

Colorado Water Conservation Board (CWCB) Healthy Rivers Fund Grant to the Colorado Rio Grande Restoration Foundation

Lower Rio Grande Study – Phase 1

Final Report

Amount: \$10,000.00

Background

In September 2013, the Colorado Rio Grande Restoration Foundation (Foundation), the fiscal agent for the Rio Grande Headwaters Restoration Project (RGHRP), was awarded \$10,000 from the Colorado Healthy Rivers Fund. The award was used to document and assess the lower 33-mile stretch of the Rio Grande in Colorado by floating the project entire reach and completing target surveying and data collection. Funded activities included condition assessment and surveys completed by Riverbend Engineering and Bureau of Land Management (BLM), summary of site characteristics completed by Riverbend Engineering, and project administration completed by the RGHRP. The total value of the project was \$19,782 with \$10,000 from the Colorado Healthy Rivers Fund and \$9,782 in cash and in-kind contributions from the Foundation and BLM. This final report complements the Foundation's Reimbursement Request #1 for the Lower Rio Grande Study – Phase 1.

Summary of Assessment by Riverbend Engineering

Riverbend Engineering assessed the condition of the Rio Grande below the Alamosa National Wildlife Refuge to the Colorado/New Mexico state line, 33 river miles, which are within the Rio Grande Natural Area (RGNA). This stretch was not included in the Rio Grande Headwaters Restoration Project 2001 Study and is home to diverse wildlife, cultural, and historical resources. This reach of the river is privately owned at the upper end and on the majority of the east side. The last 22 miles are managed by the BLM on the west side of the river. This study included floating the entire reach, and current and historic aerial photography was used to help document changes. From March to September, Riverbend, along with the RGHRP and BLM, collected data including over 60 photo points to document the river as it migrates downstream. On these trips, observational data was recorded on streambank stability, riparian habitat condition, geomorphology, in-stream structures, aquatic habitat, and sediment transport. At 4 sites, more detailed studies were done to provide detailed cross sectional information, water quality analysis (temperature, turbidity, salinity, conductivity), pebble counts to quantify dominant river bed material, and major stream type classifications. The Colorado Stream Visual Assessment Protocol (SVAP2) was utilized for field assessments throughout the project area.

While the slope of the river through most of this reach is less than 0.5%, the river varies wildly from a deeply incised basalt canyon to having a flood plain width of over 850 feet. Sections of river have abundant riparian vegetation and old grove cottonwoods, while others are overgrazed with little to no vegetation or habitat for wildlife. There are no major active surface water diversions unlike the Rio Grande both above and below this reach, which is heavily allocated. The Conejos River confluence is just below the fifth mile in the project area, and several other smaller ephemeral tributaries join along the way. Feral horses, domestic sheep, cows, minnows, carp, several species of macroinvertebrates, geese with goslings, red winged blackbirds, hawks, and an owl were observed during data collection.

The data collected in 2014 through Phase 1 will be used in the Lower Rio Grande Study – Phase 2 to complete the final report: The Lower Rio Grande Study. In the Study, data will be used to identify areas of concern, and develop and prioritize restoration projects, such as bank stabilization, riparian habitat restoration, sediment transport mitigation, and in-stream structures. Stakeholders will review the report to ensure it is in line with local priorities and budgets, and provides guidance to the RGNA Commission, Bureau of Land Management, and private landowners. Phase 2 was recently funded by the 2014 Colorado Healthy Rivers Fund and BLM.

Project Budget

This table includes the expenses requested for reimbursement, totaling \$10,000.00, and the sources of match.

Final Expenditures for the Lower Rio Grande Study – Phase 1					
Task	Description	Source of Funds			TOTAL
		CHRF	BLM	In-Kind	
1	Condition Assessment and Surveys				
	<i>Riverbend Engineering Site Assessments and Targeted Surveying</i>	\$ 7,500.00	\$ 4,700.00	\$ -	\$ 12,200.00
	<i>BLM Site Assessments and Targeted Surveying</i>	\$ -	\$ -	\$ 1,032.00	\$ 1,032.00
	TOTAL TASK 1				\$ 13,232.00
2	Summary of Site Characteristics				
	<i>Riverbend Engineering Data Analysis and Summary</i>	\$ -	\$ 3,050.00	\$ -	\$ 3,050.00
	TOTAL TASK 2				\$ 3,050.00
3	Project Administration				
	<i>Project Management, Surveying, and Oversight</i>	\$ 2,500.00	\$ -	\$ 1,000.00	\$ 3,500.00
	TOTAL TASK 3				\$ 3,500.00
TOTAL		\$ 10,000.00	\$ 7,750.00	\$ 2,032.00	\$ 19,782.00

Lower Rio Grande Study Map

