Introduction
Wilderness Workshop has a formal, long-term wilderness monitoring partnership with the Aspen-Sopris Ranger District of the White River National Forest. Begun in the mid-1990s, it’s one of the longest such agreements of its kind in the nation. This wilderness monitoring partnership focuses on collecting data from Congressionally designated wilderness areas in the White River National Forest. Specifically, data is collected to monitor air and water quality as well as the incursion of noxious, non-native weeds. Depending on need and resources, the program will occasionally include additional components such as wilderness character monitoring, visitor use surveys, and human impacts evaluations. Data is used to ensure that regional wilderness areas are managed in compliance with the Wilderness Act and the Clean Air Act.

Wilderness Monitoring Program Description
Our Wilderness Monitoring Program has three core components:

- Air quality monitoring
- Water quality monitoring
- Noxious weed inventorying

The Maroon Bells Snowmass Wilderness Area is designated under the Clean Air Act (CAA) as a Class I airshed, which means it’s considered one of the highest quality air sheds in the nation and a baseline against which the rest of the nation’s air is measured against. The CAA establishes that the federal land managers of Class I areas have an affirmative duty to tolerate no degradation of air quality and the air monitoring program was established to ensure this very valuable resource remains highest quality. The program has three components:

- An air monitoring site atop Aspen Mountain checked every Tuesday (or alternate days) year-round that is part of a national monitoring network called IMPROVE – Interagency Monitoring of Protected Visual Environments.
- Two air monitoring facilities, one at the base of Sunlight Mountain Resort and one at the top of Sunlight Peak across the valley checked every Tuesday year-round that is also part of a national network called NADP – National Atmospheric Deposition Program.
- Wilderness lake chemistry sampling, conducted from 15 high elevation lakes three times during the summer, which is used as a secondary or surrogate means of testing air quality under the assumption that atmospheric contaminants collect and can be detected in lake water.

Noxious weeds are non-native plants that disrupt native vegetation because they have no natural controls and are able to adapt to varied conditions. One of the most serious and fastest growing problems in the West today is the spread and establishment of invasive non-native plants. Noxious weed infestations have contributed to the loss of essential ecological functions
within public and private lands, including wilderness. Monitoring weeds in wilderness provides key data to managers (including Pitkin County) to better appraise the spread of noxious weeds and to create strategies for restoring ecological balance. Monitoring noxious weeds within the wilderness lands of the Roaring Fork Valley is an important contribution to wilderness stewardship and the administration of the Wilderness Act. Wilderness Workshop supports the Forest Services, noxious weeds program by performing inventories of trails or areas selected by the F.S. to better inform their treatment and management.

Wilderness Monitoring Specialist Duties
The Wilderness Monitoring Specialist (WMS) is responsible for all aspects of WW's wilderness monitoring partnership with the Aspen-Sopris Ranger District. Duties include:

- Collecting water samples three time from fifteen designated alpine lakes during the summer season, typically late June through the end of September. The WMS must maintain proper lake sample handling, and chain of custody protocols and conduct all paperwork, inventory, shipping, and reporting work. Lakes include:
  - Maroon Bells Snowmass Wilderness – Avalanche, Moon, and Capital Lakes
  - Collegiate Peaks – Brooklyn and Tabor Lakes
  - Holy Cross Wilderness - Upper Turquoise, Upper West Tennessee and Blodgett Lakes
  - Eagles Nest Wilderness – Upper Willow and Booth Lakes
- Collect air quality data from IMPROVE site atop Aspen Mountain every Tuesday (or alternate days). Responsibilities include timely shipping and receiving of air sampling supplies, proper handling protocols, chain of custody and reporting responsibilities. Periodic maintenance of air sampling equipment is also be required.
- NADP data collection every Tuesday. The WMS will collect data from NADP sites at the base of Sunlight Mountain Resort and atop Sunlight Peak every Tuesday.
- Survey approximately six wilderness trails each summer for noxious weed occurrences. Trails are assigned by WRNF Range Con. The WMS is responsible for identifying noxious weeds, mapping locations and size of infestations. Full reports submitted to USFS personnel at the conclusion of summer.

Position Requirements
- The position is full-time in the summer season (3 months between June-Sept) and part-time (approximately 10 hours per week) the rest of the year.
- Able to work independently with little oversight; responsible for field sampling in a precise, efficient and safe manner.
- High degree of physical fitness capable of long, solo days of travel across many miles of difficult, high altitude terrain in a variety of conditions.
- Highly skilled in winter and summer wilderness/backcountry travel in a safe, efficient manner.
- Leave No Trace ethics and practices a must. Some overnight camping may be required.
- Capable of understanding and adhering to strict monitoring and reporting protocols without deviation.
- Able to identify noxious weed. Able to document findings with combined mapping, software applications, and GPS location data.
- Assists in development of Annual Operating Plan agreement between WW and WRNF.
- Effectively collaborate and communicate with WW partners including WRNF, NADP, IMPROVE, RMRS and USGS personnel to ensure monitoring requirements are being met.
- Submit annual reimbursement request upon completion of prescribed agreement terms.
- Extensive travel across the White River National Forest.

**Ideal Candidate**

- Self-reliant
- Highly responsible and diligent
- Exhibits/practices solid judgment and navigation in backcountry situations
- Ability to hike up to 10 miles a day to high elevations on consecutive days
- Comfortable operating a 4x4 vehicle on tight, steep and rough roads
- Strong winter travel experience on skis
- Problem solving attitude
- Diplomatic personal relationship skills
- Self-starter, takes initiative
- Experience in natural resource science
- Competent with technical, scientific equipment and sampling protocols
- Mechanical aptitude to work with machinery to collect quality assured data, maintain and/or replace equipment parts under the direction of EPA mandated protocol.
- Excellent communication and reporting abilities, including (but not necessarily limited to) technical writing, fluency with GPS, GIS, Google Earth, and website applications.
- Ability to prioritize time sensitive, scheduled monitoring duties over other part-time work or other personal responsibilities
- Personal high clearance vehicle highly desired.
- Forest Service vehicle operation certifications (truck, snowmobile, UTV) or willingness to acquire them desirable.

**Compensation**

Wilderness Monitoring Specialist will be paid $20-25/hr. depending upon experience; will be covered under WW’s Workman’s Compensation policy; and personal vehicle mileage reimbursed at standard federal rates.

**TO APPLY**

Please visit [https://wildernessworkshop.org/careers](https://wildernessworkshop.org/careers) and use the link provided there to apply.

No calls, please.