



Colorado Water Conservation Board

Exhibit A - Water Plan Grant – Statement of Work

Statement Of Work	
Prepared Date:	April 5, 2023
Name of Grantee:	Coalition for the Poudre River Watershed (CPRW)
Name of Water Project:	Lower Cache la Poudre Priority Reach Design Project
Funding Source:	Watershed Health and Recreation
Water Project Overview:	
This project has three major goals: to complete the 60% design for the downstream half of “Reach 13”, create a 30% restoration design for priority “Reach 16” and to facilitate/build landowner and community understanding for understanding watershed health. In 2017, the Grantee worked with stakeholders and a technical team to develop a river flood recovery & resiliency master plan for the lower Cache la Poudre River (east of the I-25 to the confluence with the South Platte). The focus of this first phase of the project was to prioritize reaches of the river that had the greatest need for restoration & resiliency building, analyze sediment transport issues, and develop a strong stakeholder network to support decision making which includes the Lower Poudre Steering Committee. The steering committee includes representatives from the City of Greeley, Town of Windsor, Northern Water, Colorado Parks and Wildlife, University of Northern Colorado, Larimer County, and local landowners. In 2020, the Grantee and the committee selected Reach 13 to complete a 30% design. The Reach was identified as a prime location for restoration focused on river health, resiliency, and showcasing innovative restoration techniques. The Reach is 1.2 miles long, spanning the Town of Windsor and City of Greeley’s growth management within Weld County. Landownership includes three landowners who have initially been receptive to the designs. The 30% design was completed in 2021 by Stillwater Sciences. Last year, the Grantee received funding from Wildlands Restoration Volunteers to complete a 60% design was completed for the upstream half (~.5 mi) of the Reach. The overall approach of the Reach 13 design seeks to maximize natural approaches like native vegetation, connecting the river to its floodplain, installing large wood jams, simulated beaver structures, and allowing the river to perform natural geomorphic processes to improve health, resiliency, and function. The proposed techniques will follow two approaches: active and passive restoration. Active restoration will take a direct/hands-on approach to restoring river processes (i.e grading to narrow the channel). Passive restoration will take a hands-off approach, utilizing specific treatments to allow the river to ‘do the work’ (i.e. large wood for sediment deposition). There is currently active and planned gravel mining along Reach 13 by two different landowners, including Great Western and Martin Marietta. To-date, representatives from both companies have	



shared best available information that the mines are planned to be reclaimed as water storage reservoirs on grade with the existing floodplain and will be offset at least 200-400 feet from the existing active channel bank. The design currently includes a 200-foot buffer to prevent encroachment on the reservoirs while still providing functional floodplain area. During the 30% design phase, the Grantee also assessed options for the Poudre River Trail. A section of the trail was significantly undermined along a large outside bend following recent large runoff events that has now been temporarily stabilized with sheet pile and riprap. At this location, the trail impacts river health and function while maintaining a risk for future repair efforts. A concept design and construction budget was created to relocate the trail to the other side of the river.

Throughout the 60% design process for the upstream half of the Reach, the Grantee met bi-monthly with the landowners to share design updates, secure buy-in, and to better understand the landowner plans for gravel mining. As of fall 2022, the gravel mining operations are anticipated to be completed by mid-2024. After the operations are completed and reservoirs installed, implementation for the Reach 13 restoration project can begin. This project will also provide an opportunity for the team to explore options to begin project implementation while mining is actively occurring, as there may be opportunities for shared permitting and for Great Western or Martin Marietta to use fill produced from the project in the construction of their reservoirs. However, the implementation of the Reach 13 project is variable and will depend on the gravel mining schedule. Because of this, the Grantee and the Lower Poudre Steering Committee decided to select a second priority Reach to advance a restoration design to ensure the Grantee continues to make progress on implementing the Master Plan to increase the resiliency of the lower Poudre River.

This fall, the Grantee and the Lower Poudre Steering Committee selected Reach 16 as the next focus area. Reach 16 was identified as the 5th priority for restoration out of the 28 total reaches in the Lower Poudre Master Plan. There are two large landowners along this reach including the City of Greeley and Aggregate Industries. Because a large portion of the Reach is owned by Greeley and is not undergoing active gravel mining, the Grantee anticipates reaching the design-build phase more quickly than Reach 13. Finally, between 2015-2019, the City of Greeley Natural Areas worked with the Army Corps of Engineers to restore native grassland and wetland habitat in the upland areas of Reach 16. If implemented, this project will help reconnect the river to its floodplain which will further enhance the existing restoration work.

Project Objectives:

To achieve the project goals, the Grantee will follow these measurable objectives:

- 1) Engage Reach 13 and Reach 16 landowners, land managers and stakeholders:** The Grantee will work with the lower Poudre Steering Committee, Reach 13 & 16 landowners, partners and stakeholders through monthly or bi-monthly meetings, site visits to existing restoration projects, and via online platforms. To increase awareness and understanding of water and watershed issues in the Poudre we will organize 1-2 community forums in Greeley.
- 2) Complete a 60% design for the downstream half of Reach 13 (Martin Marietta):** The Grantee will complete the 60% design for the downstream half of the Reach to compliment



the 60% design for the upstream half that was completed this fall. This design will provide the appropriate foundation to progress with design-build opportunities in the next two years.

3) Develop a realistic timeline for design, permitting, and construction for Reach 13:

Reach 13 is large and owned by landowners with diverse interests and plans for the corridor. There is active gravel mining along Reach 13, and the project will need to be phased and planned around the mining. By meeting monthly/bimonthly with the Reach 13 landowners, the Grantee will sufficiently develop a timeline for implementation based on their existing plans.

4) Complete a 30% Design for Reach 16: The Grantee will complete a 30% design for the entire 0.9-mile Reach and will serve as the basis to seek design-build funding in the next two years.

Tasks
Task 1 – Project and Contract Management
Description of Task:
The Grantee will ensure that all administrative aspects of the project are managed efficiently and in a timely manner.
Method/Procedure:
• Maintaining accurate documentation of project metrics, timelines and milestones • Bi-weekly meetings with the project team • Tracking costs and budget • Preparing requests for reimbursement • Completing project reporting
Deliverable:
• A well-managed project with accurate reporting metrics

Tasks
Task 2 – Landowner and stakeholder engagement
Description of Task:



Over the past two years, the Grantee has cultivated relationships with three landowners along the Reach 13 project area. As the Grantee completes the 60% design along the downstream end of the reach, the Grantee will continue to engage landowners to both share project updates and best available science behind river resiliency and how it relates to the design and to alleviate questions/concerns. To date, the Reach 13 landowners are supportive of the designs. Landowners along both Reach 13 and Reach 16 have diverse interests from gravel mining to housing developments. By continuing to actively engage these landowners, this project provides a unique opportunity to combine the future development plans in the corridor in a way that best serves the river.

The Grantee will work closely with the Lower Poudre Steering Committee and landowners along both Reaches throughout the project. Completing the designs will also require landowner permission to enter private land, including the river itself. The Grantee will secure landowner access agreements.

This project also provides a unique opportunity to conduct outreach and engagement efforts among the lower Poudre communities to share information both about the restoration projects and resilient river restoration techniques through meetings, site visits etc. The focus of these efforts will be to target industry and/or businesses near the river corridor, including landowners in adjacent Reaches.

Method/Procedure:

- Convene bi-monthly Lower Poudre Steering Committee Meetings
- Work with landowners to develop access agreements for Reach 13 and 16
- Establish monthly meetings with the Reach 13 and Reach 16 landowners to share project updates
- Organize site visits with Reach 13 & 16 landowners to completed restoration projects like River Bluffs in the Town of Windsor
- Engage prospective new stakeholders through community meetings, advisory meetings, and tours
- Engage river adjacent businesses/industries in river resiliency forums/tours etc.

Deliverable:

- Landowner access agreements for both Reaches
- Support from Reach 13 landowners for the 60% design
- Support and buy-in from City of Greeley and private landowner for the Reach 16 30% design
- Increased awareness and understanding of river resiliency/watershed health by residents, industry & businesses documented by participation in workshops/tours/meetings



Tasks
Task 3 – Complete the 60% design for the downstream half of Reach 13
Description of Task: The Grantee will sole source Stillwater Science to complete the 60% design for the downstream end of Reach 13 (Martin Marietta). Stillwater has been working on the project since 2020 and hiring their team to complete the remaining design will ensure the project's success. Once under contract, Stillwater, will develop 60% designs for the downstream half of Reach 13 and assist with landowner outreach. Subtask 1: Site assessment • Stillwater Sciences will conduct 1-2 site visits to ground truth the 30% design Subtask 2: Draft 60% design & write Basis of Design Report (including implementation timeline & cost estimates) The design process will continue from the 30% conceptual designs completed in 2021 and the 60% design of the upstream half of the Reach to develop a 60% planset for the downstream half. The 60% design will include updated analyses and design. The Grantee will also update the Preliminary Opinion of Probable Costs for the entire 1.2-mile Reach. Another important piece of this task will be to develop a realistic timeline for design, permitting and construction for Reach 13. This will be a critical step to get to implementation of the project and will include careful coordination with the landowners to verify our timeline and milestones against their gravel mining activities. Finally, with an updated 60% design for the entire reach, the Grantee will be able to better inform the City of Greeley and Town of Windsor of potential options to protect the Poudre River Trail along the Reach.
Method/Procedure: Subtask 1: • 1-2 field assessments and surveying of the downstream half of Reach 13 & site visit to ground truth potential 60% design treatments on Martin Marietta property • Data processing from site visit(s) Subtask 2: • Update hydrologic analysis • 2D modeling of proposed conditions to inform design • Proposed conditions sediment transport analysis to inform design • Preliminary large wood structure design analysis • Revegetation design • Work with Martin Marietta and Great Western during bi-weekly meetings to incorporate any updated plans from gravel mining operations & proposed reservoirs into the design and to develop timeline for implementation • Review options for Poudre River Trail



- Finalize Preliminary Opinion of Cost for the entire 1.2-mile Reach

Deliverable:

- 60% Basis of Design Report
- 60% Design Planset and Preliminary Opinion of Probable Cost for the entire 1.2 miles of Reach 13
- Updated timeline and milestones for implementation including permitting needs

Tasks

Task 4 –Develop a 30% design for Reach 16

Description of Task:

The Grantee will undergo a competitive bid process to select the consulting team to create the 30% design for Reach 16. The Lower Poudre Steering Committee will assist with the selection process. Once the team has been selected and the contract awarded, the development of the 30% design will begin. The design will require field assessments and surveying of Reach 16 to understand the existing condition of the reach, complete cross sections to understand site specific geomorphology and engineering constraints and ground truth any desktop analyses. The Grantee will select the most appropriate analysis tools and lines of evidence based on the results of the field work. A 1D FDP model will be used to help inform the conceptual design along with a sediment transport analysis of the Reach. 2D modeling will occur in the next project phase. The Grantee will work with the City of Greeley and ACOE to incorporate and enhance the existing restoration work that was completed into the design. Three design alternatives will be presented to the Lower Poudre Steering Committee and the private landowners. The selected alternative will be used to develop the 30% design.

Subtask 1: Complete field assessments and survey

- Site Visit/Assessment
- Survey and Post-Processing
- Existing Conditions Modeling (1D)

Subtask 2: Draft 30% design

- Restoration treatment options



- Sediment transport analysis
- Prioritization of design alternatives using MCDA
- Engineer's opinion of probable cost estimates
- Permitting needs and implementation schedule
- Aquatic and Terrestrial Species Habitat Requirements, including listed or species of concern, significant barriers etc.
- Define seasonally appropriate floodplain, lateral and longitudinal connectivity requirements
- Define the riparian vegetation target community
- Selection of preferred alternative for design

Subtask 3: Conceptual Basis of Design Report (including preliminary cost estimates)

The Grantee will create a Basis of Design report for Reach 16. The report will include field assessment and surveying results, 1D existing conditions modeling results, documentation and results of the alternatives analysis process (including the MCDA ranking and prioritization process), a narrative summary of the 30% design, stakeholder identification, permitting needs and funding opportunity summaries, and implementation schedule.

Method/Procedure:

- Complete RFP and competitive bid process to select a design consulting team

Subtask 1: Site Assessment

Once landowner access agreements are secured, the Grantee will schedule site visits with landowners

- 3-5 site visits
- 1D modeling of Reach 16 existing conditions

Subtask 2: Draft 30% design

- Sediment transport analysis
- Develop 1-3 design alternatives
- Convene Lower Poudre Steering Committee to help inform MCDA to select preferred design alternative
- Restoration treatment options
- Sediment transport analysis
- Prioritization of design alternatives using an MCDA
- Engineer's opinion of probable cost
- Permitting needs
- Work with Greeley & ACOE to ensure design complements existing wetland restoration project

Subtask 3: Conceptual Basis of Design Report (including preliminary cost estimates)

- Draft Conceptual Basis of Design Report Development



- The Grantee, Lower Poudre Steering Committee & landowners review report & provide edits
- Final Conceptual Design Basis Report/Deliverables, Planset, and Data

Deliverables:

1) 30% design package which will include:

- Opinion of probable cost
- Permitting needs summary & implementation schedule
- 1D existing conditions modeling results
- Alternative analysis documentation
- 30% design summary
- Compiled data (GIS, hydrological, geomorphic)
- Description of methodologies used for modelling and design

2) Conceptual Basis of Design Report

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.