Rio Grande Riparian Stabilization Project - Phase 5Final Report





Prepared for:

Colorado Water Conservation Board Colorado Watershed Restoration Program
Grant Contract Number: CTGG1 PDAA 2021-0020
Attn: Chris Sturm

April 18, 2024

Colorado Rio Grande Restoration Foundation Grant Amount: \$200,000

Prepared by: Emma Reesor and Connor Born



Final Report Executive Summary

Project Title: Rio Grande Riparian Stabilization Project – Phase 5

CWCB Watershed Grant Contract Number: CTGG1 PDAA 2021-0020

Project Start Date: July 1, 2020 Project Completion Date: April 15, 2024

FUNDING

TOTAL FUNDING	\$635,461.50
Community Volunteers – In-kind	\$5,220.00
Technical Advisory Team – In-kind	\$1,740.00
Gates Family Foundation	\$72,036.50
North American Wetland Conservation Act Grant	\$11,009.00
Landowner Contributions	\$64,200.00
American Forests	\$20,256.00
SLV Water Conservancy District	\$6,000.00
Colorado Healthy Rivers Fund	\$15,000.00
SLV Conservation Connection Initiative	\$40,000.00
National Fish and Wildlife Foundation	\$200,000.00
CWCB CWRP Grant	\$200,000.00

EXPENDITURES

TOTAL EXPENDITURES	\$635,461.50
Other Expenditures	\$435,461.50
Expenditures of CWCB CWRP Funds	\$200,000.00

Summary Accomplishments

The Rio Grande Riparian Stabilization Project – Phase 5 (Phase 5) was a riparian restoration and streambank stabilization project completed by the Rio Grande Headwaters Restoration Project (RGHRP) in 2024. The goal of Phase 5 was to improve riparian health, floodplain function, and water quality by stabilizing streambanks within the project boundaries, as well as connect previously restored sites to improve the overall health and resiliency of the reach. Through Phase 5, streambank stabilization was completed on 1.4 miles of the Rio Grande on 1 public and 3 private sites. Aggressive revegetation efforts were implemented on Project sites to further stabilize the streambanks and restoring 22 acres of riparian habitat. Along with contracted plantings, volunteers also contributed riparian revegetation efforts, totaling 160 volunteer hours. The RGHRP gave tours and provided updates to local newspapers and community groups as part of outreach and education. Monitoring has shown Phase 5 efforts were successful. The RGHRP will continue annual monitoring for 5 years. Phase 5 improved the health of the Rio Grande in Alamosa County by stabilizing streambanks and restoring riparian areas, resulting in reduced sediment loading and improved riparian, upland, and aquatic habitat. Additionally, the capacity of the Rio Grande to transport sediment that has entered the system from upstream reaches was increased. Finally, improvements to riparian habitat and floodplain function improved the condition of wetlands located throughout the riparian areas within the project boundary.

TABLE OF CONTENTS

	Page
Executive Summary	2
Table of Contents	3
Introduction	4
Background	4
Methods	7
Results	14
Conclusions and Discussions	19
Actual Expense Budget	21
Acknowledgements	22
List of Tables	Page
Table 1. Phase 5 Project Outcomes by Site	14
Table 2. Phase 5 – Site 1 Stream Visual Assessment Protocol Scores	15
Table 3. Phase 5 – Site 2 Stream Visual Assessment Protocol Scores	16
Table 4. Phase 5 – Site 3 Stream Visual Assessment Protocol Scores	17
Table 5. Phase 5 – Site 4 Stream Visual Assessment Protocol Scores	18
Table 6. Phase 5 – Phase 5 Actual Expense Budget by Task and Funding Source	21
List of Figures	Page
Figure 1. Location of Phase 5 Project Area within the Rio Grande Basin	5
Figure 2. Location of Phase 5 Sites within Project Area	5
Figure 3. Site visits to review project designs with Phase 5 Technical Advisory Team	7
Figure 4. Phase 5 Site 1 Final Design Plan View	8
Figure 5. Phase 5 Site 2 Final Design Plan View	8
Figure 6. Phase 5 Site 3 Final Design Plan View	9
Figure 7. Phase 5 Site 4 Final Design Plan View	9
Figure 8. Construction Monitoring Photos	11
Figure 9. Earth Day volunteer and educational events	12
Figure 10. Community volunteer tree planting event	13
Figure 11. Site 1 before and after photo point	15
Figure 12. Site 2 before and after photo point	16
Figure 13. Site 3 before and after photo point	17
Figure 14. Site 4 before and after photo point	18
Figure 15: Aerial view of Site 4 following restoration activities	19

INTRODUCTION

The Rio Grande Riparian Stabilization Project – Phase 5 (Phase 5) brought together private landowners, the City of Alamosa, and local stakeholders to complete streambank stabilization and riparian restoration along the Rio Grande in Alamosa County. This reach of the Rio Grande is experiencing a deterioration in river function due to unstable and eroding streambanks and degraded riparian areas. Loss of streambanks further reduces riparian habitat, negatively affecting birds and wildlife. Unstable streambanks also increase sediment inputs into the river, decreasing water conveyance, reducing water quality, and harming fishery health.

Phase 5 improved the health and resilience of the Rio Grande in Alamosa County by stabilizing 1.4 miles of streambank and restoring 22 riparian acres, thereby reducing sediment load to the river, improving riparian and aquatic habitat, reconnecting the river to its floodplain, and revitalizing riparian wetlands. These actions also improve water quality and storage during drought years and increase channel capacity, reducing flood risks to the downstream City of Alamosa. Additionally, Phase 5 engaged 75 volunteers in revegetation efforts, promoting community participation in restoration activities.

The project applicant, the Colorado Rio Grande Restoration Foundation, is the fiscal agent for the Rio Grande Headwaters Restoration Project (RGHRP). The mission of the RGHRP is to restore and conserve the historical functions and vitality of the Rio Grande Basin in Colorado for improved water quality, agricultural water use, riparian health, wildlife and aquatic species habitat, recreation, and community safety. Formed in 2001, the RGHRP has a history of completing restoration projects in collaboration with local, state, and federal partners to improve the health of the Rio Grande headwaters. The RGHRP has completed past riparian stabilization projects, including the Rio Grande Riparian Stabilization Project – Phase 3 and Phase 4. Through these two projects, 10 sites underwent streambank stabilization and riparian restoration, resulting in improvements to over 3.5 miles of river channel. Phase 5 builds on these efforts, by implementing additional riparian stabilization adjacent to Phase 3 and 4 project locations.

BACKGROUND

Phase 5 is located along the Rio Grande in Alamosa County, upstream of the City of Alamosa (Figure 1). Through Phase 5, four (4) sites underwent streambank stabilization and riparian restoration, three on private land and one on the City of Alamosa's public Alamosa Riparian Park (Figure 2). These actions reduced sediment loading and improved water quality by stabilizing the streambanks, improved the riparian and upland habitat by increasing willow and riparian vegetation cover, and enhanced the fishery. Additionally, the capacity of the Rio Grande to transport sediment that has entered the system from upstream reaches was increased. Finally, improvements to riparian habitat and floodplain function improved the condition of public trails located throughout the riparian areas within and surrounding the Alamosa Riparian Park. Sites were chosen strategically both for the critical and urgent nature of their instability and their location relative to previously restored sites.

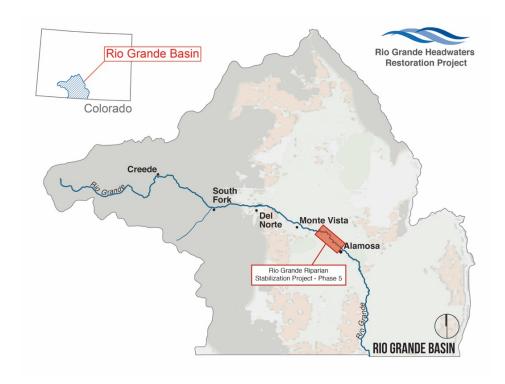


Figure 1: Location of Phase 5 Project Area within the Rio Grande Basin.

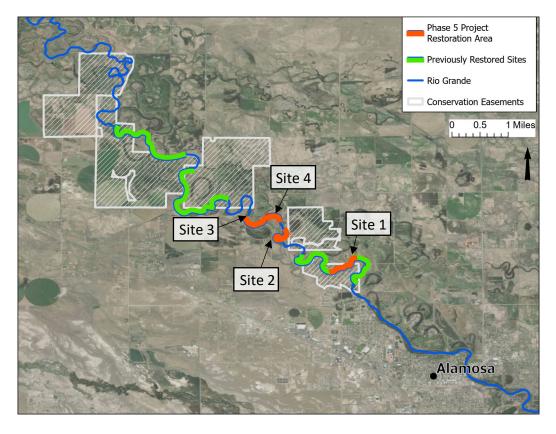


Figure 2: Location of Phase 5 Sites within Project Area, relative to previously restored sites.

The need for Phase 5 was identified in the following planning documents and efforts:

- The Rio Grande Headwaters Restoration Project 2001 Study The 2001 Study surveyed 91 miles of the Rio Grande through the Valley floor, summarized the condition of the river and riparian area, analyzing the causes of declining river health, and provided recommendations for restoration. The Study found a primary cause of degradation in the project reach to be sedimentation, and highlighted the overall poor condition of the riparian area within the project reach as well as a low Stability Index, an indication that streambanks were experiencing heightened instability.
- Rio Grande Stream Management Plan (2020) Assessment results from the Rio Grande SMP identified the need for river and riparian restoration within the Phase 5 project area. Recommendations for Reach 13 of the Rio Grande SMP (Alamosa County Line to the City of Alamosa) include projects focused on floodplain reconnection, reduction of sediment sources through bank stabilization, and aquatic and riparian habitat enhancement.
- City of Alamosa Comprehensive Plan (2017) A result of mass community input and surveying, the Alamosa Comprehensive Plan identified goals and priorities for the City and laid out strategies to accomplish them. Among these was a strong emphasis on increasing access to the river and improving trails, vegetation, and sustainability in public access areas.

In addition to these planning efforts, the methods for Phase 5 have been guided by lessons learned by the RGHRP and project partners during past streambank stabilization and riparian restoration work completed in the area.

The long-term goal of Phase 5 is to improve the health and resiliency of the Rio Grande by stabilizing streambanks and restoring riparian areas. The objectives of Phase 5 were to:

- 1. Improve water quality, reduce sediment loading, enhance sediment transport by stabilizing the stream channel on the Rio Grande;
- 2. Improve floodplain connectivity through channel shaping;
- 3. Restore riparian habitat by revegetating reshaped streambanks with native grasses, sedges and forbs, willow transplants, and cottonwood saplings;
- Promote community participation and increase understanding of local watershed and stream health issues by reaching out to the community with presentations, tours, volunteer events;
- 5. Enhance public open spaces by stabilizing streambanks and restoring riparian habitat on the newly established Alamosa Riparian Park.

Phase 5 was implemented through a partnership between the RGHRP, Riverbend Engineering, the City of Alamosa, private landowners, and the Phase 5 Technical Advisory Team (TAT). The TAT included representatives from San Luis Valley Water Conservancy District (SLVWCD), Colorado Open Lands, Colorado State Forest Service (CSFS), USFWS Partners for Fish and Wildlife, and the Natural Resources Conservation Service (NRCS) and was formed to assist with

project planning and design to ensure the project best addressed the ecological and hydrological needs for the project.

METHODS

The following passages detail how the project objectives listed above were met through the completion of Project Tasks. CWCB funding supported the completion of Tasks 2-5.

TASK 1: Project Design and Engineering

Description of Task: Complete designs and permitting for the project elements

Methods: Riverbend Engineering was hired to complete survey, site assessments, and designs for each Phase 5 project site. This included site visits with landowners and project partners to review preliminary designs and ensure the goals of the project were addressed in the final design (Figure 3). The final design drawings included accurate material quantities required for the channel shaping and construction of the new bank stabilization structures, and riparian revegetation as well as profile view, typical sections, structure details, and an updated estimate of construction quantities and costs. Final designs for Site 1 (Figure 4) were completed in Summer 2020. Final designs for Site 2 (Figure 5) and 4 (Figure 6) were completed Summer 2021. Final designs for Site 3 were completed Fall 2023 (Figure 7). Upon completion of final designs, Riverbend Engineering worked with the RGHRP and project landowners to obtain USACE permits for project activities.



Figure 3: Site visits to review project designs with Phase 5 Technical Advisory Team.

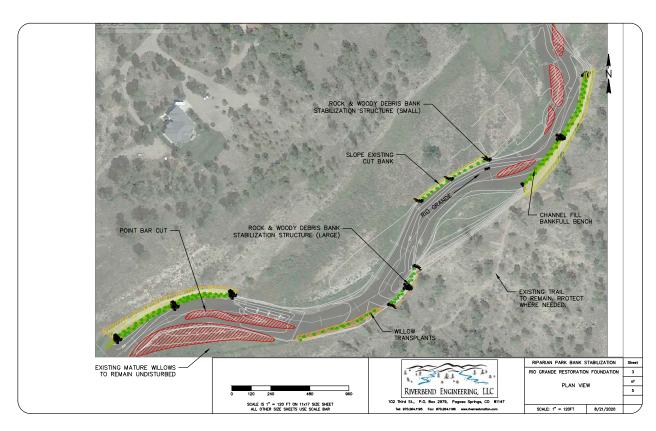


Figure 4: Phase 5 Site 1 Final Design Plan View.

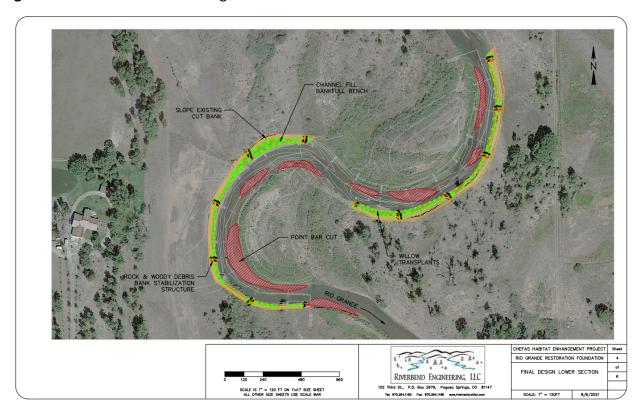


Figure 5: Phase 5 Site 2 Final Design Plan View.

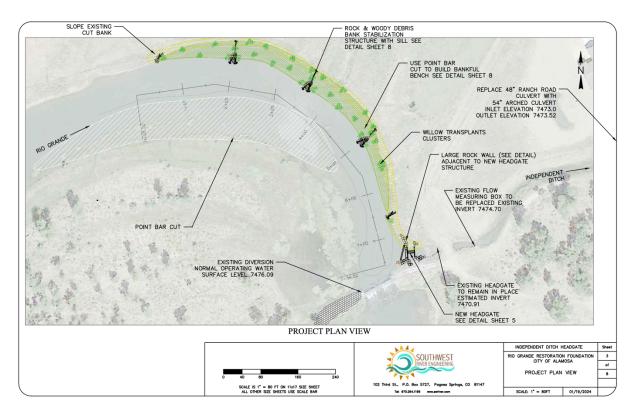


Figure 6: Phase 5 Site 3 Final Design Plan View

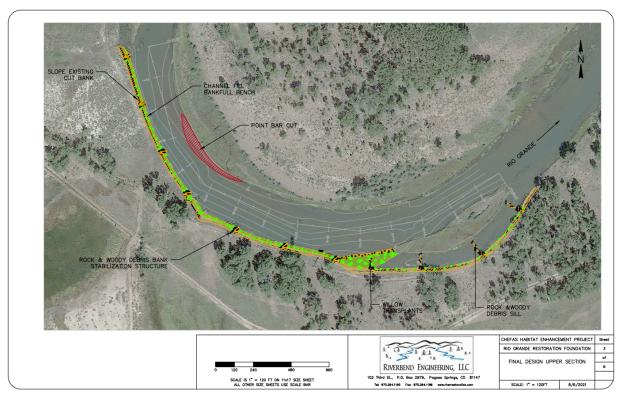


Figure 7: Site 4 Final Design Plan View.

TASK 2: Streambank Stabilization and Riparian Restoration

Description of Task: Implement channel shaping streambank stabilization and riparian revegetation on 6,400 linear feet of stream. Protect riparian areas by completing fencing and grazing best management practices at sites where owners are currently grazing livestock. Coordinate community and youth volunteer revegetation events to improve riparian habitat in project area.

Method: Implementation of streambank stabilization and riparian restoration for each project site was completed at different times.

Site 1: Robins Construction was awarded the project bid and mobilized in November 2020. They began earthwork, reshaping the streambanks and river channel and constructed the floodplain bench. Cold temperatures caused the river to freeze in December at which time the contractor demobilized until the river thawed in the spring. In March 2021, the contractor remobilized and constructed rock and root wad stabilization and fish habitat structures, planted willow clumps along the floodplain bench, and reseeded the site. Riverbend Engineering provided construction oversight, ensuring that all elements were constructed as designed and in accordance with permit requirements. Construction of Site 1 was complete in April 2021, resulting in bank stabilization and riparian revegetation along 2,112 linear feet of stream. A series of community volunteer revegetation events were held in April 2021 to plant riparian saplings (red osier dogwood, thin leaf alder, and golden current) and reseed a mix of native riparian grasses, sedges and forbs. Through these events, a total of 300 saplings were planted and a half acre was seeded.

Site 2: Absmeier Landscaping and Construction, LLC was hired to complete Site 2. In February 2022, they mobilized and begin hauling and staging rock at the site. They completed channel shaping and construction of rock and root wad stabilization structures in April 2022, after the river thawed and conditions were favorable for construction. Following the earthwork and installation of rock and root wad stabilization structures, the contractor planted willow transplants and reseeded site. Riverbend Engineering provided construction oversight, ensuring that all elements were constructed as designed and in accordance with permit requirements. Construction of Site 2 was completed in May 2022, resulting in bank stabilization and riparian revegetation along 2,112 linear feet of stream. In May 2023, riparian fencing was installed to protect the restoration and newly planted riparian vegetation from grazing on the landowner's property.

Site 3: Absmeier Landscaping and Construction, LLC was hired to complete Site 3. They mobilized in November 2022 and began channel shaping and construction of rock and root wad stabilization structures. At the end of November, freezing conditions caused ice damming that backed up water to a level that required the contractor to stop work. The contractor remobilized March 2023 to complete the remaining work, which included final channel shaping, willow transplants, and reseeding. In addition, an abandoned ditch/berm along the river was removed to reconnect the floodplain and prepare for the installation of new riparian fencing Construction management was completed by Southwest River Engineering. Riparian fencing

was installed in May 2023 to protect the restoration site and newly planted riparian vegetation from grazing on the landowner's property. Construction of Site 3 was completed in May 2023, resulting in bank stabilization and riparian revegetation along 2,200 linear feet of stream.

<u>Site 4:</u> Robins Construction was hired to complete Site 4. They began work in March 2024 with channel and bank shaping. Following the initial work in the river channel, rock and root wad stabilization structures were installed and the floodplain bench was revegetated with willow clumps and native seed. Construction management was completed by Southwest River Engineering. Construction of Site 3 was completed in April 2024, resulting in bank stabilization and riparian revegetation along 1,050 linear feet of stream. Riparian fencing will be installed in May 2024 to protect the restoration site and newly planted riparian vegetation from livestock grazing on the landowner's property. This site was completed in conjunction with improvements at the Independent Ditch Diversion, which will also improve river health through more natural flow regimes.



Figure 8: Construction Monitoring Photos.

TASK 3: Outreach and Education

Description of Task: Conduct public outreach and education to raise awareness of project activities and RGHRP efforts, and encourage other landowners to participate in future projects.

Method:

The RGHRP worked with project partners to conduct outreach and education efforts to keep the community informed in the project activities. This included the development of regular project newsletters, press releases, social media posts, and site tours. The RGHRP staff presented project updates and information to the Rio Grande Water Conservation District Board, SLV Water Conservancy District Board, Rio Grande Basin Roundtable, Alamosa Rotary Club, and the Revitalize the Rio Coalition. In addition, the RGHRP partnered with the City of Alamosa, Colorado State Forest Service, Rio Grande Watershed Conservation and Education Initiative to organize a series of education and community volunteer events in April 2021 on the Alamosa Riparian Park restoration area (Site 1). This included Earth Day education events with Adams State University and Alamosa High School, engaging a total of 8 college students and 20 high school students. A community volunteer day on April 24, 2021 brought 44 individuals of all ages to the Alamosa Riparian Park to plant riparian saplings (red osier dogwood, thin leaf alder, and golden current) and reseed a mix of native riparian grasses, sedges and forbs. Through these events, a total of 300 saplings were planted and a half acre was seeded.





Figure 9: Earth Day volunteer and educational events at the Alamosa Riparian Park restoration site with Adams State University (left) and Alamosa High School (right) students, April 2021.





Figure 10: Community volunteer tree planting event on April 24, 2021.

TASK 4: Project Monitoring

Description of Task: Monitor each project site for five years using the RGHRP Sampling and Analysis Plan (SAP)

Method: The RGHRP completed pre- and post-construction monitoring for each project site. Monitoring included photographic documentation and visual stream assessments. Set photo points were used to track conditions of the riparian plant communities, bank stabilization, and overall visual condition of the project area over time. The United States Department of Agriculture's Stream Visual Assessment Protcol II (SVAP II) was also used to assess the sites.,

This monitoring protocol provides quantitative scores to inform of the success of restoration implementation within the project reach, and is used in other RGHRP projects.

Riverbend Engineering in partnership with the RGHRP completed pre-construction surveys, cross section transects, photographic documentation and visual stream assessments for the project site. Riverbend Engineering, LLC provided construction monitoring, oversight, and management to ensure all Project elements met desired specifications. The RGHRP completed post construction monitoring, including photographic documentation and visual stream assessments. The RGHRP will continue to monitor the site for five years following construction.

TASK 5: Project Management and Administration

Description of Task: Complete project oversight, management, and partner coordination. Complete all necessary contracts, status reports, and internal and external documents. Ensure tasks are completed within approved costs and timelines.

The RGHRP oversaw project management and administration of Phase 5. This included completing contracts with project funders, project landowners, and contractors; managing budgets and reimbursement requests; and completing periodic reports. In addition, the RGHRP performed project oversight, ensuring project design and implementation was timely and accurate. The RGHRP organized outreach and education efforts and completed site monitoring. The RGHRP will continue to organize outreach events and complete long-term monitoring.

RESULTS

Through the implementation of project methods listed above, Phase 5 resulted in the following outcomes for each project site:

Table 1 : Phase	5 F	Pro	iect	Outcomes	by Site.
------------------------	-----	-----	------	----------	----------

Project Site	Streambank Stabilized (Linear Feet)	Riparian Habitat Restored (Acres)
Site 1	2,110	6
Site 2	2,112	5
Site 3	2,112	9
Site 4	1,050	2.5
Total	7,284	22.5

The RGHRP staff complete monitoring for each Phase 5 site before, during, and after construction. Monitoring consisted of photographic documentation and stream visual assessments for the project site. Additionally, Riverbend Engineering completed preconstruction surveys and cross section transects. Riverbend Engineering, LLC provided construction monitoring, oversight, and management to ensure all Project elements met desired specifications and will complete an annual check to assess the condition and function of streambanks and aquatic habitat structures. The RGHRP will continue to monitor the project site for 5 years following construction.

The following photos and tables show the improvements in streambank stability and riparian condition as a result of Phase 5 activities.

Site 1 Monitoring Results:





Figure 11: Site 1 before and after photo point.

Preconstruction	Sco	ro								
Preconstruction	Score									
8.18.2020	Monitoring 8.31.2021	Monitoring 9.1.2022	Monitoring 8.14.2023							
5	7	8	7							
3	3	3	3							
2	9	9	8							
3	6	8	8							
3	6	7	7							
5	6	6	7							
6	7	7	8							
10	10	10	10							
3	4	7	8							
3	3	3	3							
5	3	6	8							
3	5	5	8							
4.6	6.3	7.2	7.7							
	3 2 3 3 5 6 10 3 3 5 3 4.6	3 3 9 9 3 6 3 6 5 6 6 7 10 10 3 4 3 3 5 3 5 4.6 6.3	3 3 3 2 9 9 3 6 8 3 6 7 5 6 6 6 7 7 10 10 10 3 4 7 3 3 3 5 3 6 3 5 5							

Site 2 Monitoring Results:



Figure 12: Site 2 before and after photo point.

Table 2. Site 2 Stream Visual Assessment Scores									
Element		Score							
	Preconstruction 8.31.2021	Monitoring 9.1.2022	Monitoring 8.14.2023						
Channel Condition	3	8	7						
Hydrologic Alteration	2	2	2						
Bank Condition	2	9	8						
Riparian Area Quantity	4	7.5	8						
Riparian Area Quality	4	6.5	7						
Water Appearance	4	7	7						
Nutrient Enrichment	7	8	8						
Manure/Waste Presence	8	8	8						
Pools	4	9	9						
Barriers to Movement	3	3	3						
Fish Habitat Complexity	3	8	8						
Aquatic Invert. Habitat	4	9	9						
Overall Score:	4.4	7.7	7.6						
1-2.9 Severely Degrad	led; 3-4.9 Poor; 5-6	.9 Fair; 7-8.9 Good; 9	9-10 Excellent						

Site 3 Monitoring Results:



Figure 13: Site 3 before and after photo point.

Table 3. Site 3 Stream Visual Assessment Scores								
Element	S	core						
	Preconstruction 8.25.2022	Monitoring 8.14.2023						
Channel Condition	4	7						
Hydrologic Alteration	3	3.5						
Bank Condition	3	8						
Riparian Area Quantity	3	9						
Riparian Area Quality	4	6.5						
Water Appearance	6	7						
Nutrient Enrichment	7	8						
Manure/Waste Presence	10	10						
Pools	2	5						
Barriers to Movement	3	3						
Fish Habitat Complexity	5	7						
Aquatic Invert. Habitat	5	7						
Overall Score:	5.0	7.4						
1-2.9 Severely Degraded ; 3-4.9 Poor ; 5-6.9 Fair ; 7-8.9 Good ; 9-10 Excellent								

Site 4 Monitoring Results:



Figure 14: Site 4 before and after photo point.

Table 4. Site 4 Stream Visual Assessment Scores								
Element	Sco	ore						
	Preconstruction 8.14.2023	Postconstruction 4.11.2024						
Channel Condition	4	7						
Hydrologic Alteration	3	3						
Bank Condition	3	7						
Riparian Area Quantity	5	6.5						
Riparian Area Quality	4.5	6						
Water Appearance	7	8						
Nutrient Enrichment	8	6						
Manure/Waste Presence	8	10						
Pools	6	8						
Barriers to Movement	1	1						
Fish Habitat Complexity	4	7						
Aquatic Invert. Habitat	4	7						
Overall Score:	5.2	7.0						
1-2.9 Severely Degraded; 3-4.9 Poor; 5-6.9 Fair; 7-8.9 Good; 9-10 Excellent								

CONCLUSION AND DISCUSSION:

Phase 5 objectives were met and exceeded through the methods and results described above. Restoration on selected sites stabilized 7,284 linear feet of stream through the installation of rock and root wad stabilization structures. Bank reshaping and stabilization addressed sedimentation and erosion issues while also improving floodplain connectivity. These structures will keep banks stable while riparian plantings and reseeding are established. Riparian revegetation resulted in the planting of 2,375 willows and other native woody shrubs and seeding of native grasses and forbs across 22.5 acres of restored riparian habitat. This work was assisted by 72 volunteers, who learned about the importance of healthy rivers while planting and reseeding within the recently established Alamosa Riparian Park. Work with in the ARP not only resulted in the benefits listed above, but also enhanced the quality of trails within this excellent community open space. Most importantly, completed work linked previously restored sites to create a continuous stretch of over 5 miles of restored river.



Figure 15: Aerial view of Site 4 following restoration activities.

Lessons Learned and Future Project Recommendations

Phase 5 was the culmination of years of planning, coordination, and fundraising that wouldn't have been possible without the collaboration of each partner and funder. Lessons learned from the planning and implementation of this project include:

- Utilize the Technical Advisory Team to develop and review the designs to ensure methods have the greatest potential for success and meet site specific needs.
- Hire contractors with experience in river restoration and streambank stabilization projects; ensure they understand the techniques included in the design and have engineers supervise implementation to provide needed guidance and training.
- Allow for flexibility in project timelines to account for challenges in construction timing and river conditions. To protect the endangered Southwestern willow flycatcher, all construction activities must take place before June or after September. This limits the contractor to working in the fall, winter, and early spring, when river conditions can be challenging. During Phase 5, contractors were delayed due to ice build-up in the winter and high river flows in spring.
- Provide daily project management during construction; ensure Project representatives are available during business hours and visit the site regularly to observe progress and address concerns.
- Plant willow clumps into the water table to ensure success in drought conditions.
- Survival rates of additional riparian species, including Golden Currant, Thin-leaf Alder, and Red Osier Dogwood suggest both dogwood and alder are not successful enough in this reach of river to justify planting. Golden Currant planting will be considered as a supplemental species for future revegetation efforts.
- Involve the community in project implementation through volunteer events, tours, and other education and outreach efforts. This was a great way to educate the public and build community investment in river health.
- Track all project timelines and complete needed reports in advance of deadlines.

The RGHRP is continuing to implement the recommendations of the 2001 Study, Lower Rio Grande Study, Upper Rio Grande Watershed Assessment, and Rio Grande Basin Stream Management Plans. Lessons learned throughout the Phase 5 will be applied to future projects implemented by the RGHRP and project partners. These lessons will be especially valuable to future streambank stabilization and riparian restoration projects across the San Luis Valley, which are prioritized in the Rio Grande Basin Stream Management Plans.

ACTUAL EXPENSE BUDGET

Table 6: Rio Grande Riparian Stabilization Project – Phase 5 Actual Expense Budget by Task and Funding Source.

		Cash Contributions								In-kind Contributions			
Task	Description	CWCB Funds	NFWF	SLVCCI	CHRF	SLVWCD	American Forests	Landowners	NAWCA	Gates Family Foundation	TAT	Community Volunteers	
1	Project Design, Engineering, and Permitting	\$ -	\$ -	\$ 26,522.50	\$ 15,000.00	\$ 3,000.00	\$ -	\$ -	\$ -	\$ 9,911.50	\$ 1,740.00	\$ -	\$ 56,174.00
2	Streambank Stabilization and Riparian Restoration	\$ 188,000.00	\$ 200,000.00	\$ -	\$ -	\$ -	\$ 20,256.00	\$60,250.00	\$ 11,009.00	\$ 62,125.00	\$ -	\$ 5,220.00	\$ 546,860.00
3	Outreach and Education	\$ 1,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000.00
4	Monitoring	\$ 1,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000.00
5	Project Management and Administration	\$ 10,000.00	\$ -	\$ 13,477.50	\$ -	\$ 3,000.00	\$ -	\$ 3,950.00	\$ -		\$ -	\$ -	\$ 30,427.50
TOTAL		\$ 200,000.00	\$ 200,000.00	\$ 40,000.00	\$ 15,000.00	\$ 6,000.00	\$20,256.00	\$64,200.00	\$11,009.00	\$ 72,036.50	\$1,740.00	\$ 5,220.00	\$ 635,461.50
% of Pro	ject Budget	31.5%	31.5%	6.3%	2.4%	0.9%	3.2%	10.1%	1.7%	11.3%	0.3%	0.8%	

ACKNOWLEDGMENTS

The successful completion of Phase 5 is a testament to hard work, collaboration, and coordination with the project partners and funders. These include National Fish and Wildlife Foundation, Colorado Water Conservation Board, San Luis Valley Conservation and Connection Initiative, Colorado Healthy Rivers Fund, American Forests, Gates Family Foundation, US Fish and Wildlife Service, City of Alamosa, Private Landowners, San Luis Valley Water Conservancy District, Rio Grande Water Conservation Education Initiative, Colorado State Forest Service, SLV Health, and community volunteers.

Special thanks to the Colorado Water Conservation Board for providing grant funds for the continued efforts to improve the overall condition of the Rio Grande. This great project would not have been possible without your support!

For More Information, Contact
Daniel Boyes, Executive Director
Colorado Rio Grande Restoration Foundation
Rio Grande Headwaters Restoration Project
623 Fourth Street
Alamosa, CO 81101
(719) 589-2230
daniel@riograndeheadwaters.org

