



## 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 Restoration Project at Gunbarrel Road
Grant Request Amount	<b>\$440,136.00</b>
Primary Category	\$440,136.00
<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>\$528,598.43</b>
<i>Natural Resources Conservation Service</i>	\$118,304.43
<i>Private Landowners</i>	\$175,000.00
<i>Natural Resources Conservation Service</i>	\$235,294.00
Total Project Cost	<b>\$968,734.43</b>

### Applicant & Grantee Information

Name of Grantee: Colorado Rio Grande Restoration Foundation

Mailing Address: 623 4th Street Alamosa CO 81101

Organization Contact: Daniel Boyes

Position/Title: Executive Director

Phone: 719-589-2230

Email: daniel@riograndeheadwaters.org

Organization Contact - Alternate: Emma Reesor

Position/Title: Administrative Director

Phone: (719) 589-2230

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### 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	37.606369
Longitude	-106.140079
Lat Long Flag	Stream location: Coordinates based on general location on stream
Water Source	Rio Grande
Basins	Rio Grande
Counties	Rio Grande
Districts	20-Rio Grande

### Water Project Overview

Major Water Use Type	Environmental
Type of Water Project	Design & Construction
Scheduled Start Date - Design	11/1/2024
Scheduled Start Date - Construction	3/31/2026
Description	<p>The Rio Grande at Gunbarrel Road, near Monte Vista, CO is facing a deterioration in river health due to unstable and eroding streambanks, an over-wide channel, and degraded riparian areas. Unstable and eroding streambanks are causing significant amounts of sediment to be mobilized, degrading water quality, reducing aquatic habitat due to sedimentation, and reducing the extent of riparian habitat.</p> <p>The Rio Grande Restoration Project at Gunbarrel Road (the Project) seeks to improve the health and resilience of the Rio Grande downstream of Gunbarrel Road by stabilizing streambanks, constructing a bankfull bench planted with native riparian vegetation, and reshaping the stream to restore appropriate channel dimensions. Restoration activities will reduce erosion and improve water quality, enhance riparian and aquatic habitat, increase alluvial water storage during drought years, and reduce risk to life and property. The Project will engage private landowners, the Natural Resources Conservation Service and local stakeholders in ~1 mile of river restoration.</p> <p>When complete, the Project will have the following outcomes:</p>

- Stabilization of 5,111 linear feet of streambank at four sites along the Rio Grande;
- Restoration of at least 1 acre of riparian habitat for threatened and endangered species;
- Reduced risk of flood-related impacts to life and property.

### 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)
5,111	Length of Stream Restored or Protected (linear feet)
	Length of Pipe, Canal Built or Improved (linear feet)
	Efficiency Savings (dollars/year)
	Efficiency Savings (acre-feet/year)
1	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
	Number of Coloradans Impacted by Engagement Activity
Other	
No additional measurable results provided	

### Water Project Justification

The Rio Grande Restoration Project at Gunbarrel Road (the Project) will improve the health and resilience of the Rio Grande downstream of Gunbarrel Road, near Monte Vista, CO by stabilizing streambanks, constructing bankfull benches planted with native riparian vegetation, and reshaping the stream channel to restore appropriate channel dimensions. Over the last two decades, significant amounts of concrete rip rap have been placed in the river channel in portions of the Project area. This materials has proven ineffective and has led to degraded riparian and aquatic habitat and has increased streambank erosion in some areas. Restoration activities will reduce erosion and improve water quality, enhance riparian and aquatic habitat, increase alluvial water storage during drought years, and reduce risk to life and property.

The Project will engage private landowners, the Natural Resources Conservation Service (NRCS), and local stakeholders in ~1 mile of river restoration. Among the identified project sites is a roughly ½-mile portion of the riverfront which is under conservation easement through the NRCS' Wetland Reserve Easement Program (WRP). Properties under this program are intended to provide some or all of the following benefits to wildlife and ecosystem function: "habitat for migratory waterfowl and other wetland dependent wildlife, including threatened and endangered species; improve water quality by filtering sediments and chemicals; reduce flooding; recharge groundwater; protect biological diversity; provide resilience to climate change." The Project will meet many of the WRP's objectives: Revegetated streambanks and riparian areas will improve habitat for multiple riparian-dependent species, including the federally endangered Southwestern Willow Flycatcher (SWFL) and federally threatened Western Yellow-Billed Cuckoo (YBCU). Reduced erosion and sediment loading will enhance aquatic habitat for vulnerable aquatic species, including the Rio Grande Chub (RGC), a species which is endemic to the Rio Grande Basin and is a tier 1 species of concern in Colorado.

As such, the Project will address environmental and community needs facing the Rio Grande Basin and State of Colorado. Project activities will support multiple Colorado Water Plan (CWP) Action Areas and goals set in the Rio Grande Basin Implementation Plan. The Project aligns primarily with the CWP Action Areas of Vibrant Communities and Thriving Watersheds in the following ways:

- Enhanced riparian and aquatic habitat through riparian revegetation, erosion reduction, channel shaping, and construction of bankfull benches, is in alignment with the action item to “rehabilitate streams to improve habitat, reduce erosion, and meet needs” (CWP Section 3 pp. 205). As noted on page 204 of the CWP, “sustaining healthy watersheds, which include the forests, rivers, and habitat within them, is critical to Colorado’s tourism, our resilience, and our water supply.”
- Channel shaping, creation of vegetated bankfull benches, and aquatic habitat restoration with materials such as woody debris will restore natural sediment transport processes, increase alluvial aquifer storage, and mitigate potential impacts to aquatic life. In doing so, the Project implements “Nature-based solutions [which will] attenuate flood flows, boost late-season low flows, and improve ecosystem health and water quality” (CWP Section 3 pp. 205). This, combined with riparian revegetation, will improve water quality by increasing stream shading and buffering water temperature.
- By stabilizing streambanks and reducing the risk of extreme streamflow and/or wildfire events to life and property, the Project is aligned with the CWP action to “Create greater drought, fire, and flood resilience” (CWP Section 3 pp. 206).
- By restoring riparian and aquatic habitat for multiple native and vulnerable species, including the threatened and endangered species described above, the Project supports the action of “Improving riparian and aquatic habitat [for] important to the recovery of native and imperiled species” (CWP Section 3 pp. 206).

In addition to meeting many of the Colorado Water Plan Goals, the Project meets two 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). Additionally, the Project furthers the objectives of the IPP RG-2020-0029, titled “Rio Grande Riparian Stabilization Project - Phase 6 (2021 Rio Grande BIP, Section 6, pp. 41).

The need for this Project was identified in the Rio Grande Stream Management Plan (2020 SMP, Section 4.1, pp. 202) and is a result of planning and collaboration between the Natural Resources Conservation Service (NRCS), Bird Conservancy of the Rockies, Rio Grande Headwaters Land Trust, the Rio Grande Water Conservation District, private landowners, and the Colorado Rio Grande Restoration Foundation. 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 riparian areas, restoring natural channel processes, and enhancing aquatic and riparian habitats along the Rio Grande corridor.

Finally, requested CWP grant funds for the Project will be leveraged by significant in-kind and cash contributions, including federal funds, from the NRCS and private landowners.

### Related Studies

The need for the Rio Grande Restoration Project at Gunbarrel Road (the Project) was identified in local and community-driven planning efforts and works toward implementing multiple CWCB programs. Recent plans, have highlighted the need to restore streams and rivers in the Rio Grande Basin, including the Rio Grande mainstem, to enhance wildlife habitat, work towards more healthy and resilient streams and rivers, and support recreation opportunities in the area. Listed below are the plans, and studies which have informed this project:

- Rio Grande Stream Management Plan (SMP, 2020): The restoration needs addressed by the Project were prioritized in the Rio Grande SMP.
- Rio Grande Basin Implementation Plan (BIP, 2021): The Project meets two of the five BIP Goals.

Additionally, this project supports two of the four Colorado Water Plan (CWP) Interconnected Action Areas: Vibrant Communities and Thriving Watersheds and assists in the implementation of the CWCB's Wildfire Ready Watersheds program. This Project is a holistic approach to improve river health and function, enhance wildlife habitat, increase the resiliency of the river and the community to manage extreme flow events, and mitigate the effects of climate change. This restoration approach is well aligned with CWP Action Areas and reduces risks to life and property resulting from high-flow and/or extreme events, including potential wildfire impacts. Project partners have used successes and lessons learned over the years to develop and inform the proposed project. The Project will provide lasting and systemwide benefits for the Rio Grande and the San Luis Valley.

#### **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.