

**Engaging Stakeholders & Communities in the Poudre Through Citizen Science, Collaboration,
& Outreach – Phase 1**

Final Report



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Coalition for the Poudre River Watershed

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Table of Contents

Project Summary and Accomplishments	3
Obstacles Encountered	8
Match Requirements.....	8

Project Summary and Accomplishments

The Phase 1 of Engaging Stakeholders and Communities in the Poudre through Citizen Science, Collaboration and Outreach had two major goals including: 1) building stakeholder and community conversations around water and watershed health in the Cache la Poudre and 2) increasing community awareness of water resources by empowering them to participate in vital watershed monitoring through CPRW's citizen science water quality monitoring program. The project provided us with the needed capacity to expand our reach across the basin, participate in key working groups, support our citizen science water quality monitoring program, and organize crucial outreach events like the annual Poudre RiverFest.

Task 1: Build the stakeholder conversation in the CLP around water and watershed health

This grant provided us with the needed capacity to participate as active members of the following working groups: Preble's Meadow Site Conservation team for the North Fork of the Cache la Poudre, Poudre Initiative, Poudre River Runs Through It Action/Study workgroup. By participating in these groups on a monthly/bimonthly basis, we were able to stay up to date with the various efforts and projects across the basin and coordinate priority projects alongside partners.

The grant provided for some of our work in the lower watershed east of I-25. In the last two years, we've developed a 60% design for river restoration on a high priority reach (Reach 13) in Greeley. In fall 2022, we held a willow harvest and planting event along Reach 13 with partners from Wildlands Restoration Volunteers.

We also began the design for a fish passage project in the Town of Windsor on the Whitney and BH Eaton Diversion structures Outreach for this project include several events and tours of existing restoration project sites for the private landowners along the reach. Over the last 3 years, we have met bi-monthly with our Lower Poudre Steering Committee who have helped guide our priority projects. The committee includes representatives from the City of Greeley, Town of Windsor, Northern Water, Colorado Parks and Wildlife, and University of Northern Colorado.

The project also provided capacity to finalize the River Health Assessment Framework for the entire Poudre basin. With this project, we worked with ~15 subject matter experts to refine the indicators and metrics from the first RHAF effort. The final product will be a methods document and implementation plan for the RHAF from headwaters to confluence.

Staff also reengaged with the Poudre Runs Through It in early 2023, following a hiatus with the pandemic and CPRW's Executive Director transition. CPRW's director was nominated to serve on the South Platte Basin Roundtable as an Environmental Representative in fall 2022. The

Colorado Water Plan grant funding supported the director's attendance at the Roundtable for the last 6 months.



Photo 1. Willow harvest on Reach 13



Photo 2. Site Conservation Team landowner field trip

Task 2: Empower & Engage the CLP community through Community Science

This project provided staff and partner support to expand our citizen science water quality monitoring program. Since 2019, the program has had 7 returning volunteers with 3-5 new volunteers who join every year. In response to the 2020 Cameron Peak Fire, we recruited additional volunteers to help collect water quality data to help track impacts of the fire and our restoration projects. Every spring we hold a training session for the volunteers and establish sampling schedules. The volunteers were split up into groups of 2-3 to cover the 3 different sampling regions for the season. Volunteers collect samples 1x a month at 30-40 sites between the months of May-October, and the USFS Rocky Mountain Research Station analyses the samples. Between 2019-2022, volunteers contributed over 900 hours to the program. This spring, we held a volunteer learning session where researchers from the RMRS shared data and preliminary conclusions on the data that the volunteers have helped to collect over the last 3-4 years. This year, the program has expanded to include new sampling locations and volunteers. RMRS anticipates producing a research paper on the findings from the volunteer data in the next 1-2 years.

Steve & Kat Davis who have been volunteering for CPRW's citizen science program since 2019 say this about the program:



Photos 3-4. CPRW Citizen Scientists sampling baseline water quality monitoring locations in 2021 & 2022

Task 3 – Increase community awareness and knowledge of the Poudre & its water resource/watershed health issues

This project allowed staff to continue to maintain our leading role on the organizing committee for the 2020, 2021 and 2022 Poudre RiverFest. This included a mix of an all-virtual event in 2020, half virtual with a smaller celebration in 2021, and finally larger (back to normal, post-pandemic) celebration in 2022. Last year, the festival was held at New Belgium Brewery and had over 2,000 attendees which was a significant increase from the previous two years. Last year we finally debuted the “Poudre River Experience” tunnel which includes educational information about the watershed starting from headwaters to confluence. This educational tool was developed with the Poudre RiverFest committee and is available for use across the watershed by request.

We also held a variety of different educational events for the public over the last three years including a *Resilient River* webinar series that culminated in an in-person panel, webinars and community meetings on our post-fire work, field trips to restoration sites with landowners and the general public to showcase river resiliency projects and presentations on watershed health to local elementary schools throughout the year.

Finally, this project also provided some of the initial planning support for our Poudre River Mural project. As a part of this project, we created a Poudre Watershed curriculum with the Weld District 6 curriculum coordinator that will be shared with all schools in the district in fall 2023. In the last two quarters, we hired muralist Armando Silva (outside funding) to create the mural and partnered with the Chappelow Arts Magnet School 7th and 8th grade art classes. The art students will work with CPRW and Armando to design the mural. The mural's theme centered around what the river & watershed means to the students. The mural will be painted next fall and placed on an outside wall of Chappelow Arts Magnet school.



Photo 5. CPRW staff uses the watershed model at the 2022 Poudre RiverFest to demonstrate the impacts of a wildfire to the river after a rainstorm.



Photos 6-8. 'Poudre River Experience' debut at the 2022 Poudre RiverFest

Task 4- Project/Contract management

This task included grant management tasks such as reporting and requests for reimbursement.

Obstacles Encountered

The biggest obstacle this project faced was the COVID-19 pandemic which dramatically altered our outreach efforts for most of the grant period. While most events were postponed or cancelled, we were still able to shift our approach to hold the virtual Poudre RiverFest in 2020 and 2021, webinar series etc. We also moved our Lower Poudre Steering Committee meetings and other stakeholder meetings to online platforms for the last several years.

There was also the 2020 Cameron Peak Fire that burned >200,000 acres in the watershed between August-December of that year. Our focus had to shift from everything else we were doing to the CPF response. This was a huge lift for our staff to manage for a little over a year until we were able to expand our capacity and hire a Post-Fire Program coordinator. With the pandemic and the fire, our citizen science program was also delayed in 2020. We had to develop COVID-19 safe procedures for the volunteers to sample, which meant that they didn't begin volunteering until late June/early July. As soon as the CPF started, none of the volunteers were able to sample because all of our sites were either in USFS closure areas or in the actual burn footprint.

Because of the pandemic and the CPF response, we did need to extend the grant period beyond its original expiration date of December 31, 2022, to complete all deliverables. However, we were still able to complete the project by March 31, 2023.

Match Requirements

All match requirements were met for this project. We used funding from our Bureau of Reclamation WaterSMART grant and funding from the City of Greeley Natural Areas that paid for the 30% and subsequent 60% design of the 1.2-mile Reach 13 River Restoration project for a total of \$63,457 in match for this grant.