



Coalition for the Poudre River Watershed
Citizen Science Water Quality Monitoring Program
Volunteer Job Description

We appreciate your willingness to take part in this important role in monitoring water quality in the Cache la Poudre (Poudre) Watershed. Your efforts and the data you collect will be integral for CPRW and our partners including the USFS-Rocky Mountain Research Station (RMRS) to monitor and track water quality in small streams before and after prescribed fires and wildfires in the watershed.

The 2012 High Park and 2020 Cameron Peak wildfires in the Poudre watershed impacted the water supply of 300,000 citizens and highlighted the link between forest health and clean water delivery. To reduce the risk of future high severity wildfires like the High Park Fire, the US Forest Service-Canyon Lakes Ranger District aims to increase the use of prescribed fire and other fuel reduction treatments to sustain watershed conditions and protect water quality.

Our Citizen Science Water Quality Monitoring Program has three focus areas:

- Develop a baseline data set of water quality in high priority reaches (based on CPRW's Upper Poudre Resiliency Plan)
- Collect water quality data to measure the impact of prescribed fire, an increasingly important forest management tool, on our waterways
- Monitor the impacts from the Cameron Peak Fire and track outcomes from post-fire restoration

Our Mission: *The Coalition for the Poudre River Watershed's (CPRW) mission is to improve and maintain the ecological health of the Poudre River watershed through community collaboration*

Volunteer Job Description:

1) *Job Title:* **CPRW Water Quality Citizen Scientist**

Citizen Scientists will report to Cory Dick, CPRW Watershed Project Manager, at cory@poudrewatershed.org

2) *Work Location:*

All citizen science monitoring sites are in the upper Cache la Poudre (Poudre) watershed (see below for a map of the upper Poudre watershed) and are on USFS Arapaho-



Roosevelt National Forest public land. There are three regions of monitoring sites that volunteer groups will be assigned to for the year.

The regions include:

- Highway 14
- Red Feather Lakes/ Elkhorn Creek
- Cherokee Park

See Figure 1 for an overview map of the Cache la Poudre watershed, monitoring locations and prescribed fire locations.

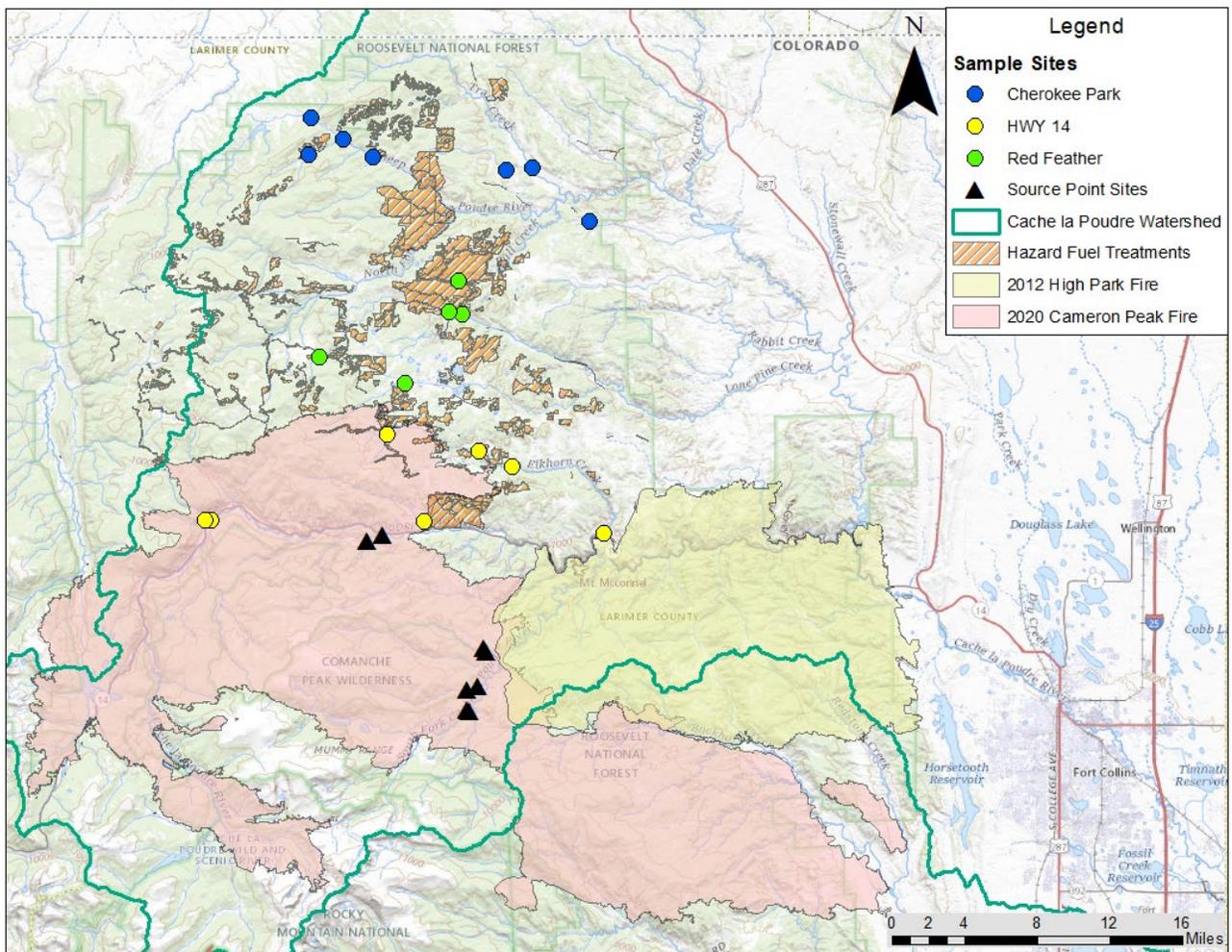


Figure 1. Overview of monitoring locations and planned/completed prescribed burns/wildfires



3) *Roles and Responsibilities*

Citizen scientists will be paired into groups of 2-3 and will be assigned a region of the watershed with associated monitoring sites. Each group will sample the same sites throughout the season to increase efficiency.

- Attend the required training session
- Citizen Science groups will use their own vehicles to drive to the monitoring sites during sampling days
- Navigate to monitoring locations using maps, GPS/tablet software, and directions with photos
- Follow sampling protocol and standard operating procedures (SOP) to collect scientifically defensible water quality data
- Commit to sampling water quality data at least 1x a month during the season (June-October). Sampling can occur during the week or on the weekend, depending on availability of the volunteer groups
- Represent CPRW and the USFS-Rocky Mountain Research Station when collecting samples
- Follow safety protocol and always consider the safety and well-being of yourself and fellow citizen scientists first
- Collect scientifically defensible data to inform future land management decisions on public lands

4) *Monitoring Day Schedule*

On monitoring days, each group will be expected to meet a CPRW staff person at the **Innosphere in north Fort Collins**, located at **320 E Vine Drive**.

Each group will be required to check-out the supplies and equipment needed for the day (see the Citizen Science SOP for the supply and equipment list). Groups will also review safety protocols, the sampling protocol, SOP, and will discuss any questions or concerns with CPRW staff prior to departure.

Groups will head out to their assigned region and will collect all samples for the day. If taking water grab samples, ensure that samples are placed in and remain in the cooler. After all samples have been collected, the group will return to the Innosphere and will check-in all the supplies and equipment, including the cooler with samples and data sheets.



5) *Qualifications*

A desire to learn more about the Poudre Watershed, explore, and have fun while collecting water quality data to support land management decisions in our watershed and across the west.

6) *Time Commitment*

CPRW Citizen Scientists will be expected to commit to sampling at least 1x a month between the months of June-October for *at least* one season. Each sampling event will take anywhere from 6-8 hours to complete, depending on experience level of the group, road/weather conditions, and number of sites to visit for the day. Sampling events can happen during the week, or on the weekend, depending on availability of citizen scientists.

We also need a few citizen scientists to be available throughout the months of September-May on short notice to help us collect water quality samples both before and after a prescribed fire is implemented. Throughout the prescribed fire window (September-May), the USFS and partners will organize and implement prescribed burns depending on proper conditions. Because prescribed fires are implemented only when conditions are favorable, volunteers may be needed on short notice to help collect samples both before a burn begins and post-burn.

7) *Training*

Prior to volunteering in the program, all interested citizen scientists will be required to attend a training. During the training, future citizen scientists will review the following:

- Goals/objectives of the project
- The standard operating procedure for the program
- Volunteer job description
- What to expect on a sampling field day
- Learn the correct way to take a water quality sample
- How to use the multiparameter water quality sonde to collect data
- How to get to the monitoring locations using maps, tablets and GPS units
- Safety protocol
- Tentative schedule for the summer