

**COUNTY OF SOLANO**  
**CLASS SPECIFICATION**  
**Hydro-Geological Analyst**  
Effective Date: 12/13/2017

**CLASS SUMMARY:**

Under general direction, the Hydro-Geological Analyst supports the Environmental Health Manager by conducting and analyzing independent research, and supervising assigned staff on water and natural resources related programs or projects. This position coordinates, participates, and presents complex information, findings, and recommendations to local, regional, federal, and public stakeholders on natural resource and water related issues advocating County policies, considerations, and goals. This class develops policy recommendations, strategies, and implements changes on water and natural resource management programs based on evaluations of the programs.

**DISTINGUISHING CHARACTERISTICS:**

This class is distinguished from the:

- Environmental Health Manager, which is the management level class that is responsible for the operational policies, goals, and procedures of the Environmental Health Division of the Resource Management Department.
  
- Geologist, which is a lead class that performs professional duties related to the analysis, evaluation, and interpretation of hydrogeological conditions affected by contaminant releases from leaking underground fuel storage tanks.

**SUPERVISION RECEIVED AND EXERCISED:**

- Supervision is provided by the Environmental Health Manager.

**AND**

- Employees in this class may exercise supervision over professional, technical, and support staff on water and natural resources related programs or projects.

**ESSENTIAL DUTIES:** This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.

- Performs feasibility studies and research, and develops documentation supporting current department activities and long range water and natural resource planning.
- Analyzes complex technical environmental reports on water and natural resource matters, especially related to surface water, ground water, flood control, and environmental issues; works with staff from other Department divisions, including the Water and Natural Resources

Program Manager, county departments, regional partners, and contractors to accomplish tasks.

- Makes recommendations for addressing applicable Federal, State, and Local, laws, and regulations affecting water and natural resources and implements the required program modifications.
- Represents the Department by:
  - developing and maintaining collaborative partnerships and representing the Department with community leaders, local, regional, and statewide organizations, non-profit agencies, local businesses, and other County departments;
  - developing, implementing, and/or promoting a variety of programs and projects consistent with the Department's and County's goals, services, needs, and priorities;
  - working closely with community groups, staff and policy makers from the County, regional organizations, and/or local, state, and federal agencies, and with technical experts on water and natural resource issues and strategic planning efforts to further the County's goals; and
  - preparing complex reports and making presentations to elected or appointed legislative bodies, agencies, committees or work groups regarding various work programs and projects; participating as an active and contributing member of designated community organizations, committees/project teams, and special interest work groups as a representative of the Department.
- Performs supervisory duties over professional, technical, and support staff on water and natural resources related programs or projects such as:
  - assigning work and organizing, planning and scheduling staff's work activities and deadlines;
  - establishing standards for acceptable work products and evaluating performance;
  - monitoring work in progress, reviewing completed work and recognizing employees' work efforts and accomplishments;
  - responding to employee concerns and problems;
  - proposing disciplinary actions;
  - interviewing applicants and recommending selections;
  - providing career development mentoring and recommending training and career development opportunities;
  - ensuring that employees are properly trained and that they are scheduled for or have received required training or needed formal training;
  - providing instruction and/or guidance to employees in handling difficult or complex work problems;
  - reviewing and approving timesheets and requests for leave; and
  - communicating, supporting and enforcing County and Department policies and procedures including those related to equal opportunity and to safety.
- Assists management in the administration of the unit by:
  - participating in the administration of the unit's budget by submitting budget recommendations, monitoring expenditures, approving routine purchases and assisting in preparation of fiscal reports;

- applying for and monitoring grants or other specialized funding and preparing and monitoring contracts;
  - coordinating the work of contractors and consultants with the work of the unit;
  - reviewing work unit procedures, practices and work methods to increase the effectiveness and efficiency of operations;
  - monitoring the achievement of goals and objectives of the unit; and
  - assisting in the evaluation of department programs and operations.
- May provide professional oversight over programs or project assistance in other divisions when professional expertise is necessary.
  - Performs other duties of a similar nature or level as assigned.

### **EDUCATION AND EXPERIENCE:**

**Education:** Bachelor's degree or higher from an accredited college or university with a major in urban planning, environmental planning, environmental sciences, water resources, natural resources, civil engineering, geology, hydrogeology, or a closely related field.

**AND**

**Experience:** Five (5) years of full-time paid experience in providing oversight in water resource planning, water policy development, natural resource planning, long range planning and environmental review process, water quality or water remediation protection or planning, or water supply protection or planning, or any other related fields, or combination thereof, and one (1) year of lead or supervisory experience in any field.

### **LICENSING, CERTIFICATION AND REGISTRATION REQUIREMENTS:**

- Possession of a valid California Driver's License, Class C is required upon date of hire. California Driver's License must be kept current while employed in this class.
- Possession of a California registration or license as a Geologist, Engineering Geologist, Hydrologist, or Civil Engineer is highly desirable, but not required.

### **REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

#### **Knowledge of:**

- Federal, State, and Local laws, regulations, statues, principles, and policies applicable to work performed/ unit supervised such as: Water law in California, environmental review process including the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), civil engineering/hydro geologic practices relating to surface water, groundwater, hydrology, storm water, flood control, and resource management planning.
- Methods to promote, implement, evaluate, and modify assigned water and natural resources policy and programs to meet state requirements or County objectives. Interpret political and administrative directions and identify administrative changes and incorporate them into operational policy and procedures.

- Standard and accepted principles and practices of supervision, leadership, motivation, team building, organization, training, and conflict resolution. Methods to effectively delegate and ensure work product is timely, within budget, and meets objectives.
- Practices and techniques of administrative and statistical analysis, statistical report preparation, and graphic presentation of analysis.
- Methods and procedures of public hearings; staff role to public bodies.
- Oral communication techniques to include presentations to groups of various sizes in a positive, inclusive, and motivational manner.
- Public Administration principles and practices of budgeting, cost analysis, fiscal management, and program planning/evaluation.
- English composition, spelling, grammar, vocabulary, and punctuation for both written and oral communications.
- Formats and appropriate terminology for written communications such as business correspondence, policies, procedures and narrative reports.
- Basic mathematics for developing, preparing and completing numerical, budgetary, and/or statistical reports.
- Standard office procedures, practices, equipment, personal computers, and software.

**Skill and/or Ability to:**

- Research laws, regulations, procedures and/or technical reference materials; analyze, evaluate and interpret the data gathered; draw logical conclusions; develop reasonable and deliverable options, make appropriate recommendations; and implement the resultant change effectively.
- Understand, interpret and apply applicable laws, regulations and policies and use good judgment in their application.
- Collect, comprehend, and analyze complex information, data, and maps. Present complex information in readily understandable manner.
- Gather and analyze statistical data and prepare comprehensive statistical reports.
- Supervise, evaluate, train, and develop staff and organize their work.
- Represent the Department in meetings with representatives from various County and non-County organizations, government agencies, with local businesses, and/or with the general public.
- Manage a variety of simultaneous work projects and carry them through to successful completion.
- Determine the appropriate course of action in stressful and/or emergency situations.
- Assist in budget preparation, funding proposals, and narrative reports.
- Write and administer contracts and grants according to designated guidelines and regulations.
- Understand and analyze expenditure reports.
- Communicate information and ideas clearly and concisely, both orally and in writing.
- Work with and speak to various cultural and ethnic individuals and groups in a tactful and effective manner.

- Establish and maintain effective working relationships with those contacted in the performance of required duties.
- Prepare a variety of written communications to include reports, policies and procedures.
- Maintain accurate records and document actions taken.
- Perform a variety of technical and specialized tasks and functions in an independent, competent and timely manner.
- Maintain confidentiality of records and information per pertinent laws/regulations.
- Organize and prioritize work assignments.
- Use modern office equipment to include computers and related software applications.

**PHYSICAL REQUIREMENTS:**

- **Mobility and Dexterity:** Positions in this class typically require balancing, stooping, kneeling, reaching, crawling, reaching, standing, walking, fingering, grasping, feeling (i.e. sense of touch), and repetitive motion.
- **Lifting, Carrying, Pushing and Pulling -- Medium work:** Positions in this class require exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 of force constantly to move objects.
- **Vision:** Positions in this class require the employee to have close visual acuity, with or without correction, to prepare and analyze data and figures, view a computer terminal, read, and to distinguish between normal and off shade colors and to read gauges and meters in dimly lighted areas etc. Positions in this class also require employees to have depth perception and good eye-to-hand coordination in order to operate a motor vehicle and to operate a variety of hand and power tools.
- **Hearing/Talking:** Positions in this class require the employee to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Positions in this class require the employee to express or exchange ideas by means of the spoken word. Detailed or important instructions must occasionally be conveyed to others accurately, loudly, and/or quickly.
- **Other:** Positions in this class typically require the employee to have sufficient sense of smell, vision, touch and hearing to observe equipment functions for normal and abnormal occurrences.

**WORKING CONDITIONS:**

- **Office Work plus Outdoor Work:** While most work will be in an office setting, visits to outdoor worksites will require an employee in this class to occasionally work outside and be subject to a variety of weather conditions, walking on uneven terrain, toxic or caustic chemicals, atmospheric conditions, and working around vehicles in operation and around machinery with moving parts.
- **Traffic Hazards:** Employees in this class will be required to operate a vehicle and thus will be subject to traffic hazards while driving.
- **Environmental:** Employees in this class may be exposed to environmental conditions and work site hazards when working in remote locations or at job sites to investigate water and natural resources issues.

**OTHER REQUIREMENTS:**

- **Background Checks:** The County may conduct a background check and a reference check on candidates prior to appointment to a position within this class.
- **Independent Travel:** Incumbents are required to travel independently, for example, to perform work at other work sites, to attend meetings with other County employees, to attend meetings with community organizations, etc.
- **Language Proficiency:** Some positions allocated to this class will require the applicant to speak, read and write in a language other than English.

**CLASS HISTORY AND CLASS INFORMATION:**

- **Date Approved by the Civil Service Commission:** 12/13/2017
- **Date Adopted by the Board of Supervisors:** 1/9/2018
- **Date(s) Revised:**
- **Date(s) Retitled and Previous Titles of the Class:**
- **Class Code:** 355020