

**POSITION
DESCRIPTION**

Incumbents in this parenthetical are distinguished from other Research Analysts by being able to perform research and statistical studies involving various types of digital spatial data and the techniques and methodologies associated with geographic information systems. The studies, objectives, and conclusions may be based on spatial analysis of: natural resource management, land use and transportation planning, emergency response planning and health assessments.

Positions exist statewide with the Department of Water Resources.

**EXAMINATION
INFORMATION**

This examination will consist two components: a **Performance Test Weighted 50%** (may include utilizing PC based GIS software, specifically ESRI's ArcGIS Desktop v9.1 or v8.3 and associated extensions, to conduct GIS related analysis of one or more data sets) and a **Qualifications Appraisal Interview Weighted 50%**. In order to obtain a position on the eligible list, a minimum rating of 70.00% must be attained for both components. **COMPETITORS WHO DO NOT APPEAR FOR THE EXAMINATION WILL BE DISQUALIFIED.**

**SCOPE OF
EXAMINATION**

**Performance Test - Weighted 50%
Qualifications Appraisal Interview - Weighted 50%**

In addition to evaluating the competitors' relative abilities as demonstrated by quality and breadth of experience, emphasis in the examining interview will be on measuring competitively, relative to job demands, each competitor's:

A. Knowledge of:

1. Research methods and techniques including planning of studies and investigations, statistical procedures, general principles, concepts, and terminology used in research.
2. Principles and concepts of geography or cartography, and computer mapping.
3. Techniques of spatial analysis that involve map overlays and proximity analysis.
4. Familiarity with various map products provided by the U.S. Geological Survey, including digital formats.
5. Familiarity with map projections and coordinate systems.
6. Understanding and commitment to effectively carry out State and departmental equal employment opportunity policies.
7. Designing and implementing research-related projects.
8. Departmental policies and procedures.

B. Ability to:

1. Gather, compile, analyze, and interpret GIS data.
2. Prepare research and statistical reports.
3. Analyze written and numerical data regarding GIS related problems.
4. Communicate effectively.
5. Reason logically and creatively and use a variety of GIS related analytical techniques to resolve or provide information regarding complex GIS related problems.
6. Develop and evaluate GIS related alternatives.
7. Consult with and advise upper management or other interested parties on a wide variety of GIS related subject matter areas.
8. Gain and maintain the confidence and cooperation of others.
9. Adapt and perform spatial analysis techniques and methods to complex problems involving mapped information.

**DESIRABLE
QUALIFICATIONS**

College level courses equivalent to six semester hours of geographic analysis techniques and six semester hours of data base management techniques; which may include computer cartography, remote sensing, or spatial analysis of statistical data.

**SPECIAL PERSONAL
QUALIFICATIONS**

Ability to analyze problems accurately, develop appropriate solutions, and recommend effective optional courses of action; identify improvements and to originate and develop new solutions which depart from traditional and existing patterns; assume increased responsibility; flexibility; work effectively with others.

**EDUCATION AND
EXPERIENCE AS AN
ALTERNATE TESTING
STRATEGY**

If conditions warrant, this examination may utilize an evaluation of each candidate's experience and education as compared to a standard developed from the class specification. For this reason it is especially important that each candidate take special care in accurately and completely filling out their application. List all experience relevant to the "Requirements for Admittance to the Examination" shown on the announcement. Supplementary information will be accepted but read the "Requirements for Admittance to the Examination" carefully to see what kind of information will be useful to the staff doing the evaluation.

**VETERANS
PREFERENCE**

Veterans Preference Credit is not granted in this examination, as it does not qualify as an entrance examination under the law.

GENERAL INFORMATION

The Department of Water Resources 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 competitors will be notified.

It is the candidate's responsibility to contact the Recruitment and Selection Services Section of the Department of Water Resources, (916) 653-6330 three weeks after the final filing date if he/she has not received a progress notice.

Applications are available at Department of Water Resources' offices, local offices of the Employment Development Department, the State Personnel Board, and the SPB web site: www.spb.ca.gov.

If you meet the requirements stated on the reverse, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination described on this bulletin will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the classification.

Examination Locations: Ordinarily, qualifications appraisal interviews are scheduled in Sacramento and Los Angeles. However, locations of interviews may be limited or extended as conditions warrant.

If a candidate's notice of oral interview fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request.

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) service-wide promotional, 5) departmental open, 6) open eligible list. 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 this bulletin. In the case of continuous testing examinations, names are merged into the appropriate lists in order of final test scores (except as modified by veterans preference credits) regardless of the date of the test, and the resulting eligible lists will be used only to fill vacancies in the area shown on the bulletin.

Devices for Communications Impairment

TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD Device. TDD: (916) 653-1804; California Relay Service: 1-800-735-2929 (TDD); 1-800-735-2922 (Voice)

For information regarding this examination, please contact Michelle Hill at (916) 653-6330.