



**COLORADO**

Colorado Water Conservation Board

Department of Natural Resources

**Colorado Water Conservation Board**

**Water Plan**

**Water Project Summary**

Name of Applicant	RiversEdge West	
Name of Water Project	Dolores River Riparian Habitat Restoration	
Grant Request Amount		<b>\$336,758.40</b>
Primary Category		\$336,758.40
<i>Watershed Health &amp; Recreation</i>		
Total Applicant Match		<b>\$1,000.00</b>
<i>Applicant Cash Match</i>		\$1,000.00
<i>Applicant In-Kind Match</i>		\$0.00
Total Other Sources of Funding		<b>\$336,519.80</b>
<i>Bureau of Land Management</i>		\$146,795.00
<i>Bureau of Land Management</i>		\$10,000.00
<i>National Fish and Wildlife Foundation</i>		\$144,800.00
<i>Western Colorado Conservation Corps</i>		\$3,432.00
<i>Southwest Conservation Corps</i>		\$9,000.00
<i>Volunteers for Outdoor Colorado</i>		\$6,000.00
<i>Volunteers for Outdoor Colorado</i>		\$16,492.80
Total Project Cost		<b>\$674,278.20</b>

**Applicant & Grantee Information**

Name of Grantee: RiversEdge West	
Mailing Address: PO Box 1907 Grand Junction CO 81502	
FEIN: 270,007,315	
Organization Contact: Shannon Wadas	
Position/Title: Associate Director	Email: <a href="mailto:swadas@riversedgewest.org">swadas@riversedgewest.org</a>
Phone: 9702567400	
Organization Contact - Alternate: Rusty Lloyd	
Position/Title: Executive Director	Email: <a href="mailto:rlloyd@riversedgewest.org">rlloyd@riversedgewest.org</a>
Phone: 9702567400	
Grant Management Contact: Shannon Wadas	
Position/Title: Associate Director	Email: <a href="mailto:swadas@riversedgewest.org">swadas@riversedgewest.org</a>
Phone: 9702567400	
Grant Management Contact - Alternate: Shannon Wadas	
Position/Title: Associate Director	Email: <a href="mailto:swadas@riversedgewest.org">swadas@riversedgewest.org</a>
Phone: 9702567400	

**Description of Grantee/Applicant**

RiversEdge West restores riparian ecosystems through education, collaboration, and technical assistance. We accomplish this by replacing invasive plants with native plant species along thousands of riverside acres across the Southwest, educating thousands of community members and youth to foster long-term river stewardship, training river restoration professionals through our training series and annual conference – including education and outreach about the tamarisk beetle, and researching and developing new restoration techniques to effectively restore riparian ecosystems.

### 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	38.213240
Longitude	-108.494590
Lat Long Flag	Stream location: Coordinates based on general location on stream
Water Source	Dolores River
Basins	Southwest
Counties	Montrose; San Miguel; Dolores; Mesa
Districts	63-Dolores River Basin

### Water Project Overview

Major Water Use Type	Environmental
----------------------	---------------

Type of Water Project Construction / Implementation

Scheduled Start Date - Design 4/1/2024

Scheduled Start Date - Construction 12/31/2026

Description

This proposal will support restoration efforts on the Dolores River from McPhee Reservoir to the Confluence of the Colorado, maintaining past treatment areas while implementing treatment on remaining tamarisk infestation. Treatments are to be implemented by Western Colorado Conservation Corps (WCCC) and Southwest Conservation Corps (SCC) and include 3-person strike teams as well as 8-person specialty crews. Crew work includes initial tamarisk removal, tamarisk re-sprout treatments, secondary weed treatments, and native plant revegetation efforts. Volunteers for Outdoor Colorado (VOC) will assist with implementation efforts through two volunteer events. Additional removal of tamarisk and willows will be performed by a local heavy equipment contractor who will remove these plants to aid in the creation and restoration of backwater fish habitat. RiversEdge West (REW) will work with Bird Conservancy of the Rockies to perform avian surveys to determine riparian health of the treatment areas and track habitat improvements.

**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)
26,400	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)
83	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
60	Number of Coloradans Impacted by Engagement Activity

Other

This project also enhances communication and coordination between agricultural landowners, community members, federal agencies, businesses, conservation districts, and local governments through a collaborative approach. In addition to the populations directly impacted by engagement, this project also positively impacts local residents, business, and visitors by improving overall watershed health, recreational access, and landscape aesthetics.

**Water Project Justification**

The Dolores River Riparian Habitat Restoration project aligns with the strategic goals outlined in the Colorado Water Plan and the Southwest Basin Roundtable Implementation Plan, making it a pivotal endeavor to improve aquatic and terrestrial habitat, including for endangered native fishes, advance river-based recreation, and improving agricultural uses of riparian areas. It achieves this alignment by:

Enhancing Habitat: Improving both aquatic and terrestrial habitats, with a particular focus on creating a more favorable environment for endangered native fish species.

Expanding River-Based Recreation: Enhancing the quality and accessibility of river-based recreation opportunities.

Fostering Sustainable Agriculture: Enhancing the utility of riparian areas for agricultural purposes in a sustainable manner.

The project stands as evidence to the power of collaboration. It brings together a diverse set of stakeholders, ranging from federal agencies and county representatives to nonprofit organizations, private landowners, and community volunteers. This collective effort goes beyond jurisdictional boundaries, ensuring a comprehensive and holistic approach to addressing riparian health.

The project's foundation draws significantly from the Dolores River Riparian Action Plan (DR-RAP), which has served as a guiding document for the Dolores River Restoration Partnership (DRRP) since 2010. Complementing this foundation, a transition plan established in 2014 provides valuable direction for current treatment efforts. Furthermore, the ongoing development of an updated restoration plan reinforces the project's commitment to guided, forward-thinking, and collaborative restoration efforts.

Included below are specific areas within the Colorado Water Plan and the Southwest Basin Roundtable's Implementation Plan that resonate with the project.

## 2023 Colorado Water Plan

### Thriving Watersheds:

Healthy Lands - Shared stewardship improves watershed health and resilience across multiple jurisdictions (pg. 204): This project represents a collaborative effort between nonprofit organizations, private landowners, county government, and federal and management agencies that restores riparian areas across jurisdictional boundaries and on multiple land ownership types.

Engaged Partners - Agencies and stakeholders need to plan together, prioritize together, and act together (pg. 207): This project is a collaborative effort resulting from planning among federal agency staff, local stakeholders, and other partners.

Meeting Future Water Needs - Increase access to recreational opportunities (pg. 206): This project improves recreational opportunities by enhancing public river access points, opening up river campsites, and improving river aesthetics.

Wise Water Use - Invasive phreatophyte and species removal (pg. 206): This project removes tamarisk which disconnects floodplains from the river, channelize rivers, alter nutrient cycles, and consume large amounts of water. The Dolores River portion is part of the larger Dolores River basin-wide efforts of the Dolores River Restoration Partnership that works across jurisdictional and state boundaries to implement riparian restoration. The project sites occur on adjacent private and Bureau of Land Management lands.

Healthy Lands - Reconnecting floodplains and nature-based solutions (pg. 206): Tamarisk and Russian olive armor riverbanks which causes rivers to disconnect from the floodplain. This project removes tamarisk to re-establish and maintain floodplain connectivity.

Healthy Lands - Improving riparian and aquatic habitat (pg. 206): This project improves riparian habitat by removing invasive plant species and establishing diverse native plant species. It also improves instream habitat by removing invasive plants that armor riverbanks and disconnect the river from the floodplain and reduce the presence of backwater habitats that native fish depend on. Removal of tamarisk, Russian olive, and selective willows also helps maintain natural river geomorphology, which is key to healthy native fish habitat in the lower

Dolores River.

Partner Actions Rely on Effective Engagement at Different Levels (pg. 207): As a nonprofit organization, RiversEdge West coordinates the Dolores River Restoration Partnership which consists of federal, state, county, research, educational, and nonprofit entities as well as private landowners. On the Dolores River, RiversEdge West leads project coordination, planning, and data collection. Project sites along the Dolores River and tributaries are identified in the Dolores River Riparian Action Plan as well as a Transition Plan for Monitoring and Maintenance.

Resilient Planning:

Meeting Future Water Needs - Flood storage for extremes (pg. 217): Healthy and properly functioning riparian areas, which this project aims to maintain and establish, act as natural storage areas that absorb water during atypically high river flow events.

Robust Agriculture:

Healthy Lands - Reducing erosion and improving water quality (pg. 195): This project enhances riparian buffers of agricultural lands that consist of diverse native vegetation which can aid in erosion control and contain filtration properties which can improve water quality

Southwest Basin Implementation Plan

Goal D1: Maintain, protect, and enhance recreational values that support local and regional economies derived from recreational water uses, such as fishing, boating, hunting, wildlife watching, camping, and hiking.

This project will significantly contribute to enhancing recreational opportunities and enjoyment of the Dolores River. By increasing shoreline access, improving wildlife habitat for viewing, and facilitating better access for rafting and other recreational activities. These enhancements not only benefit the local and regional economies that rely on activities like fishing, boating, and wildlife watching but also enrich the experience for outdoor enthusiasts and the community at large.

Goal E1: Encourage and support restoration, recovery, and sustainability of endangered, threatened, and imperiled aquatic and riparian-dependent species and plant communities.

Through the removal of invasive woody plants, this project will improve critical fish habitat on the Dolores River, which includes threatened and imperiled species such as the Bluehead sucker, Colorado pikeminnow, flannelmouth sucker, razorback sucker, and Roundtail chub. The removal of tamarisk will result in a more dynamic river system, reduce channelization, and encourage the formation of slackwater habitat pools, crucial for the survival of these vulnerable species. This project exemplifies a commitment to the long-term sustainability and recovery of these aquatic populations and their associated riparian habitats.

Goal E2: Support efforts to protect, maintain, monitor, and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, support native species and functional habitat (aquatic and terrestrial ecosystems) in the long term, and adapt to changing conditions.

By removing these plants that armor banks, create channelization of the bank, and reduce connectivity to the

floodplain, this project looks to improve the riparian ecosystem of the Dolores River to a more self-sustaining and functional state. In the short term, this project removes tamarisk and select willows which improves habitat for fish including warm and cold-water species as well as terrestrial wildlife. In the long term, this project is part of the greater effort of the Dolores River Restoration Partnership (DRRP) which is committed to the long-term monitoring and maintenance of past projects and investments made. Specifically related to this project will be the monitoring of treatment plots for avian activity and learning how various bird species adapt to removal efforts.

Goal F3: Encourage and support projects that build resilient watersheds and healthy forests impacted by drought, fire, and climate change.

The removal of tamarisk through this project serves as a fundamental step towards building more resilient watersheds and fostering healthy riparian forests. In doing so, it combats the impacts of drought, mitigates fire risks, and addresses the challenges posed by climate change. By reducing salinity levels in the Dolores River Basin, a consequence of tamarisk invasion, we alleviate one aspect of environmental stress. Furthermore, the removal of tamarisk, a significant fire fuel, directly decreases the likelihood and severity of wildfires in riparian forests. This, in turn, prevents water quality issues resulting from intense fires. Additionally, the project incorporates the active revegetation of native plants, particularly willows, which have been proven to enhance water quality and contribute to the resilience of the ecosystem (Franks et al 2019).

Goal F4: Support the management objectives, strategies, and actions identified in the Colorado Aquatic Nuisance Species Management Plan and the Noxious Weed Program to avoid or mitigate negative impacts to natural resources, outdoor recreation, and the water infrastructure of the Southwest Basin.

This project supports goals of the Colorado Noxious Weed Program through targeted removal of several list B noxious weeds including tamarisk, Russian olive, Russian knapweed, and hoary cress. Additionally, list A species Purple loosestrife, has been historically mapped in the Dolores River corridor and crews are trained on identification to provide early detection and rapid response should an infestation be discovered. Removing these invasive species will meet natural resource management goals and improve recreational access.

### Related Studies

Independent Peer Review of Tamarisk and Russian Olive Evapotranspiration Colorado River Basin:  
<https://riversedgewest.org/resource-center/documents/independent-peer-review-tamarisk-russian-olive-evapotranspiration-colorado-river-basin>

Dolores River Riparian Action Plan (DR-RAP):  
[https://ocs.fortlewis.edu/drrp/pdf/2010\\_Dolores\\_River\\_Riparian\\_Action\\_Plan.pdf](https://ocs.fortlewis.edu/drrp/pdf/2010_Dolores_River_Riparian_Action_Plan.pdf)

Dolores River Restoration Partnership Transition Plan for Monitoring & Maintenance :  
[https://riversedgewest.org/sites/default/files/2023-08/DRRP\\_Transition\\_Plan\\_03\\_20\\_2017.pdf](https://riversedgewest.org/sites/default/files/2023-08/DRRP_Transition_Plan_03_20_2017.pdf)

### Taxpayer Bill of Rights

N/A