DEFINITION
Under direct or general supervision, performs engineering, water management, flood management and water quality projects; assists in conducting field inspections and investigations of the Agency’s systems and facilities; participates in scientific studies; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED
Receives general supervision from the Supervising Water Resources Engineer, Principal Engineer, Assistant General Manager, and/or the General Manager. No direct supervision of staff is exercised.

CLASS CHARACTERISTICS
This is the entry-level class in the Water Resources Engineer series. Incumbents perform the less difficult and complex tasks in the field of water resources engineering. As experience and proficiency are gained, assignments will become more technically diverse and difficult, while exercising increasing independence of judgment.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)
Management reserves the right to add, modify, change or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Under the supervision of licensed engineers, designs simple structures, water facilities and appurtenances.
- Under supervision of licensed engineers, performs construction management of Agency projects.
- Performs hydraulic calculations.
- Performs staff functions for various Agency committees.
- Assists in and performs a variety of skilled technical duties in the development, installation, modification, and maintenance of water quality and water measurement instrumentation.
- Analyzes data from measuring devices, including quality assurance and quality checking, validating, plotting, and filing.
- Collects and prepares water quality samples for laboratory analysis during the winter storm season, for special studies, and for occasional baseline conditions.
- Prepares manual and computerized written, oral, tabular, and graphic reports summarizing findings; presents findings orally.
- Working closely with contractors and vendors, participates in various engineering projects, including assisting in and conducting field inspections and investigations of the Agency’s systems and facilities.
- Prepares engineering drawings for Agency staff by utilizing surveying data collected in the field to generate topographic features, alignments, profiles, and cross-sections.
Works with Agency staff on surveying projects; operates the Total Station, RTK, GPS, and other survey and mapping equipment to ensure that standard surveying techniques are applied.

Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Basic principles, practices, procedures, and standards related to hydraulics and hydrology.
- Basic engineering design and layout of civil facilities, as well as construction practices and construction management.
- Basic understanding of engineering design related to creek restoration.
- General understanding of geomorphology and fluvial processes.
- Basic understanding of flood management and flood control facilities.
- Practices, techniques, tools, and equipment used in the collection and preparation of water quality sampling.
- Effective communication techniques and public relations.
- Methods and techniques of effective technical report preparation and presentation.
- Safety principles and practices.
- Modern office practices, methods, and computer equipment.
- Computer applications related to the work, including word processing, database, spreadsheet applications, CAD and/or GIS applications.
- English usage, grammar, spelling, vocabulary, and punctuation.

Ability to:

- Prepare, understand, and interpret basic to routine engineering construction plans, specifications, and other contract documents.
- Learn, interpret, apply, and explain technical written material and laws, codes, regulations, ordinances, and Agency engineering policies and procedures.
- Analyze water and flood control problems and develop proposed solutions.
- Read and understand basic technical drawings and specifications.
- Perform basic design and planning using a variety of techniques.
- Perform mathematical and basic engineering computations with precision.
- Prepare and present clear, concise, and logical records, written and oral reports, correspondence, and other written materials.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence and independent judgment within general policy, procedural, and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work.
- Deal effectively with the public, vendors, contractors and Agency staff, in person and over the telephone.
- Provide a high level of customer service to public and Agency staff, in person and over the telephone.
**Education and Experience:** Any combination of training and experience, which would provide the required knowledge, skills and abilities, is qualifying. A typical way to obtain the required qualifications would be:

Assistant Water Resources Engineer: Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field. (No experience necessary.)

**License and Certifications:**
- Possession of an appropriate California driver’s license and a satisfactory driving record.
- License requirements may be waived at the discretion of the Agency.

**PHYSICAL DEMANDS**

Must possess mobility to work in the field and in a standard office setting and use standard office equipment, including a computer; strength, stamina, and mobility to perform medium physical work; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard or calculator. Positions in this classification bend, stoop, kneel, reach and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects necessary to perform job functions.

**ENVIRONMENTAL ELEMENTS**

Employees partially work in an office environment with moderate noise levels, controlled temperature conditions and no direct exposure to potentially hazardous physical substances. Employees also work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.

**WORKING CONDITIONS**

May infrequently be required to work on evenings, weekends, and holidays.

**COVID-19 REQUIREMENTS**

Due to the current COVID-19 pandemic, and partial shutdown in Solano County, the new Assistant Water Resources Engineer will be required to primarily work from home (i.e. telecommute), work individually in the field, maintain social distancing when others are present, and provide consistent reliable communication with their supervisor. The position will also need to abide by the Agency’s current COVID-19 Policy. Additionally, under the current COVID-19 pandemic, in-person training will be difficult for this new position. Instead, the Water Agency will be initially seeking an internal recruitment, with qualified candidate(s) already familiar with many of SCWA’s processes. If internal qualified candidate(s) cannot be found, the Water Agency may delay recruitment of this position. Once the
partial shutdown in Solano County is lifted, this position will be expected to work from the Water Agency’s main office at 810 Vaca Valley Parkway in Vacaville, CA and in compliance with all federal, state, and local requirements.

**CURRENT EMPLOYEE BENEFITS**

RETIREMENT - The Agency participates in CalPERS retirement program. New CalPERS members have a defined benefit formula of 2% at age 62 and pay a contribution rate of 50% of the normal cost. The Agency is not enrolled in Social Security.

HEALTH BENEFITS – The Agency has a cafeteria plan for medical insurance (through CalPERS). Up to $19,181.47 per year (80% of Kaiser with Family Plan) is available for medical insurance costs. 25% of any unutilized benefits in the cafeteria plan is reimbursed to the employee at the end of the calendar year. The Agency pays the cost of the following benefits:

- Dental Insurance for employee and dependents.
- Disability Insurance for the employee.
- Long-Term Care Insurance for the employee and dependents up to $800 per year.
- Post-Retirement Health.

LEAVE - Regular full-time employees accrue vacation leave at the rate of 15 day per year. After three (3) years employees accrue vacation leave at the rate of 20 days per year. Regular full-time employees accumulate 12 sick leave days per year.

HOLIDAYS – Regular full-time employees receive 12 paid holidays per year.

OTHER BENEFITS – Employees may elect to participate in a deferred compensation plan and/or a flexible spending account plan.

**SELECTION PROCESS**

Based on the information provided in the application documents, the best qualified applicants will be invited for an interview. All applicants meeting the minimum qualifications are not guaranteed an interview. If selected the job offer is contingent upon completing a pre-employment medical examination.

**HOW TO APPLY**

Please refer to job flyer.