

WATER RESOURCES TECHNICIAN I/II

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job.

DEFINITION

Under general direction provide scientific and professional level support to the Water Resources Division by assisting with, gathering, compiling, and analyzing data related to wells, water production, land use, and water quality. Manage the District Well Tracking Program and provide technical and regulatory support to the Water Demand Division related to the District's Water Distribution System Permitting process. Perform a variety of technical and database tasks related to design, operation, and maintenance of the District's Geographic Information System (GIS), Well Program, hydrologic data sets, and field data collection methods. Establish relationships and access agreements with property owners. Monitor acquisition and accuracy of meter reads and follow up with well owners to verify. Assist as needed on the Aquifer Storage and Recovery, Streamflow, Groundwater, Fisheries, Drone, Bathymetry, and Riparian Programs. Provide excellent customer service.

DISTINGUISHING CHARACTERISTICS

This is the full journey level class within the professional Water Resources Technician series. Employees within this class perform the full range of duties as assigned. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished between Water Resources Technician I and II in that the latter performs more complex duties with minimal supervision and guidance.

SUPERVISION RECEIVED AND EXERCISED

Reports to the Water Resources Manager and receives direction from the District Engineer.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

The following duties are typical for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- 1. Manages the District's Well Tracking Program; distribute, collect and compile annual production reports from all well owners and operators in the District.
- 2. Uses GIS software, related graphic support tools, and databases to create, maintain, and update a variety of water supply systems records, charts and maps, plans, profiles, well completion details, hydrologic data, and detailed drawings from reports, notes and sketches.
- 3. Analyzes stored information in Property Files and works with the District's GIS consultant to recommend and implement GIS database structures, designs and requirements.
- 4. Prepares a wide variety of graphic reports, including visual displays for meetings, technical illustrations, signs, charts, graphs, and similar materials to support the District's technical programs and permitting duties.



- 5. Perform well registrations; track permits from County Health Department, perform meter inspections, mail letters and forms, locate wells in the field from maps, assign numbers and reference to assessor parcel number; review well logs; update District database.
- 6. Read water meters on wells; maintain records in databases, calculate production and report to General Manager as required in the District Rules; notify well owners of violations and follow up on discrepancies.
- 7. Walks or drives District vehicle to assigned route and reads meters.
- 8. Works with landowners to establish access to well meters should the well owner want District Staff to read the well meters.
- 9. Assist Fishery Biologists and Technicians; assist with fish rescue operations and population surveys.
- 10. Assist with high flow streamflow, groundwater, and Aquifer Storage and Recovery, Done, and Bathymetry programs as needed.
- 11. Respond to public inquiries in a courteous manner; provide information within the area of assignment; resolve complaints in an efficient and timely manner.

QUALIFICATIONS

Knowledge of:

Natural science, conservation, or resource management

Geographic Information Systems (GIS) software including technical database queries

GIS principles and techniques for data conversion, conflation and metadata generation

Graphic presentation software and computerized drawing techniques

Records management practices and procedures; organizing and maintaining accurate files and records, including computer data storage and retrieval including cloud based services and field based mapping

Principles of mapping, hydrologic, hydrogeologic, and mathematical principles related to water measurement including global positioning satellite systems for mapping

Laws and regulations relating to wells, water distribution, water production, fisheries, and riparian environments

Computer applications related to hydrology including data management, word processing and report writing

Mathematics and statistics

Operation of pumps and water meters

Occupational hazards and standard safety practices

Ability to:

Read and interpret maps, aerial photographs, photos, engineering design and construction plans, regulations and ordinances

Create, interpret, and utilize GIS map layers and data sets for analytical purposes

Assist with the development and integration of GIS with the District's database management system

Accurately compile, enter, and analyze technical and other data into appropriate forms, reports, and documents



Provide project support with the creation of presentation materials

Learn methods and techniques involved in the collection and analysis of field data, recording clear and accurate field notes

Establish and maintain effective working relationships with those contacted in the course of work.

Meet with land owners on their properties to assist with the Well Reporting and the Water Distribution System Permitting Process

Learn and explain the District Rules related to Well Reporting and the Water Distribution System Permitting Process

Conduct several projects concurrently and meet deadlines

Develop and maintain databases and spreadsheets

Operate equipment in a safe and effective manner

Perform instrument calibration and compliant water quality sampling protocols including chain of custody forms

Communicate effectively, both orally and in writing, preparing reports and technical documents. Work independently in the absence of supervision

<u>Experience and Training Guidelines for Water Resource Technician I</u> —- Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience

One year of increasingly responsible water resource management experience; providing project support using GIS-related tools to develop and maintain information in databases, as well as preparing graphic presentations.

Training

Bachelor's degree from an accredited college or university with major course work in environmental sciences, resource management, GIS, or a related field.

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

Experience and Training Guidelines for Water Resource Technician II —- Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:



Experience

Three years of increasingly responsible water resource management experience. providing project support using GIS-related tools to develop and maintain information in databases, as well as preparing graphic presentations.

Training

Bachelor's degree from an accredited college or university with major course work in environmental sciences, resource management, GIS, or a related field.

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

WORKING CONDITIONS

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environmental Conditions:

Office and field environment with some travel to attend meetings; work in and around water; exposure to all types of weather and temperature conditions; exposure to poisonous plants, animals, and/or insects; work closely with others and work alone; irregular work hours; exposure to computer screens, atmospheric conditions, and slippery and uneven conditions; working with machinery.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for moderate to heavy lifting and carrying; walking, standing and sitting for prolonged periods of time; bending, climbing and reaching; operating motorized vehicles and equipment.

Vision:

See in the normal visual range with or without correction; specific vision abilities required by this job include close and distance vision, color perception and depth perception.

Hearing:

Hear in the normal audio range with or without correction.