

Exhibit A

Scope of Work

WATER ACTIVITY NAME – 2009 Rio Grande Riparian Stabilization Project – Phase 4

GRANT RECIPIENT – Colorado Rio Grande Restoration Foundation

FUNDING SOURCE – Watershed Supply Reserve Account and Rio Grande Inter-Basin Roundtable

INTRODUCTION AND BACKGROUND

The Colorado Rio Grande Restoration Foundation (Foundation) is the fiscal agent for the Rio Grande Headwaters Restoration Project (RGHRP). The RGHRP was formed to implement the recommendations of a study completed in 2001, the 2001 Study. The 2001 Study was prompted by a group of citizens who were concerned that the river had been impaired. The 2001 Study, sponsored by the San Luis Valley Water Conservancy District and funded by the Colorado Water Conservation Board, analyzed 91 miles of the Rio Grande from South Fork to the Alamosa/Costilla County line. This reach was identified as the portion of the Rio Grande in Colorado that has been most impacted by human intervention in the past 100 years. The 2001 Study analyzed the current vegetation, human impact, agricultural disturbance, geomorphology, hydrology, wildlife habitat, and aquatic habitat of the 91-mile reach. The 2001 Study determined that a major cause of the deterioration in river function was the continual increase in sediment loading caused by unstable streambanks. This results in loss of streambank stability, degradation of riparian habitat, and deposition of bed-load materials downstream. The sediment loading also negatively affects the condition of the fishery; in localized areas the depth to width ratio is inadequate to support most macroinvertebrate life.

Since 2001, the RGHRP has been working to improve the function of the Rio Grande in Colorado. The 2009 Rio Grande Riparian Stabilization Project - Phase 4 (Phase 4) will continue these efforts. The Goal of Phase 4 is to improve water quality by reducing sediment entering the river within the project boundaries. In Phase 4, six (6) sites will receive streambank stabilization and riparian restoration treatments; these actions will reduce sediment loading by stabilizing the streambanks, improve the riparian and upland habitat by increasing willow and riparian vegetation cover, and enhance the fishery. Additionally, the capacity of the Rio Grande to transport sediment that has entered the system from upstream reaches will be increased. Finally, the improvements to riparian habitat and floodplain function will improve the condition of wetlands located throughout the riparian area within the project boundary.

Phase 4 will be funded with \$250,000.00 from the CO Non Point Source (CO NPS) Program, \$148,000.00 from the Colorado Water Conservation Board (CWCB) Water Supply Reserve Account (WSRA), \$119,000 from project landowners, and approximately \$39,660.00 of in-kind services. Total estimated project cost is \$556,660.00 (see attached budget).

PHASE 4 GOALS, OBJECTIVES, TASKS, and DELIVERABLES

Phase 4 Environmental Goal - Improve the function of the Rio Grande by reducing sediment loading by 20,000 cubic feet per year in Alamosa County, Colorado. These efforts will result in improved water quality, reduced erosion, increased sediment transport capacity, increased quality of riparian areas and habitat, and proper functioning floodplains.

Objective 1 – Improve water quality, reduce sediment loading, and enhance sediment transport by stabilizing up to 1.5 miles of streambank and reconfiguring the stream channel at six (6) sites on the Rio Grande in Alamosa County.

Task 1 – The RGHRP will hire third party engineers and contractors to design and implement streambank stabilization methods on up to 1.5 miles of riparian area. Phase 4 will utilize methods including, but not be limited to: bank shaping, channel reconfiguration, and rock or log structure installation.

Products – Stabilized streambanks, reduced sediment loading, and reconfigured stream channel on six (6) sites. Additional sites will be added in the event actual engineering and site work is completed at less than estimated cost.

Task 2 – The RGHRP will hire third party engineers and contractors to design and implement bioengineering techniques in order to further stabilize the streambanks following construction in Task 1. Techniques used in the riparian areas may include, but are not limited to willow clump plantings, bareroot shrub plantings, and grass and forb seeding. Upland areas disturbed during onsite activities will be reseeded with appropriate species. Additionally, volunteers will aid in revegetation efforts by participating in four revegetation events organized by the RGHRP.

Products – Reestablishment of riparian vegetation, increased streambank stability, and reduced erosion. Four coordinated volunteer efforts, through which groups of approximately 20 volunteers will complete revegetation efforts at the Project sites.

Phase 4 Programmatic Goal 1 – Reduce streambank erosion and protect the riparian area after streambank stabilization with improved grazing techniques, where applicable.

Objective 2– Identify and implement grazing best management practices (BMPs) to reduce sediment input and enhance riparian areas on sites where livestock grazing occurs.

Task 3 – The landowners will implement identified grazing BMPs. This may include, but is not limited to, fencing, short duration grazing rotations, prohibiting all grazing, or other improved grazing practices.

Products - Improved riparian zones through grazing BMP implementation and a demonstration of the benefits of improved grazing management.

Phase 4 Programmatic Goal 2 – Track the progress of Phase 4 activities and long-term site condition with evaluation and monitoring.

Objective 3 – Ensure Project design is implemented accurately. Monitor sites to track long-term condition and evaluate overall success of reaching Goals and Objectives.

Task 4 – The RGHRP will work with the third party engineers to characterize sites before on-site work to establish baseline condition. RGHRP will monitor on-site activities to ensure on-the-ground efforts are consistent with Project design. RGHRP personnel will

monitor sites according to the Phase 4 Sampling and Analysis Plan (SAP), once approved by the WQCD NPS Program Coordinator, to ensure proper function and determine if Projects successfully attain Goals and Objectives.

Products - Annual Monitoring Reports that can be compared to determine if the riparian stabilization was successful and the desired results have been achieved.

Phase 4 Programmatic Goal 3 – Promote community awareness of and involvement in non-point source pollution, water quality related issues, and riparian health through Outreach and Education.

Objective 4 – Increase understanding of water quality issues and encourage involvement in Phase 4 by reaching out to the community with presentations, tours, and volunteer events.

Task 5 – The RGHRP will develop visual aids about Phase 4; speak at public meetings, local schools, and conferences about the importance of water quality and healthy rivers; submit articles to local newspapers with Project information and updates; organize four volunteer revegetation efforts and two tours for local schools and community groups.

Products - A well-informed community regarding, non-point source issues in the watershed, the activities of the RGHRP, and the importance of healthy rivers. Finally, two tours will be given so interested community groups and individuals may see the completed Project sites and the importance of non-point source management and riparian stabilization Projects.

Phase 4 Programmatic Goal 4 – Determine most cost efficient and effective riparian stabilization methods for implementation at the six (6) Project sites.

Objective 5 – Facilitate discussions with the Technical Advisory Team, the multi-discipline team of expert advisors active in Phase 3, to identify the most appropriate riparian stabilization methods for implementation at each site.

Task 6 – The RGHRP will organize site visits for the Technical Advisory Team. The Technical Advisory Team will discuss suitable methods to address the causes of increased sediment loading. Using lessons learned from previous projects and the best available science, the Technical Advisory Team will determine the most effective and cost-efficient methods for implementation at each site. This information will be incorporated into Objectives 1 and 2. The Technical Advisory Team will also visit sites after construction to evaluate success of chosen methods.

Products - A Team of professionals committed to selecting the most technically and cost effective mitigation measures to be implemented at each Project site. A detailed look at the completed sites to determine how future efforts can be improved.

Phase 4 Programmatic Goal 5 – Administer Phase 4 efficiently, within budgeted costs and Project timelines, and in accordance with Project Goals, Objectives, and Tasks.

Objective 6 – Complete all necessary contracts, status reports, and internal and external documents. Ensure Tasks are completed within approved costs and timelines.

Task 7 – The RGHRP will administer Phase 4. This includes completing contracts with the CDPHE, CWCB, landowners, third party engineers, and contractors; obtaining the necessary environmental permits; managing budgets and reimbursement requests; and

completing semi-annual and final reports. Additionally, the RGHRP will perform Project oversight; making certain project design and implementation are timely and accurate. The RGHRP will organize outreach and education efforts and complete site monitoring in accordance the Phase 4 SAP, once approved.

Products – All appropriate contracts, external and internal reports, and on-site Project activities completed within planned period and anticipated costs.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the water activity sponsor. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed.

All products, data and information developed as a result of this grant must be provided to CWCB in hard copy and electronic format as part of the project documentation.

