STATE OF COLORADO

Colorado Water Conservation Board
Department of Natural Resources
1580 Logan Street, Suite 600
Denver, Colorado 80203
Phone: (303) 866-3441
Fax: (303) 894-2578
www.cwcb.state.co.us

September 24, 2013

Trout Unlimited, Inc.
Attn: Elizabeth Russell
1523 Arbor Drive
Lafayette, CO 80026

RE: Notice to Proceed – WSRA Grant – Keber Creek Restoration Project in the Rio Grande River Basin

Dear Elizabeth,

This letter is to inform you that the WSRA contract to assist in the above project in the Rio Grande River Basin was signed on September 18, 2013. The original contract will be mailed to you.

With the executed contract, you are now able to proceed with the project and continue invoicing the State of Colorado for cost incurred through **December 31, 2015** at which time the contract will expire. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 45 days. I wish you much success in your project.

Sincerely,

Rebecca Mitchell, Section Chief
Water Supply Planning Section
1580 Logan, Room 200
Denver, CO 80203
303-866-3441 x3217
Rebecca.Mitchell@state.co.us
www.cwcb.state.co.us

WATER CONSERVATION BOARD
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Buyer: MAGGIE VAN CLEEF
Phone Number: 303-866-3292
Agency Contact: DORI VIGIL
Phone Number: 303 866 3441

DATE: 09-18-13

IMPORTANT
The PO# and Line # must appear on all invoices, packing slips, cartons and correspondence

ACC: 09-17-13

PURCHASE ORDER
STATE OF COLORADO

P.O. # OE PDA 14IBC000010 Page# 01

State Award #

BID #

FEIN 381612715 **Phone:** - -
Vendor Contact: ELIZABETH RUSSELL
Purchase Requisition #:

VENDOR
TROUT UNLIMITED INC
1300 N 17TH ST STE 500
ARLINGTON VA 22209

Invoice in Triplicate
To: DIVISION OF WATER CONSERVATION
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Payment will be made by this agency

Ship To: DIVISION OF WATER CONSERVATION
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Delivery/Installation Date: 12-31-15
F.O.B. DESTINATION STATE PAYS NO FREIGHT

INSTRUCTIONS TO VENDOR:

1. If for any reason, delivery of this order is delayed beyond the delivery/installation date shown, please notify the agency contact named at the top left. (Right of cancellation is reserved in instances in which timely delivery is not made.)
2. All chemicals, equipment and materials must conform to the standards required by OSHA.
3. NOTE: Additional terms and conditions on reverse side.

SPECIAL INSTRUCTIONS:

LINE ITEM	COMMODITY/ITEM CODE	UNIT OF MEASUREMENT	QUANTITY	UNIT COST	TOTAL ITEM COST
001	91843000000 CMS#61032 KEBER CREEK RESTORATION PROJECT WSRA GRANT				$34,871.00

DOCUMENT TOTAL = $34,871.00

THIS PO IS ISSUED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS
This PO is effective on the date signed by the authorized individual.
EPSPO PAA

FOR THE STATE OF COLORADO

Authorized Signature

9/18/13
Date

DP-01 (R-02/06)

Exhibit A
Statement of Work

WATER ACTIVITY NAME – Kerber Creek Restoration Project

GRANT RECIPIENT – Trout Unlimited

FUNDING SOURCE – Rio Grande Interbasin Roundtable Account

INTRODUCTION AND BACKGROUND
Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal)

The Kerber Creek Restoration Project (KCRP) is a partnership among government agencies, nonprofit organizations, and private landowners dedicated to restoring the Kerber Creek watershed, which has been heavily impacted by legacy mining activities in the Bonanza Mining District. Since 2007, the project has successfully treated over 60 acres of mine wastes, restored over 4000 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. On behalf of KCRP, Trout Unlimited (TU) is now requesting $34,871 to contribute to the restoration of 47,520 feet of stream bank. This request is part of the larger effort to restore site KC16, the largest privately owned parcel of land in the watershed. Site KC16 includes almost 30% of the untreated mine waste deposits remaining in the watershed and 17.3% of the entire length of stream bank along Kerber Creek. If this proposal is accepted, funds will be available to completely restore site KC16.

OBJECTIVES
List the objectives of the project

1) Effectively manage project
2) Phytostabilization of 36 acres of mine waste deposits
3) Stream bank stabilization along 47,520 feet of stream bank
4) Installation of in-stream rock structures where necessary along 23,760 feet of stream
5) Monitoring of geomorphological, biological, and water quality variables
6) Engineering at upper watershed source areas
7) Development of a sustainable BSG

TASKS
Provide a detailed description of each task using the following format

TASK 1 – Project management

Description of Task
Project funds will be effectively managed and documented, and all necessary project reports will be completed efficiently and submitted in a timely manner.

Method/Procedure
TU personnel will manage all project funding in a consistent manner and use its considerable experience to ensure that all reports are submitted to the appropriate entity on time, as it has in the past.

Deliverable
Appropriately completed project reports; Completed restoration project

TASK 2 – Mine wastes treatment (not funded through WSRA)

Description of Task
A total of 36 acres of mine wastes will be treated at site KC16, the largest privately owned parcel of land along Kerber Creek. In-situ phytostabilization is the treatment method of choice.

Method/Procedure
A pre-determined mixture of soil amendments will be applied to 36 acres of mine waste deposits and incorporated to a depth of 18". Amendments include: (1) lime, to neutralize soil pH in the short-term, (2) limestone, to provide long-term buffering capacity, and (3) compost, to limit bioavailability in soils by chemically binding metals to the organic molecules. This method also limits the bioavailability of metals mobilized from the deposit to the stream by runoff or groundwater, since metals will still remain bound to the organic component. Specific amendment application rates have been determined using data from previous site characterization efforts and from rates used to treat deposits at similar sites in the Kerber Creek watershed. Following amendment application, a native seed mix will be distributed using broadcast seeding to promote revegetation of the treated deposits. Straw will then be crimped on top to provide protection from erosion.

Deliverable
36 acres of mine wastes treated

TASK 3 – Stream bank stabilization

Description of Task
A total of 47,520 feet of stream bank at site KC16 will be restored using both vegetation and engineered rock structures. WSRA funding will be used to restore 2,300 feet of stream bank.

Method/Procedure
Following the appropriate site survey and design of engineered structures by NRCS personnel, a contractor will implement restoration activities where prescribed. These activities include the installation of root wads, willow fascines, and engineered rock structures. In-stream restoration will be implemented before Task 1 (mine wastes treatment) to prevent negative impacts from heavy equipment on treated areas. Volunteers will plant willows, sedge mats, and cottonwoods with supervision from project personnel following the completion of construction activities.

Deliverable
47,520 feet of stream bank restored

TASK 4 – Engineered rock structure installation

Description of Task
A variety of engineered in-stream rock structures will be installed at designated points along 47,520 feet of stream bank. WSRA funds will be used for rock structures to be installed along 2,300 feet of stream bank located at KC16-E, and NRCS will contribute the necessary engineering as an in-kind donation.

Method/Procedure
Cross vanes, J-hooks, rock barbs, and low-head dams will be installed as per NRCS engineering designs. These structures redirect the thalweg to the center of the stream, reducing erosion by decreasing the shear stress on stream banks, improving aquatic habitat by allowing for the development of self-scouring pools separated by shallower riffles, increasing sinuosity, and decreasing the width-to-depth ratio.

Deliverable
Approximately 250 in-stream rock structures installed along 47,520 feet of stream bank

TASK 5 – Monitoring (not funded through WSRA)

Description of Task
Project personnel will monitor a variety of geomorphological, biological, and water quality variables at previously established sites throughout the watershed. Data collected will be used to evaluate the effects of the project and to document project success.

Method/Procedure
As specified in the KCRP Sampling and Analysis Project Plan (SAPP)[1], available upon request: water quality, stream sinuosity, macroinvertebrate population, fishery density, and vegetation cover will be monitored at five sites; channel width and channel depth will be monitored at four sites; and repeat photographs will be taken at five sites that correspond with vegetation monitoring sites. All monitoring and data analysis methods will follow standard, approved practices that have been utilized for past restoration projects in the watershed, thus allowing for direct comparison between data collected before and after restoration.

Deliverable
Documented improvement in both geomorphological and biological variables as a result of restoration that can be included in project reports

TASK 6 – Engineering at source areas (not funded through WSRA)

Description of Task
Design alternatives will be developed for contaminant source areas in the upper watershed to help mitigate persistent water quality issues in the Kerber Creek watershed. Specifically, efforts will focus on the identification of possible solutions to contaminant loadings from the Minnie Lynch Mine Site.

Method/Procedure
TU will contract with experts to complete an Engineering Evaluation/Cost Analysis (EE/CA) that will identify cleanup alternatives for the Minnie Lynch Mine Site. The EE/CA will use characterization data collected in 2009 and 2010 and compiled into a technical memorandum to evaluate potential options.

Deliverable
Implementation alternatives that could result in a 30-60% reduction in metals loading to Kerber Creek downstream of its confluence with Rawley Gulch

[1] Kerber Creek Restoration Project. 2013. Sampling and Analysis Project Plan. BLM Saguache Field Office.

TASK 7 – BSG Development (not funded through WSRA)

Description of Task
Efforts to keep BSG members engaged in the project and to share project successes will continue. Through outreach documents, conference attendance, and educational tours, San Luis Valley residents will remain knowledgeable of and interested in KCRP.

Method/Procedure
Quarterly BSG meetings will continue throughout the remainder of the project to keep stakeholders informed of watershed issues. In addition, KCRP will continue to publish quarterly newsletters, to host public watershed tours, and to attend and present at a variety of relevant conferences. Finally, three interpretive signs will be designed and installed throughout the watershed to provide visitors with an introduction to the project and the history of the watershed.

Deliverable
Committed stakeholders; informed public; quarterly newsletters; three interpretive signs

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 statement 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.

BUDGET
Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, $/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

Two budget tables are attached (Tables 1 and 2). Table 1 presents a complete project budget with confirmed funding, expected funding from NRCS, and proposed funding from WSRA. Table 2 presents an itemized budget specific to the proposed WSRA project.

SCHEDULE

Two schedules are presented (Tables 3 and 4). Table 3 presents a generalized project schedule, and Table 3 gives a schedule specific to the proposed WSRA project.

PAYMENT
Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. 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 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 help promote the development of a common technical platform.

Project Budget

Tasks	Task Description	Sources																
		Nonpoint Source	DRMS	CWCB	CSFS	CDPHE	BSG	Tiffany & Company Foundation	CEC	Xcel Energy	Norcross Wildlife Foundation	In-Kind Donations	Federal Funding	NRCS[1]	Confirmed Totals	Expected NRCS Funding[2]	Expected Totals[3]	CWCB WSRA Funding	Totals[4]
1	Project management	$36,000	$0	$6,200	$3,800	$6,000	$0	$0	$0	$0	$0	$0	$0	$0	**$52,000**	$0	**$52,000**	$3,736	**$55,736**
2	Mine wastes treatment	$221,000	$19,400	$0	$30,600	$30,000	$19,500	$4,000	$28,000	$2,500	$0	$50,000	$0	$0	**$405,000**	$0	**$405,000**	$0	**$405,000**
3	Stream bank stabilization	$44,000	$5,600	$27,400	$0	$12,000	$5,000	$5,000	$6,000	$0	$0	$5,000	$0	$8,000	**$118,000**	$60,000	**$178,000**	$11,169.50	**$189,169.50**
4	Engineered rock structure installation	$53,000	$0	$3,400	$0	$6,000	$500	$10,600	$4,900	$0	$0	$5,000	$0	$52,950	**$136,350**	$400,000	**$536,350**	$19,965.50	**$556,315.50**
5	Monitoring	$22,000	$0	$0	$0	$3,000	$0	$0	$6,000	$0	$0	$5,100	$10,000	$0	**$46,100**	$0	**$46,100**	$0	**$46,100**
6	Engineering at source areas	$25,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$25,000**	$0	**$25,000**	$0	**$25,000**
7	BSG development	$12,000	$0	$0	$0	$3,000	$0	$400	$5,100	$0	$1,700	$20,000	$0	$0	**$42,200**	$0	**$42,200**	$0	**$42,200**
Source Totals		$413,000	$25,000	$37,000	$34,400	$60,000	$25,000	$20,000	$50,000	$2,500	$1,700	$85,100	$10,000	$60,950	**$824,650**	$460,000	**$1,284,650**	$34,871	**$1,319,521**

CWCB WSRA 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[5]	$43.15	115	$4,963
Total				$34,871

[1] NRCS funding includes both project design and implementation. NRCS funds projects through landowner cost-share programs (e.g., EQIP, WHIP); thus, TU does not receive NRCS funding directly. Rather, NRCS funds are used to restore private lands either by reimbursing landowners who pay the contractors or by directly paying the contractors. The NRCS funds listed here were used to pay the contractor who completed in-stream restoration on the easternmost 2,585 feet of stream at KC16-E.

[2] NRCS expects to receive approximately half of the listed sum in 2014 through the EQIP program to complete in-stream restoration on the westernmost 1,250 feet of stream at KC16-E and the entirety of the stream at KC16-M. A second application to the EQIP program for the other half will be written in 2014 to cover in-stream restoration at KC16-W. Because NRCS cost-share programs depend on federal budget allocations, TU is also pursuing other potential grant funding opportunities to complete the associated restoration projects.

[3] Expected totals list totals for each task equivalent to the sum of confirmed totals and expected NRCS funding.

[4] Proposed totals list totals for each task equivalent to the sum of confirmed totals, expected NRCS funding, and proposed WSRA funding.

[5] Labor costs cover both rock installation and bank stabilization. For this reason, labor costs are halved and distributed between tasks 3 and 4 in Table 1.

Timeline Table

Task	Description	Target Start Date	Target Completion Date
1	Project Management	9/16/2013	2/1/2016
2	Mine wastes treatment	9/16/2013	12/1/2015
3	Stream bank stabilization	9/16/2013	12/1/2015
4	Engineered rock structure installation	9/16/2013	12/1/2015
5	Monitoring	9/16/2013	10/29/2016
6	Engineering at source areas	9/16/2013	9/30/2014
7	Stakeholder group development	9/16/2013	12/1/2015