



# POSITION DESCRIPTION

## Summer 2022

**NPS UNIT:** Rocky Mountain National Park

**Position #: 82**

**Position Title:** Natural Resource Management Assistant

**Position Type:** Fellows DHA

**Primary natural resource discipline:** Social Sciences

**Position Keywords:** Visitor Use; Impacts; Resource Mapping; Resource Damage; Community Science; Education; Scientific reading, writing and editing; Wilderness; Trail Encounter Rates

**Location:** Estes Park, Colorado

### COVID-19 NOTICE

As the COVID-19 pandemic continues to change and evolve, project timelines and structure remain flexible and it may be necessary to postpone start dates, begin work remotely, or reformulate the project’s description. Should any development in the COVID-19 outbreak impair a project’s timeline or results, the SIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.

### POSITION DESCRIPTION AND WORK PRODUCTS

**Project Description:** This position will serve as the field lead for Rocky Mountain National Park (RMNP)’s Trail Encounter Project, which is a new community science project that contributes to the park’s visitor use management strategy by monitoring visitor impacts to natural resources and visitor trail experience. The Trail Encounter Project will be developed by the SIP Fellow and piloted in 2022. Through this project, the SIP Fellow will determine the most appropriate trail encounter data method to use for Rocky Mountain National Park, implement the project, create a protocol for future implementation of the project, and develop a report on the pilot project findings.

To better understand visitor-use and resource impacts in these high visitation areas, the SIP Fellow will conduct a research project using existing trail encounter data collection methods and develop a new protocol to quantify trail congestion using trail encounter rates. Data will be used to inform managers about this area’s visitor use capacity, ecological impacts, and aesthetic and safety effects on park resources and visitor experience.

To accomplish this, the SIP Fellow will leverage community scientist volunteers to assist in trail encounter data collection in these high visitor-use areas. As the field lead, the SIP Fellow will be responsible for recruiting, training, and managing volunteers in the field. The Fellow will hone their leadership, communication, and organizational skills by leading backcountry and field training for volunteers, and coordinating field teams to collect trail encounter data, developing a protocol, and synthesizing all the data into a report.

Specific Duties Include:

- Collaborate with RMNP staff about existing data and findings.
- Participate in RMNP backcountry and other safety trainings.
- Determine best method to use for trail encounter data collection
- Develop a new protocol to evaluate trail congestion using visitor encounter rates.
- Develop and test various resource condition classes to understand level of impacts.
- Design and lead volunteer-based community science campaigns to collect trail encounter data and produce maps of trail encounter rates; recruit, train, and lead volunteers in the field.
- Contribute data to collaborative research effort within the Research Learning Center.
- Make management recommendations based on project results.

**Work Products:** Conduct data analysis, develop a protocol, create GIS map products, and write a report about evaluate trail congestion using visitor encounter rates. The SIP Fellow will also be expected to create one communication product about their project (engaging social media post, web content etc.) and a summarizing scientific presentation of their findings.

The SIP Fellow will give a formal scientific presentation of their project findings to the Division of Resource Stewardship and/or



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## Summer 2022

the RMNP Superintendent/Leadership Team. Other opportunities for presentations will include Community Scientist orientation/training and a brown bag lunch seminar. If interested, the intern may collaborate with RMNP Interpretation staff to develop an interpretive program based on their project and present to the public.

### NATURAL & PHYSICAL WORK ENVIRONMENT

Rocky Mountain National Park embraces 415 square miles of pristine, uninhabited mountains in north-central Colorado and, as such, is one of the most spectacular, yet easily accessible high mountain areas. The park encompasses glacier-sculptured valleys, rugged gorges, alpine lakes, and vast areas of alpine tundra. Summer weather is generally sunny with frequent afternoon lightening showers. Recreational activities in the park include scenic drives, 355 miles of hiking trails, horseback riding, climbing, fishing, and wildlife watching.

The gateway community of Estes Park is located at 7,500 feet and located ~5 miles from park headquarters. The town has several grocery stores, a library, restaurants, a hospital, and several clinics, doctor and dentist offices. Recreational and educational opportunities in town include educational classes through the library and adult education learning program, a running club, walking trails and bike paths, and trivia – events and activities that many park staff attend as groups. The Denver metropolitan area is a 2-hour drive and provides a spectrum of amenities and an international airport.

Work will involve both office and field work. Field work includes hiking on and off trail in steep, mountainous terrain up to 12,000 feet elevation with possible exposure to inclement weather (hot or cold temperatures, wind, rain, snow, and lightning). The SIP intern could encounter wildlife such as elk, moose, and black bear. Office space will be provided and will include a varied desk platform allowing for sitting and standing, computer, phone line, and close access to a shared printer.

### QUALIFICATIONS

The most qualified applicants will have, or be pursuing, a degree in social sciences, human dimensions, recreation management and/or natural resource management. Applicants should have experience collecting data in the field, using GPS units, mapping and analyzing spatial data using ArcCollector and ArcGIS, have the ability to write a scientific report including data display and analysis, and develop a protocol for future implementation of the project. Additionally, applicants should: 1) have and demonstrate the ability to carry out research independently; 2) have good communication and basic leadership skills to organize and implement volunteer community scientist campaigns; 3) possess backcountry and off-trail hiking experience (preferably in mountainous terrain) and; 4) be attentive to safety while working in the field.

The most qualified applicant will possess:

- A degree in ecology, GIS, recreation management, natural resources, and human dimensions
- Experience collecting data using GPS and mapping/analyzing spatial data in ArcGIS
- Ability to write scientific reports including data display and analysis
- Familiarity writing protocols and standard operating procedures
- Good communication/leadership skills to organize and implement volunteer community scientist campaigns
- Backcountry/off-trail hiking skills and experience in mountainous terrain with adverse weather conditions
- A valid driver’s license

The applicant must be a U.S. citizen or U.S. permanent legal resident (“green-card-holder”). Prior to starting this position, a government security background clearance will be required.

### VEHICLE AND DRIVER LICENSE REQUIREMENTS

Applicant must have a valid driver's license to drive a government vehicle.

A personal vehicle is REQUIRED for this position.

### HOUSING

**Park housing is available and will be provided at no cost to the participant.** Housing will be provided at Rocky Mountain



## POSITION DESCRIPTION Summer 2022

National Park. Interns will have individual sleeping space with a shared bathroom within a house, cabin, or dormitory. Common kitchen supplies maybe available. Interns are expected to provided their own linens. All park housing is located adjacent to the town of Estes Park.

### INTERNSHIP DATES

**Start Date:** 05/30/2022

**Number of Weeks:** 12

**Flexible Start Date:** Yes

### LIVING ALLOWANCE

12 weeks (\$640/week = \$7,680)

### Partners

This position is offered through the National Park Service's Scientists in Parks (SIP) Program in partnership with various organizations.

