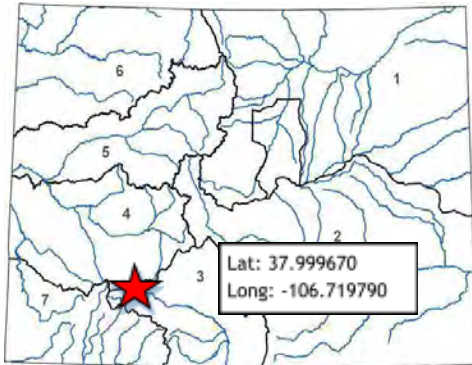




# Rio Grande National Forest Wet Meadows Restoration Project Colorado Rio Grande Restoration Foundation

March 2023 Board Meeting

## Water Plan Grant Application



DETAILS	
Total Project Cost:	\$279,699
Water Plan Grant Request:	\$99,841
Recommended Amount:	\$99,841
Other CWCB Funding:	\$0
Other Funding Amount:	\$179,858
Applicant Match:	\$0
Project Type:	Construction/Implementation
Project Category:	Watershed Health & Restoration
Measurable Result:	95,040 feet of stream restored; 357 acres of restored or preserved habitat; 30 Coloradoans impacted by engagement activity

LOCATION	
Counties:	Conejos, Rio Grande, Hinsdale, Saguache, Mineral
Drainage Basin:	Rio Grande

Colorado Water Plan Grant funding will support the Colorado Rio Grande Restoration Foundation with the Rio Grande National Forest (RGNF) Wet Meadows Restoration Project. This well-developed, landscape scale effort will map, implement, and monitor process based restoration of wet meadows across the RGNF to improve aquatic habitat, floodplain connectivity, water quality, community participation, and data.

This project aims to restore habitat for the Rio Grande Cutthroat Trout, chub, and sucker, all Colorado Parks and Wildlife Tier 1 Wetland Species of Concern.

Success of the project will include 1) the identification of priority restoration areas and beaver reintroduction sites across the RGNF, 2) the restoration of 18 miles of stream and 357 acres of riparian and wet meadow habitat through implementation of process based restoration techniques and revegetation, 3) the development of a formal beaver relocation protocol to support partners with their reintroduction on suitable sites in the RGNF, 4) the engagement of local stakeholders and 30 volunteers in restoration activities and beaver reintroduction efforts, and 5) the completion of long-term monitoring to track the effectiveness of reintroduction and restoration efforts.

The RGNF Wet Meadows Restoration Project project demonstrates a strong commitment to collaboration with broad-based involvement from local stakeholders, the U.S. Forest Service, Colorado Parks and Wildlife, Trout Unlimited, and Southwest Conservation Corps. It was identified in the Rio Grande Basin Implementation Plan, several local stream management plans, the Upper Rio Grande Watershed Assessment, and the proposed U.S. Forest Service Rio Grande Land Management Plan. The Rio Grande Basin Roundtable supports this project.

The Colorado Water Plan grant request is 36% of the total project cost and the other project funding is 64%.

### Funding Recommendation:

Staff recommends full funding of \$99,841 to Colorado Rio Grande Restoration Foundation for the RGNF Wet Meadows Restoration Project.

**COLORADO**Colorado Water  
Conservation Board

Department of Natural Resources

## Colorado Water Conservation Board

**Water Plan****Water Project Summary**

Name of Applicant	Colorado Rio Grande Restoration Foundation
Name of Water Project	Rio Grande National Forest Wet Meadows Restoration Project
Grant Request Amount	<b>\$99,841.00</b>
Primary Category	\$99,841.00
<i>Watershed Health &amp; Recreation</i>	
Total Applicant Match	<b>\$0.00</b>
<i>Applicant Cash Match</i>	\$0.00
<i>Applicant In-Kind Match</i>	\$0.00
Total Other Sources of Funding	<b>\$179,858.00</b>
<i>US Forest Service</i>	\$37,500.00
<i>Trout Unlimited</i>	\$37,608.00
<i>National Fish and Wildlife Foundation</i>	\$99,359.00
<i>Community Volunteers</i>	\$5,391.00
Total Project Cost	<b>\$279,699.00</b>

**Applicant & Grantee Information**

Name of Grantee: Colorado Rio Grande Restoration Foundation

Mailing Address: 623 4th Street Alamosa CO 81101

FEIN: 753,169,057

Organization Contact: Emma Reesor

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Organization Contact - Alternate: Daniel Boyes

Position/Title: Program Manager

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Grant Management Contact: Emma Reesor

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Phone: (719) 589-2230

Grant Management Contact - Alternate: Daniel Boyes

Position/Title: Program Manager

Email: daniel@riograndeheadwaters.org

Phone: 719-589-2230

**Description of Grantee/Applicant**

No description provided

**Type of Eligible Entity**

- ☐ Public (Government)
- ☐ Public (District)
- ☐ Public (Municipality)
- ☐ Ditch Company
- ☐ Private Incorporated
- ☐ Private Individual, Partnership, or Sole Proprietor
- ☒ Non-governmental Organization
- ☐ Covered Entity
- ☐ Other

### Category of Water Project

- ☐ Agricultural Projects  
*Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.*
- ☐ Conservation & Land Use Planning  
*Activities and projects that implement long-term strategies for conservation, land use, and drought planning.*
- ☐ Engagement & Innovation Activities  
*Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.*
- ☒ Watershed Restoration & Recreation  
*Projects that promote watershed health, environmental health, and recreation.*
- ☐ Water Storage & Supply  
*Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.*

### Location of Water Project

Latitude 37.999670  
 Longitude -106.719790  
 Lat Long Flag Other: Coordinates based on other boundaries or locations  
 Water Source The project will take place on the Rio Grande National Forest (RGNF), which encompasses 1.84 million acres and is home to the headwaters of the Rio Grande, Conejos River, Saguache Creek, and many other streams.  
 Basins Rio Grande  
 Counties Conejos; Rio Grande; Hinsdale; Saguache; Mineral  
 Districts

### Water Project Overview

Major Water Use Type Environmental  
 Type of Water Project Construction / Implementation  
 Scheduled Start Date - Design 7/1/2023  
 Scheduled Start Date - Construction 9/1/2023  
 Description  
 The Rio Grande National Forest Wet Meadows Restoration Project (Project) will restore high elevation wet meadow habitats through the implementation of low tech, process-based techniques within the Rio Grande National Forest (RGNF) to benefit native aquatic species, riparian corridors, and overall watershed health.

Requested CWP Grant funding will support the following project activities:

- 1) The identification of priority restoration areas and beaver reintroduction sites in the RGNF;
- 2) The restoration of 18 miles of stream and 357 acres of riparian and wet meadow habitat through the implementation of process-based restoration techniques and riparian revegetation;
- 3) The development of a formal beaver relocation protocol to assist partners with the reintroduction of beavers to suitable sites on the RGNF;
- 4) The engagement of local stakeholders and 30 community volunteers in restoration activities and beaver reintroduction efforts;
- 5) The completion of long-term monitoring to track the effectiveness of project efforts and inform future restoration and reintroduction.

Project activities will improve riparian and aquatic habitat and engage community members in environmental stewardship, resulting in measurable outcomes for species of conservation concern. This project is a partnership between the RGNF, Trout Unlimited, Rio Grande Headwaters Restoration Project, Colorado Parks and Wildlife, Volunteers for Outdoors Colorado, and Southwest Conservation Corps.

#### Measurable Results

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	New Storage Created (acre-feet)
95,040	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (dollars/year)
	Efficiency Savings (acre-feet/year)
357	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
30	Number of Coloradans Impacted by Engagement Activity
Other	
Project partners will engage with 15 agency stakeholders and landowners regarding beaver introduction.	

#### Water Project Justification

The Rio Grande National Forest Wet Meadows Restoration Project (Project) will restore high elevation wet meadow habitats through the implementation of low tech, process-based techniques to benefit instream and riparian habitat for Rio Grande cutthroat trout (RGCT), Rio Grande sucker, and North American beaver. The Project will also develop and pilot a formal beaver translocation protocol, allowing Project partners to utilize beavers more effectively as a restoration tool. As such, the Project will address environmental and recreational needs facing the Rio Grande Basin and State of Colorado.

Project activities will support many of the Watershed Health, Environment, and Recreation goals listed in Section 10.3 of the Colorado Water Plan (CWP). The Project meets CWP Goals and Criteria in the following ways:

- By restoring habitat for RGCT, a Tier 1 Species of Concern in Colorado, the Project supports the goal to “Enhance Environmental and Recreational Economic Values: Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans (CWP, Section 10.3, pp. 10-12).” The Project will support existing

RGCT populations, allowing Coloradans continue to enjoy fishing for the Rio Grande Basin's native trout species.

- Restoration activities further the goal to “Protect Healthy Environments: Understand, protect, maintain, and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term resiliency” (CWP, Section 10.3, pp. 10-12). Project activities will reduce erosion, enhance aquatic habitat, and support healthy and functioning wet meadow complexes.
- Finally, the Project will help meet the goal to “Work on creating resilient watersheds to protect, restore, and enhance water quality in the face of climate change” (CWP, Section 10.3, pp. 10-14). Restoration of stream-floodplain connectivity and natural hydrologic processes will increase alluvial aquifer storage and augment late summer streamflow. This, combined with native riparian revegetation, will improve water quality by increasing stream shading and buffering water temperature.

Additionally, the Project will help mitigate potential future impacts to recreation identified in the 2019 Technical Update to the 2015 Water Plan (Technical Update, formerly SWSI). The Technical Update resulted in the Environmental Flow Tool, which quantifies potential risks to the environment and recreation associated with predicted changes in streamflow. Environmental Flow Tool results for Rio Grande Basin streams, including the Rio Grande, Conejos River, and Alamosa River, suggest average annual streamflow will decrease, particularly during late summer months. These changes in streamflow will adversely impact aquatic organisms. This Project will mitigate potential impacts to aquatic life by improving aquatic species habitat through improved water quality, the creation of pools and woody habitat, and by augmenting late summer streamflows through floodplain reconnection.

In addition to meeting many of the Colorado Water Plan Goals and complimenting the Technical Update, the Project meets three of the five Rio Grande Basin Implementation Plan (BIP) Goals and is supported by the Rio Grande Basin Roundtable. For example, this Project meets the BIP goal to work toward, “Healthy watersheds that provide critical ecosystem services, are resilient to disturbances, and benefit from ongoing efforts to protect water sources, improve water quality, enhance aquatic, riparian, wetland, and upland habitat, and maintain connected ecosystems.” (2021 Rio Grande BIP, Section 4, pp. 22). The Project is also listed in the BIP Identified Projects and Processes (IPPs) under name, “Rio Grande National Forest Wet Meadow Restoration Project - Phase 2.”

The need for this Project was identified in the Upper Rio Grande Watershed Assessment (URGWA) and Rio Grande, Conejos River, and Saguache Creek Stream Management Plans (2020 SMPs, Section 3.2.9, pp. 139) and is a result of planning and collaboration between the U.S. Forest Service Rio Grande National Forest (RGNF), Colorado Parks and Wildlife (CPW), Trout Unlimited (TU), and the Rio Grande Headwaters Restoration Project. Participation from diverse stakeholders ensures that multiple needs are being met through project design and implementation. The Project meets multiple SMP goals by improving the condition and function of floodplains and riparian areas, restoring natural channel processes, and enhancing aquatic and riparian habitats in the Rio Grande Basin's headwaters streams.

In addition, requested CWP grant funds for the Project will be leveraged by significant in-kind and cash contributions from the RGNF and TU as well as grant funding through the National Fish and Wildlife Foundation (NFWF) Southwest Rivers Headwaters Fund. Without CWP funding, project partners would likely not be able to raise sufficient dollars out of pocket or from other grant sources to fund this project. As such, CWP funds are critical to complete the Project.

## Related Studies

The following is a list of related studies supporting the Project activities:

- 1) Rio Grande, Conejos River, and Saguache Creek Stream Management Plans (SMP): The Project's restoration activities were identified and prioritized in the 2020 Rio Grande, Conejos River, and Saguache Creek SMPs.
- 2) Upper Rio Grande Watershed Assessment (URGWA): The URGWA is a study of the Rio Grande headwaters from Stony Pass to South Fork, completed in 2019, that examined the ecological condition of the Rio Grande mainstem and its major tributaries. In response to the results of the geomorphology assessment, the URGWA recommended the "promotion and protection of beaver activity" in the watershed to mitigate the impacts of altered hydrologic and sediment regimes. This Project will implement these recommendations, improving the overall health of the watershed through natural beaver activity, process-based stream restoration, and riparian restoration.
- 3) RGNF Proposed Land Management Plan: The USFS's proposed management plan for the RGNF highlights the importance of continued support for beavers, including reintroduction projects, stream restoration efforts and activity monitoring.
- 4) Rio Grande Basin Implementation Plan: The Project meets three of the five BIP Goals and is listed in the 2021 Rio Grande Basin Implementation Plan under the Identified Projects and Processes (IPPs) name, "Rio Grande National Forest Wet Meadow Restoration Project - Phase 2."

Additionally, the Project will build upon the success and lessons learned from the Rio Grande National Forest Beaver Characterization, Restoration, and Reintroduction Project, which resulted in a characterization study of beaver habitat potential, reintroduction of beavers at priority restoration areas within the RGNF, and implementation restoration to enhance aquatic and riparian habitat in critical headwater wet meadow/stream complexes. Project partners have taken successes and lessons learned to develop this proposed Project. Together, these projects will provide lasting and systemwide benefits for the Rio Grande Headwaters.

#### **Taxpayer Bill of Rights**

The Applicant, The Colorado Rio Grande Restoration Foundation, is not subject to TABOR limitations, as it is a Colorado nonprofit organization operating under Section 501(c)(3) of the U.S. Internal Revenue Code.