

### Grand Valley Fluvial Hazard Mapping and Riparian Coordination Mesa County

### Colorado Watershed Restoration Program Application

0

County/Counties: Drainage Basin:

С

Colorado and

January 2022 Board Meeting

	DETAILS
~	Total Project Cost:\$330,879
	Colorado Watershed \$157,434 Restoration Program Request:
1	Recommended amount: \$80,000
5	Other CWCB Funding: \$0
2m	Other Funding Amount: \$142,658
-ly	Applicant Match: \$30,787
	<pre>Project Type(s): Planning</pre>
0 N	<i>Project Category(Categories):</i> Watershed and Stream Restoration
Mesa	Measurable Result: Fluvial Hazard Zone mapping,
Gunnison	increased planning and coordination, monitoring and
	maintenance of riparian restorations

The purpose of this project is to collaboratively coordinate resources to benefit riparian habitat in the Grand Valley. These efforts will enhance resources, restoration and management of riparian habitat on local, state, private lands as well as Bureau of Land Management lands contained within National Conservation Areas proximate to the Grand Valley. This proposal will also seek to map and delineate Fluvial Hazard Zone areas vulnerable to sediment and debris impacts spurred by flood events. This is an important step outlined in the Grand Valley River Corridor Initiative taking shape in Mesa County.



This project will work to achieve the following objectives: 1.Coordinate the maintenance of previously treated sites in the DRC to ensure recovery from invasive plant infestation and habitat enhancement as well as improved overall river function. 2.Conduct riparian monitoring within BLM NCAs to gather information about current conditions and inform future management practices. 3. Coordination of restoration work on private lands within the watershed to help ensure water use efficiencies and improved riparian habitat management.

- 4. Monitoring and maintenance work that has been prioritized through the Stewardship Framework is implemented.
- 5. Ecology students of diverse backgrounds cultivate in field training and experience and are cultivated as possible future nature resource managers.
- 6. Fluvial Hazard Mapping information is gathered to inform future planning throughout the entire river corridor.
- 7. Outreach technical assistance and funding opportunities to private landowners (including Stewardship Framework and fluvial hazard mapping information).

#### COLORADO WATER CONSERVATION BOARD Colorado Watershed Restoration Grant RiversEdge West Project Proposal Summary Sheet

Project Title: Grand Valley Fluvial Hazard Mapping and Riparian Coordination

**Project Location and Coordinates:** Colorado and Gunnison rivers through the Grand Valley in Mesa County - Coordinates 39.0639° N, 108.5506° W

Grant Type: Watershed Restoration Grant

Grantee and Fiscal Agent: RiversEdge West PO Box 1907 Grand Junction, CO 81502 Primary Contact: Rusty Lloyd, Executive Director (970) 256-7400 rlloyd@riversedgewest.org

Grant Request Amount: \$157,434 Match Amount: \$173,444 Cash Match: \$142,658 In-kind Match: \$30,787

#### Estimated Completion Date: March 2024

**Brief Description of the Project:** The purpose of this project is to collaboratively coordinate resources to benefit riparian habitat in the Grand Valley. These efforts will enhance resources, restoration and management of riparian habitat on local, state, private lands as well as Bureau of Land Management lands contained within National Conservation Areas proximate to the Grand Valley. This proposal will also seek to map and delineate Fluvial Hazard Zone areas vulnerable to sediment and debris impacts spurred by flood events. This is an important step outlined in the Grand Valley River Corridor Initiative taking shape in Mesa County.

#### **Qualifications Evaluation**

# Identify the lead project sponsor and describe the other stakeholders' level of participation and involvement.

RiversEdge West (REW) is the lead project sponsor and grant coordinator for this proposal, but will be working closely with a number of key stakeholders to carry out the proposed scope of work. REW is the natural lead given the various components scope of work fall directly within REW's purview and REW has the capacity to execute the proposal.

REW effectively coordinates and supports the restoration of riparian lands throughout Colorado, working with myriad partners such as public land managers, tribes, state entities, non-profits, and private landowners. With over 20 years of experience, REW and our partners have amassed a broad base of information and lessons learned about restoration techniques in the area. REW helped establish and currently leads the Desert Rivers Collaborative (DRC), the Dolores River Restoration Partnership (DRRP), and the White River Partnership; and directly supports eight others across West. Thousands of acres of initial tamarisk and Russian olive removal has occurred, as well as monitoring and maintenance efforts, revegetation of sites, and the engagement of thousands of volunteers and students. REW has had a very successful track record in advancing effective riparian restoration and this proposal is looking to build on those successes to ensure the longevity of the work that has been accomplished to date and create a product to inform the entire process of riparian restoration efforts in stream management planning processes in western Colorado.

The DRC, established in 2012, has Memorandum of Understanding Signatories with 20 entities in Mesa and Delta Counties and continues to have over 30 attendees at partnership meetings. Since 2014, under REW's leadership, the DRC has completed restoration treatments on hundreds of acres of riparian lands within the footprint of the DRC. Restoration treatments include the initial removal of woody invasive species such as tamarisk and Russian olive (TRO), treating TRO re-sprouts, secondary weeds control, and revegetation of sites. For this proposal, REW will be partnering with the Bureau of Land Management, Mesa County, City of Grand Junction, City of Fruita, Town of Palisade and Colorado Parks and Wildlife to conduct targeted monitoring and maintenance work throughout the watershed.

For work on private lands within the watershed, REW has hired a Private Lands Biologist (PLB) who is working in conjunction with the Natural Resources Conservation Service and the local Conservation Districts to provide focused technical assistance and conservation planning to landowners and agricultural producers. The PLB works in Resource Team 4, which encompasses Mesa, Delta, and parts of Garfield, Gunnison, and Montrose counties (see Map 4). Included in Resource Team 4 is one of the Colorado River Salinity Control districts, which has specific funding for salinity-reducing practices. The conservation practices implemented in this district have wide-reaching downstream impacts on riparian health.

REW is also a lead in the development of the Grand Valley River Corridor Initiative (RCI), alongside Colorado Mesa University and One Riverfront. RCI is a parallel process to the DRC and has a much larger scope and footprint throughout the Grand Valley than the DRC, as its goal is to develop a framework for coordinating improved communication among water and riverside land managers in the region (see attachment F, RCI geography). REW sits on the RCI Steering Committee and is spearheading the capacity and planning that will eventually evolve into a community-driven process. So far, RCI has done stakeholder outreach, an initial assessment of the key issues affecting the river corridor, hosted stakeholder workshops, has procured seed funding to keep coordination going and is pursuing initial mapping throughout the corridor using existing mapping layers from the various jurisdictions and resource managers.

#### Partners with an active role in this proposal are:

- RiversEdge West
- Bureau of Land Management
- Natural Resource Conservation Service
- Delta Conservation District
- Colorado Mesa University
- Desert Rivers Collaborative (20 partners)

#### Specify in-kind services and cash contributions (match) amount for the proposed activities. See detailed budget provided as Attachment F.

#### **Organizational Capability**

#### What is the applicant organization's history of accomplishments in the watershed?

Since its inception in 2002, REW has supported watershed-wide collaborative partnerships that are comprised of federal, state, and local agencies; community organizations and land owners throughout the West. As part of this effort, REW provides leadership, support, training, and technical assistance to community partnerships, including the DRC and the RCI to ensure they have the capacity, technical resources, and information required to carry out and sustain riparian restoration work. REW has helped to initiate numerous stakeholder approaches to improving the health of riparian areas throughout the state which actively address riparian restoration today (e.g., Desert Rivers Collaborative, Purgatoire Watershed Weed Management Collaborative, Arkansas Woody Invasive Plant Partnership, Dolores River Restoration Partnership, Middle Colorado Watershed Council, and White River Partnership). One of REW's core competencies is sharing technical information and best-practices regarding riparian management.

Furthermore, REW is committed to advancing all aspects of riparian restoration activities, including funding and planning for ongoing monitoring and maintenance of river systems. This includes helping four Colorado stakeholder groups to begin building organizational capacity for stewardship of their riparian areas via our Restore Our Rivers Campaign, raising nearly \$300,000 across the four partnerships in new funds (in 2016 & 2017) from foundations and individuals.

Specific to the DRC focus area, since 2014, 575 acres of initial tamarisk and Russian olive (TRO) removal have occurred, 671 acres of TRO re-sprouts have been addressed, 259 acres of seeding and revegetation have taken place, and 1,273 acres of secondary weeds have been treated by our myriad partners. The proposed work complements and extends restoration efforts funded by previous CWCB grants, including the Water Supply Reserve Account (WSRA) and Invasive Phreatophyte Control Program (IPCP).

In regards to work on private land since the beginning of the partnership agreement in 2018, the NRCS has contracted and implemented wildlife habitat conservation and restoration on 1,254 acres and obligated \$558,072 to fund these projects. The NRCS has funding cycles each calendar year with specific fund pools for wildlife habitat restoration for planned conservation projects. In addition to conservation planning within the NRCS framework, the PLB can be more creative about procuring alternative funding for projects, or incorporating more private landowners into DRC projects.

The Grand Valley's River Corridor Initiative foot print extends from De Beque, Colorado to the Utah state line and encompasses the Gunnison River from Bridgeport to the confluence with the Colorado River. The river corridor is a vital community, economic, cultural, and ecological resource that supports the Grand Valley's wellbeing and prosperity. To date, decision-making about river corridor land-use, habitat management, and water use occurs over dozens of agencies and stakeholder groups each with their own plans and missions; however, these groups share values and challenges related to river corridor management and activities. Given the diverse values of the river corridor, the forecasts for continued growth in the Grand Valley, and the growing environmental stressors (e.g. drought and fire), there is an acute need for collaboration and coordination river corridor activities and planning. The Grand Valley River Corridor Initiative (RCI) in partnership with the Colorado Riverfront Foundation (CRF) will address these needs by establishing the framework for a consensus-driven process that will help to improve communication, prioritize projects, and target restoration/conservation activities within the river corridor.

Over the past year, the RCI Core Team (OneRiverfront, RiversEdge West, and Colorado Mesa University) has worked to gather information from a wide diversity of stakeholders to learn more about shared values and challenges in the river corridor. Through this process the Core Team has determined a need and readiness for ongoing Grand Valley-wide planning and coordination in the river corridor. This proposal intends to build the framework for a successful long-term regional collaborative by taking the information gathered and using it to engage stakeholders in the design of the RCI.

# What level of staffing will be directed toward the implementation of the proposed project/planning effort? Discuss the number of staff and amount of time dedicated for the project.

Both the DRC and RCI projects are key priorities for REW. REW will dedicate the necessary amount of staff time with current staff to ensure that all project goals are met and will ensure new staff and interns are trained and have adequate oversight. This proposal also seeks additional capacity to be able to carry out the action plans that have been outlined to achieve implementation work and ensure restoration, planning and mapping work is completed. Resumes/Bios are outlined in Attachment A:

- Executive Director, Rusty Lloyd 50 hours = .01 FTE
- Associate Director, Shannon Wadas- 240 hours = .05 FTE
- Restoration Coordinator, Rica Fulton- 120 hours = .03 FTE
- Funding Program Coordinator, Kristen Jespersen 100 hours = .02 FTE
- Private Land Biologist, Christine Prins 3809 hours = .91 FTE
- BLM/DRC Coordinator 2745 hours = .66 FTE

• Joel Sholtes, CMU Professor and Fluvial Hazard Expert - 40 hours = .01 FTE

#### Demonstrate that the project budget and schedule are realistic.

CWCB funding will be used to meet the total project budget. With generous in-kind support and a substantial cash match, each task budget is realistic and achievable. The timeline for this project will take place over two years for coordination, monitoring, maintenance and mapping to be conducted. Project budget and timeline are outlined in Attachment F.

#### **Proposal Effectiveness**

#### What information is the project sponsor using to develop the proposed plan or project?

The Colorado Water Plan and Basin Implementation Plans are the central platform and guide for watershed restoration and stream management planning in Colorado. As such, initiatives in these plans drive the planning and implementation of this project. The central purpose of this proposal is providing a tool for riparian restoration work within watershed planning, stream management planning, and integrated watershed management planning. This proposal will add to the multifaceted elements in these plans as a tool for those interested in making restoration goals within existing plans come to fruition. Notably, the Colorado Basin Roundtable supports this proposal and has been identified as a high priority in the Identified Projects and Processes (IPPs).

The DRC utilizes a <u>5-Year Implementation Plan</u> to guide restoration efforts. This plan complements other planning efforts in the Grand Valley; the most pertinent to this effort is the Colorado River Section 206 Aquatic Ecosystem Restoration report, which provides detailed assessment and restoration plans for the Colorado River from Loma to Palisade.

Resource Management Plans have also been developed for several CPW sites, including Island Acres and Horsethief Canyon SWA. Federal Resource Management Plans for Dominguez Escalante National Conservation Area and McInnis Canyons National Conservation Area, and Ruby-Horsethief are also central to work in those areas.

The DRC also utilizes the DRC Rapid Monitoring Protocol, based on work from a sub-committee stemming from REW's Stewardship Framework Initiative.

#### Discuss the multiple objective aspects of the project and how they relate to each other.

This proposal encompasses multiple stages of work throughout the Grand Valley – coordination, planning, mapping, outreach and implementation to achieve improved management of both riparian lands and eventually instream uses as well. As a whole the proposal directly works to achieve multiple goals of the Water Plan – improved planning, improved mapping, targeted restoration, mapping of fluvial hazard zones, and identification of priority sites for restoration and protection.

Objectives driving work of the DRC includes habitat enhancement through the reduction of invasive plants, restoration of native vegetation, stakeholder coordinator to improve riparian health, recreation opportunities, and other watershed benefits. This proposal seeks support for capacity that will allow for the ongoing coordination of site maintenance throughout the Grand Valley, stemming from comprehensive monitoring conducted in the summer of 2021. REW's Restoration Coordinators will work closely with federal, state, municipal, county, and private partners to develop short and long-term restoration maintenance plans on priority riparian areas in the DRC area. Particular emphasis will occur in coordination with the Bureau of Land Management (BLM) in two local National Conservation Areas, Escalante-Dominguez and McInnis Canyons to spearhead monitoring efforts, implement restoration projects, and work with land managers on mapping and other compliance tasks.

The proposed expanded capacity for the PLB will increase comprehensive conservation planning on

private property to address wildlife habitat and riparian resource concerns. Planned practices vary from invasive removal, bank stabilization, erosion control, in-stream habitat improvement, wetland creation and restoration, native seeding, and more. Each plan is designed after extensive resource inventorying and evaluation, and is specific to each property. In addition to planning these habitat improvement practices, conservation plans receiving funding require at least one year of habitat management. This monitoring and management involves detailed observation on the success of the practices and demonstration from the landowner that the area is properly managed.

This proposal also seeks support to carry out much needed fluvial hazard mapping. RCI is spearheading the development of an overlay mapping process that identifies the various land uses and designations within the corridor to better identify where key issues are. However, a key missing piece in this information is the identification of fluvial hazard zones. Planning for erosion hazards is an essential component of effective river corridor management and the prevention of future flood damages. The objective of this task is to fill a key information gap in the planning process so that Grand Valley riverside land managers can better anticipate where lands most vulnerable to fluvial hazards are and designate uses in those areas accordingly. The proposed mapping will complement the work of the Stewardship Framework in helping to identify specific areas within the watershed that are appropriate for future development and those that are appropriate for conservation. A component of this project will be outreaching the results of the mapping process to key land managers and owners.

Overall, the goal of the RCI is to better coordinate the multiple uses within the designated reach of the watershed to manage anticipated impacts of increased water demand, drought, habitat restoration, and development. It is expected that the stakeholder outreach and mapping work being done through the RCI now will serve as a precursor to a future Stream Management or Integrated Watershed Management Planning process in the near-future.

# Describe the proposed monitoring or implementation plan. How will the project or plan measure success of its objectives?

Monitoring is a built-in component of all the implementation work included in this proposal. The DRC Coordinator will be focused on monitoring BLM NCA lands as well as working DRC partners to ensure monitoring takes place on sites that are being maintained. The DRC Rapid Monitoring Protocol was developed collaboratively in 2020 and 2021, providing a standardized set of metrics to inform restoration needs, progress, and riparian health on a watershed scale. The Stewardship Framework that serves as the basis for the proposed implementation work, is informed by ongoing monitoring and outlines protocols for conducting this work.

The Private Lands Biologist will interface with landowners to develop Conservation Plans on properties that have eligible and viable projects. All conservation plans are developed with a timeline of practices that are achievable by the landowner, will allow for the success of the practice, and minimize impact to wildlife (i.e. bird nesting). Also included in all conservation plans are standards and specifications that must be achieved for incentive payments to be made. This ensures all practices are done well. Each practice has a lifespan the landowner agrees to maintain for a minimum of that practice lifespan. And in riparian restoration and wildlife habitat plans, we include at least 1 year of habitat management, which involves continuous monitoring via photo documentation, species lists, and wildlife journals throughout the season. The monitoring and maintenance of all conservation practices are a condition of receiving funding through the NRCS and lead to successful implementation and long-term, healthy management of newly created or restored habitat.

#### Attachment A – REW Staff and Project Partner Bios

**Rusty Lloyd, Executive Director** - Rusty has been with REW since January of 2011. He holds a Bachelor of Science from Kansas State University and a Master's of Public Administration from University of Colorado, Denver. He has over 20 year of experience working in the public and nonprofit sectors. Prior to REW he spent six years as the director of the Western Colorado Conservation Corps and has worked in natural resource management with several federal and state governments in KS and CO.

**Shannon Wadas, Associate Director** - Shannon has worked for since November of 2018. Shannon holds a Bachelor of Arts in Environmental Studies and Outdoor Recreation with a minor in Biology. Shannon worked for Colorado Parks and Wildlife for 10 years and most recently served as the northwest regional representative for U.S. Senator Michael Bennet. She covered six counties and filled various congressional aide roles including constituent advocacy, outreach on legislation and specific policy objectives, and planning and staffing the senator on official visits to the region. As the Associate Director of RiversEdge West, Shannon enjoys utilizing her natural resource experience, along with her management and leadership skills, to support staff and the overall mission of the organization.

**Kristen Jespersen, Funding Program Coordinator** - Kristen works with practitioners to procure short-term and long-term funding for project work and coordinates capacity building activities with partnerships. Kristen has more than 15 years of experience with land management and conservation planning both in the private and public sectors. She earned a Master of Arts in International Policy Studies from the Monterey Institute of International Studies in Monterey, CA and a Bachelor of Arts in Anthropology from Reed College in Portland, OR.

**Rica Fulton, Restoration Coordinator** – Rica has been with REW since June of 2019 and holds a Bachelors in Environmental Studies and Geographic Information Systems at Fort Lewis College in Durango, and a Master's Degree at the University of Wyoming in Geography, Water Resources, and Environment and Natural Resources. Rica has worked for a private geospatial firm, environmental non-profits, and with federal agencies.

**Christine Prins, Private Land Biologist**- Christine started with REW in January, 2021. She holds a Bachelor of Science in Biology from Calvin College in Grand Rapids, MI and a Masters of Science in Botany from Colorado State University in Fort Collins, CO. She has worked at CSU as a biology lab coordinator and an Extension program coordinator. She has extensive field experience as a vegetation crew leader at Rocky Mountain National Park, a research technician on projects at Wind Cave National Park, and as a consultant in mine reclamation monitoring. She also has a passion for teaching and working with volunteers. As the Private Lands Biologist in a partnership with the NRCS, she has the opportunity to put all of these passions together to lead internal training, hold outreach workshops, develop conservation and restoration plans for landowners, and work with other REW staff as a technical resource on REW projects.

Joel Sholtes, CMU Professor and Fluvial Hazard Expert -Joel Sholtes, PhD, PE, teaches civil engineering specializing in water resources engineering: hydraulics, hydrology and water resource management. His professional and academic experiences focus on physical river processes (river hydraulics and fluvial geomorphology) with applications to stream rehabilitation, riverine infrastructure management and flood hazards. Prior to teaching at CMU, Sholtes worked for the Bureau of Reclamation, Sedimentation River Hydraulics Group.

#### Attachment B – Watershed Plans and Links

- Colorado Water Conservation Board
  - <u>State Water Plan</u>
  - <u>Colorado River Basin Implementation Plan</u>
  - Colorado River: 15-Mile Reach Programmatic Biological Opinion Depletion Accounting Pursuant to Appendix B Report Period 2001-2005
  - Floodplain Information Report for the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin March 1995

#### US Fish and Wildlife Service

- Flow Regimes for Restoration and Maintenance of Sufficient Habitat to Recover Endangered Razorback Sucker and Colorado Pikeminnow in the Upper Colorado River March 2001
- Upper Colorado River Subbasin Floodplain Management Plan February 2006
- Final Programmatic Biological Opinion for Bureau of Reclamation's Operations and Depletions, Other Depletions, and Funding and Implementation of Recovery Program Actions In the Upper Colorado River Above the Gunnison River – December 1999

#### **Bureau of Reclamation**

- Draft EIS Aspinall Unit Colorado River Storage Project Gunnison River, Colorado, 2009
- ES Habitat Restoration at the Lucy Ferril ELA Wildlife Sanctuary November 2003
- Relationships Between Flow and Rare Fish Habitat in the 15-Mile Reach of the Upper Colorado River May 1995

#### One Riverfront/Colorado Riverfront Foundation

• Strategic Plan – 2014

#### City of Grand Junction

- One Grand Junction Comprehensive Plan
- Municipal Code
- Development Regulations
- Parks, Recreation and Open Space Master Plan

#### City of Fruita

- Comprehensive Plan
- Land Use Map
- Land Use Code
- Parks, Open Space and Trails Master Plan

#### Town of Palisade

- Comprehensive Plan
- Land Development Code
- Zoning Map

#### Mesa County

- Master Plan
- Community Area Plans
- Future Land Use Map
- Resource Management Plan

#### **RiverEdge West**

- Strategic Plan
- Tamarisk Mapping

#### Attachment C - Scope of Work

#### **GRANTEE AND FISCAL AGENT:**

RiversEdge West (REW) PO Box 1907 Grand Junction, CO 81502

#### **PRIMARY CONTACTS:**

Rusty Lloyd Executive Director 970-256-7400 rlloyd@riversedgewest.org

**Project Title:** Grand Valley Fluvial Hazard Mapping and Riparian Coordination **Grant Request Amount:** \$157,434

#### **INTRODUCTION AND BACKGROUND:**

RiversEdge West and the Desert Rivers Collaborative have been working to restore riparian lands throughout the Grand Valley by removing invasive plants for the past ten years. These efforts have resulted in the removal of tamarisk and other invasive plants and the enhancement of wildlife habitat and enhancement of recreation along 1730 acres of riparian lands on the Colorado and Gunnison Rivers. However, in some cases, restoration work has been undone by unplanned development and/or changing hydrology and the investment of time and resources in restoring habitat has been lost. To help prevent this in the future and to better coordinate planning and management within the river corridor in general, REW, Colorado Mesa University and One Riverfront have been working to establish a framework for bringing together a wide array of river and riverside land managers and users to better communicate about plans for the area and anticipate future stressors on the river system. In parallel, the REW has been working with the DRC to create a Stewardship Framework (funded by CWCB), that will serve as a tool for identifying where and what maintenance should be done on past treated sites within the watershed. This tool will serve an important guideline for determining where best to focus future restoration work on public and private lands. This proposal seeks funding to implement this maintenance work on priority publicly managed sites, as well as outreach the tool to private landowners. This proposal also aims to connect the work of the DRC to the RCI to inform restoration activities in the future. Activities in this proposal will likely lay the foundation for a future Stream Management or Integrated Watershed Management Plan in the future.

#### **OBJECTIVES:**

- **Objective 1:** Coordinate the maintenance of previously treated sites in the DRC to ensure recovery from invasive plant infestation and habitat enhancement as well as improved overall river function.
- **Objective 2:** Conduct riparian monitoring within BLM NCAs to gather information about current conditions and inform future management practices.
- **Objective 3**: Coordination of restoration work on private lands within the watershed to help ensure water use efficiencies and improved riparian habitat management.
- **Objective 4**: Monitoring and maintenance work that has been prioritized through the Stewardship Framework is implemented.
- **Objective 5**: Ecology students of diverse backgrounds cultivate in field training and experience and are cultivated as possible future nature resource managers.
- **Objective 6**: Fluvial Hazard Mapping information is gathered to inform future planning throughout the entire river corridor.

• **Objective 7**: Outreach technical assistance and funding opportunities to private landowners (including Stewardship Framework and fluvial hazard mapping information).

#### TASKS

#### TASK 1 – Desert Rivers Collaborative and BLM NCA Coordination, Monitoring and Maintenance

<u>Description of Task</u>: The DRC coordinates restoration, monitoring, and outreach activities with many diverse stakeholders including federal, state, municipal, non-profit, corporate and private partners. Given the importance of restoration to river systems and adjacent communities in the Grand Valley and the kickoff of the River Corridor Initiative (RCI), REW is expanding its reach and staff capacity.

Building on REW's Riparian Restoration Stewardship Framework and monitoring data collected in 2021, staff from REW will develop restoration implementation plans with the City of Grand Junction, City of Fruita, Town of Palisade, Colorado Parks and Wildlife, Bureau of Land Management, and a number of private entities. This process will require balancing ecological needs, landowner priorities and goals, and creating unique plans based on the resources and capacity of each entity. A number of projects are also planned for 2022-2023 that require detailed planning and coordination, including a wetland construction project that will expand habitat for wildlife adjacent to the Colorado River.

Furthermore, REW often receives inquiries for technical assistance that are unplanned and do not fit within currently funded projects. However, the ability for REW to thoughtfully react and respond to these technical questions and inquiries is critical to achieve our mission and goals. Since many of the involved partners do not have the adequate funding to conduct necessary restoration treatments, in addition to the ongoing monitoring and maintenance work that is required, REW staff are able to help fundraise and effectively leverage funds to support the ongoing restoration work along the Grand Valley.

A key partner and land manager within the geography of the DRC is the Bureau of Land Management (BLM). REW and the Grand Junction BLM Field Office are partnering to create a full-time partner position to focus on conducting riparian monitoring, restoration planning, NEPA assistance, and other riparian projects primarily in the National Conservation Areas (NCAs) within the geography of the DRC – specifically Escalante-Dominguez and McInnis Canyons. This position would be trained by REW and BLM staff and split time between offices; roughly half time with the BLM and half time on DRC tasks.

<u>Method/Procedure:</u> Work with the BLM to increase REW's capacity to carry out monitoring and restoration projects in the BLM NCAs and adjacent BLM lands and to coordinate work of the DRC on state, municipal, and county lands as described above.

This will entail working with partners to inform and implement restoration priorities, utilize REW's Stewardship Framework to assist DRC partners and others on restoration best-practices, manage on-theground restoration projects, conduct outreach and work with volunteers, manage contractors and conservation corps crews, and other related tasks.

#### Deliverables:

- Develop monitoring reports and implementation plans developed with 10 DRC partners on over 80 riparian sites, totaling over 500 acres.
- Coordination and summary of restoration work conducted by DRC partners on over 250 acres on federal, state, municipal, and county land.
- Increase capacity to work on planning and project implementation in the Grand Valley, specifically the wetland creation project.
- Assist RCI Core Team on outreach, project coordination, and other necessary tasks.

• Ongoing technical assistance to promote enhanced management of riparian lands and restoration best-practices in the DRC area.

#### TASK 2 – Private Lands Outreach and Coordination

Description of Task: Conduct targeted and effective outreach to private landowners in the Grand Valley to ensure they have the information and resources needed to implement improvements on their riparian lands that complement the objectives of the Desert Rivers Collaborative (DRC). The Stewardship Framework used by the DRC is realized through the NRCS conservation planning process, and the Private Lands Biologist (PLB) follows this process to design comprehensive conservation plans for individual landowners. When plans successfully receive funding, the PLB ensures conservation practices are implemented according to NRCS standards and specifications. In an effort to expand the quality and opportunity for riparian and wildlife habitat conservation planning and streamline the implementation process, the PLB will lead internal training to NRCS staff in riparian health and management best practices, train to become a Certified Conservation planner, and acquire Job Approval Authority in habitat conservation and management practices.

<u>Method/Procedure</u>: Work with current PLB (partner position with REW and NRCS) to coordinate outreach with private landowners in the watershed. Outreach will be prioritized using the Stewardship Framework and other partner inputs. The goal will be to continue implementation and payment on existing habitat projects, planning on at least six properties, secure funding and begin implementation per decided management actions. All training to receive certification

#### **Deliverables:**

- Certify existing contracts in implementation phase on 235 acres with \$51,393 in NRCS incentive payments and \$17,131 landowner match.
- Develop 6 new Conservation Plans and submit for program funding with an estimated 200 treatment acres and \$150,000 in NRCS incentive payments and \$50,000 landowner match.
- Host 4 private landowner workshops focused on enhanced knowledge of hydrology, riparian health, and best practices in management and conservation.
- Elevate technical skills of internal NRCS staff by leading 2 training sessions on riparian health and plant identification.
- Achieve Certified Planner status and Job Approval Authority in common habitat conservation practices.

#### TASK 3 – Grand Valley River Corridor Initiative Fluvial Hazard Mapping

<u>Description of Task</u>: The Colorado and Gunnison rivers through the Grand Valley in Mesa County represent a vital community and ecological asset. Increasing development pressure, recreational uses, and habitat needs within the river corridor require better tools for managing land use decisions and infrastructure therein. A FEMA floodplain mapping update for the Colorado River is underway; however, this static, inundation map only communicates part of the story of floodplain hazards. Understanding where the Colorado and Gunnison river channels have been in the past and where they may go or influence in the future is necessary to inform land use planning in the river corridor. Both Mesa County and the City of Grand Junction are conducting planning efforts to identify appropriate land uses within the river corridor.

Fluvial Hazard Zone maps delineate areas vulnerable to sediment and debris impacts spurred by flood events. Mapping these hazards in anticipation of future flood events may alert residents and community organizations to the hazards and susceptibilities in their housing, transportation, agricultural, recreational, water supply and delivery and wastewater systems. The process of mapping the Fluvial Hazard Zone results in an understanding of the interactions between a stream and its watershed, water, sediment, debris, and human actions and the telling of this story is valuable for restoring and strengthening the relationship between the human and natural community within a watershed.

As a product, Fluvial Hazard Zone maps can be used to inform land use planning, stream interventions, and to identify and prioritize the conservation or restoration of natural geomorphic floodplains, wetlands, and river corridors within a watershed. These latter items are critical to inform the work and project identification of the DRC and REW.

We propose to map the Fluvial Hazard Zone (FHZ) along approximately 40 miles of the mainstem of the Colorado River through the Grand Valley including:

- 15 Mile Reach from Palisade to the confluence with the Gunnison River
- Alluvial and unconfined reaches of the Gunnison River near the confluence with the Colorado
- 19 miles downstream of the Colorado-Gunnison Confluence to the entrance of Ruby-Horsethief Canyon

We have received letters of support from the following municipalities in mapping the Fluvial Hazard Zone through the Grand Valley: The Mesa County Floodplain Management Program, City of Grand Junction Public Works Department, City of Fruita Engineering Department, Town of Palisade. Each municipal partner has agreed to participate in informing the mapping process, assisting with proposed stakeholder workshops, and pursuing adoption of FHZ maps into their planning and development review process.

<u>Method/Procedure</u>: REW staff will hire a contractor that will conduct fluvial hazard mapping in the designated geography of the RCI (specified above). This will include GIS and "paper map" deliverables along with a report and meta-data documenting the mapping process. The CMU Professor and Fluvial Hazard Expert will oversee the completion of the mapping project, coordinate communication across the municipal stakeholders of the Grand Valley, and solicit input on existing concerns related to fluvial geomorphic hazards.

#### Deliverables:

- Map the Fluvial Hazard Zone (FHZ) along approximately 40 miles of the mainstem of the Colorado River through the Grand Valley including:
  - $\circ$   $\,$  15 Mile Reach from Palisade to the confluence with the Gunnison River  $\,$
  - Alluvial and unconfined reaches of the Gunnison River near the confluence with the Colorado River
  - 19 miles downstream of the Colorado-Gunnison River Confluence to the entrance of Ruby-Horsethief Canyon

#### THE COLORADO BASIN ROUNDTABLE C/O P.O. BOX 1120 GLENWOOD SPRINGS, COLORADO 81602

October 27, 2021

Colorado Water Conservation Board C/O Chris Sturm 1313 Sherman St. Denver, Colorado 80203

Dear Mr. Sturm,

I am writing on behalf of the Colorado Basin Roundtable to express its support for RiversEdge West's (REW) grant proposal to the Colorado Water Conservation Board's Watershed Restoration Grant program. This proposal will continue to support the Desert Rivers Collaborative (DRC) by increasing REW's capacity to support the BLM and private landowners with monitoring and restoration; coordination with federal, state, municipal, county, and private interests as part of the River Corridor Initiative (RCI) in the Grand Valley; and for fluvial hazard mapping in the Grand Valley River corridor that will help inform future planning.

REW's valuable work in obtaining increased resources for restoration projects and monitoring, removing invasive species, and helping plan for restoration at a watershed scale by connecting stakeholders is consistent with the Roundtables goals and objectives and its recent BIP update. This project illuminates the connection between restoration and overall riparian land use planning and preparedness and would allow the DRC and RCI coordinating committee to conduct meaningful outreach and education, provide resources and technical assistance, and best understand how the river will respond to different environmental factors in the future.

The DRC maintains broad support from local and regional interests ranging from local nonprofits to state governments and federal agencies. While more recent, the RCI has also been well-received, and support and outreach continue to grow. The tasks proposed in this grant application exemplify a commitment to collaboration around our important river ecosystems, as evidenced by the myriad partners involved in project planning and implementation.

The leadership role that REW and their partners are playing in the long-term vision of the riparian areas in the Grand Valley and surrounding areas is critical to the long-term river health and associated community values. Establishing additional capacity and funds to support these efforts is a priority for the Colorado Basin Roundtable and will bring value to the entire community.

Regards,

Jason V. Turner, Chair



Natural Resources Conservation Service Grand Junction Field Office 2738 Crossroads Blvd. Grand Junction, CO 81506

November 2, 2021

Colorado Water Conservation Board 1313 Sherman St. Denver, Colorado 80203

Dear Mr. Sturm,

I am writing on behalf of the Natural Resources Conservation Service (NRCS) to bring attention to the collaborative efforts established between RiverEdge West's (REW) and NRCS. REW has been a valued partner to the NRCS since the commencement of the partnership agreement in 2018. By working together, we are able to fund a Private Land Biologist (PLB). Continued funding to REW increases REW's capacity to support the NRCS's ability to work with private landowners, other federal agencies, conservation districts and the Desert Rivers Collaborative (DRC) to address issues relating to water conservation and quality, riparian restoration and monitoring, wildlife habitat creation and enhancement, and outreach and education.

The PLB works in Resource Team 4 of the NRCS, which mirrors the DRC in geographic reach, and includes work in a Colorado River Salinity Control District. The PLB uses the NRCS's conservation planning approach to design and implement conservation practices that improve wildlife habitat and restore riparian ecosystems, as well as improves water conservation and quality. Through this partnership, the PLB functions as a crosswalk between the Stewardship Framework used in the DRC and federal policies and contracts.

The PLB conducts restoration and overall riparian land use planning, meaningful outreach and education, provides resources and technical assistance, and has an overall understanding of how the river will respond to different environmental factors in the future. The PLB will also play a vital role in broadening the use of the fluvial hazard maps. The PLB will outreach the results of the mapping to other NRCS planning staff and to the public via outreach events through partnerships with Conservation Districts.

NRCS commits \$40,000 annually through a partnership agreement. NRCS also provides computer equipment, supplies, and a vehicle for site visits, at an estimate of \$7,000 per year to this project. The partnership between REW and NRCS is playing an important role in the long-term vision and health of the riparian areas in the Grand Valley and surrounding areas. The PLB is indispensable in extending the mission of NRCS which aligns with REW's and CWCB's missions.

Sincerely,

Amanda Ewing Resource Team Lead – District Conservationist Grand Junction and Delta Service Centers

NRCS Helping People Help the Land

USDA is an equal opportunity provider, employer, and lender



#### United States Department of the Interior

BUREAU OF LAND MANAGEMENT McInnis Canyons National Conservation Area Dominguez-Escalante National Conservation Area 2815 H Road Grand Junction, Colorado 81506



November 1, 2021

Colorado Water Conservation Board 1313 Sherman St. Denver, Colorado 80203

Dear Mr. Sturm,

I am writing to express my support for RiversEdge West's (REW) grant proposal to the Colorado Water Conservation Board's Watershed Restoration Grant program. This proposal will continue to support the Desert Rivers Collaborative (DRC) by increasing REW's capacity to support the BLM with monitoring and restoration, and supporting coordination with federal, state, municipal, county, and private interests as part of the River Corridor Initiative (RCI) in the Grand Valley.

RiversEdge West has been a valuable partner in the past, gathering increased resources for restoration projects and monitoring, removing invasive species, and helping plan for restoration at a watershed scale by connecting stakeholders. This project would allow the DRC and RCI coordinating committee to conduct meaningful outreach and education and provide needed resources for continued coordinated riparian restoration work. The DRC maintains broad support from local and regional interests ranging from local nonprofits to state governments and federal agencies. While more recent, the RCI has also been well-received. The tasks proposed in this grant application exemplify a commitment to collaboration around riparian ecosystems, as evidenced by the partners involved in project planning and implementation.

The BLM is excited to partner with REW to increase capacity and support monitoring and restoration efforts on public lands, including National Conservation Areas along to the Colorado and Gunnison Rivers. REW's expertise in restoration project management, stakeholder engagement, and monitoring will help conduct this work effectively.

The role that REW and their partners are playing in the Grand Valley and surrounding areas is critical to long-term riparian health. Establishing additional capacity and funds to support these efforts is a priority and will bring value to the entire community. The BLM, therefore, strongly supports the proposed project. We see great opportunity for this project to benefit the BLM and other agencies working to maintain and improve riparian areas on public lands.

Sincerely,

AMY CARMICHAEL CARMICHAEL Date: 2021.11.01 13:50:46 -06'00'

Amy Carmichael National Conservation Area Manager (acting) McInnis Canyons & Dominguez-Escalante NCAs

> INTERIOR REGION 7 • UPPER COLORADO BASIN COLORADO, NEW MEXICO, UTAH, WYOMING



Delta Conservation District 690 Industrial Blvd, Delta, CO 81416 www.DeltaCD.net 970-399-8194 deltaconservationd@gmail.com

November 4, 2021

Colorado Water Conservation Board 1313 Sherman St. Denver, Colorado 80203

Dear Mr. Sturm,

I am writing on behalf of the Delta Conservation District to express our support for RiversEdge West's (REW) grant proposal to the Colorado Water Conservation Board's Watershed Restoration Grant program. This proposal will continue to support the Desert Rivers Collaborative (DRC) by increasing REW's capacity to support the BLM and private landowners with monitoring and restoration; coordination with federal, state, municipal, county, and private interests as part of the River Corridor Initiative (RCI) in the Grand Valley; and for fluvial hazard mapping in the Grand Valley River corridor that will help inform future planning.

RiversEdge West has been a valuable partner to the Delta Conservation District in the past in gathering increase resources for restoration projects and monitoring, removing invasive species, and helping plan for restoration at a watershed scale by connecting stakeholders. This project illuminates the connection between restoration and overall riparian land use planning and preparedness and would allow the DRC and RCI coordinating committee to conduct meaningful outreach and education, provide resources and technical assistance, and best understand how the river will respond to different environmental factors in the future.

The DRC maintains broad support from local and regional interests ranging from local nonprofits to state governments and federal agencies. While more recent, the RCI has also seen been well-received and support and outreach continues to grow. The tasks proposed in this grant application exemplify a commitment to collaboration around our important river ecosystems, as evidenced by the myriad partners involved in project planning and implementation.

The Delta Conservation District is committed to supporting the undertakings outlined in REW's proposal to restore and protect river ecosystems. The Delta Conservation District commits 40 hours and \$760. to this project.

The leadership role that REW and their partners are playing in the long-term vision of the riparian areas in the Grand Valley and surrounding areas is critical to the long-term river health and associated community values. Establishing additional capacity and funds to support these efforts is a priority for the Delta Conservation District and will bring value to the entire community.

Sincerely,

Vanussa dull, sus

Vanessa Hoff, President Delta Conservation District



175 East Third Street P.O. Box 128 Palisade, CO 81526 Phone: (970) 464-5602 Fax: (970) 464-5609 www.townofpalisade.org

Colorado Water Conservation Board 1313 Sherman St. Denver, Colorado 80203

Dear Mr. Sturm,

I am writing on behalf of the Town of Palisade to express my support for RiversEdge West's (REW) grant proposal to the Colorado Water Conservation Board's Watershed Restoration Grant program. This proposal will continue to support the Desert Rivers Collaborative (DRC) by increasing REW's capacity to support partners with monitoring and restoration; coordination with federal, state, municipal, county, and private interests as part of the River Corridor Initiative (RCI) in the Grand Valley; and to conduct fluvial hazard mapping in the Grand Valley River corridor that will help inform future planning.

RiversEdge West has been a valuable partner to the Town of Palisade with our Riverbend Park restoration efforts in the past, by gathering increased resources for restoration projects and monitoring, removing invasive species, and helping plan for restoration at a watershed scale by connecting stakeholders. This project illuminates the connection between restoration and overall riparian land use planning and preparedness and would allow the DRC and RCI coordinating committee to conduct meaningful outreach and education, provide resources and technical assistance, and best understand how the river will respond to different environmental factors in the future.

The DRC maintains broad support from local and regional interests ranging from local nonprofits to state governments and federal agencies. While more recent, the RCI has also been well-received, and support and outreach continue to grow. The tasks proposed in this grant application exemplify a commitment to collaboration around our important river ecosystems, as evidenced by the myriad partners involved in project planning and implementation.

The Town is committed to supporting the undertakings outlined in REW's proposal to restore and protect river ecosystems.

The leadership role that REW and their partners are playing in the long-term vision of the riparian areas in the Grand Valley and surrounding areas is critical to the long-term river health and associated community values.

Sincerely,

ah

Troy Ward Director of Parks, Recreation, and Events Town Of Palisade, Colorado

#### Attachment E – Photos

Planting Cottonwoods in the Grand Valley



**Protecting plantings** 



Maintenance work along the Colorado River



Maintenance work and coordination post fire



#### Attachment F – Detailed Budget and timeline

Staff/Partner Time(for 2 years)	# Hours	Rate		Total	Total		СВ	CWCB % Match M		Match %	Match Source	Notes	
REW BLM Partner Position	2745.6	\$	35	\$	96,096	\$	38,438	40%	\$	57,658	60%	BLM	Cash
REW Restoration Coor.	120	\$	44	\$	5,280	\$	2,640	50%	\$	2,640	50%	REW Funds -Bacon Foundation	
Funding Program Coor.	100	\$	60	\$	6,000	\$	3,000	50%	\$	3,000	50%	REW Funds	
Associate Director	80	\$	63	\$	5,063	\$	2,531	50%	\$	2,531	50%	REW - WFF	
Executive Director	50	\$	71	\$	3,531	\$	1,765	50%	\$	1,765	50%	REW-Funds	In-kind
BLM - Grand Junction	120	\$	36	\$	4,320	\$	-	0%	\$	4,320	100%	BLM	In-kind
Subtota	1			\$	120,289	\$	48,375		\$	71,914			

Task 1/Desert Rivers Collaborative Coordination	. Monitoring and Maintenance
	, monitoring and maintenance

						CWC	В		Ma	atch			
Expenses (for 2 years)	Unit	Cost	# of Units	Tota		Portic	on	CWCB %	Por	tion	Match %	Match Source	
Mileage	\$	0.56	2000	\$	1,120	\$	280	25%	\$	840	75%	BLM Vehicles	In-kind
Per Diem	\$	59.00	5	\$	295	\$	-	0%	\$	295	100%	REW Funds	In-kind
Subtotal				\$	1,415	\$	280		\$	1,135			
Task 1 total				\$	121,704	\$	48,655	25%	\$	73,049			

#### Task 2/Private Lands Outreach and Coordination

Staff/Partner Time (for 2 years)	# Hours	Rate		Total		CW	/СВ	CWCB %	Ma	atch	Match %	Match % Match Source	
Private Lands Biologist	3809.53	\$	42	\$	160,000	\$	79,999	50%	\$	80,000	50%	NRCS	Cash
Associate Director	120	\$	63	\$	7,560	\$	3,780	50%	\$	3,780	50%	CWCB and REW Funds	
Delta Conservation District	40	\$	19	\$	760	\$	-	0%	\$	760	100%	Workshops	In-kind
Subtotal				\$	168,320	\$	83,779		\$	84,540			

Expenses (for 2 years)	Unit	Cost	# of Units	Total		CWCB		CWCB %	Ma	itch	Match %	Match Source	Notes
Mileage	\$	0.58	10344	\$	6,000	\$	-	0%	\$	6,000	100%	NRCS vehicle	In-kind
Per Diem	\$	59.00	5	\$	295	\$	-	0%	\$	295	100%	REW funds	Inkind
Subtotal				\$	6,295	\$	-		\$	6,295			

Task 2 total	\$	174,615	\$	83,779	48%	\$	90,835	l
--------------	----	---------	----	--------	-----	----	--------	---

Task 3/Grand Valley River Corridor Initiative Fluvial Mapping												
Staff/Partner Time	# Hours	Rate	Tot	tal	CWCB	CWCB %	Match	Match %	Match Source	Notes		
CMU Coordinator	40	\$ 52	L\$	2,040	\$-	0%	\$ 2,040	100%	СМИ	In-Kind		
REW Associate Director	40	\$ 63	3\$	2,520	\$-	0%	\$ 2,520	100%	REW	In-Kind		
Subtotal			\$	4,560	\$ -		\$ 4,560					

Expenses	Unit Cost	# of Units	Total		CW	СВ	CWCB %	Ma	tch	Match %	Match Source	Notes
FHZ Contractor(s)			\$	30,000	\$	25 <i>,</i> 000	66%	\$	5,000	33%	Mighty Arrow Foundation	Cash
Subtotal			\$	30,000	\$	25,000		\$	5,000			

```
Task 3 total
$ 34,560
$ 25,000
72%
$ 9,560
```

	Total		CWCB		CWCB %	Ма	atch Total	Match %	Cash		In-kind	
Task 1 - 3 Subtotals:	\$ 3	30,879	\$ 15	7,434	48%	\$	173,444	52%	\$ 1	42,658	\$	30,787
										82%		18%

Match Sources and Totals	In-l	kind	Cas	sh -	Cash	- Pending
RiversEdge West	\$	16,827				
Colorado Mesa University	\$	2,040				
Bureau of Land Management	\$	5,160	\$	57,658		
Delata Conservation District	\$	760	\$	-		
Natural Resource Conservation Service	\$	6,000	\$	40,000	\$	40,000
Mighty Arrow Foundation	\$	-	\$	5,000		
Total	\$	30,787	\$	102,658	\$	40,000

			Overall Bu	dget			
Task	Description	Target Start Date	Target Completio n Date	CWCB Funds	Other Funding Cash*	Other Funding In- Kind*	Total
1	Desert Rivers Collaborative and BLM NCA Coordination, Monitoring and Maintenance	04/01/22	03/31/24	\$48,655	\$57,658	\$15,392	\$121,704
2	Private Lands Restoration Coordination/Outreach	04/01/22	03/31/24	\$83,779	\$80,000	\$10,835	\$174,615
3	Grand Valley River Corridor Initiative Fluvial Hazard Mapping	04/01/22	03/31/24	\$25,000	\$5,000	\$4,560	\$34,560
	TOTALS			\$157,434	\$142,658	\$30,787	\$330,878

### **Project Timeline**

Task 1	Date	Activity
	April 2022-February 2024	Develop monitoring reports and implementation plans
	April 2022-February 2024	Coordination of restoration work conducted by DRC and BLM partners
		Ongoing technical assistance to promote enhanced management of riparian lands and
	Ongoing	restoration best-practices in the DRC area.

Task 2	Date	Activity
		Certify Conservation plans with riparian values contained within for federal incentive
	April – December 2022	funding
	January 2023 -February	
	2024	Develop 6 new Conservation plans with in area 4 resource team
	January 2023 -February	
	2024	Conduct 4 workshops for land owners on riparian health, hydrology and best practices
	Ongoing	Land owner education, outreach on enhancement riparian habitat on private lands

Task 3	Date	Activity
	April – August 2022	Scope of work developed for contractor to map, select contractor
	August - December. 2022	Conduct evaluation of sites with contractor to be mapped
	January-Sept. 2023	Mapping and ground truthing take place
	October 2023 – February	
	2024	Produce final mapping product





## Desert Rivers Collaborative Major Project Areas



The REW and BLM Partner Position will work half of the time on Desert Rivers Collaborative coordination with federal, state, municipal, county, private, and other non-profit entities on riparian lands in Mesa and Delta Counties. Major project areas can be found on this map.

Please note: polygons representing specific provate lands are omitted for privacy,

## Bureau of Land Management National Conservation Areas in the Grand Junction Region



The REW and BLM Partner Position will work half of the time on riparian restoration projects and monitoring in the BLM NCA's (yellow.)

NRCS Resource Team 4 Geographic Area



Figure 4 - Geographic area covered by NRCS Resource Team 04