

☐ CURRENT ☒ PROPOSED

POSITION INFORMATION	
NAME	MCR I
CLASSIFICATION Engineering Geologist	POSITION NUMBER 538-101-3756-091
WORKING TITLE Forest and Watershed Geology Program Engineering Geologist	DIVISION/UNIT California Geological Survey/Forest & Watershed Geology Program
EFFECTIVE DATE	LOCATION Sacramento
BARGAINING UNIT R09	CONFLICT OF INTEREST DESIGNATION 3, 7

REQUIREMENTS OF POSITION			
☒ MEDICAL EVALUATION	☒ CONFLICT OF INTEREST	☒ TRAVEL REQUIRED	☐ BILINGUAL FLUENCY
☐ SUPERVISORY	☐ SPECIALIST	☐ DRIVER LICENSE	☐ PROFESSIONAL LICENSE
☐ TYPING CERTIFICATE	☒ HYBRID	☐ OTHER	

DEPARTMENT STATEMENT:
All employees are responsible for contributing to an inclusive, safe, and secure work environment that values diverse cultures, perspectives, and experiences, and is free from discrimination. You are expected to work cooperatively with team members and others to enable the department to provide the highest level of service possible. Your efforts to maintain regular attendance and treat others fairly, honestly, and with respect are critical to the success of the department’s mission and vision.

GENERAL STATEMENT:
Under the general direction of the Senior Engineering Geologist (Supervisor), the Engineering Geologist is responsible for performing Timber Harvest Plan (THP) reviews as well as other forest and watershed related geologic, slope stability, and erosion reviews, geologic hazard assessments, local and regional geologic and geomorphic mapping, and fluvial geomorphic analysis. Duties include, but are not limited to:

ESSENTIAL FUNCTIONS	
PERCENT	DESCRIPTION
40%	Administers the design, implementation, analysis, and reporting for the geologic review of Timber Harvesting Plans (THPs), Non-Industrial Timber Management Plans (NTMPs) and other related documents and reports prepared by registered professional foresters and licensed geologists and engineers. The incumbent must also be able to prepare concise, well-organized, and easily understood geologic reports and maps within a very short time frame (often less than seven days). Responsible for the development of highly specialized

POSITION DUTY STATEMENT

	information, on the potential effects of logging operations in unstable geologic environments as related to: (1) location and relative stability of landslides; (2) lithology, stratigraphy, structure, weathering characteristics, and engineering properties of geologic formations as they affect excavations for forest engineering structures; (3) occurrence, nature, and extent of rock materials suitable for construction; (4) designs and construction techniques for logging roads, watercourse crossings, skid trails, and landings; (5) groundwater and subsurface drainage; and (6) slope stabilization and erosion control through suitable state-of-the-art measures; (7) impacts of proposed harvesting on areas underlain by old mine sites and potentially hazardous mine wastes ; (8) ecological performance and cumulative effects in the forested and wildland environment; and (9) potential for impacts to public safety and the environment.
25%	Assists in the development, design, implementation, analysis, mapping, and reporting for regional, watershed based, and other specialized geologic and geomorphic studies. Uses aerial and satellite imagery, digital topography, field mapping techniques, and existing geologic and geomorphic map data to prepare quadrangle or watershed-based maps depicting the extents of mappable existing landslides and geologic units using geographic information systems (GIS). Writes reports summarizing regional geology, landslide characteristics, geologic material engineering properties, and the analysis used to make geologic interpretations. Works with professional peers in the California Geological Survey (CGS), other governmental agencies, academia, and private industry to maintain state-of-the-art landslide and geologic hazard mapping skills and assists in technology transfer.
25%	Conducts on-the-ground engineering geologic inspections of proposed, in-progress, and completed timber harvesting sites. Prepares highly specialized recommendations, reports, maps, and graphs pertinent to the design, construction, maintenance, and ultimate use of engineered structures related to timber harvesting. Determines suitability of designs and stabilization measures prepared for other engineered structures. Prepares responses to questions from the public related to geologic issues. Conducts similar engineering geologic reports and inspections for other Cal Fire programs related to vegetation management, State Demonstration Forest timber sales, forest improvements, prison camp and fire station sites and building locations, wildfire rehabilitation work, and forest watershed research. Conducts emergency response related to geologic hazards including post-wildfire and storm-driven landslides, earthquakes, and tsunamis when requested. Conducts detailed engineering geologic mapping for slope stability, soil erosion, and sediment routing research. Analyzes engineering geologic and erosion problems associated with Forest Practices Act violations.

MARGINAL FUNCTIONS

PERCENT	DESCRIPTION
5%	Performs administrative duties including, but not limited to: adheres to department policies, rules and procedures; submits administrative requests including leave, overtime, travel, and training in a timely and appropriate manner; accurately reports time in the Tempo timekeeping system; and submits timesheets by the due date.

POSITION DUTY STATEMENT

5%	Conducts training sessions on slope stability, road construction, and related topics for foresters and other non-geologists involved with timber harvesting and related wildland management practices. Keeps abreast of technical issues related to engineering geology and the forested environment. Conducts training of geologic and erosion problems associated with roads and other constructed features in the wildland environment. Assists and advises public safety agencies on event derived geologic hazards such as inspecting and assessing life-safety, utility, transportation, and private property hazards and damage in areas affected by landslides, earthquakes, severe storm events, and wildland fires. Required to complete safety trainings including but not limited to Incident Command System, Fireline Safety Awareness, and Emergency Incident Awareness. Presents papers and attends technical and professional meetings. May be called upon as an expert witness.
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SUPERVISION RECEIVED:

The Engineering Geologist reports and receives the majority of assignments from the Senior Engineering Geologist (Supervisor); however, direction and assignments may also come from the Supervising Engineering Geologist.

SUPERVISION EXERCISED:

NONE

ADMINISTRATIVE RESPONSIBILITIES FOR SUPERVISORS AND MANAGERS:

NONE

PERSONAL CONTACTS:

The Engineering Geologist routinely interacts with other CGS and Department of Conservation staff, federal, state and local agencies, and may include extensive public and professional contact. Contacts may be made via personal interaction, written correspondence, telephone, email, and/or virtual interactions. The incumbent must be able to communicate clearly and work cooperatively with other government specialists and private individuals to achieve mutual resolution of common concerns.

ACTION AND CONSEQUENCES:

If these functions are not adequately performed, consequences may include, but are not limited to:

- CGS will not meet its obligations under AB 1492 (2012) with regard to timber harvesting and forestry activities in California.
- CGS will not meet its contractual obligations to assure timely and accurate completion of work under interagency agreements.
- CGS will not meet its emergency response obligations to protect public safety and environment by identifying and assessing post-event derived geologic hazards.
- Negative impacts to CGS's relationships with our state, federal, and academic partners, as well as the public.

CONDUCT AND ATTENDANCE EXPECTATIONS:

You are expected to be courteous, treat others fairly, honestly, with respect, work cooperatively, and provide the highest level of service possible when interacting with state employees, peers, management, and the public. You are expected to maintain regular attendance according to your approved work schedule. The core office hours for the California Geological Survey are Monday through Friday from 8:00 a.m. to 5:00 p.m.

ENGINEERING GEOLOGIST

DUTY STATEMENT REVISION: 2/5/2025

POSITION DUTY STATEMENT

Telework may be available for this position in accordance with the Department of Conservation's Telework Policy and procedures. Working at home, before and/or after hours is unauthorized unless pre-approved. Commute to or from the office is not considered time worked.

WORKING CONDITIONS/PHYSICAL REQUIREMENTS

FREQUENCY	DESCRIPTION
FREQUENTLY	• Office work at a computer and related equipment under artificial lighting for prolonged periods of time, standing or sitting during in-person meetings is also necessary. • Working overtime and traveling overnight to conduct field work, attend meetings or training or complete projects. • Strenuous field work in mountainous, forested and desert terrains during all weather conditions; in road cuts, mines or other excavations. Utilizing hand tools; travelling on foot, in off-road vehicles, in all-terrain vehicles, in watercraft, or in fixed-wing or rotary wing aircraft. • Capable of working long field days and driving significant distances to and from remote field sites; capable of driving 4x4 vehicles and all-terrain vehicles off-road. • Participate in mission tasked emergency response teams with other state agencies identifying potential geologic life hazards.
OCCASIONALLY	• Post-landslide, fire, or earthquake field response may expose employee to additional hazards created by event conditions including ground failures or shaking.

The duties of this position are subject to change and may be revised as needed or required.

I have read and understand the duties listed above and I can perform these duties with or without reasonable accommodation (if you believe reasonable accommodation is necessary, discuss your concerns with your supervisor).

Employee Printed Name

Employee Signature

Date

I have discussed the duties of this position with, and have provided a copy of this duty statement to, the employee named above.

Supervisor Printed Name

Supervisor Signature

Date