# Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet Agenda Item 32.f

**Applicant:** Colorado Rio Grande Restoration Foundation

Water Activity Name: 2009 Rio Grande Stabilization Project – Phase 4

Water Activity Purpose: Structural and/or nonstructural water project or activity

**County:** Alamosa

**Drainage Basin:** Rio Grande **Water Source:** Rio Grande **Amount Requested:** \$98,000

Source of Funds: \$98,000 (Statewide Account); \$50,000 (Basin Account) – approved May 2010

Matching Funds: \$352,000 (\$250,000 from a Colorado Non-Point Source Grant, \$2,000 from the Rio

Grande Headwaters Restoration Project, and \$100,000 from landowners match)

## **Staff Recommendation**

Staff recommends approval of up to \$98,000 from the Statewide Account to help complete the 2009 Rio Grande Stabilization Project – Phase 4. The request for \$50,000 from the Rio Grande Basin Account was approved at the May 2010 CWCB meeting.

## **Water Activity Summary:**

The proposed project (Phase 4) is a riparian stabilization project on the Rio Grande in Alamosa County. The purpose of the project is to address the causes of deterioration of river function as identified in a study funded by the CWCB in 2001 (2001 Study). The 2001 Study analyzed the condition of 91 miles of the Rio Grande and determined the deterioration in water quality and fishery conditions was due to increased sediment loading. This was caused by unstable stream banks, which resulted from deteriorated conditions of the riparian zone and changing river flow patterns. From the 2001 Study, recommendations were developed to improve the river's functions. Restoration work focuses on a multi-faceted approach using proven techniques such as bioengineering, installation of rock and wooden structures, revegetation, construction of bank-full benches, and implementation of grazing best management practices.

The Rio Grande Headwaters Restoration Project (RGHRP) was the outgrowth of the 2001 Study to implement its findings. The mission of the Rio Grande Headwaters Restoration Project is "...to restore and conserve the historical functions and vitality of the Rio Grande in Colorado for improved water quality, optimal agricultural water use, riparian habitat, wildlife and aquatic species habitat, recreation, and community safety, while meeting the requirements of the Rio Grande Compact."

In 2004 the need was identified for a well-defined Rio Grande Watershed Restoration Strategic Plan (Strategic Plan). Completed in 2007, the Strategic Plan highlighted the importance of continued efforts to implement of the recommendations from the 2001 Study. In 2004, through partnerships with the NRCS, the RGHRP completed a cost-share riparian stabilization project with funding from the Colorado Non-Point Source Program. The 2004 Riparian Stabilization Project – Phase 2 involved 17 private landowners on approximately 8,300 feet of stream bank on the Rio Grande in Rio Grande County, CO. Matching funds came from the Environmental Quality Incentive Program (EQIP), the Colorado Division of Wildlife (CDOW) Colorado Habitat Improvement Program (CHIP), and the landowners.

In 2008, the RGHRP received a Colorado Non-Point Source Program grant of \$250,000 for the 2008 Riparian Stabilization Project – Phase 3 (Phase 3), to be completed on five sites in Alamosa County. The sites have been surveyed and the riparian stabilization projects have been engineered. Groundwork is currently ongoing in accordance with appropriate river levels and environmental conditions.

In 2009, the RGRHP contracted to receive Water Supply Reserve Account funding of \$285,000 (approved at the September 2008 CWCB meeting). This grant is being used as a match for Phase 3, in Alamosa County. The RGHRP also became aware of the NRCS sponsored Cooperative Conservation Partnership Initiative (CCPI) program. The RGHRP applied for and received a grant of \$390,000, which required non-federal funds match. After consideration, it was determined a portion of the WSRA grant of \$285,000 could be made available as match to the CCPI grant. Therefore, the 2009 awarded WSRA grant of \$285,000 is being used to match both the Colorado Non Point Source grant of \$250,000 and the CCPI grant of \$390,000. The 2009 CCPI Project is underway and twelve riparian stabilization projects in Rio Grande County have selected, of which seven have been completed.

In January 2009, the RGHRP received another Colorado Non-Point Source Grant of \$250,000 to continue riparian restoration on the Rio Grande. On behalf of the RGHRP, the Foundation is requesting \$148,000 from the Water Supply Reserve Account to assist in the completion of the 2009 Rio Grande Riparian Stabilization Project, Phase 4 (Phase 4) in Alamosa County. Phase 4 will target additional areas in need of restoration identified by the 2001 Study.

Threshold and Evaluation Criteria
The application meets all four Threshold Criteria.

The application articulates how the project meets the Evaluation Criteria as summarized below:

<u>Tier 1: Promoting Collaboration/Cooperation & Meeting Water Management Goals & Identified Needs:</u> This project addresses consumptive and nonconsumptive needs by reducing sediment loading that adversely impacts water quality and irrigation operations. As detailed in the application (page 10) numerous and diverse entities are involved in the project. The project addresses important needs identified by SWSI, the roundtable, and previous work funded by the CWCB.

<u>Tier 2: Facilitating Water Activity Implementation:</u> The RGHRP does not have the resources to fund a project of this magnitude, but has shown a strong ability to highly leverage funding and achieve successful projects. The current project is enrolled in the Measurable Results Program of the CWCB and CDPHE. As a result a Sampling and Analysis Plan (SAP) has been developed to help monitoring efforts of the project's success.

<u>Tier 3: The Water Activity Addresses Issues of Statewide Value and Maximizes Benefits:</u> This project will help sustain agriculture, environment, and recreation by stabilizing streambanks resulting in improved water quality and riparian health. The riparian communities along the Rio Grande provide potential habitat for three bird species that are either protected under the federal Endangered Species Act (ESA) or the Colorado State Threatened, Endangered and Species of Special Concern list. This project will significantly improve habitat for all affected species. By increasing irrigation efficiency and reducing sediment loading the project also improves Colorado's ability to fulfill its commitments under the Rio Grande Compact. The current effort is complementary to a long history of CWCB involvement with the project.

## Funding Overview

Total grant funding in the amount of \$148,000 is requested. At the May 2010 CWCB meeting \$50,000 was approved from the Rio Grande Basin Account. Currently, the request for an additional \$98,000 from the Statewide WSRA account is under consideration. Requested WSRA funds constitute about 30% of the overall project cost (\$500,000). The balance of funding comes from a Colorado Non-Point Source Grant (\$250,000), the Rio Grande Headwaters Restoration Project (\$2,000), and landowner matches (\$100,000).

### **Discussion:**

Phase 4 of the Rio Grande Stabilization Project will continue important restoration work on portions of the 30 sub-reaches identified by the original 91-mile study area of the 2001 Study funded by the CWCB. This is a structural project that will improve the ability of the Rio Grande to meet both consumptive and non-consumptive needs of the area by stabilizing streambanks and increasing the ability of the river to transport water. As such, it allows for agriculture demands to be met by increasing the ability of irrigators to divert their appropriated water right when they are in priority and improving the function of diversion structures by reducing sediment loading. Additionally, the project sustains multiple non-consumptive uses and environmental needs by improving riparian conditions, repairing river channel problems, reducing sediment load, thereby improving both wildlife habitat and water quality for fisheries. The Rio Grande Stabilization Project has a history of successful restoration work on critical reaches of the Rio Grande. The project has also successfully leveraged a large amount of local, state and federal funds.

#### **Issues/Additional Needs:**

No issues or additional needs remain.

#### **Staff Recommendation:**

Staff recommends approval of up to \$98,000 from the Statewide Account to help complete the 2009 Rio Grande Stabilization Project – Phase 4. The request for \$50,000 from the Rio Grande Basin Account was approved at the May 2010 CWCB meeting.

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

**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.

**Engineering:** All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.