

Rio Grande Inter-Basin Roundtable
c/o San Luis Valley Water Conservancy District
623 Fourth Street
Alamosa, CO 81101
Telephone: (719) 589 – 2230
Email: slvwcdco1@qwestoffice.net

June 24, 2013

Mr. Michael King, Executive Director
Colorado Department of Natural Resources

Mr. Todd Doherty, Intrastate Water Management & Development
Colorado Water Conservation Board

Reference: Kerber Creek Restoration

Gentlemen:

The Rio Grande Inter-Basin Roundtable (R.G.R.T) has determined that the single, most critical water issue confronting the Rio Grande Basin (Basin) is the current unsustainable management of surface and ground water. The R.G.R.T. has made the decision that water activities that address this issue be favorably considered for funding from the Water Supply Reserve Account, SB 2005 -179 (WSRA Funds), providing the proposed water activities meet the SWSI findings for the Basin and the CWCB & IBCC Criteria and Guidelines for funding.

The Kerber Creek Restoration Project (KCRP) request will facilitate the final phase of an ongoing community based effort to rehabilitate Kerber Creek, Saguache County.

KCRP is a collaborative effort dedicated to restoring the Kerber Creek watershed, which has been heavily impacted by legacy mining activities in the Bonanza Mining District of Saguache County, Colorado. Many silver, lead, copper, and zinc mines operated in the District from the 1880s to the 1970s, with major production occurring mainly during the 1920s and 1930s. Mine wastes and tailings, originally sequestered behind dams in the upper watershed, were transported downstream and deposited in the Kerber Creek floodplain during high flow events that caused the dams to fail. These mine waste deposits led to phytotoxic soil conditions that decimated the riparian vegetation, which subsequently destabilized the stream banks and significantly altered channel morphology. In addition to these impacts, groundwater and runoff flowing through and over the mine waste deposits as well as flows from mine adits of former mine sites impaired water quality throughout the watershed. In the 1990s, the American Smelting and Refining Company (ASARCO, Inc.) partnered with local landowners, the US Forest Service (USFS), and the Bureau of Land Management (BLM) to initiate voluntary cleanup efforts in the watershed. These efforts significantly improved water quality and aquatic habitat by plugging the Rawley 12 draining adit and relocating major tailings deposits. However, additional work on lower watershed mine waste deposits was not possible when ASARCO, Inc. declared bankruptcy in 2002.

In 2005 the BLM began an investigation of the environmental condition of the lower watershed, completing a full environmental assessment in 2006. This investigation was the

beginning of KCRP, which today functions as a non-legal entity grounded in partnerships among a variety of organizations, including, but not limited to, USFS, BLM, the US Fish and Wildlife Service (USFWS), the Natural Resources Conservation Service (NRCS), Trout Unlimited (TU), Saguache County Sustainable Environment and Economic Development (ScSEED), the Colorado Department of Public Health and Environment (CDPHE), and the Bonanza Stakeholders Group (BSG), a coalition of more than 20 private landowners in the Kerber Creek watershed.

Since 2007, KCRP has successfully treated over 60 acres of mine wastes, restored over 4,000 feet of stream bank, and installed over 250 in-stream rock structures in the lower watershed. These accomplishments have been made possible by the over \$2 million in grant funding awarded to the project to date and scores of project volunteers, who have collectively contributed over 13,000 hours.

Trout Unlimited (TU), an organization dedicated to the restoration of this nation's cold-water fisheries, has been involved in KCRP since its inception. In 2009, TU was awarded a large Colorado Nonpoint Source Program grant on behalf of KCRP to complete phytostabilization of mine wastes along 12 miles of stream covering approximately 40 acres of private and public land. The local TU chapter, Collegiate Peaks Anglers, has contributed over 600 hours of volunteer labor and has committed to adopting this watershed for future work days throughout the length of the project. TU and federal partners have been instrumental in gathering local support for the project and have recruited numerous private landowners to participate and serve as project partners.

TU is an essential KCRP partner and manages the majority of project funding and will serve as the applicant and fiscal agent for this WSRA request.

TU is requesting \$34,871 from WSRA to install 25 in-stream rock structures along some remaining 4,800 ft. of unrestored stream bank, in the center of the overall restoration project. This work will include reshaping the associated stream bank and the installation of in-stream rock structures that will redirect the thalweg to the center of the stream, reducing erosion by decreasing the shear stress on stream banks. This action will improve aquatic habitat by creating pool-riffle sequences, and decreasing the width-to-depth ratio. Over time, in-stream restoration will also help to reestablish the connection between the stream and its floodplain, thereby increasing groundwater storage and base flows. Where possible, any established riparian vegetation disturbed as a result of project implementation will be recycled by incorporation into channel design using bioengineering techniques, decreasing the quantity of rock needed and thus project costs. Both the phytostabilization and in-stream restoration techniques have proven effective along Kerber Creek in past restoration projects completed between 2008 and 2012.

The anticipated total Kerber Creek Restoration Project costs are over \$1,319,000. Of the \$34,871.00 being requested from the Rio Grande Basin Account \$17,484 will be used to purchase 282 cubic yards of rock, \$8,688 will be used to reshape banks, and \$4,963 will pay labor costs. An additional \$3,490 is needed to cover TU administrative, project management, and oversight costs, see following Table.

WSRA Proposed Project Budget

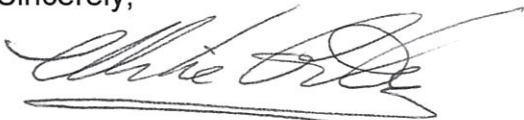
Tasks	Task Description	Price per CY	CY	Total Cost
1	Project Management			
	TU Administrative Costs			\$3,736
3	Stream bank stabilization			
	Reshaping & excavating banks	\$4	2172	\$8,688
4	Engineered rock structure installation			
	Rock	\$62	282	\$17,484
		Price per Hour	Hours	Total Cost
	Labor	\$43.15	115	\$4,963
Total				\$34,871

The balance of the overall Project's funding of \$1,319,000 is coming from the other sources, including, but not limited to: Tiffany & Company Foundation, Norcross Wildlife Foundation, Xcel Energy, CDPHE Non-Point Source Program, Colorado Division of Mine Reclamation and Safety, Colorado State Forest Service, CWCB, NRCS and In-Kind contributions from landowners and volunteers. Details of this matching funding can be seen in Exhibit A, Project Budget, Table 1, in the Application.

At the regular R.G.R.T. meeting on June 11, 2013 the R.G.R.T. Members unanimously approved that this request for funding of \$34,871.00 from the Rio Grande Basin Account be forwarded to the CWCB for their approval. The R.G.R.T. urges the CWB Board to approve this request.

The R.G.R.T. appreciates the support of the Department of Natural Resources, the Colorado Water Conservation Board and the Interbasin Compact Commission in assisting in meeting the needs of all users of Colorado's water.

Sincerely,



Mike Gibson
Chair, Rio Grande Interbasin Roundtable

Attachment (1)