



State of California
Department of Conservation

Engineering Geologist

Exam Code: 9PB02

Department: Department of Conservation
Department of Water Resources

Exam Type: Multi-departmental, Open

Final Filing Date: Continuous

CLASSIFICATION DETAILS

Engineering Geologist -

Range A:	\$5,098.00 - \$6,078.00
Range B:	\$5,837.00 - \$7,303.00
Range C:	\$7,184.00 - \$8,996.00
Range D:	\$7,664.00 - \$9,597.00

View the [classification specification](#) for the Engineering Geologist classification.

APPLICATION INSTRUCTIONS

Final Filing Date: Continuous

Who Should Apply:

Applicants who meet the minimum qualifications as stated on this bulletin may apply for and take this examination.

Once you have taken this examination, you may not retake it for **six (6) months**.

How To Apply:

The link to connect to the Training and Experience Evaluation is located farther down on this bulletin in the "Taking the Exam" section.

Special Testing Arrangements:

If you require assistance or alternative testing arrangements due to a disability, please contact the testing department listed in the Contact section of this bulletin.

MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements as stated on this exam bulletin to be accepted into the examination. Part-time or full-time jobs, regardless of whether paid or volunteer positions, and inside or outside California state service will count toward experience.

Engineering Geologist

Education: Equivalent to graduation from college with major work in geology, engineering geology, or a closely related field that includes coursework in geology. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.) (Registration as a senior in a recognized institution will admit applicants to the Engineering Geologist examination, but they must produce evidence of graduation or its equivalent before they can be considered eligible for appointment.)

POSITION DESCRIPTION

Engineering Geologist

Engineering Geologist positions in the Department of Water Resources and Department of Conservation generally fall into two areas of work: engineering geology or groundwater.

An Engineering Geologist performing engineering geology work conducts investigations for the purpose of obtaining the necessary geologic data for the planning, design, and construction of dams and water conveyance facilities. The Engineering Geologist characterizes soil and rock for the purpose of engineering analysis and assists in determining its suitability as foundation for civil structures and for construction materials. The Engineering Geologist performs seismic hazard analyses for the design and re-evaluation of dams and water conveyance facilities. The Engineering Geologist prepares maps, cross-sections, and reports to communicate the results of these investigations.

An Engineering Geologist working in groundwater investigates the sequence, structure, and other properties of geologic materials with respect to water supply, water quality, groundwater flow, and groundwater surface water interaction; evaluates geologic and hydrogeologic data to determine aquifer characteristics, groundwater occurrence and availability, temporal trends, and groundwater basin budgets. The Engineering Geologist reviews and prepares reports, work plans, and data for groundwater studies and conjunctive use projects; develops and reviews groundwater monitoring programs, analyzes hydrogeologic data, and conducts or oversees field investigations including installing monitoring wells, conducting pumping tests, and collecting groundwater samples and water level measurements.

Positions exist statewide with the Department of Water Resources and Department of Conservation.

EXAMINATION SCOPE

This examination consists of the following components:

Training and Experience Evaluation – Weighted 100% of the final score.

The examination will consist solely of a **Training and Experience Evaluation**. To obtain a position on the eligible list, a minimum score of 70% must be received. Applicants will receive their score upon completion of the Training and Experience Evaluation process.

In addition to evaluating applicants' relative knowledge, skills, and ability, as demonstrated by quality and breadth of education and/or experience, emphasis in each exam component will be measuring competitively, relative job demands, each applicant's:

Knowledge of:

1. Stratigraphic, structural, historical, and economic geology as related to civil engineering projects.
2. Geological processes and survey techniques, equipment, and procedures.
3. Fundamental principles of mineralogy, petrography, soil mechanics, and hydrogeology.
4. Photogeology, geological mapping and drafting, and the application of geology to engineering problems.
5. Grouting methods, techniques, and equipment.
6. Geological literature.
7. Subsurface exploration and sampling procedures.

Ability to:

1. Conduct geological and geophysical exploration investigations.
2. Conduct independent technical research work.
3. Make, record, and evaluate observations on geological engineering problems.
4. Make accurate tests, observations, and measurements.
5. Analyze situations accurately and take effective action.
6. Prepare and analyze technical reports.

ELIGIBLE LIST INFORMATION

A departmental, open eligible list for the Engineering Geologist classification will be established by the California Department of Human Resources for use by:

**Department of Water Resources
Department of Conservation**

The names of **successful** competitors will be merged onto the eligible list in order of final score regardless of exam date. Eligibility expires **twelve (12) months** after it is established. Applicants must then retake the examination to reestablish eligibility.

Veterans' Preference will be granted for this examination. In accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, or widow or widower of a veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligible list.

Veterans status is verified by the California Department of Human Resources (CalHR). Information on this program and the Veterans' Preference Application (Std. 1093) is available [online](#). Additional information on veteran benefits is available at the Department of Veterans Affairs.

Career Credits will not be added to the final score for this exam, because it does not meet the requirements to qualify for Career Credits.

EXAMINATION INFORMATION

[Preview Training and Experience Evaluation](#)

PREPARING FOR THE EXAMINATION

Here is a list of suggested resources to have available prior to taking the exam.

Employment History: Employment dates, job titles, organization names and addresses, names of supervisors or persons who can verify your job responsibilities, and phone numbers of persons listed above.

Education: School names and addresses, degrees earned, dates attended, courses taken (verifiable on a transcript), persons or office who can verify education, and phone numbers of persons or offices listed above.

Training: Class titles, certifications received, names of persons who can verify your training, and phone numbers of persons listed above.

TAKING THE EXAMINATION

Take the online [Training and Experience Evaluation](#) for the **Engineering Geologist** classification.

TESTING DEPARTMENTS

Department of Water Resources
Department of Conservation

CONTACT INFORMATION

Questions regarding this examination should be directed to:

Department of Water Resources: (916) 445-3488

Department of Conservation: (916) 322-7685

California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

TTY is a Telecommunications Device for the Deaf and Hard of Hearing, and is reachable only from phones equipped with a TTY Device.

EQUAL OPPORTUNITY EMPLOYER

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right of family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding, and related medical conditions), and sexual orientation.

DRUG-FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

GENERAL INFORMATION

Examination and/or Employment Application (STD 678) forms are available at the California Department of Human Resources, local offices of the Employment Development Department, and through your [CalCareer Account](#).

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described in this bulletin will be rated against a predetermined job-related rating, and all applicants who pass will be ranked according to their score.

The California Department of Human Resources (CalHR) reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all applicants will be notified.

General Qualifications: Applicants must possess essential personal qualifications including integrity, initiative, dependability, good judgement, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open

examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) servicewide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

High School Equivalence: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Education Development (GED) Test; 2) completion of 12 semester units of college-level work; 3) certification from the State Department of Education, a local school board, or high school authorities that the competitor is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.