

# **USDA Forest Service Resource Assistant Program**

Position. Natural Hazards Geologist Fellow

**Duration.** 8 Month Fellowship (32 weeks): Starting July 2024 through February 2025 (dates are

dependent upon the start date).

**Location.** Washington (National) Lands, Minerals, and Geology Office in Lakewood, CO Office

within the

USDA Forest Service's Region 2 Office 1617 Cole Blvd., Bldg 17, Suite 100

Lakewood, CO, 80401

**Reports To.** The Natural Hazards Geologist Fellow will report to Lynne Chastain-Carpenter, the National Geologic Hazards Program Manager.

#### Job Overview

This project seeks a RAP participant to assist with the administration of the geologic hazards program in the USDA Forest Service (FS). Work will involve GIS/LiDAR, data management, communication, writing, web content development, and information sharing. The internship will focus on the management and/or assessment of geologic hazards, at a national level. The participant will have the opportunity to work with other program leads at the Washington Office – Lands, Minerals, and Geology Office, primarily based in Lakewood, CO.

### **Responsibilities and Duties**

In order of importance, provide a bullet point list of the responsibilities and essential duties of this job, including the travel percentage, if necessary.

- Write/update web content for geologic hazards programs (FS-only (internal) and public-facing (external) content).
- Update geologic hazards outreach media (i.e. posters, brochures, educational materials).
- Participate in and assist with ongoing geologic hazard projects. Activities may include working
  on FS implementation of the 2021 National Landslide Preparedness Act (NLPA), providing
  geologic hazard support (especially gathering GIS data LiDAR, DEM, geologic base maps,
  etc.) for specific geologic hazard projects, and working on special projects, such as
  researching various live monitoring equipment to assess status of landslides.
- Participate in conference calls for the planning geologic hazards mapping tool.
- Assist with creating national guidance for geologic hazard vulnerability to support management decisions regarding land management activities and issues including employee and public safety.
- Assist with Geology/GIS mapping using LiDAR to create digital elevation models (DEM) overlain by a surface model to map potential geologic hazard features at the Tongass NF, AK.



In the process, update and refine the processes and procedures document that details how to implement this process, so that other Forests may implement this at their locations.

- Develop presentation templates and/or educational activities for educators related to geologic hazards.
- Assist with oral history interviews of geologic hazards personnel and partners in the Forest Service.
- Potential options to travel to the field to perform the Unstable Slope Management Program tool for assessing slope stability above and below roads.
- Potential to travel to the Quake Lake Visitor Center on the Custer Gallatin National Forest to
  provide geologic hazards program support for the 65th anniversary of the earthquake and
  subsequent landslide that killed more than 20 people in August 1959.
- Potential for travel for other types of field assistance, as requested by local Forest Service units.
- Other tasks as requested.

#### **Qualifications**

Provide a bullet point list of the qualifications that are necessary for someone to fill this position. Points you may wish to include are education level, major/degree, experience, specific skills, certifications and licenses, and physical abilities.

- Master's degree preferred, although not required.
- A degree in geology, engineering geology, geotechnical engineering, civil engineering (with focus on Geotech), environmental science (with focus on physical science), hydrology, and soils science will all be considered.
- Professional work as after completion of degree is preferred but not required.
- Proficient with GIS software such as ArcGIS Pro.
- Experience using LiDAR or other remote sensing data such as SAR.
- Experience or interest in illustration and graphic design with a focus on science communication, geologic hazards, or emergency management.
- Excellent verbal and written communication skills. English proficiency is needed as well as good skills with grammar, punctuation, syntax, sentence construction, etc. in writing. Technical / nontechnical editing experience is a plus.
- An interest in geology and the natural world and a desire to assist the Forest Service as a civil servant.

## **Minimum Requirements**

- Completion of 2 years at an accredited university, an Associate's degree, or higher
- US citizenship or permanent residency. RAs must undergo a government background check if selected.
- Participation in US Forest Service Orientation Training scheduled July 15-19, 2024