



**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

**DATE:** November 1, 2023

**AGENDA ITEM:** Consent Agenda 2a, Water Supply Reserve Fund Change of Grantee

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**Staff Recommendation:**

Staff recommends the Board approve a change of grantee/project sponsor from the San Luis Valley Water Conservancy District to the Colorado Rio Grande Restoration Foundation for the project titled, “Shaw Reservoir Rehabilitation Project”.

**Background:**

At the March 2022 Board meeting, the Board approved a \$342,600 grant from the Water Supply Reserve Fund to the San Luis Valley Water Conservancy District (SLVWCD) for the Shaw Reservoir Rehabilitation Project. This project has been contracted but no reimbursement requests have been submitted by SLVWCD. WSRF grant funds will be used to rehabilitate the Shaw Reservoir feeder ditch and headgate, upgrading the reservoir outlet works, lining the outlet pipe, and adding automated measurement and controls.

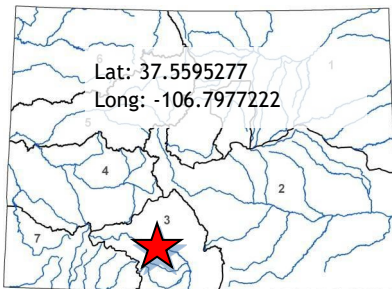
SLVWCD is requesting a change in fiscal agent to the Colorado Rio Grande Restoration Foundation (CRGRF) due to TABOR restrictions. The proposed new grantee, CRGRF, is familiar with the project and they have the organizational capacity to finish the project.

See attached for the amended Water Activity Summary Sheet, signed letters from both organizations, a revised scope of work, budget, schedule and an updated Certificate of Insurance.





**Water Supply Reserve Grant - CHANGE OF GRANTEE**



LOCATION
<b>County:</b> Mineral
<b>Drainage Basin:</b> Rio Grande

DETAILS	
<b>Total Project Cost:</b>	\$685,200
<b>Total WSRF Grant Request:</b>	\$342,600
<i>Rio Grande Basin Account Request:</i>	\$40,000
<i>Statewide Account Request:</i>	\$302,600
<b>Awarded Amount:</b>	\$342,600
<b>Remaining Amount:</b>	\$342,600
<i>Other CWCB Funding:</i>	\$0
<i>Other Funding Amount:</i>	\$33,000
<i>Applicant Match:</i>	\$309,600
<i>Project Type:</i> Construction/Implementation	
<i>Water Use Type:</i> Municipal	
<i>Measurable Result:</i> 608.1 acre-feet of existing storage or preserved; 500 linear feet of pipe built	

If the change of grantee request is approved, WSRF funds will be used to upgrade the reservoir outlet works and line the outlet pipe. The project would help preserve 608 acre-feet of existing storage and improve 500 feet of piping.

The San Luis Valley Water Conservancy District (District) was previously awarded this grant by the Board in March 2022. On October 17, Staff was notified by the district that their accountant consulted with their auditor and determined the District’s General and/or Enterprise Funds may be put at risk due to TABOR restrictions if they received all grants (two WSRF and two Water Plan grants) that have been previously approved by the Board. The proposed new grantee is familiar with the project and does not have the same TABOR restrictions.

**Staff Recommendation:** Staff recommends approval of change of grantee from the San Luis Valley Water Conservancy District to the Colorado Rio Grande Restoration Foundation. Project approval is contingent upon the applicants’ abilities to resolve issues and additional needs identified by staff.

**Background:** The project includes rehabilitation of the Shaw Reservoir feeder ditch and headgate, upgrading the reservoir outlet works, lining the outlet pipe, and adding automated measurement and controls. The ditch and headgate were damaged in the West Fork Complex Fire. The District has stated this project will protect the ability for this pre-compact reservoir and recreation asset to remain full much of the time and operate safely with greater flexibility. Project partners include the Bureau of Land Management, Mineral County, and Trout Unlimited.

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

623 Fourth Street  
Alamosa, CO 81101  
(719) 589-2230  
[Heather@slvwcd.org](mailto:Heather@slvwcd.org)



November 2, 2023

Ben Wade, Project Manager  
1313 Sherman Street, Room 718  
Denver, CO 80203

Subject: Shaw Reservoir Rehabilitation Project

Dear Mr. Wade,

The San Luis Valley Water Conservancy District has determined our General or Enterprise Funds may be put at risk with regard to TABOR restrictions if we receive CWCB grants. Out of an abundance of caution, I am requesting the CWCB Board approve a change of the fiscal agent of the following grant to the Colorado Rio Grande Restoration Foundation (CRGRF):

**Shaw Reservoir Rehabilitation Project, Water Supply Reserve Account Grant, approved at March 2022 CWCB Board Meeting; CMS #175743, CTGGI 2022-3413.**

The Scope of Work and Budget for the grant will remain largely the same; updates to the timeline and scope of work capture the project status and changes in roles. The SLVWCD will complete the project activities and contribute in-kind and cash funding as planned. The CRGRF will complete the contracting and project reporting.

I am requesting CWCB staff bring this fiscal agent change to the CWCB Board at the November 2023 meeting. I apologize for any inconvenience and appreciate your flexibility.

Sincerely,

A handwritten signature in blue ink that reads "Heather R. Dutton".

Heather Dutton  
Manager, San Luis Valley Water Conservancy District

cc: Daniel Boyes and Emma Reesor, Colorado Rio Grande Restoration Foundation

Colorado Rio Grande Restoration Foundation  
Rio Grande Headwaters Restoration Project  
623 Fourth Street  
Alamosa, CO 81101  
(719) 589-2230



October 31, 2023

Colorado Water Conservation Board  
1313 Sherman Street  
Denver, CO 80203

Re: Grantee Change for Colorado Water Plan Grant - CMS# 175743, CTGGI 2022-3413  
Shaw Reservoir Rehabilitation Project

Dear CWCB Board of Directors,

On behalf of the Colorado Rio Grande Restoration Foundation (CRGRF), I am writing to accept the grantee change for the above titled grant, previously held by the San Luis Valley Water Conservancy District (SLVWCD). The CRGRF is a 501c3 and fiscal agent for the Rio Grande Headwaters Restoration Project (RGHRP). The RGHRP has been a close partner with the SLVWCD and has the organizational capacity to administer the grant in full accordance with the grant's scope of work and agreement with the CWCB. As the new grantee, we commit to continue working with the SLVWCD and CWCB to ensure all grant obligations and responsibilities for the grant are met.

Please reach out to me if you have any questions about the grant moving forward.

Sincerely,



Emma Reesor  
Administrative Director, CRGRF



**Colorado Water Conservation Board**

**Water Supply Reserve Fund**

**Exhibit A - Statement of Work**

<b>Date:</b>	October 31, 2023
<b>Water Activity Name:</b>	Shaw Reservoir Rehabilitation Project
<b>Grant Recipient:</b>	Colorado Rio Grande Restoration Foundation
<b>Funding Source:</b>	WSRF: Rio Grande Basin and Statewide Accounts

**Water Activity Overview:** (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for. (PLEASE DEFINE ALL ACRONYMS).

The project includes rehabilitation of the Shaw Reservoir feeder ditch and headgate, which were damaged in the West Fork Complex Fire, upgrading the reservoir outlet works, lining the outlet pipe, and adding automated measurement and controls. This will protect the ability for this pre-compact reservoir and extremely popular recreation asset to fill and operate safely, with greater flexibility. The project is a partnership with the San Luis Valley Water Conservancy District, Bureau of Land Management, Mineral County, and Trout Unlimited. The WSRF funds will be used to upgrade the reservoir outlet works and line the outlet pipe.

**Objectives:** (List the objectives of the project. (PLEASE DEFINE ACRONYMS).

Rehabilitate the outlet works of the Shaw Reservoir to allow for sustained recreation use, fishery enhancement, augmentation supply security, and flexible management.

Replace the headgate and feeder ditch for Shaw Reservoir, an off-channel reservoir, with a fish barrier to allow for improved water diversion and upstream native Rio Grande Cutthroat Trout reintroduction.

Add automated measurement and reservoir controls to allow for more precise monitoring and water management.

**Tasks**

Provide a detailed description of each task using the following format:

**Task 1 – Final Engineering**

Description of Task:

The Project Engineer has prepared cost estimates and draft engineering designs. Through Task 1, the Project Engineer will finalize designs and quantities.



Tasks
Method/Procedure:
The Project Engineer will prepare final designs and project quantities to be used for project implementation.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Final project designs and quantities, to be used in construction.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Final project designs and quantities, to be used in construction, and engineering invoices.

Tasks
Provide a detailed description of each task using the following format:
<b><u>Task 2 – Headgate and Feeder Ditch Repair</u></b>
Description of Task:
<p>The original headgate was burned in West Fork Complex Fire and the current headgate was rebuilt by hand with wood and sandbags. The existing headgate will be replaced with a more robust, stable structure, which will act as a barrier to downstream non-native trout. This will allow for improved diversion efficiency as well as facilitate the reintroduction of native Rio Grande Cutthroat trout upstream of the headgate.</p> <p>The feeder ditch was burned over during West Fork Complex Fire. The ditch crosses steep slopes, two of which are eroding. The repairs will include installing and securing a pipeline, to avoid the ditch washing off the hillside.</p>
Method/Procedure:
A contractor will remove the current hand-built sandbag and wooden headgate and install a new engineered headgate with a measurement flume. The headgate will be built as a barrier to upstream movement of downstream fish. The contractor will install and secure a pipeline (approximately 500 feet) to convey water from Kitty Creek, across the eroding slopes, to the stable portion of the ditch.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
A new headgate, measurement flume, and piped portion of the feeder ditch.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Photos of and invoices tracking the removal of the existing headgate structure and the installation of a new headgate, measurement flume, and pipeline.



<b>Tasks</b>
Provide a detailed description of each task using the following format:
<b><u>Task 3 – Outlet Works Repairs</u></b>
Description of Task:
The outlet pipe is the original pipe and is in stable condition, but at risk for rust and deterioration. Further, the outlet does not have positive drainage and water pools below the outlet pipe. The measurement flume below the outlet is sunken and needs to be replaced. Finally, the gate has become jammed with woody debris and wouldn't close tightly on occasion in recent years. The repairs will address these issues.
Method/Procedure:
A contractor will complete the following tasks: Line the outlet tunnel with cure in place liner, which will protect structural integrity; Install a new staff gage and flume, shape and rip-rap downstream ditch; Install a new outlet gate, valve stem, and trash rack on upstream side of outlet tunnel.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
A lined outlet pipe, new measurement flume and cleaned outlet ditch, and new gate with trash rack.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Photos of and invoices tracking installation of the outlet pipe liner, new measurement flume and cleaned outlet ditch, and new gate with trash rack.

<b>Tasks</b>
Provide a detailed description of each task using the following format:
<b><u>Task 4 - Automation</u></b>
Description of Task:
Shaw Reservoir is currently only measured by driving or snowmobiling to the site and reading the staff gage. Releases only occur when the gate is opened or closed by hand. The project will include adding automated measurement and operations controls.
Method/Procedure:
Install automated controls that allow for remote water measurement and remote reservoir operations.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Automated controls in place.



**Tasks**

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Pictures and invoices tracking the installation of automated reservoir measurement and operations controls.

**Budget and Schedule**

**Exhibit B - Budget and Schedule:** This Statement of Work shall be accompanied by a combined Budget & Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format. A separate excel formatted Budget is required for engineering costs to include rate and unit costs.

**Reporting Requirements**

**Progress Reports:** The grantee shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

**Final Report:** At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

**Payments**

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

**Performance Requirements**

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per the Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.





## Performance Requirements

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



**COLORADO**

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Department of Natural Resources

**Colorado Water Conservation Board**

**Water Supply Reserve Fund**

**EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs**

**Date: October 31, 2023**

**Water Activity Name: Shaw Reservoir Rehabilitation Project**

**Grantee Name: Colorado Rio Grande Restoration Foundation**

<u>Task No.</u> <sup>(1)</sup>	<u>Description</u>	<u>Start Date</u> <sup>(2)</sup>	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) <sup>(3)</sup>	<u>WSRF Funds</u> (Basin & Statewide combined) <sup>(3)</sup>	<u>Total</u>
1	Final Engineering	12/15/2023	12/15/2028	\$ 72,000.00	\$ -	\$72,000
2	Headgate and Feeder Ditch Repair	12/15/2023	12/15/2028	\$ 140,400.00	\$ -	\$140,400
3	Outlet Works Repairs	12/15/2023	12/15/2028	\$ 70,200.00	\$ 342,600.00	\$412,800
4	Automation	12/15/2023	12/15/2028	\$ 60,000.00	\$ -	\$60,000
<b>Total</b>				<b>\$342,600</b>	<b>\$342,600</b>	<b>\$685,200</b>



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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

**DATE:** November 1, 2023

**AGENDA ITEM:** Consent Agenda CA2b, Water Supply Reserve Fund Change of Grantee

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**Staff Recommendation:**

Staff recommends the Board approve a change of grantee/project sponsor from the San Luis Valley Water Conservancy District to the Colorado Rio Grande Restoration Foundation for the project titled, “Beaver Park Reservoir Seepage Mitigation Study”.

**Background:**

At the July 2023 Board meeting, the Board approved a \$170,000 grant from the Water Supply Reserve Fund to the San Luis Valley Water Conservancy District (SLVWCD) for the Beaver Park Reservoir Seepage Mitigation Study. This grant has yet to be contracted. WSRF grant funds will be used to complete a geotechnical investigation, drilling, lab work and develop recommendations for seepage control actions for Beaver Park Reservoir.

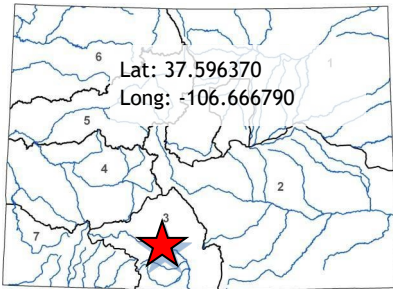
SLVWCD is requesting a change in fiscal agent to the Colorado Rio Grande Restoration Foundation (CRGRF) due to the district facing TABOR restrictions if contracted. The proposed new grantee, CRGRF, is familiar with the project, and does not face the same restrictions giving them the ability to complete the project.

See attached for the amended Water Activity Summary Sheet, signed letters from both organizations, a revised scope of work, budget, schedule, and an updated Certificate of Insurance.





**Water Supply Reserve Grant - CHANGE OF GRANTEE**



LOCATION	
<b>County:</b>	Rio Grande
<b>Drainage Basin:</b>	Rio Grande

DETAILS	
<b>WSRF Total Project Cost:</b>	\$209,800
<b>Total WSRF Grant Request:</b>	\$170,000
<i>Rio Grande Basin Account Request:</i>	\$50,000
<i>Statewide Account Request:</i>	\$120,000
<b>Awarded Amount:</b>	\$170,000
<b>Remaining Amount:</b>	<b>\$170,000</b>
<i>Other CWCB Funding:</i>	\$0
<i>Other Funding Amount:</i>	\$34,800
<i>Applicant Match:</i>	\$5,000
<i>Project Type:</i> Implementation/Design/Engineering	
<i>Water Use Type:</i> Environmental	
<i>Statewide Category:</i> Aging Infrastructure	
<i>Measurable Result:</i> 4,750 acre feet existing storage preserved or enhanced.	

If the change of grantee request is approved, WSRF funds will help the new grantee, the Colorado Rio Grande Restoration Foundation, complete the project activities which include a geotechnical investigation, drilling, lab work, and recommendations for seepage control actions for Beaver Park Reservoir.

The San Luis Valley Water Conservancy District (District) was previously awarded this grant by the Board in July 2023. On October 17, Staff was notified by the district that their accountant consulted with their auditor and determined the District’s General and/or Enterprise Funds may be put at risk due to TABOR restrictions if they received all grants (two WSRF and two Water Plan grants) that have been previously approved by the Board.

**Staff Recommendation:** Staff recommends approval of change of grantee from the San Luis Valley Water Conservancy District to the Colorado Rio Grande Restoration Foundation. Project approval is contingent upon the applicants’ abilities to resolve issues and additional needs identified by staff.

**Background:** Beaver Park Dam is a large high hazard dam owned and operated by Colorado Parks and Wildlife (CPW). The reservoir was constructed by the Mosca Irrigation District in 1912-1914 to store snowmelt runoff for irrigation. Today, the primary use of the reservoir is recreation and water rights storage. Water releases are a critical part of operations for CPW and partners including the District, Bureau of Land Management, Trout Unlimited, and the Rio Grande Water Conservation District.

The Beaver Park Dam is 113 feet high at its maximum section and provides roughly 4,750 acre-feet of pre-compact water storage. Since first filling of the reservoir, the dam has experienced seepage related performance issues. Some issues have been mitigated throughout the dam’s 100+ year life, but loss of reservoir storage capacity through seepage remains a challenge to this day. There is a point source seepage exit emerging about one quarter mile downstream of the dam. The character and amount of this seepage has remained unchanged for many years. This source has never been considered an urgent dam safety issue in need of mitigation, but seepage flows continuously throughout the year and releases several cubic feet per second (an average of 3.5 ac-ft/day and as much as 11 cfs). This water could be stored and released at times when most needed by fish and wildlife or made available for creative water sharing projects.

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

623 Fourth Street  
Alamosa, CO 81101  
(719) 589-2230  
[Heather@slvwcd.org](mailto:Heather@slvwcd.org)



November 2, 2023

Ben Wade, Project Manager  
1313 Sherman Street, Room 718  
Denver, CO 80203

Subject: Beaver Park Reservoir Seepage Mitigation Study

Dear Mr. Wade,

The San Luis Valley Water Conservancy District has determined our General or Enterprise Funds may be put at risk with regard to TABOR restrictions if we receive CWCB grants. Out of an abundance of caution, I am requesting the CWCB Board approve a change of the fiscal agent of the following grant to the Colorado Rio Grande Restoration Foundation (CRGRF):

**Beaver Park Reservoir Seepage Mitigation Study, Water Supply Reserve Account Grant, approved at July 2023 CWCB Board Meeting.**

The Scope of Work and Budget for the grant will remain largely the same; updates to the scope of work capture the changes in roles. The SLVWCD will complete the project activities and contribute in-kind and cash funding as planned. The CRGRF will complete the contracting and project reporting.

I am requesting CWCB staff bring this fiscal agent change to the CWCB Board at the November 2023 meeting. I apologize for any inconvenience and appreciate your flexibility.

Sincerely,

A handwritten signature in blue ink that reads "Heather R. Dutton".

Heather Dutton  
Manager, San Luis Valley Water Conservancy District

cc: Daniel Boyes and Emma Reesor, Colorado Rio Grande Restoration Foundation

Colorado Rio Grande Restoration Foundation  
Rio Grande Headwaters Restoration Project  
623 Fourth Street  
Alamosa, CO 81101  
(719) 589-2230



October 31, 2023

Colorado Water Conservation Board  
1313 Sherman Street  
Denver, CO 80203

Re: Grantee Change for WSRF Grant for the Beaver Park Reservoir Seepage Mitigation Study

Dear CWCB Board of Directors,

On behalf of the Colorado Rio Grande Restoration Foundation (CRGRF), I am writing to accept the grantee change for the above titled grant, submitted by the San Luis Valley Water Conservancy District (SLVWCD) and approved at the July 2023 CWCB Board meeting. The CRGRF is a 501c3 and fiscal agent for the Rio Grande Headwaters Restoration Project (RGHRP). The RGHRP has been a close partner with the SLVWCD and has the organizational capacity to administer the grant in full accordance with the grant's scope of work and agreement with the CWCB. As the new grantee, we commit to continue working with the SLVWCD and CWCB to ensure all grant obligations and responsibilities for the grant are met.

Please reach out to me if you have any questions about the grant moving forward.

Sincerely,

A handwritten signature in black ink that reads "Emma Reesor".

Emma Reesor  
Administrative Director, CRGRF



**Colorado Water Conservation Board**

**Water Supply Reserve Fund**

**Exhibit A - Statement of Work**

<b>Date:</b>	<b>10/31/2023</b>
<b>Water Activity Name:</b>	<b>Beaver Park Reservoir Seepage Mitigation Study</b>
<b>Grant Recipient:</b>	<b>Colorado Rio Grande Restoration Foundation</b>
<b>Funding Source:</b>	<b>WSRF Rio Grande Basin &amp; Statewide Account</b>

**Water Activity Overview:** (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for. (PLEASE DEFINE ALL ACRONYMS)).

The proposed project includes a geotechnical investigation along the right reservoir abutment near the Beaver Park Dam, which is owned and operated by the Colorado Parks and Wildlife (CPW). Seepage from the reservoir is not considered a dam safety issue, but it does impact CPW's ability to manage water resources at Beaver Park Reservoir, particularly at certain reservoir levels. The primary use of the reservoir is recreation, but water rights storage, and augmentation and irrigation releases are also a critical component of operations for CPW and its partners including the Division of Water Resources, the Grantee, Groundwater Management Subdistricts, the Bureau of Land Management, and others. Beaver Park Dam is approximately 113 feet high at its maximum section and provides roughly 4,750 Ac-ft of water storage. Since first filling of the reservoir, the dam has experienced seepage related performance issues. Some of these issues have been mitigated throughout the dam's 100+ year life, including CPW's complete rehabilitation of the dam and spillway in 2016, but loss of reservoir storage capacity through seepage within the reservoir basin remains a challenge.

It is believed that drilling test holes along the right abutment near the dam will help characterize the joints and fissures known to be present in the foundation bedrock. These are the known seepage pathways from the reservoir. Once characterized, a grouting campaign (a future phase) within the right abutment of the dam would be the most effective treatment of the seepage issue. To properly design and execute a future grouting campaign, a geotechnical study will be necessary. This will require project management and engineering support by CPW's dam safety staff, and coordination with the State Engineers Office Dam Safety Division. The proposed project, Phase 1, includes professional engineering services to perform a geotechnical investigation, laboratory analyses, and deliver a final report that describes the key findings and informs a future grouting campaign.

**Objectives:** (List the objectives of the project. (PLEASE DEFINE ACRONYMS)).

- Characterize the seepage pathways in the right abutment near Beaver Park Dam.
- Summarize key findings from the geotechnical study and determine feasibility of a grouting campaign to mitigate the seepage pathways.

**Tasks**

**Task 1 – Geotechnical Investigation**

Description of Task:



**Tasks**

Task 1 includes the performance of a geotechnical investigation to inform a potential future grouting campaign (Phase 2.) Specific items to be performed include:

- Professional engineering services, including obtaining a State Engineering Office (SEO) approved drilling plan,
- Engineering support,
- Drilling of core samples,
- Laboratory analyses of core samples
- Development of project deliverables, including a final report and recommendations for Phase 2

Method/Procedure:

The Grantee will:

1. Develop detailed scope of work for professional services to complete the necessary engineering for the project. As needed, Grantee staff will work with CWCB to ensure all required CWCB reporting is included in this scope.
2. Publicly solicit for professional engineering services via an RFQ (Request for Qualifications) process.
3. Evaluate submitted SOQs (Statement of Qualifications) and select and contract with an engineering consultant.
4. Search within CPW file archives for existing records of drilling logs and other pertinent geologic and geotechnical information, review those records, and provide to the engineering consultant as allowed.
5. Work with engineering consultant to develop a SEO approved drilling plan and develop bid documents based on that approved drilling plan.
6. Work with selected engineering consultant to select and contract with a qualified drilling contractor.
7. Manage the project budget by collecting and maintaining project invoicing, change orders, contract amendments, etc. to keep project on task and within budget.
8. Work with engineering consultant and drilling contractor to ensure project deliverables are met.
9. Provide closeout of both the engineering consultant and drilling contractor contracts.
10. Clearly communicate with CWCB and other funding partners concerning project progress, budget, etc.
11. Perform up to two (2) site visits during drilling to observe dam performance and collection of data.
12. Work with consultant to develop and summarize key findings from the drilling effort into a deliverable format and present to CWCB staff.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

A final engineering report summarizing the drilling investigation and laboratory results. A scope of work for Phase 2 to implement a targeted grouting campaign that reduces seepage.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

The Grantee will provide CWCB staff project invoices, contracts, photos of investigative activities, and reports, including a Phase 2 scope of work.





**Tasks**

Provide a detailed description of each task using the following format: (PLEASE DEFINE ACRONYMS)

**Task 2 – Project Administration**

Description of Task:

The Grantee will project management that includes project progress tracking, execution of necessary contracts, and completion of project deliverables on time and as budgeted. The Grantee will compile submit all invoices and reports to CWCB staff.

Method/Procedure:

1. Track project activities and coordinate with partners and contractors to complete project actions on schedule.
2. Complete invoicing and payments, and track expenses ensuring adherence to budget.
3. Complete all invoicing and reporting to CWCB.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

Project will be completed as proposed.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

The Grantee will provide CWCB staff with documentation of project activities and project completion including required documents, invoices, and reports identified in Task 1.

**Budget and Schedule**

**Exhibit B - Budget and Schedule:** This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format. A separate excel formatted Budget is required for engineering costs to include rate and unit costs.

**Reporting Requirements**

**Progress Reports:** The grantee shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

**Final Report:** At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

**Payments**



### Reporting Requirements

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

### Performance Requirements

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per the Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



# COLORADO

Colorado Water Conservation Board

Department of Natural Resources

## Colorado Water Conservation Board

Water Supply Reserve Fund

EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs

Date: 10/31/2023

Water Activity Name: Beaver Park Reservoir Seepage Mitigation Study

Grantee Name: Colorado Rio Grande Restoration Foundation

<u>Task No.</u>	<u>Description</u>	<u>Start Date</u>	<u>End Date</u>	<u>Matching Funds</u>	<u>WSRF Funds</u>	<u>Total</u>
1	Geotechnical Investigation	12/15/2023	12/15/2028	\$34,800	\$170,000	\$204,800
2	Project Administration	12/15/2023	12/15/2028	\$5,000	\$0	\$5,000
<b>Total</b>				\$39,800	\$170,000	\$209,800