



COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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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 7, 2023

AGENDA ITEM: Agenda 8a-m, 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.



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:

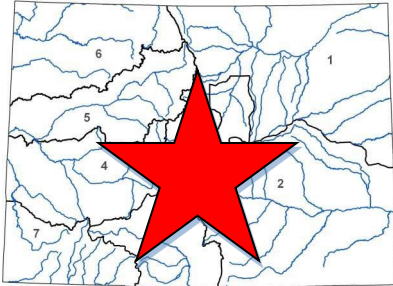
- List of completed WSRF projects;
- List of WSRF projects in progress; and
- List of WSRF projects in the contracting and procurement process.



Water Supply Reserve Fund Applications for Consideration at the September 2023 CWCB Board Meeting																	
Agenda Item	Statewide Project Category	Basin	Applicant/Grantee	Name of Water Activity	Basin(s) Account Request	Statewide Account Requests	RT Requested Amount	Non-WSRF Cash Match	Non-WSRF In-Kind Match	Non-WSRF Total Match	Statewide Match (Basin & Non-WSRF)	WSRF Total Project Costs	Basin Only Request Match % (min 25%)	Statewide Match % (Basin min 10%/applicant Match min 15% vs Total Project Cost)	PM		Grants Portal ID
Agenda Item 11a	Drought Resiliency	Arkansas	Colorado Ag Water Alliance	Agricultural Drought Resilience & Innovative Water Conservation - Phase 2	\$75,000	\$388,750	\$988,750	\$220,000	\$0	\$220,000	\$820,000	\$1,208,750	N/A	67.84%	Nora		157App-01204 (N
		Colorado			\$75,000												
		Gunnison			\$50,000												
		Metro			\$25,000												
		North Platte			\$75,000												
		Rio Grande			\$75,000												
		South Platte			\$75,000												
		Southwest			\$75,000												
		YWG			\$75,000												
Consent Agenda 2a		Colorado	Blue River Watershed Group	Swan River Restoration Project	\$80,000	\$0	\$80,000	\$30,000	\$0	\$30,000	N/A	\$110,000	27.27%	N/A	Steven		App-01127
Director's Report		Colorado	The Blue Stone Ditch Association	The Blue Stone Ditch Association Engineering Study	\$22,800	\$0	\$22,800	\$5,000	\$2,600	\$7,600	N/A	\$30,400	25.00%	N/A			App-01202
Agenda Item 11b	Aging Infrastructure	Gunnison	Orchard City Irrigation District	Fruitgrowers Dam Outlet Gates Improvement Project	\$100,000	\$150,000	\$250,000	\$558,665	\$0	\$558,665	\$658,665	\$808,665	N/A	81.45%	Matt		App-01161
Agenda Item 11c	Aging Infrastructure	Gunnison	Durkee Ditch Company	Durkee Ditch Pipeline Project	\$88,807	\$176,193	\$265,000	\$623,072	\$0	\$623,072	\$711,879	\$888,072	N/A	80.16%	Joshua		App-01178
Director's Report		Gunnison	Redlands Water & Power Company	Hydroelectric Power Plant & Main Pump Station System Optimization Review (SOR)	\$33,237	\$0	\$33,237	\$167,236	\$24,600	\$191,836	N/A	\$225,073	85.23%	N/A	Cole		App-01159
Agenda Item 11d	Aging Infrastructure	Gunnison	Short Ditch Extension	Short Ditch Extension Piping Project	\$40,200	\$85,305	\$125,505	\$391,516	\$11,000	\$402,516	\$442,716	\$528,021	N/A	83.84%	Joshua		App-01171
Agenda Item 11e	Drought Resiliency	Gunnison	Town of Paonia	Hydrogeological Study of Paonia Spring Complexes	\$25,000	\$122,975	\$147,975	\$95,000	\$5,000	\$100,000	\$125,000	\$247,975	N/A	50.41%	Steven		App-01165
Agenda Item 11f	Aging Infrastructure	Gunnison	Western Slope Conservation Center	Farmer's Ditch Improvement Project	\$100,000	\$200,000	\$300,000	\$0	\$1,200	\$0	N/A	\$300,000	0.00%	N/A	Joshua		App-01174
Director's Report		Metro	Open Water Foundation	Clear Creek & Boulder Creek Basin Information Websites	\$40,000	\$0	\$40,000	\$56,320	\$20,000	\$76,320	N/A	\$116,320	65.61%	N/A	Carolyn		App-01186
Director's Report	Aging Infrastructure	Metro	Wadley Farms 3 Homeowner's Association	Wadley Farms Filing No. 3 Lake #1 Rehabilitation & Improvement Project	\$15,000	\$23,000	\$38,000	\$16,890	\$0	\$16,890	\$31,890	\$54,890	N/A	58.10%	Ben		App-01143
Consent Agenda 2b		Metro	Colorado Geological Survey/ CO School of Mines	South Platte Basin Geologic Salinity Sources - Geologic Formation Chemical Characterization	\$40,234.50	\$0	\$80,469	\$13,857	\$12,357.00	\$26,214	N/A	\$106,683	25%	N/A	Nora		App-01185
		South Platte			\$40,234.50												
Consent Agenda 2c		North Platte	Colorado River Engineering	Continued Monitoring of North Park Lysimeter Station	\$75,000	\$0	\$75,000	\$25,000	\$0	\$25,000	N/A	\$100,000	25.00%	N/A	Ben		App-01188
Agenda Item 11g		North Platte	Colorado State Forest Service	Thinning Young Lodgepole on State Lands - Enhancing Watershed Health	\$200,000	\$0	\$200,000	\$0.00	\$0	\$0.00	N/A	\$200,000	0.00%	N/A	Andrea/Steven		App-01206
Agenda Item 11h	Aging Infrastructure	Rio Grande	Colorado Rio Grande Restoration Foundation	Independent Ditch Headgate Improvement Project	\$23,000	\$126,800	\$149,800	\$77,900	\$0	\$77,900	\$100,900	\$227,700	N/A	44.31%	Cole		App-01192

Agenda Item 11i	Aging Infrastructure	Rio Grande	Costilla County Conservancy District	Guadalupe Sanchez Acequia Improvement Project	\$34,541	\$137,908	\$172,449	\$172,960	\$0	\$172,960	\$207,501	\$345,409	N/A	60.07%	Cole		App-01215
Agenda Item 11j	Drought Resiliency	Rio Grande	Ducks Unlimited	Alamosa NWR Units C1, T, O, & P Restorations	\$33,125	\$216,875	\$250,000	\$81,250	\$0	\$81,250	\$114,375	\$331,250	N/A	34.53%	Chris		App-01217
Agenda Item 11k	Drought Resiliency	Rio Grande	Ducks Unlimited	Monte Vista NWR Units 14, 15, & 16 Restoration	\$68,750	\$431,250	\$500,000	\$187,500	\$0	\$187,500	\$256,250	\$687,500	N/A	37.27%	Chris		App-01218
Director's Report		Rio Grande	Sheep Creek Landowner's Association	Sheep Creek Community Pond Fresh Water & Fire Mitigation Enhancement	\$40,000	\$0	\$40,000	\$35,000	\$5,000	\$40,000	N/A	\$80,000	50.00%	N/A	Ben		App-01146
Director's Report	Aging Infrastructure	South Platte	Sedgwick County Well Users	Augmentation Well Rehabilitation	\$18,516	\$18,516	\$37,032	\$37,034.36	\$0	\$37,034.36	\$55,550.36	\$74,066.36	N/A	75.00%	Nora		App-01184
Agenda Item 11l	Aging Infrastructure	South Platte	Smith & Emmons	Diversion & Measurement Structures Replacement	\$50,000	\$250,000	\$300,000	\$155,550	\$0	\$155,550	\$205,550	\$455,550	N/A	45.12%	Cole		App-01179
Agenda Item 11m	Drought Resiliency	South Platte	Water Supply & Storage Company	Chambers Lake & Long Draw Reservoir Automation	\$30,000	\$89,564	\$119,564	\$119,564	\$0	\$119,564	\$149,564	\$239,128	N/A	62.55%			App-01181
Consent Agenda 2d		South Platte	The Watershed Center	Flow Monitoring at Gold Lake & Left Hand Park	\$66,885	\$0	\$66,885	\$60,625	\$7,500	\$68,125	N/A	\$135,010	50.46%	N/A	Ben		App-01180
Director's Report		Southwest	Florida Consolidated Ditch Company	Pastorous Reservoir Headgate Replacement	\$46,275	\$0	\$46,275	\$15,425	\$0	\$15,425	N/A	\$61,700	25.00%	N/A	Ben		App-01153
Director's Report		Southwest	Mountain Studies Institute	Post 416 Fire Recovery Monitoring	\$17,943	\$0	\$17,943	\$21,300	\$0	\$21,300	N/A	\$39,243	54.28%	N/A	Steven		App-01154
Director's Report		Southwest	San Miguel Watershed Coalition	Floodplain Restoration Opportunity Inventory & Wetland Coexistence	\$49,850	\$0	\$49,850	\$22,000	\$10,000	\$32,000	N/A	\$81,850	39.10%	N/A	Chris/Andrea		App-01147
Director's Report		YWG	City of Craig	Fortification Creek Stage Sensor & Telemetry Project	\$10,000	\$0	\$10,000	\$3,461	\$3,120	\$6,581	N/A	\$16,581	39.69%	N/A	Laura		App-01211
Consent Agenda 2e		YWG	Norvell Ditch Company	Norvell Infrastructure Improvement Project	\$99,750	\$0	\$99,750	\$27,500	\$6,250	\$33,750	N/A	\$133,500	25.28%	N/A	Ben		App-01210
					\$2,089,148	\$2,417,136	\$4,506,284										

Water Supply Reserve Grant Application



LOCATION
Counties: All
Drainage Basin: Statewide

DETAILS	
Total Project Cost:	\$1,208,750
Total WSRF Grant Request:	\$988,750
Basin Account Requests:	\$600,000
Statewide Account Request:	\$388,750
Recommended Amount:	\$988,750
Other CWCB Funding:	\$0
Other Funding Amount:	\$220,000
Applicant Match:	\$0
Project Type: Construction/Implementation	
Water Use Type: Agricultural	
Statewide Category: Aging Infrastructure, Drought Resiliency	
Measurable Result: Implement 20-30 new drought projects on an annually through 2026, and “scale up” 10-20 successful current projects.	

Currently, the applicant and their partners are funding over 30 innovative agricultural drought projects throughout the state. These projects include developing new technology to make drip irrigation possible in a much wider range of conditions, planting alternative crops, using soil health practices to reduce evaporative losses, restoring rangeland, and other water conservation improvements. Each project was selected by an advisory group and has a technical advisor and outside consultants who are assessing the impacts on water use as well as other metrics like productivity, profitability, and soil health.

If approved, the applicant will use funds to continue this project over the next three years. In addition to continuing to support new projects, the applicant intends to scale-up current projects that prove to be successful. Federal funding will also be identified to aid in scaling up successful projects. The applicant will hire water resource consultants on every project to collect data and projects will be selected by a technical advisory group made up of agriculture organizations, non-profit organizations, local and state agencies.

Issues/Additional Needs: CWCB Staff will recommend this project for full funding on the following conditions:

- The Scope of Work (Exhibit A) be revised prior to contracting to include the wording “water projects” to ensure all projects receiving grant funds have a clear tie to water.
- While the technical advisory group will recommend projects for funding, a select group of CWCB staff will provide oversight of selected projects to ensure the projects adhere to WSRF Grant Guidelines.
- The applicant must provide annual updates at the January CWCB Board Meeting throughout the course of the project. If approved, the CWCB will release funds for projects selected to begin in 2024 and the applicant will provide an overview of selected projects to the CWCB Board. Prior to funding being committed to projects in 2025 & beyond, the applicant must provide an update to the Board on ongoing and/or completed projects to receive additional funding from the Board to start new or continue upscaled projects.
- No WSRF funds are to be provided to entities who have the capacity to write their own grant applications.
- Individual projects should not exceed \$20,000. Projects greater than \$20,000 should be directed to apply for a WSRF or Water Plan Grant. Exceptions may be made for projects where multiple



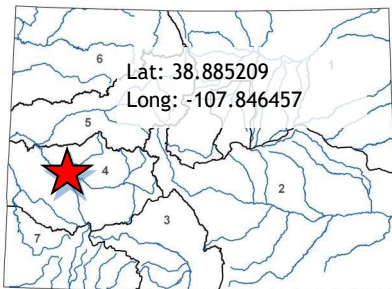
producers decide to consolidate into one larger grant to maximize collaborative benefits and minimize administrative burden.

No other issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$75,000 from the Arkansas Basin Account, up to \$75,000 from the Colorado Basin Account, up to \$50,000 from the Gunnison Account, up to \$25,000 from the Metro Basin Account, up to \$75,000 from the North Platte Basin Account, up to \$75,000 from the Rio Grande Basin Account, up to \$75,000 from the South Platte Basin Account, up to \$75,000 from the Southwest Basin Account, up to \$75,000 from the Yampa/White/Green Basin Account and up to \$388,750 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION
County: Delta
Drainage Basin: Gunnison

DETAILS	
Total Project Cost:	\$888,072
Total WSRF Grant Request:	\$265,000
Gunnison Basin Account Request:	\$88,807
Statewide Account Request:	\$176,193
Recommended Amount:	\$265,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$623,072
Applicant Match:	\$0
Project Type: Construction/Implementation	
Water Use Type: Agricultural	
Statewide Category: Aging Infrastructure	
Measurable Result: 18,215 linear feet of pipe or canal built; \$10,000 efficiency savings/year; 58 acre-feet efficiency savings/year; 50 Coloradans impacted by incorporating water-saving actions into land use planning & impacted by engagement activity.	

The applicant diverts water from both Currant Creek and Dry Creek just above the confluence of the two creeks approximately 4.5 miles east of the Town of Cedaredge. The alignment travels 4.3 miles with a relatively flat slope while contouring a steep hillside until it reaches Redlands Mesa. Another 1.7 miles of ditch are maintained on the mesa with a total of 11 turnouts dividing 500 shares. The ditch has ~10cfs of senior water rights dating to 1908 with another junior right from 1937. Several thousand feet of pipe has been installed by the ditch company along the hillside sections over the years to stabilize the ditch and reduce maintenance.

If approved, WSRF funds would be used to install 17,515 linear feet of pipe from the downstream end of recently installed N-12 pipe to Redlands Mesa. An inverted siphon will shortcut the Clark Draw loop and minimize the total pipe length. 18" PVC pipe will carry Redlands Mesa shares for Durkee shareholders from the Clark Draw into the new pipe. The first section of pipe will be 26" high density polyethylene (HDPE) pipe which can bend to match the curves in the ditch alignment, while the final section will be 30" HDPE pipe to accommodate the extra shares delivered at the Clark Draw.

The applicant believes the project is eligible for funding by the Bureau of Reclamation Salinity Program and plans to apply in September 2023. If awarded, Salinity grant award would cover the remaining funding gap to complete their proposed project.

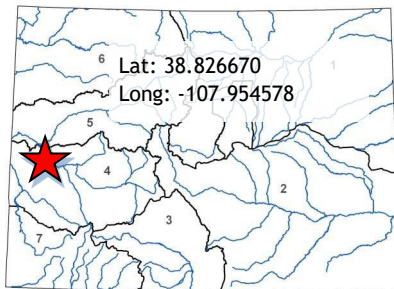
The applicant believes the results of the project will include greatly reduced cleaning and maintenance and associated costs, prevention of 1,067 tons per year of salt loading into the Colorado River, and long-term stabilization of the ditch. Piping would eliminate seepage and evaporation losses amounting to an estimated 0.325cfs during the irrigation season for a total of 58 acre-feet per year.

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

Funding Recommendation: Staff recommends approval of up to \$88,807 from the Gunnison Basin Account and up to \$176,193 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION	
County:	Delta
Drainage Basin:	Gunnison

If approved, the applicant will use grant funds to replace existing guard and regulating gate valves that were installed during the construction of the dam in 1938. Replacing these devices will allow for more accurate flow monitoring and accuracy via upgraded electric controls for new guard and regulating gates and installation of electrical components for Supervisory Control and Data Acquisition (SCADA) control to be installed at a later phase. The motor operated regulating valve will make it possible to decrease spills and over-deliveries to irrigators. Replacement will also prevent a possible failure of the gates and valves, especially the emergency gate valve that does close but is leaking approximately 1500 gal/min when closed. The project will also end the risk of a no-fill restriction because of the degraded condition of the existing outlet gates. A pre-cast control housing on a concrete pad will be placed over the gate chamber access hatch. A 200-amp electrical service will be brought in to supply power to a ventilation system, regulating gate motor operator, electrical outlets, and interior and exterior lights. It will be wired and prepared for a future SCADA installation.

The improvements planned in this project includes water management software which will yield information to help the applicant board make more informed decisions at the beginning of the irrigation season. At present the applicant Board of Directors has limited information available to help make the annual decisions on the amount of water to appropriate for each share of the applicant stock. This will decrease the mismatch between "water on the books" and water that is truly available for delivery in the reservoir.

The CWCB Board approved a WSRF grant in March 2022 to help install the infrastructure need for increased gate control efficiency. *The applicant is currently pursuing a CWCB loan (\$175,000) to help fund the project.

Issues/Additional Needs: The original applicant was listed as the Delta Conservation District (DCD), but the proposal is the same WSRF project awarded in March 2022 to the Orchard City Irrigation District (OCID). Staff has spoken with the DCD & OCID staff, and the Gunnison Roundtable Chair and all parties have agreed to change the applicant/grantee to the Orchard City Irrigation District. The applicant is also in the process of applying for a CWCB Loan to help complete the project. No issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$100,000 from the Gunnison Basin Account and up to \$150,000 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.

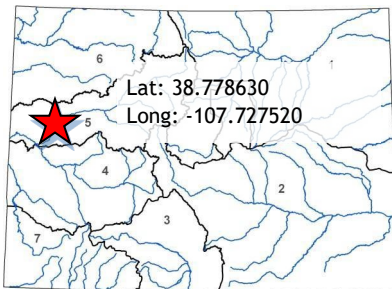
DETAILS	
Total Project Cost:	\$808,665
Total WSRF Grant Request:	\$250,000
Gunnison Basin Account Request:	\$100,000
Statewide Account Request:	\$150,000
Recommended Amount:	\$250,000
Other CWCB Funding:	\$175,000
Other Funding Amount:	\$225,000
Applicant Match:	\$158,665
Project Type: Design/Construction	
Water Use Type: Agricultural	
Statewide Category: Aging Infrastructure	
Measurable Result: Replacing guard and regulating gate valves.	



Short Ditch Extension Piping Project Short Ditch Extension

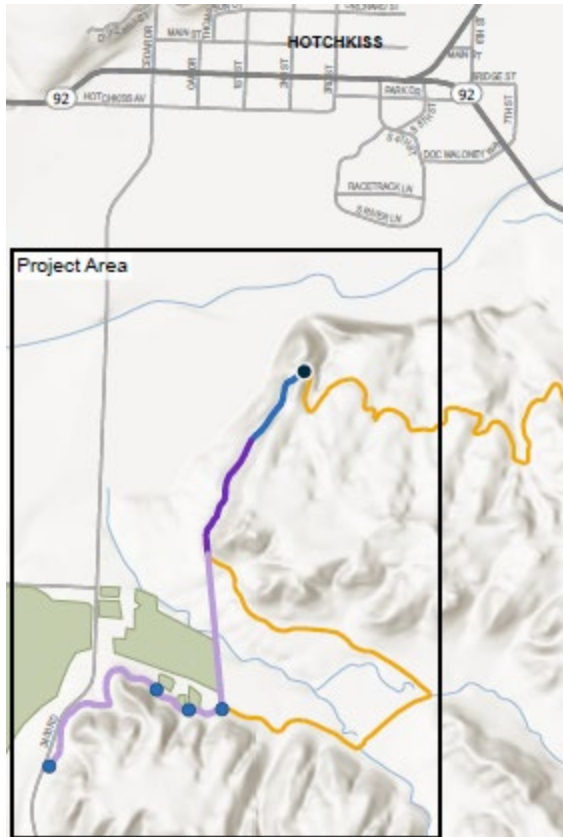
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Water Supply Reserve Grant Application



LOCATION
County: Delta
Drainage Basin: Gunnison

The applicant has senior water rights from 1904. This organization from Hotchkiss primarily supplies irrigation water to 346 acres of agricultural land in the North Fork Valley.



DETAILS	
*Total WSRF Project Cost:	\$528,021
Total WSRF Grant Request:	\$125,505
Gunnison Basin Account Request:	\$55,000
Statewide Account Request:	\$70,505
Recommended Amount:	\$125,505
Other CWCB Funding:	\$0
Other Funding Amount:	\$376,516
Applicant Match:	\$26,000
Project Type: Construction/Implementation	
Water Use Type: Agricultural	
Statewide Category: Aging Infrastructure	
Measurable Result: 5,500 linear feet of pipe or canal built; 220 acre-feet of efficiency savings; 419 tons of salt saved per year entering the Colorado River System	

This project will incorporate a larger piping project being completed by the Bureau of Reclamation (BOR). The entire project will pipe the tail-end of the Short Ditch Extension from the end of the existing piped section to the final turnout, approximately 5,500 LF total. The new pipeline will tie on to the existing line and follow the existing ditch alignment for approximately 2,130 feet, then will shortcut the existing alignment by acting as an inverted siphon across the valley below the ditch using BOR funds. Once on the other side, the pipe will continue for another 2,720 feet, include the turnout structures, and reseed. The Project will preserve and protect the existing pipe, headwall, and trash rack, and terminate into an existing 24-inch pipe that discharges into the final settling pond.

*The actual total project cost of the project is \$846,110, however, WSRF funds are only being used to purchase the turnouts and install the piping which brings the WSRF total project cost to \$528,021.

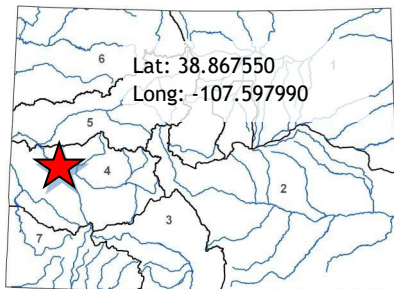
Issues/Additional Needs: No issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$55,000 up to Gunnison Basin Account and up to \$70,505 from the Statewide Account. Project approval is contingent upon the applicants' abilities to

resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION	
County:	Delta
Drainage Basin:	Gunnison

DETAILS	
Total Project Cost:	\$247,975
Total WSRF Grant Request:	\$147,975
Gunnison Basin Account Request:	\$25,000
Statewide Account Request:	\$122,975
Recommended Amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$50,000
Applicant Match:	\$50,000
Project Type: Study/Planning	
Water Use Type: Municipal	
Statewide Category: Drought Resiliency	
Measurable Result: A hydrogeological study to understand the characteristics of the aquifers that feed the spring systems	

The applicant is a small municipality in Delta County with a population of 1,448. Their water comes from 31 springs that feed into 2 treatment plants and one 2 Mgal storage tank.

Engineers have recommended that the applicant conduct a hydrogeology study and sustainability plan that addresses watershed health and resiliency to ensure their water supplies are reliable in the coming decades. The applicant is also moving forward to meter and repair its spring complexes, address water loss, repair and replace water storage and defective and aging infrastructure. If approved, WSRF funds would be used to conduct the study.

The applicant is proposing a four phased approach:

- Phase 1: A hydrogeologic study to understand the characteristics of the aquifers that feed the spring systems - spatially and temporally.
- Phase 2: Planning in collaboration with USFS Ranger District, fire agencies, local conservation partners, and other watershed stakeholders to develop a “Wildfire Ready Watersheds” plan to address drought, fire, flood, and climate resilience.
- Phase 3: Implement projects that mitigate fire and fluvial hazards, drought conditions, while improving water quality and summertime carryover water supplies
- Phase 4: Adaptive management to take corrective measures to ensure the goals of the project are met.

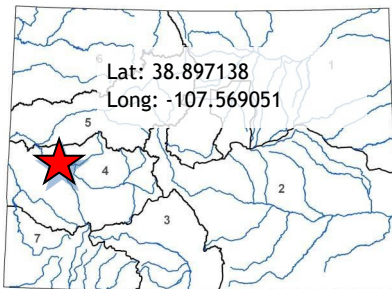
The project aligns with the Gunnison Basin Implementation Plan.

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

Funding Recommendation: Staff recommends approval of up to \$25,000 from the Gunnison Basin Account and up to \$122,975 from the Statewide Account. Project approval is contingent upon the applicants’ abilities to resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION
County: Delta
Drainage Basin: Gunnison

The applicant is Western Slope Conservation Center, a 501(c)(3) non-profit organization based in Paonia, CO. Their mission is to *“build an informed and engaged community to protect and enhance the lands, air, water and wildlife of the Western Slope”*.

The Farmers Ditch diversion structure is approximately 100 years old. The concrete headgate is crumbling and leaks around the gate when closed. WSRF funds, if approved, will be used to modernize the structure to improve water delivery and efficiency for agriculture use. Additionally, these improvements will maximize instream flows by leaving excess water in the river and improving ecosystem resilience to allow for upstream fish passage and safe recreational boating.

The project will include the installation and automation of an actuator on the reconstructed headgate for the Farmers Ditch, an actuator on the existing turnback gate, and a radar to monitor flow rates at the Parshall Flume. This will allow the ditch company and water commissioner to monitor and control flows into the ditch from a remote location, substantially improving efficiency and keeping excess water in the river for instream flow improvements. An Obermeyer gate in the diversion structure will allow the ditch company to sweep the river when necessary, replacing drop boards. The inclusion of 1,600 feet of piping will eliminate ditch and structural leakage. The construction of a point bar would replicate the natural morphology of the river channel and allow for fish passage. A proposed 200' long rock runout from the top of the dam will provide safe recreational boating.

*WSRF funds are being used for design and engineering, permitting and project management. The overall total project cost is over \$2.2 million.

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

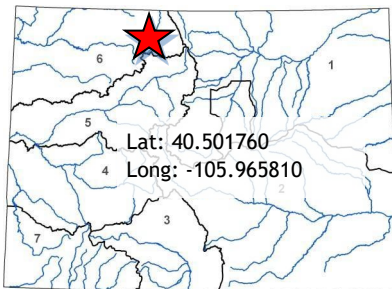
Funding Recommendation: Staff recommends approval of up to \$100,000 from the Gunnison Basin Account and up to \$200,000 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



DETAILS	
*Total WSRF Project Cost:	\$621,910
Total WSRF Grant Request:	\$300,000
<i>Gunnison Basin Account Request:</i>	\$100,000
<i>Statewide Account Request:</i>	\$200,000
Recommended Amount:	\$300,000
<i>Other CWCB Funding:</i>	\$0
<i>Other Funding Amount:</i>	\$300,710
<i>Applicant Match:</i>	\$21,200
<i>Project Type:</i> Design & Construction/Implementation	
<i>Water Use Type:</i> Agriculture	
<i>Statewide Category:</i> Aging Infrastructure	
<i>Measurable Result:</i> 2,000 feet of stream restored or protected; 1,600 feet of pipe or canal built; 3,400 acre-feet of efficiency savings/year; 3 acres of restored or preserved habitat.	



Water Supply Reserve Grant Application



LOCATION
County: Jackson
Drainage Basin: North Platte

DETAILS	
Total Project Cost:	\$503,603.15
Total WSRF Grant Request:	\$200,000
North Platte Basin Account Request:	\$200,000
Recommended Amount:	\$200,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$290,000
Applicant Match:	\$13,603.15
Project Type: Construction/Implementation	
Major Water Use Type: Environmental	
Measurable Result: 250 acres of restored or preserved habitat; Increase of snow water equivalent (SWE) by 20%	

The applicant is responsible for forest management on State Lands throughout Jackson County. A part of maintaining forest health has been active management of mature stands of lodgepole pine. Regeneration harvest of these stands helps to create age class diversity that improves the resilience of forests in the Headwaters of the North Platte Watershed. Recent increases in forest insect and disease outbreaks and catastrophic wildland fire have reinforced the need for active management. A result of past lodgepole harvest are regenerating stands with a high density of young trees. These stands require thinning for healthy development. Thinning will: 1) improve forest health through reducing competition among trees, 2) increase snow water equivalent by up to 20% through opening the canopy and reducing transpiration, 3) improve growth of trees and timber quality, and 4) mitigate future risks of bark beetle and wildfire.

This project aims to thin approximately 400 acres of young lodgepole stands across the State Forest, and on the State Land Board section of Owl Mountain. This forest is part of the Headwaters of the Michigan and Canadian Rivers, which feeds the North Platte River. WSRF funds would be used to thin 250 acres around both bodies of water.



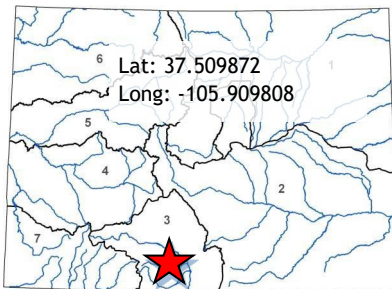
The Colorado State Land Board and Colorado Parks & Wildlife are providing cash match for the thinning of the remaining project area.

Issues/Additional Needs: A majority of North Platte Roundtable members approved the project but there was a 'no' vote from one member who believed the State Land Board should fund the entire project. No other issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$200,000 from the North Platte Basin Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION	
County:	Alamosa
Drainage Basin:	Rio Grande

DETAILS	
Total Project Cost:	\$227,700
Total WSRF Grant Request:	\$149,800
Rio Grande Basin Account Request:	\$23,000
Statewide Account Request:	\$126,800
Recommended Amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$77,900
Applicant Match:	\$0
Project Type: Construction/Implementation	
Water Use Type: Agriculture	
Statewide Category: Aging Infrastructure	
Measurable Result: \$2,433 efficiency savings per year; 1 aging headgate replacement; 1 woody debris deflector installed.	

The Independent Ditch Headgate Improvement Project (Project) is a multi-purpose project to improve function and reduce maintenance at the Independent Ditch headgate to benefit the ditch's water users and the public.

The applicant states the Independent Ditch headgate is in poor condition and requires significant maintenance. Water users must remove woody debris and manually adjust the headgate to ensure accurate diversion daily throughout the irrigation season.

The Project will directly benefit Independent Ditch water users by improving diversion efficiency and reducing maintenance through construction of a new concrete headwall and stainless-steel headgate, as well as installation of headgate automation and a woody debris deflector. The project will benefit City of Alamosa residents and the public who enjoy recreating in open spaces enhanced by Independent Ditch irrigation water. Headgate automation will also improve water rights administration by increasing efficiency. Additionally, upstream streambank stabilization and revegetation occurring simultaneously will reduce erosion and sedimentation at the headgate and improve aquatic and riparian habitat. The applicant has partnered with the Independent Ditch water users, City of Alamosa, and the Colorado Division of Water Resources.

If approved, WSRF funding will support engineering, construction, and project management and monitoring.

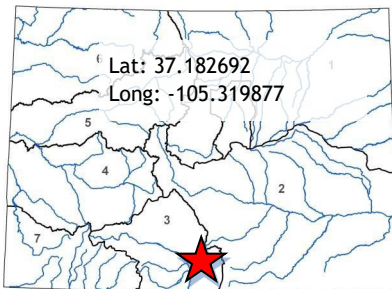
This project aligns with the Rio Grande Basin Implementation Plan and with the Water Plan's action areas of Vibrant Communities, Robust Agriculture and Thriving Watersheds.

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

Funding Recommendation: Staff recommends approval of up to \$23,000 from the Rio Grande Basin Account and \$126,800 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION
County: Costilla
Drainage Basin: Rio Grande

DETAILS	
Total Project Cost:	\$345,409
Total WSRF Grant Request:	\$172,449
Rio Grande Basin Account Request:	\$34,541
Statewide Account Request:	\$137,908
Recommended Amount:	\$172,449
Other CWCB Funding:	\$0
Other Funding Amount:	\$172,960
Applicant Match:	\$0
Project Type: Construction/Implementation	
Water Use Type: Agriculture	
Statewide Category: Aging Infrastructure	
Measurable Result: 380 feet of stream protected or restored; construction of new diversion & headgate; replacement of measurement flume	

The applicant states the Guadalupe Sanchez Acequia is over 170 years old and needs repairs and improvement. During small flood events, the ditch breaches and water runs back into the Rio Culebra. There is significant erosion along the ditch that discharges sediment into the stream. Delivery of water is difficult to impossible in the event of a flood on one of the arroyos that cross the ditch.

If approved, grant funds will help to improve the function, provide diversion efficiency and reduce maintenance of the Guadalupe Sanchez Acequia for the water users of the acequia, as well as improve stream function. Currently, the Guadalupe Sanchez Acequia headgate and diversion are nonexistent and require significant maintenance by water users.

The project will include constructing a new diversion structure and a new headgate at the river, as well as rebuilding and revegetating the riverbank of the new headgate. The project will directly benefit water users on the Guadalupe Sanchez Acequia by improving diversion efficiency and it will also improve water administration by installing and improving headgate function. Requested Grant funding will support project construction, construction management, and project administration.

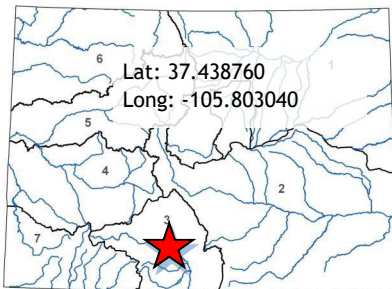


Issues/Additional Needs: No issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$34,541 from the Rio Grande Basin Account and up to \$137,908 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.



Water Supply Reserve Grant Application



LOCATION
County: Alamosa
Drainage Basin: Rio Grande

The applicant is partnering with the U.S. Fish & Wildlife Service, and Colorado Parks & Wildlife to assist with the restoration of natural hydrologic processes on Units C1, T, O & P of Alamosa National Wildlife Refuge (ALNWR) in the San Luis Valley. This Refuge encompasses a large section of the Rio Grande floodplain that was historically referred to as the Alamosa Marshes and considered one of the largest wetland complexes within the San Luis Valley and Colorado.



Funding Recommendation: Staff recommends approval of up to \$33,125 from the Rio Grande Basin Account and up to \$216,875 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.

DETAILS	
Total Project Cost:	\$331,500
Total WSRF Grant Request:	\$250,000
Rio Grande Basin Account Request:	\$33,125
Statewide Account Request:	\$216,875
Recommended Amount:	\$250,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$20,312.50
Applicant Match:	\$60,937.50
Project Type: Construction/Implementation	
Water Use Type: Environmental	
Statewide Category: Drought Resiliency	
Measurable Result: 1,000 acres of restored or preserved habitat.	

Currently, the Rio Grande River within the Refuge boundary exhibits a severely altered hydrograph, with restricted peak flows occurring during peak runoff periods. Consequently, surface hydrologic inflows supporting the complex of wetlands are now dependent on irrigation water diverted from the river.

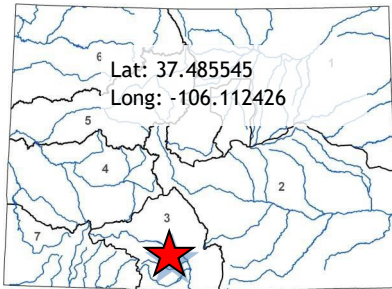
If approved, the applicant will use WSRF funds to identify, design, permit, and construct the landforms, water conveyances, and water-control structures. The applicant's goal is to ensure that high-quality aquatic and wetland habitats are enjoyed by birds, other wildlife, and the public for many years to come.

The project aligns with the Rio Grande Basin Implementation Plan which calls for "healthy watersheds that provide critical ecosystem services, resiliency, improve water quality, and enhance local wildlife habitats".

Issues/Additional Needs: The applicant must provide letters of match commitment from their project partners prior to contracting. No other issues or additional needs have been identified.



Water Supply Reserve Grant Application



LOCATION
County: Rio Grande
Drainage Basin: Rio Grande

The applicant has partnered with the U.S. Fish & Wildlife Service, Colorado Parks & Wildlife, and the Colorado Department of Public Health & Environment to assist with the restoration of natural hydrologic processes on Units 14, 15, & 16 of Monte Vista National Wildlife Refuge (MVNWR) in the San Luis Valley of Colorado.

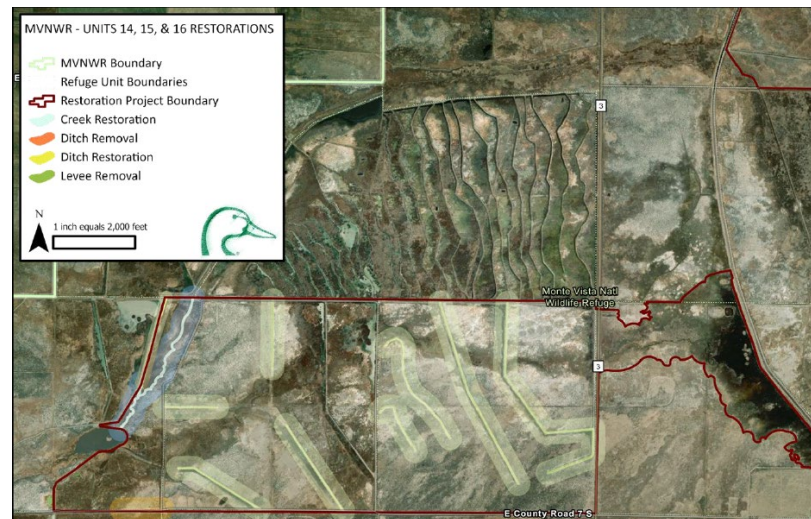
The public infrastructure is close to 100 years old. If approved, WSRF funds will be used to identify, design, permit, and construct the landforms, water conveyances, and water-control structures that will allow for the conservation of increasingly scarce water resources and 546 acres of wetland habitat important to many wildlife species found in the Rio Grande Basin. Modernization of this water infrastructure will allow for more efficient and more ecologically oriented management of Refuge water supplies stretched thin by changes in the physical and administrative availability of water brought about by long-term drought cycles experienced in the last twenty years. The work will ensure that the citizens of the San Luis Valley and of Colorado, more generally, will be able to continue to enjoy the hundreds of thousands of ducks, geese, cranes, and other species that draw people to the region.

The project meets the following Rio Grande Basin Implementation Plan Goals: Healthy watersheds that provide critical ecosystem services, resiliency, improve water quality, and enhance local wildlife habitats; and vibrant and resilient agriculture, recreation, municipal, and industrial economies that support thriving communities.

Issues/Additional Needs: The applicant must provide letters of match commitment from their project partners prior to contracting. No other issues or additional needs have been identified.

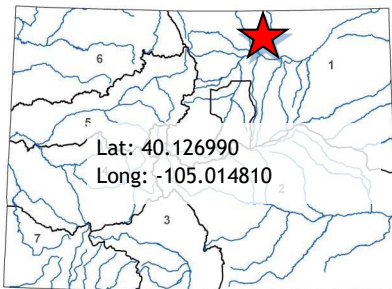
Funding Recommendation: Staff recommends approval of up to \$68,750 from the Rio Grande Basin Account and up to \$431,250 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.

DETAILS	
Total Project Cost:	\$687,500
Total WSRF Grant Request:	\$500,000
Rio Grande Basin Account Request:	\$68,750
Statewide Account Request:	\$431,250
Recommended Amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$140,625
Applicant Match:	\$46,875
Project Type: Construction/Implementation	
Water Use Type: Environmental	
Statewide Category: Drought Resiliency	
Measurable Result: 546 acres of restored or preserved habitat.	





Water Supply Reserve Grant Application



LOCATION
County: Weld
Drainage Basin: South Platte

The applicant is a ditch company located in Longmont that delivers 693-acre feet annually to five shareholders.

If approved, the applicant would use WSRF funding to replace its aged and failing diversion structures as well as replace a non-standard measuring flume. The existing headgate structure leaks water through the structure and through the adjacent ground and the Division 1 Engineer has ordered this be remedied. The existing check structure relies on long check boards that are difficult to place and remove and require wading in the stream to access.



The Parshall measuring flume was modified previously but no longer applies to the standard 4-ft Parshall flume rating table. The applicant believes the new replacement structures will provide a long service life, ease, efficiency and safety of operation, and accurate measurement of diversions. The applicant has a senior direct flow water right and having access to reliable diversions provides the applicant drought resiliency.

The applicant received a CWCB loan in September 2022 which is being used as their match.

The project aligns with the South Platte Basin Implementation Plan.

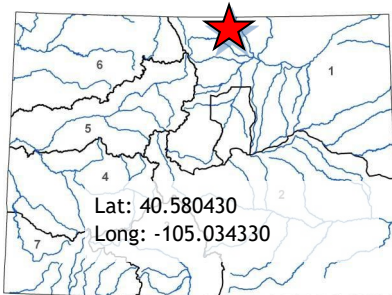
Issues/Additional Needs: No issues or additional needs have been identified.

Funding Recommendation: Staff recommends approval of up to \$50,000 from the South Platte Basin Account and up to \$250,000 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.

DETAILS	
Total Project Cost:	\$455,550
Total WSRF Grant Request:	\$300,000
South Platte Basin Account Request:	\$50,000
Statewide Account Request:	\$250,000
Recommended Amount:	\$300,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$155,500
Project Type: Design/Construction/Implementation	
Water Use Type: Agriculture	
Statewide Category: Aging Infrastructure	
Measurable Result: Outcome is a long-life, reliable, safe to operate, and accurate diversion and measurement system using modern structures to replace failing infrastructure and assure delivery of senior water right, especially during times of drought.	



Water Supply Reserve Grant Application



LOCATION
County: Larimer
Drainage Basin: South Platte

DETAILS	
Total Project Cost:	\$239,128
Total WSRF Grant Request:	\$119,594
South Platte Basin Account Request:	\$30,000
Statewide Account Request:	\$89,564
Recommended Amount:	\$119,564
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$119,564
Project Type: Design/Construction/Implementation	
Water Use Type: Agriculture	
Statewide Category: Drought Resiliency	
Measurable Result: \$100,000 efficiency savings/year; 1,000 acre-feet efficiency savings.	

If approved, the applicant will use grant funds to add instrumentation at Long Draw Reservoir and Chambers Lake for monitoring of reservoir levels, reservoir gate position and downstream DWR-measured outlet release. In addition to monitoring, data will be telemetered for remote access in near real time and two-way data communications will allow for gate positions to be changed remotely. Work will include adding automation, which can maintain outlet discharge over time by programmatically adjusting gate positions to match release targets.

The applicant states the current system requires staff to manually change the water supply, taking up to a full day to complete for every event and at times three events a day can occur, placing a tremendous burden on staff time and causing unnecessary drive time and vehicle emissions. System automation will help reduce the water supply gap through improved system efficiency and will save money, reduce emissions, and free-up staff time to focus on other system needs, like maintenance of mountain collection ditches, collection system efficiency improvements, and water supply increases.

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

Funding Recommendation: Staff recommends approval of up to \$30,000 from the South Platte Basin Account and up to \$89,564 from the Statewide Account. Project approval is contingent upon the applicants' abilities to resolve issues and additional needs identified by staff.

