





# GEOSCIENTISTS-IN-THE-PARKS 2017 – PROJECT DESCRIPTION

## NPS UNIT: LASSEN VOLCANIC NATIONAL PARK

PD #: 2017621

Position Title: GIS Intern Position Type: GIP Intern

Primary natural resource discipline: Multidisciplinary Location: 38050 Hwy 36 E Mineral, California 96063

PROJECT DESCRIPTION AND WORK PRODUCTS

**Position Description:** The Geographic Information Systems (GIS) program at Lassen Volcanic National Park is administered from within the Division of Resource Management for the benefit of all park divisions including Facilities, Fire Management, and Protection. The park GIS includes a master geodatabase of base data sets, an internal web map viewer of mapped park features, a file library of print-ready maps, and data management for various inventories, monitoring, and resource management programs like archeology, buildings, and hazard trees. The park is increasingly moving to use ArcGIS Online to create, manage, and share geospatial data.

The selected intern will assist the GIS program with managing data, developing and improving mapping applications for wildlife and vegetation, and responding to GIS requests. The intern will be assigned 1-2 principal projects based on the intern's interest and experience, but will also assist with other resource management projects and routine activities as necessary. Projects may include compiling climate data sets, migrating hazard tree data workflows to ArcGIS Online, organizing and loading the building photo-inventory in NPGallery, and researching and developing Story Maps that interpret park resources or history. Work will occur as an individual and in a team setting; field and office based; and conducted throughout Lassen Volcanic National Park.

This position is offered through the National Park Service's Geoscientists-in-the-Parks (GIP) Internship Program in partnership with Stewards Individual Placement Program (Stewards) and The Geological Society of America (GSA). Upon successful completion of the GIP internship, the participant is eligible for an AmeriCorps Education Award.

**Work Products:** Deliverables for GIS projects can include databases, maps, "how-to" guidance documents, and final reports. Intern will be expected to complete a 1- 2 page resource brief regarding each principal project.

QUALIFICATIONS

Applicants must have completed coursework in Geographic Information Systems (GIS) and at least three years toward an undergraduate degree in geology, natural resources, cultural resources, or a related field. Applicants must have training and experience with ArcGIS and geodatabases; an interest and ability to work in a rural, mountainous location; an ability to work well independently and with little supervision; and possess good computer, organizational, and communication skills.

GIP participants are considered AmeriCorps members: AmeriCorps limits the number of terms an individual can serve to 4 terms. If an applicant has previously completed 4 GIP or other AmeriCorps positions, he/she will not be eligible to apply for an additional GIP position.

The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") between the ages of 18 and 35 years old. Prior to starting this position a government security background clearance will be required.

### VEHICLE/DRIVER'S LICENSE REQUIREMENTS

Applicant must have a valid driver's license and a good driving record.

If the GIP is required to drive a park vehicle for their position, a driving records search will be performed and the GIP's ability to drive a park vehicle will be contingent upon the results. Examples that will preclude a GIP from driving a park vehicle include DUIs, multiple moving vehicle violations, suspended or revoked license, or three or more accidents (regardless of fault) in the last 3 years.

#### HOUSING

Park housing is provided at no cost to the participant. The park will provide housing at park headquarters in Mineral, CA. Housing is typically dorm room style, such as a 3-bedroom, historic, Mission 66 style house with living room, kitchen, and bathroom. Housing is shared with other staff/visiting crews and is within a five-minute walk to park offices. Water, gas, and electricity are provided. Laundry and internet are provided in separate communal areas. Linens are not provided and cell phone coverage is limited.

#### **INTERNSHIP START/END DATES**

Start Date: 9/18/2017 End Date: 12/8/2017 Number of weeks: 12 Flexibility of dates: Yes

STIPEND PAYMENT

\$3,600 for 12 weeks (\$300/week) HOUSING PAYMENT

## TRAVEL ALLOWANCE

\$250

## PHYSICAL/NATURAL & WORK ENVIRONMENT

**Physical/Natural Environment:** Lassen Volcanic National Park encompasses over 166 square miles of a dynamic volcanic landscape in northern California at the southern extent of the Cascade Range. The park was established as a unit of the national park system in 1916 shortly after a series of highly-publicized, massive volcanic eruptions of Lassen Peak in 1914 and 1915. The park includes hydrothermal areas, forested wilderness, backcountry lakes, streams, and waterfalls, impressive vistas, campgrounds, and over 150 miles of hiking trails. Elevations range from 5,650 feet to 10,462 feet and a wide variety of weather conditions occur in Lassen Volcanic NP. Between September and December daily temperatures in Mineral fluctuate as much as 30° from overnight lows below freezing to highs in the 50s and 60s. Also, expect temperatures to be about 5° cooler for every 1,000 foot increase in elevation. By mid-autumn, snow and ice closes the main road through the park for the season, but highway 36 to Mineral is open year-round. There are limited facilities in or near the park, which are located at the Visitor Center and local lodges. It is a 45-50 minute drive to the nearest town (Chester or Red Bluff) where groceries, gas, and other services are available. Redding and Chico, California are large, nearby cities with the most amenities, but are a 1.5 hour drive from park housing.

**Work Environment:** Work will be primarily based in the office with some opportunities to work in the field. Lassen Volcanic National Park has both rugged, remote backcountry and frontcountry areas with high visitation.

Intern must be able to travel through and work in remote areas and to navigate rugged terrain. Temperature and weather extremes are common during work periods (see physical and natural environment).

#### MENTORING AND LEARNING GOALS

**Mentoring:** The selected applicant will work directly for the GIS Specialist and will collaborate with all Lassen Volcanic National Park Resource Management division staff. The GIS Specialist will work closely with the intern to identify goals and identify benchmarks of success with this position. Resource Management staff will provide training on park protocols, safety, and general park information. Any required skills for a project will be addressed via training and self-learning.

**Learning Goals:** Principal learning goals will focus on GIS and data management and use of ArcGIS Online. The internship will also provide an introduction to natural and cultural resource management, government employment, the history and resources of Lassen Volcanic National Park, and implementation of park specific protocols. The intern will also receive a series of trainings focused on safety, backcountry travel, radio use, and operation of government vehicles.

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