# 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



John W. Hickenlooper Governor

Mike King DNR Executive Director

James Eklund CWCB Director

September 19, 2013

Routt County Conservation District Attn: Jackie Brown, District Manager 1475 Pine Grove Road, Suite 201a Steamboat Springs, CO 80487

RE: Notice to Proceed – WSRA Grant – Armstrong Creek Restoration Project in the Yampa/White/Green Basin

Dear Jackie.

This letter is to inform you that the WSRA purchase order to assist in the above project in the Yampa/White/Green Basin was signed on September 18, 2013. The original purchase order will be mailed to you.

With the executed purchase order, you are now able to proceed with the project and continue invoicing the State of Colorado for cost incurred through **March 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,

Chris Sturm
Stream Restoration Coordinator
Watershed and Flood Protection Section
Colorado Water Conservation Board
Department of Natural Resources

1313 Sherman St., Room 721

Denver, Co 80203

Phone: (303) 866-3441 ext. 3236

Fax: (303) 866-4474 chris.sturm@state.co.us www.cwcb.state.co.us WATER CONSERVATION BOARD 1313 SHERMAN STREET, ROOM 721 DENVER, CO 80203

**Buyer:** 

FEIN

E

R

ALLAN SMITH 303-866-3292

**Phone Number: Phone Number:** 

303 866 3441

Agency Contact: DORI VIGIL

packing slips, cartons and correspondence ACC: 09-17-13

appear on all invoices,

The PO# and Line # must

09-18-13 DATE: **IMPORTANT** 



**PURCHASE** ORDER STATE OF COLORADO

P.O. # OE PDA 14IBC000011 Page# 01

State Award #

840658095

Phone: 970-879-3225

Vendor Contact: JACKIE BROWN

**Purchase Requisition #:** 

ROUTT COUNTY CONSERVATION DISTRICT

D 1475 PINE GROVE ROAD # 201A 0

STEAMBOAT SPRINGS

CO 80487-8803

#### **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.

BID#

Invoice in Triplicate

DIVISION OF WATER CONSERVATION

1313 SHERMAN STREET, ROOM 721

DENVER, CO 80203

Payment will be made by this agency

Ship To:

To:

DIVISION OF WATER CONSERVATION 1313 SHERMAN STREET, ROOM 721

DENVER, CO 80203

Delivery/Installation Date: 03-31-15 F.O.B. DESTINATION

STATE PAYS NO FREIGHT

**SPECIAL INSTRUCTIONS:** 

LINE	COMMODITY/ITEM	UNIT OF			
ITEM	CODE	MEASUREMENT	QUANTITY	UNIT COST	TOTAL ITEM COST

001 91843000000

CMS#61062- ARMSTRONG CREEK RESTORATION PROJECT WSRA GRANT

\$50,000.00

Authorized Signature

## **Scope of Work**

**GRANTEE: Routt County Conservation District** 

PRIMARY CONTACT: Jackie Brown

ADDRESS: 1475 Pine Grove Road Suite 201a, Steamboat Springs, CO 80487

PHONE: (970) 879-3225

**PROJECT NAME: Armstrong Creek Restoration Project** 

**GRANT AMOUNT: \$50,000** 

#### INTRODUCTION AND BACKGROUND:

Armstrong Creek is located in the California Park Special Interest Area which was designated due to its diverse biological resources. The project is entirely within lands managed by the Medicine Bow-Routt National Forests. The Hahns Peak/Peak Bears Ears Ranger District, together with Colorado Parks and Wildlife, proposes to implement stream and riparian habitat restoration along two miles of Armstrong Creek. The restoration project is needed to improve stream and riparian health while improving habitat conditions for several aquatic species. Stream and riparian health would be improved by reducing sediment inputs, providing the stream access to a floodplain, improving stability of unstable streambanks, and increasing riparian vegetation on currently exposed streambanks.

The Armstrong Creek Restoration Project will create healthier grazing lands and water supply for domestic and wild animals; as well as fishing opportunities and habitat restoration for Colorado State species of concern and the Elk and ungulates that graze on the woody vegetation that is not currently present. It will also provide habitat improvement to the following Colorado State Species of Concern: Colorado River cutthroat trout, mountain sucker, Northern Leopard Frog and Boreal Toad.

#### **OBJECTIVES**

List the objectives of the project. Please include objectives for all aspects of the project whether funded by the CWCB or not

Project objectives are to:

- Improve stream and riparian health. This includes improving water quality, decreasing stream temperatures, decreasing sediment inputs, restoring riparian vegetation, and re-connecting the stream and floodplain.
- Improve habitat for, and expand the range and long-term viability of, Species of Concern (e.g., CRCT).
- Increase the resilience and resistance of native aquatic organisms and their habitats to effects of climate change.
- Reduce the amount of sediment entering Elkhead Reservoir.

• Determine which stream and riparian restoration techniques are most effective in the Elkhead Creek watershed.

#### Task 1 – [Restoration Actions on Sites 2, 3, and 4; Lower Reach]

#### Description of Task

Planned restoration actions at these sites include a combination of new channel construction and hardened floodplains similar to those constructed at Sites 1 and 5. Wetland delineations are complete and the project design is at 50%. Final design and the 404 permit will be completed by August 1 using in-kind contributions from various partners. Restoration actions will be completed in September and October 2013.

#### Method/Procedure

Restoration of Sites 2 and 3 will involve the construction of a new stream channel (600 feet and 200 feet, respectively) using USFS operators and renting an excavator, lowboy, and water pumps. Currently the stream runs along an actively slumping hillslope resulting in extensive sediment moving into the channel. The new channels will be constructed on the opposite side of the valley from the eroding hillslopes.

At Site 4, the stream currently runs along three slumping and eroding hillslope, and consequently introduces sediment erosion into the channel (400 feet). Restoration actions will involve the construction of a hardened streambank and floodplain using a toe-wood sod mat design. USFS operators and rental of an excavator, lowboy, and water pumps will be required to complete restoration.

Upon completion of construction activities; erosion control will take place using willow plantings, and straw mats on all referenced sites. Temporary fencing will be constructed around Sites 1-5. RCCD will request reimbursement from CWCB for excavation, equipment rental, willow and straw mat material purchase, and/or partial fencing labor.

#### Deliverable

Restoration actions complete; erosion control and fences constructed.

#### **Task 2 – [Upper Reach Construction]**

#### <u>Description of Task</u>

The 0.7 mile long upper reach is characterized by an incised channel (3 to 6 feet) and actively eroding streambanks.

#### Method/Procedure

The upper reach construction entails restoration of up to a 0.7 mile long reach of river. Although the entire upper reach construction will cost upward of \$105,000; restoration activities that will be requested for reimbursement from CWCB will consist of excavation construction to stabilize the stream and create the new streambank, which will take place during the late summer and early fall of 2014. The specific objectives of the construction are:

- 1. To increase connectivity between the stream channel and its floodplain
- 2. To increase the ratio of floodprone to bankfull width

- 3. To increase bank stability
- 4. To decrease average channel slope
- 5. To decrease streambank erosion from the current rate to that of a stable or reference reach
- 6. To the greatest degree practicable, the design will i) aim to minimize ground disturbance and ii) minimize or eliminate the need to deliver or remove fill to/from the project area.

#### <u>Deliverable</u>

The construction of .18 miles (approximately one third of the upper reach site) of stable stream/ streambank.

## 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.