

COLORADO Colorado Water Conservation Board Department of Natural Resources 1313 Sherman Street, Room 718 Denver, CO 80203

P (303) 866-3441

F (303) 866-4474

Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Lauren Ris, CWCB Director

- TO: Colorado Water Conservation Board Members
- FROM: Ben Wade & Dori Vigil Water Supply Planning Section

DATE: September 5, 2024

AGENDA ITEM: Agenda Item #12a-f, 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 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, verify that the water activity meets the eligibility requirements and also verifies that the applicant was an eligible entity to receive funding which are primarily outlined in the Grant Guidelines.
- 2) Staff then prepares the Water Activity Summary Sheet which documents the outcome of the review process and contains staff's recommendations.



Interstate Compact Compliance • Watershed Protection • Flood Planning & Mitigation • Stream & Lake Protection

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.



Interstate Compact Compliance • Watershed Protection • Flood Planning & Mitigation • Stream & Lake Protection

	1	1	Water Sup	ply Reserve Fund Application	s for Consider	ation at the Se	ptember 2024 CV	/CB Board Me	eting	1		1]			
Agenda Item	Statewide Project Category	Basin	Applicant/Grantee	Name of Water Activity	Basin(s) Account Request	Statewide Account Requests	RT Recommended Amount	Non-WSRF Cash Match	Non-WSRF In- Kind Match	Non-WSRF Total Match	Statewide Match (Basin & Non-WSRF)	Project Costs	Basin Only Request Match % (min 25%)	10%/annlicant	PM	Grants Portal ID
Agenda Item 12a	Aging Infrastructure	Gunnison	Goddard Enterprises	Home Ditch Diversion Reconstruction	\$40,000	\$100,694.75	\$140,694.75	\$140,694.76	\$0	\$140,694.76	\$180,694.76	\$281,389.51	N/A	64.22%	Joshua	App-02502
Consent Agenda 3a	N/A	Metro	Ducks Unlimited	Tamarack State Wildlife Area: Well 17	\$75,000	\$0	\$75,000	\$338,026	\$0	\$338,026	N/A	\$413,026	81.84%	N/A	Andrea	App-02491
Consent Agenda 3b	N/A	Metro South Platte	Colorado Watershed Assembly	Youth Development, Water Education, and the Colorado Water Plan (Year Zero)	\$46,875 \$46,875	\$0	\$93,750	\$45,782	\$20,625	\$66,407	N/A	\$160,157	41.46%	N/A	Ben	App-02471
Director's Report	N/A	Metro South Platte	Lincoln Hills Cares	South Platte Youth River Summit	\$15,000 \$5,000	\$0 \$0	\$20,000	\$200,000	\$0	\$200,000	N/A	\$220,000	90.91%	N/A	Ben	App-02482
Agenda Item 12b	Aging Infrastructure	Metro South Platte	Wadley Farms 3 Homeowner's Association	Lake #1 Improvements	\$40,000 \$20,000	\$100,000	\$160,000	\$384,500	\$0	\$384,500	\$424,500	\$544,500	N/A	77.96%	Zach	App-02484
Director's Report	N/A	Rio Grande	Colorado Master Irrigator	Colorado Master Irrigator - Moisture Probe Project	\$45,677.00	\$0	\$45,677.00	\$31,177	\$0	\$31,177	N/A	\$76,854.00	45.55%	N/A	Nora	App-02518
Director's Report	N/A	Rio Grande	Rocky Mountain Bird Observatory, dba Bird Conservancy of the Rockies	Venetero Creek Restoration Project	\$42,997.96	\$0	\$42,997.96	\$21,600	\$21,400	\$43,000	N/A	\$85,997.96	50.64%	N/A	Andrea	App-02512
Director's Report	N/A	South Platte	Boulder & White Rock Ditch & Reservoir Company	6 Mile Reservoir Improvement Project	\$26,078	\$0	\$26,078	\$26,077	\$1,800	\$27,877	N/A	\$53,955	51.67%	N/A	Ben	App-02495
Agenda Item 12c		South Platte	Dixon Canyon Ditch & Reservoir Company	Dixon Irrigation Improvement Project	\$15,000	\$97,414	\$112,414	\$37,471	\$0	\$37,471	\$52,471	\$149,885	N/A	35.01%	Zach	App-01513
Director's Report	Aging Infrastructure	I South Platta	Farmers Independent Ditch Company	Farmers Independent Ditch Lining Project Feasibility Study	\$12,337.50	\$24,675	\$37,012.50	\$9,250	\$3,087.50	\$12,338	\$24,675	\$49,350	N/A	50.00%	Ben	App-01509
Consent Agenda	N/A	South Platte	Greeley Irrigation Company	Greeley Irrigation Company Data Accuracy Project	\$59,122.00	\$0	\$59,122.00	\$30,000	\$15,000.00	\$45,000	N/A	\$104,122	51.16%	N/A	Ben	App-01508
3e Agenda Item 12d		South Platte	Highland Ditch Company	Foothills Reservoir Firming Project	\$28,000	\$99,000	\$127,000	\$150,000	\$0	\$150,000	\$178,000	\$277,000	N/A	64.26%	Zach	App-02485
Director's Report	N/A	South Platte	North Front Range Water Quality Planning Association	Regional GIS Sanitary Sewer System Map - Region 2	\$18,750	\$0	\$18,750	\$6,250	\$0	\$6,250	N/A	\$25,000	25.25%	N/A	Andrea	App-02489
Director's Report	Aging Infrastructure	South Platte	Osborn Lateral Ditch Company	Osborn Lateral Ditch Loss Mitigation Project	\$4,536	\$27,217	\$31,753	\$2,268	\$2,268	\$4,536	\$9,072	\$36,289	N/A	25.00%	Ben	App-01487
Consent Agenda 3c	N/A	Southwest	Morrison Consolidated Ditch Company	Morrison Ditch Heading Wall & Parshall Flume	\$89,095	\$0	\$89,095	\$36,365	\$0	\$36,365	\$125,460	\$125,460	28.99%	N/A	Ben	App-02462
Agenda Item 12e	Aging Infrastructure	Y/W/G	Bear River Reservoir Company	Stillwater Reservoir Downstream Blanket Drain	\$24,000	\$144,000	\$168,000	\$72,000	\$0	\$72,000	\$96,000	\$240,000	N/A	40.00%	Joshua	App-02469
Agenda Item 12f		Y/W/G	Colorado Ag Water Alliance	Upper Yampa Reservoir Rehabilitation - Phase 1	\$20,000	\$92,263	\$112,263	\$45,000	\$19,730	\$64,730	\$84,730	\$176,993	N/A	47.87%	Joshua	App-02515
Consent Agenda 3d	N/A	Y/W/G	Community Agriculture Alliance, Inc	Yampa-White-Green Education & Outreach 2025 to 2027	\$68,250 \$742,593.46	\$0 \$685,264	\$68,250 \$1,427,857.21	\$20,350	\$2,400	\$22,750	N/A	\$91,000	25.00%	N/A	Ben	App-02519
				Basin Arkansas Basin	Basin Account Requests \$0	Statewide Account Requests \$0	Total Requests \$0									
				Colorado Basin	\$0	\$0	\$0									
				Gunnsion Basin	\$40,000.0	\$100,694.75	\$140,695									
				Metro	\$176,875.0	\$50,000.00	\$226,875									
				North Platte	\$0	\$0	\$0									
				Rio Grande	\$88,675.0 \$89,095,0	\$0 \$0	\$88,674.96 \$89,095									
				Southwest South Platte	\$89,095.0 \$235,698.5	\$0 \$298,306.00	\$89,095 \$534,005									
				Yampa/White/Green	\$112,250.0	\$236,263.00	\$348,513									
				Water Supply Reserve Fund Total Requests	\$742,593.46	\$685,263.75	\$1,427,857.21									





September 2024 Board Meeting - 12a

	DETAILS				
find the stand	Total Project Cost:	\$281,389.50			
Lat: 38.597060 Long: -106.903650	Total WSRF Grant Request:	\$140,694.75			
5 YU YU	Gunnison Basin Account Request:	\$40,000			
men white the first	Statewide Account Request:	\$100,694.75			
a property of the second secon	Recommended Amount:	\$140,694.75			
L'A "	Other CWCB Funding:	\$0			
JINITAD	Other Funding Amount:	\$140,694.75			
	Applicant Match:	\$0			
	Project Type: Construction/Implementati	on			
LOCATION	Water Use Type: Agriculture				
County: Gunnison					
Drainage Basin: Gunnison	Statewide Category: Aging Infrastructure				
	Measurable Result: 112 linear feet of stream restored or				
	protected; 112 feet of pipe, canal built or improved; 1 acre of restored or preserved habitat; 27 Coloradans impacted by				
	engagement activity.				

Water Supply Reserve Grant Application

The purpose of this project is to reconstruct the in-stream diversion and headgate structure of the Home Ditch so the full decree, of 14.5 cfs, can be delivered and used to irrigate 185 acres. The proposed project is a coordinated effort between five water rights owners including two agricultural operations and three subdivisions. The Home Ditch is on the Gunnison River approximately 4 miles north of the City of Gunnison.

The existing ditch headgate is perched on an eroded bank and is non-functional. An engineering firm has completed the design work for the project. The new diversion will be a rock weir with 4-8-foot boulders, shaped as a downstream widening arch. This will raise water surface elevation and prevent over topping flows from eroding the structure. It will be lower in the center to concentrate low flows and allow fish passage. This elevation will be equivalent to the minimum necessary to divert water. A sluice gate will be installed adjacent to an adjustable headgate to reduce sediment build up at the ditch inlet.

The applicant states the project will also improve bank stability, and fish habitat while maintaining adequate fish and recreational use passage. WSRF funds will be used to purchase materials and for construction costs. The matching funds for the project are coming from multiple private ranchers and HOAs.

The project aligns with the Gunnison Basin Implementation Plan.

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

Funding Recommendation: Staff recommends approval of up to \$40,000 from the Gunnison Basin Account and up to \$100,694.75 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Wadley Farms Lake #1 Dam Rehab & Pipeline Project Wadley Farms 3 Homeowner's Association

September 2024 Board Meeting - 12b

Water Supply Reserve Grant Application

	DETAILS				
Ehme have the	Total Project Cost:	\$544,500			
A TIL	Total WSRF Grant Request:	\$160,000			
5	Metro Basin Account Request:	\$40,000			
ment have been	So Platte Basin Account Request:	\$20,000			
	Statewide Account Request:	\$100,000			
Lat: 39.959649 7 Long: -104.941805	Recommended Amount:	\$160,000			
JE CARA -~~	Other CWCB Funding:	\$0			
	Other Funding Amount:	\$0			
	Applicant Match:	\$384,500			
LOCATION	Project Type: Design & Construction				
County: Adams					
Drainage Basin: South Platte	Water Use Type: Municipal				
	Statewide Category: Aging Infrastructure				
applicant was awarded a WSRF grant in	Measurable Result: 37-acre feet of preserved or enhanced storage; 2,500 feet of pipe or canal built; 20 acre-feet of efficiency savings; 250 Coloradans impacted by incorporating				
ipplicatic was awarded a work grant in					

The applicant was awarded a WSRF grant in November 2023 to help support permitting, water saving actions into land use planning.

engineering and design for the rehabilitation of Lake #1 and construction of a gravity pipeline between Lakes #1 and #3. Clean Water Section 404 permitting for the project is now complete and the design is currently underway.

The current proposal to rehabilitate Lake #1 involves expanding reservoir storage through a combination of excavation and raising the existing dam embankment, constructing a gravity low-level outlet, installing a toe drain below the dam to control seepage through the embankment, and installing riprap on the upstream slope of the dam. Construction of the new low-level outlet will include a new irrigation pump station with a bypass installed below the dam which will replace the existing system designed over 40 years ago. The project also includes a new gravity pipeline between Lakes #1 and #3 that will reduce seepage losses associated with the existing swale currently used to transfer water between lakes.

The primary beneficiaries of the project will be the residents of the HOA, but the surrounding community will also benefit from increased storage at Lake #1 and improved operations of the applicant's water supply system. The applicant's shares are used for irrigation and for storing water designated for fire protection in dry years. Improving the applicant's supply system through the construction of this project could also reduce the possibility of using individual wells for irrigation in the future. The current HOA covenants prohibit outdoor irrigation with individual deep wells.

The applicant is in the process of applying for a CWCB loan to use as matching funds. The project aligns with the South Platte Basin Implementation Plan.

Issues/Additional Needs: Prior to contracting, the applicant must secure the loan to meet the match requirements. No other issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$40,000 from the Metro Basin Account, up to \$20,000 from the South Platte 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.



Dixon Irrigation Improvement Project Dixon Canyon Ditch & Reservoir Company

September 2024 Board Meeting - 12c

Water Supply Reserve Grant Application

	DETAILS				
and and a start of the start of	Total Project Cost:	\$149,855			
	Total WSRF Grant Request:	\$112,414			
	South Platte Basin Account Request:	\$15,000			
wenning to all the	Statewide Account Request:	\$97,414			
	Recommended Amount:	\$112,414			
Lat: 40.549994 CLong: -105.140931	Other CWCB Funding:	\$0			
	Other Funding Amount:	\$0			
	Applicant Match:	\$37,471			
LOCATION	Project Type: Design & Construction				
County: Larimer	Water Use Type: Agricultural				
Drainage Basin: South Platte	Statewide Category: Aging Infrastructure				
	Measurable Result: 350 feet of pipe/canal built or improved; \$7,000 of efficiency savings per year; 100 acre-feet of efficiency savings; 167,000 Coloradans impacted by incorporating water saving actions into land use planning and impacted by engagement activity.				

The applicant's existing water delivery system infrastructure from the dam headgate through cleanouts 0-2, inoperable flume are over 70 years old (approximately 350 feet of open pond, flume, and piping). The system has been experiencing issues relating to inefficient delivery operations, water conservation, environmental risk, and human safety.

The purpose of this project is to upgrade a specific section of the current delivery system through renovation and removal of the older infrastructure and replacing the aging infrastructure with an improved headgate flow control, measurement and transmission system, new covered cleanouts, and enclosed piping. If fully implemented, the applicant estimates this project will result in the following long-term improvements:

- Water conservation and system flow reliability
- Reduced environmental and community risk due to flood or spillage
- Elimination of current human and community safety and liability issues
- Reduction in recurring annual repair and maintenance costs due to system age and condition
- Seasonal manpower/labor operational cost reduction

The project aligns with the South Platte Basin Implementation Plan.

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

Funding Recommendation: Staff recommends approval of up to \$15,000 from the South Platte Basin Account and up to \$97,414 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



September 2024 Board Meeting - 12d

Water Supply Reserve Grant Application

	DETAILS				
and and a second	Total Project Cost:	\$277,000			
	Total WSRF Grant Request:	\$127,000			
	South Platte Basin Account Request:	\$28,000			
and the for the for	Statewide Account Request:	\$99,000			
Lat: 40.189025	Recommended Amount:	\$127,000			
۲	Other CWCB Funding:	\$0			
SHIMA IN	Other Funding Amount:	\$50,000			
	Applicant Match:	\$100,000			
	Project Type: Design/Engineering				
	Water Use Type: Agricultural				
County: Boulder Drainage Basin: South Platte	Statewide Category: Aging Infrastructure				
	Measurable Result: 3,700-acre feet of existing storage preserved or enhanced; 2,590 feet of stream restored or protected; 4,000 feet of pipe/canal built or improved; 379 Coloradans impacted by incorporating water saving actions into land use planning and impacted by engagement activity.				

The applicant is the largest mutual ditch company that diverts off the St. Vrain Creek. The ditch company was incorporated in 1872 and irrigates approximately 35,000 acres.

If approved, the project will allow the applicant to sustainably gain access to approximately 3,700 acrefeet of water that it has been unable to utilize in recent years due to dwindling exchange options along the St Vrain Creek. Without this project, the applicant will be forced to reduce the amount of water issued to their 379 shareholders. Each shareholder will lose an average of 5 acre-feet.

Once the project is complete, the shareholders will use the additional water for higher yields, producing additional revenue to the local economy. The project may also result in additional return flows to farms down-gradient. The project is multi-benefit, as the plan will create a new environmental flow of 25 cfs from the Highland Diversion downstream to the next priority diversion improving fish passage and aquatic habitat.

WSRF grant funds would be used to assist in completing the engineering and design phase of the project. The current estimated cost for the entire construction project is \$6 million.

Issues/Additional Needs: The applicant must provide a letter of match commitment prior to contracting. No other issues or additional needs have been identified.

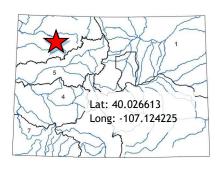
Funding Recommendation: Staff recommends approval of up to \$28,000 from the South Platte Basin Account and up to \$99,000 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Stillwater Reservoir Downstream Blanket Drain Bear River Reservoir Company

September 2024 Board Meeting - 12e

Water Supply Reserve Grant Application



LOCATION				
Counties: Garfield, Routt				
Drainage Basin: Yampa/White/Green				

DETAILS				
Total Project Cost:	\$240,000			
Total WSRF Grant Request:	\$168,000			
Y-W-G Basin Account Request:	\$24,000			
Statewide Account Request:	\$144,000			
Recommended Amount:	\$0			
Other CWCB Funding:	\$0			
Other Funding Amount:	\$48,000			
Applicant Match:	\$24,000			
Project Type: Construction/Implementation				
Water Use Type: Agricultural				
Statewide Category: Aging Infrastructure				
Measurable Result: 6,088-acre feet of existing storage				
preserved or enhanced; Other: "Improved safety of the dam structure".				

The applicant is a private not-for-profit reservoir company that owns Stillwater Reservoir. The Division of Water Resources placed a storage restriction on the reservoir in 2019 due to safety concerns.

The applicant will use WSRF funds to design and construct a downstream blanket drain on the north hillside and west abutment groin area immediately downstream of the west abutment. The drain's purpose is to provide a filtered exit for seepage, both through and/or around the left abutment, and for natural flows from the hillside adjacent to the abutment.

The blanket drain will be evaluated by the Division of Water Resources Dam Safety to address the safety concerns that led to a storage restriction being placed on the reservoir in 2019.



This project aligns with the Yampa-White-Green Basin Implementation Plan and achieves the following goals: Protecting and encouraging agricultural uses of water in the basin within the context of private property rights; improving agricultural water supplies to increase irrigated land and reduce shortages; and restoring water storage and distribution infrastructure.

Issues/Additional Needs: The applicant must secure match funding prior to contracting. No other issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$24,000 from the Yampa-White-Green Basin Account and up to \$144,000 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



September 2024 Board Meeting - 12f

Water Supply Reserve Grant Application

	DETAILS	
and the second s	Total Project Cost:	\$176,993
	Total WSRF Grant Request:	\$112,263
5	Y-W-G Basin Account Request:	\$20,000
Lat: 40,152500	Statewide Account Request:	\$92,263
Long: -106.908700	Recommended Amount:	\$112,263
to a state of the	Other CWCB Funding:	\$0
JINT CARLENT	Other Funding Amount:	\$64,730
	Applicant Match:	\$0
	Project Type: Design & Engineering	
LOCATION	Water Use Type: Agricultural	
Counties: Garfield, Routt		
Drainage Basin: Yampa-White-Green	Statewide Category: Aging Infrastructure	
	Measurable Result: 1,165-acre feet of existing st preserved or enhanced.	torage

The applicant has been working with the Division of Water Resources Dam Safety and agricultural reservoir owners to rehabilitate seven aging reservoirs in Routt County. The applicant's intent of a group approach is to reduce project costs and better coordinate the engineering and construction as well as to help the grant process and management be more efficient. All seven reservoirs are over 100 years old and are either listed as conditionally satisfactory or unsatisfactory by the Division of Dam Safety. The reservoirs include the following:

Bison Park Bull Park 2 Burnt Mesa Heart Lake **McChivvis** Rams Horn Whiteley Nelson

The proposal includes two phases. In Phase 1, the reservoir owners will complete the required work on these structures they are allowed to complete without an engineering plan which is referred to as "Dam Maintenance." This includes tree removal from embankments, some dirt work and grading, some erosion control, and installing new measurement devices. Phase 1 also includes the engineering and design for the construction work that will eventually be completed in Phase 2. The engineering and design will include lining the outlets and a reservoir capacity survey for every reservoir. It will also include other engineering items specific to each reservoir. WSRF funds will be used to complete the maintenance work, design and engineering and grant management. Multiple agricultural producers are contributing matching funds to the project.

The project aligns with 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 \$20,000 from the Yampa-White-Green Basin Account and up to \$92,263 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.