



## Colorado Water Conservation Board

### Water Plan Grant – Statement of Work – Exhibit A

#### Statement Of Work

<b>Prepared Date:</b>	<b>5/26/2023</b>
<b>Name of Grantee:</b>	<b>Colorado Rio Grande Restoration Foundation</b>
<b>Name of Water Project:</b>	<b>Rio Grande National Forest Wet Meadows Restoration Project</b>
<b>Funding Source:</b>	<b>Colorado Water Plan, Watershed Health and Recreation</b>

#### Water Project Overview:

The Rio Grande National Forest Wet Meadows Restoration Project (Project) will restore high elevation wet meadow habitats through the implementation of low tech, process-based restoration (PBR) techniques within the Rio Grande National Forest (RGNF) to benefit native aquatic species, riparian corridors, and overall watershed health. The Project will also develop a formal beaver translocation protocol, allowing Project partners to utilize beavers more effectively as a restoration tool in the future. Water Plan Grant funding will support the following project activities:

1. The identification of priority restoration areas and beaver reintroduction sites in the RGNF;
2. The restoration of 18 miles of stream and 357 acres of riparian and wet meadow habitat through the implementation of process-based restoration techniques and riparian revegetation;
3. The development of a formal beaver relocation protocol to assist partners with the reintroduction of beavers to suitable sites on the RGNF;
4. The engagement of local stakeholders and 30 community volunteers in restoration activities and beaver reintroduction efforts; and
5. The completion of long-term monitoring to track the effectiveness of reintroduction and restoration efforts and inform future restoration and reintroduction.

Project activities will improve riparian and aquatic habitat and engage community members in environmental stewardship, resulting in measurable outcomes for species of conservation concern including North American beaver, Rio Grande cutthroat trout, and Rio Grande sucker.

This project is a partnership between the RGNF, Colorado Rio Grande Restoration Foundation (CRGRF), Trout Unlimited (TU), Colorado Parks and Wildlife (CPW), Volunteers for Outdoors Colorado (VOC), and Southwest Conservation Corps (SCC).

#### Project Objectives:

This Project seeks to restore wet meadow and stream habitat conditions at key locations on the RGNF through the restoration of aquatic and riparian habitat and public education. Specific objectives include:

1. Enhance instream aquatic habitat through the installation of PBR structures;
2. Improve floodplain connectivity through the installation of PBR structures;
3. Restore riparian and wet meadow habitat through riparian revegetation and PBR techniques;



4. Improve water quality and geomorphic processes by stabilizing streams and reconnecting the floodplain through restoration activities;
5. Promote community participation and increase understanding of local stream health issues through volunteer events and stakeholder engagement;
6. Improve monitoring data to provide a better understanding of the efficacy of habitat restoration efforts.

## Tasks

### Task 1 – Project Site Identification and Evaluation

#### Description of Task:

The CRGRF, along with the US Forest Service (USFS), TU, and CPW, will identify priority wet meadow complexes/streams in the RGNF for restoration using the Rio Grande Cutthroat Trout Database, Beaver Restoration Assessment Tool, agency knowledge, and ground truthing.

#### Method/Procedure:

Using the data provided by the RGCT Database and Beaver Restoration Assessment Tool (BRAT) as a starting point, Project partners will accumulate additional information on the condition of RGNF target streams, culminating with in-person site visits to ground truth aquatic and riparian habitat conditions, beaver presence, and evaluating the potential for process-based restoration techniques and beaver reintroduction. Accessibility will also factor into the identification of restoration sites, as both equipment and materials must be transported to the sites with minimal impact. Once stream reaches and restoration sites are identified, Project partners will develop designs for PBR restoration methods at each site. Using these site designs, USFS staff will complete all necessary NEPA and US Army Corps permitting for the restoration activities.

#### Deliverable:

Identification and prioritization of restoration site locations, with a focus on habitat benefits for RGCT, Rio Grande sucker, and beaver.

### Task 2 – Process-Based Wet Meadow Restoration

#### Description of Task:

Implement instream and wet meadow habitat restoration on prioritized streams through the installation of PBR structures.

#### Method/Procedure:



Project partners will hire young adult watershed crews and strike teams through the Southwest Conservation Corps (SCC) to assist with the construction of PBR structures and associated riparian revegetation. Project partners will also work with Volunteers for Outdoor Colorado (VOC) and TU to organize a series of volunteer events to assist with restoration efforts. In addition to completing needed restoration work, SCC crew members and volunteers will receive educational training to promote personal growth and an ethic of natural resource stewardship.

The structures will be built by hand and take on a variety of shapes and sizes to address the specific challenges present in the stream reach. PBR structure types will include Temporary Wood Grade Structures (TWGS) and Post Assisted Log Structures (PALS), both of which initiate natural processes that restore stream and wetland functions. These include reducing and dispersing stream velocities and creating pools, wetlands, and riparian habitat. A TWGS structure consists of natural wooden posts driven into the streambed, spaced evenly across a stream channel. Willow branches and other vegetation are woven between the posts and varied sizes of rock and sediment are packed upstream to decrease permeability and further reduce stream velocity. Constructed TWGS and any subsequent beaver-created dams enhance aquatic habitat and are fish passable. PALS are non-channel-spanning structures that serve to direct and/or disperse flow, protect eroding banks, or stimulate erosion in a channelized system. TWGS and PALS constructed within a target reach can be easily repaired and augmented in the years after its installation. Recognizing this feature, this Project will be using monitoring results to identify where repairs and additional structures would be beneficial. In addition to the installation of process-based structures, willow cuttings and seeding may also be used to revegetate riparian areas as needed.

Crews and volunteers will be overseen by USFS and RGHRP staff to ensure restoration structures are built as intended. These activities will result in the restoration of 18 miles of stream geomorphology and 357 acres of wet meadow and riparian habitat and floodplain reconnection.

**Deliverable:**

Installation of a minimum of 120 PBR Structures resulting in enhanced aquatic habitat for RGCT and Rio Grande sucker along 18 miles of stream and 357 acres of improved wet meadow habitat and native riparian vegetation.

**Task 3- Pilot Project for Beaver Translocation**

**Description of Task:**

Develop a formalized beaver translocation protocol with agency collaboration.

**Method/Procedure:**

Partners with CPW, CRGRF, USFS, and the US Animal and Plant Health Inspection Service (APHIS) will collaborate to develop and formalize protocols and procedures for the translocation of beaver within CPW Area 17 (the Rio Grande Watershed in Colorado). As part of the *Rio Grande National Forest Beaver Characterization, Restoration, and Reintroduction Project*, the RGHRP and USFS sought to begin this process, but encountered hurdles that limited the scope of translocation.

Water Plan Grant funds will support the collaboration between these partners to develop a thorough but streamlined protocol to trap and relocate beaver families legally, humanely, and more efficiently. This protocol would also stipulate annual evaluations of translocation efforts, which would be incorporated into monitoring efforts described in Task 4.

**Deliverable:**



A formal beaver translocation framework for CPW Area 17.

#### **Task 4 – Project Monitoring**

**Description of Task:**

Monitor restoration sites for three years using established and emerging monitoring protocols.

**Method/Procedure:**

USFS, CRGRF, and TU staff will conduct PBR monitoring annually for three years, including photo point documentation, drone monitoring, measurements of PBR structure dimensions and associated changes in stream/wetland geometry, and visual assessments of restoration efficacy. Monitoring of beaver reintroduction sites will also be completed by the USFS and RGHRP staff annually for three years and will include photo point documentation and written evaluation of beaver activity. Project partners will also implement the standardized monitoring protocol currently being developed by Walton Family Foundation and Colorado State University (budget and grant timeline permitting).

**Deliverable:**

Robust quantitative and qualitative data providing a better understanding of the efficacy of habitat restoration efforts.

#### **Task 5 – Outreach and Education**

**Description of Task:**

Complete community outreach to engage and educate the public in project activities.

**Method/Procedure:**

Project partners including the CRGRF, TU, and VOC will organize volunteer events annually for 3 years to assist with restoration activities outlined in Task 2. Volunteer activities will include prepping restoration materials, building and repairing structures, and assisting with project monitoring. These events will provide great opportunities for outreach and education on the methods of stream restoration the Project is employing, as well as the importance of healthy, well-functioning watersheds.

In addition to volunteer opportunities, partners will also engage with agency stakeholders and landowners regarding restoration efforts and beaver reintroduction opportunities. This will include Project updates at local organizational meetings, such as the Rio Grande Basin Roundtable's monthly meetings.

**Deliverable:**

Increased public knowledge of Project activities and benefits. Specifically, the engagement of 30 community volunteers in restoration activities and agency stakeholders in the science and methodology of beaver reintroduction efforts.



## Task 6 – Project Management and Administration

### Description of Task:

Complete project oversight, management, and partner coordination. Complete all necessary contracts, status reports, and internal and external documents. Ensure tasks are completed within the approved costs and timelines.

### Method/Procedure:

The CRGRF will manage and administer the Rio Grande National Forest Wet Meadows Restoration Project. The CRGRF will complete contracts with the Colorado Water Conservation Board (CWCB) and other project funders, project partners, landowners, and contractors; manage project budgets, and reimbursement requests; and complete semi-annual and final reports. The CRGRF will work with USFS staff to complete all necessary environmental compliance and permitting for the Project. The CRGRF will perform project oversight, and will work closely with its partners to ensure project tasks are implemented according to the Project scope and timeline.

### Deliverable:

All appropriate contracts, external and internal reports, and project activities completed within planned period and anticipated costs.

## Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work.

## Reporting Requirements

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status 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 Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

## Payment



Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

**Costs incurred prior to the effective date of this contract are not reimbursable.** The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided as part of the project documentation.

### Performance Measures

Performance measures for this contract shall include the following:

- (a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.
- (b) Accountability: Per Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.
- (c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.
- (d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.