops the diversion structure. The dam also pushes water to the north bank away from the diversion during high flows causing erosion and widening of the river. The diversion structure can prove difficult to navigate for boaters and can be dangerous at high-flow event. During low flow the dam is a barrier to fish that are trying to navigate upstream. The canal intake removes fish from the river due to the dam and diversion configuration. The applicant and project partners have surveyed the river and diversion works, developed designs and two-dimensional hydraulic models for creating water surface elevations necessary to divert water while allowing fish passage and addressing erosion. The proposed construction project aims to improve fish and boat passage in the North Fork Gunnison River at the Stewart Diversion site, while replacing aging and inadequate infrastructure, enhancing diversion stability, and minimizing long term impacts to the riverine and riparian environment in the project reach.

The project aligns with themes and meets goals in the Gunnison Basin Implementation Plan as well as values stated in the Water Plan.

Issues/Additional Needs: If approved, all three grants will not exceed the limit of CWCB funding more than 75% of a project. No other issues or additional needs have been identified.

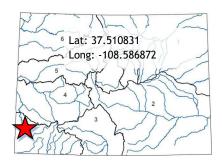
Funding Recommendation: Staff recommends approval of up to \$39,198 from the Gunnison Basin Account and up to \$265,802 of Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Increased Application Efficiency for Center Pivot Irrigation Dolores Water Conservancy District

May 2023 Board Meeting - 25e

Water Supply Reserve Grant Application



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Counties: Dolores, Montezuma **Drainage Basin:** Southwest

DETAILS	
Total Project Cost:	\$133,500
Total WSRF Grant Request:	\$100,000
Southwest Basin Account Request:	\$100,000
Recommended Amount:	\$100,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$33,500
Project Type(s): Construction/Implementation	

Major Water Use Type: Agricultural

Measurable Result: Efficiency savings of 367 acre feet/year; 20 Coloradans impacted by incorporating water saving actions into Land Use Planning; Other – Document less runoff & improved soil health

The Dolores/McPhee project was completed over 30 years ago, delivering irrigation water to the traditionally dryland-farmers in Montezuma and Dolores counties. These Full-Service Area farmers (FSA) were required to achieve a high application efficiency from irrigation systems to qualify for water access. Sprinkler irrigation is significantly more efficient than flood irrigation and FSA producers quickly installed side-roll and center pivot irrigation systems in anticipation for developing an irrigated farming economy, primarily growing high quality alfalfa in lieu of the traditional wheat and beans. These systems are older and inefficient after years of irrigating with water from the project filled with organic solids and soil, thus degrading nozzles and system equipment.

If approved, WSRF funds will be used to purchase and install new nozzles and pressure regulators for irrigators who still use aging, and inefficient center pivot systems. The applicant believes these improvements will result in water conservation through re-engineered water use that is specific to crop Evapotranspiration (ET) and crop growth stage. Additionally, the applicant states soil health/conservation practices will occur through decreased surface soil erosion, crusting from drop impact, and increased infiltration.

While no Statewide Account funds are being requested, the applicant states the project supports agricultural drought resiliency.

As stated in the Southwest Basin Implementation Plan, "Hydrologic scenarios impacted by climate change severely affect agricultural water supplies, but with implementation of efficiencies and innovative technologies, these impacts can be reduced". The proposed project will help meets this goal.

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

Funding Recommendation: Staff recommends approval of up to \$100,000 from the Southwest Basin Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Yampa River Corridor Project City of Craig

May 2023 Board Meeting - 25f

Water Supply Reserve Grant Application



LOCATION
County: Moffat
Drainage Basin: Yampa River

DETAILS			
Total Project Cost:	\$1,000,000		
Total WSRF Grant Request:	\$200,000		
Y/W/G Basin Account Request:	\$100,000		
Statewide Account Request:	\$100,000		
Recommended Amount:	\$200,000		
Other CWCB Funding:	\$0		
Other Funding Amount:	\$697,085		
Applicant Match:	\$102,915		
Project Type(s): Construction/Implementation			
Water Use Type: Municipal			
Statewide Category: Aging Infrastructure			
Measurable Result: (No measurable results provided)			

The vision for the Yampa River Corridor Project is to create a cohesive park system along the Yampa River just south of the City of Craig. If approved, WSRF requested funds would only be applied towards construction of the instream improvements at the whitewater park location, specifically the drop structures. The estimated costs for the *overall* project are just under \$5 million. The WSRF total project cost for the drop structures is \$1 million. The multiple project partners and their contributions are listed on the application to show the overall support for the project. The applicant expects to begin construction in September 2023 due to specific US Army Corps of Engineer permit restrictions.

The comprehensive project consists of three related components:

- 1.) Loudy Simpson Park improvements will include construction of a new concrete boat ramp, access road and parking area.
- 2.) A fish-friendly, in-channel recreational water feature to be constructed near Craig's municipal water intake structure. The existing degraded municipal water intake diversion dam will be reconstructed to include two navigable whitewater drop structures with associated fish passage structures. Riverward improvements will also include two small bank-side amphitheater structures, bank stabilization efforts and integrated river access points. 540 linear feet of the Yampa River will be impacted, and the project will require wetland/instream mitigation.
- 3.) Onshore amenities will be constructed adjacent to the in-channel water feature to create the beginnings of an integrated river park complex. This component will include access road, parking areas, walking trails, vault toilet and nature-based play areas.

This project was identified in the 2015 Basin Implementation Plan as well as the 2022 BIP.

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

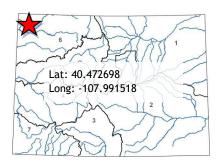
Funding Recommendation: Staff recommends approval up to \$100,000 from the Yampa White Green Basin Account and up to \$100,000 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Maybell Diversion & Headgate Construction The Nature Conservancy

May 2023 Board Meeting - 25g

Water Supply Reserve Grant Application



LOCATION

County: Moffat

Drainage Basin: Yampa/White/Green

\$1,264,442 Total Project Cost: **Total WSRF Grant Request:** \$951,884 YWG Basin Account Request: \$150,000 Statewide Account Request: \$801,884 \$951,884 **Recommended Amount:** Other CWCB Funding: \$0 Other Funding Amount: \$0 \$312,558 Applicant Match: Project Type(s): Construction/Implementation

DETAILS

Water Use Type: Agricultural

Statewide Category: Aging Infrastructure

Measurable Result: 2,000 linear feet of stream restored or protected; 10 acres of restored or preserved habitat; 90 Coloradans impacted by engagement activity; and Other: increased control & measurement of ag water at the diversion.

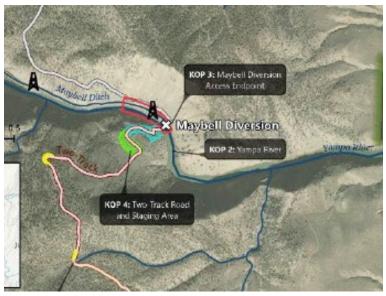
faceted project that has received previous WSRF and Water Plan grants over the past 5 years. If approved, the current proposal will help cover

The Maybell Diversion Project has been a multi-

approved, the current proposal will help cover the increased cost of materials, site work, and road development and maintenance as part of the Maybell diversion and headgate construction project. Since

2021, the rising cost of construction materials, labor, fuel, and contractor fees escalated overall costs. The *WSRF* total project cost of the current request is over \$1.2 million but the overall project is \$5.3 million and has multiple project partners contributing funds to complete the project.

The applicant believes that construction of a new Maybell diversion, once complete, will provide agricultural water security and allow passage of fish and paddlers at a location that currently impedes fish movement and poses a boating hazard. Maybell Irrigation District operates the largest diversion on the Yampa that serves 18 producers and over 1,200 acres of hay pasture.



The project aligns with several goals identified in the Yampa-White-Green Basin Implementation Plan.

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

Funding Recommendation: Staff recommends approval of up to \$150,000 from the Yampa/White/Green Basin Account and up to \$801,884 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.