



Geographic Information Systems (GIS) Technician

Department/Division:	Engineering
Reports To:	GIS Administrator
Provides Direction To:	Not Applicable
FLSA Exemption Status:	Non-Exempt
Effective Date:	

GENERAL PURPOSE

Under general supervision, the GIS Technician performs technical duties in support of the Geographic Information System (GIS) program. This position is responsible for collecting, updating, and maintaining spatial and attribute data related to the District's water infrastructure, producing maps and exhibits, and supporting engineering, operations, and customer service teams with accurate and timely GIS data. The GIS Technician ensures data integrity and contributes to the efficient operation of the District's asset management and planning efforts.

DISTINGUISHING CHARACTERISTICS

The GIS Technician position provides technical and professional duties to the overall development, operation, and maintenance of GIS in support of District operations. The work requires public contact, the frequent use of sound judgment and good knowledge of departmental operations. Completed work is reviewed in terms of compatibility with requirements effectiveness and expected results.

ESSENTIAL FUNCTIONS

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the class.

- Collects, inputs, and maintains GIS data related to the District's water infrastructure, including pipelines, valves, hydrants, meters, and easements.
- Consults with various departments regarding GIS needs and requirements, including identifying, designing and developing GIS applications and procedures integrating the GIS program with existing databases and assists with training users on how to operate applications.
- Create, update, and maintain GIS maps and related databases using ESRI ArcGIS software.
- Prepares, scans, and indexes large-format engineering documents to support GIS and recordkeeping functions.
- Creates, updates, and maintains presentation-quality maps and exhibits for meetings, reports, and public communications; produces system atlas maps for operational use.
- Performs basic spatial analysis and generates dashboards and visualizations to communicate asset performance and support decision-making.
- Conducts field verification and GPS data collection to ensure accuracy of GIS data.
- Updates asset information critical to the District's Asset Management program.

- Maintains expertise in GIS software and technologies, including emerging geospatial tools and AI applications.
- Interfaces with other departments and external agencies to support collaborative GIS projects and data sharing.
- Assists in integrating GIS data with other District systems such as asset management, work order, and conservation tracking platforms.
- Provides mapping and staffing support to the District's Emergency Operations Center during emergency response activities.
- Develops user documentation and training materials; assists staff in implementing new GIS applications or system enhancements.
- Supports conservation efforts and compliance with state initiatives such as "Conservation as a California Way of Life."
- Responds to internal and external requests for GIS data and mapping products.
- Maintains metadata and documentation for GIS layers and procedures.
- Maintain prompt and regular attendance.
- Performs other related duties, as assigned.

QUALIFICATIONS GUIDELINES

Knowledge of:

- Principles and practices of GIS, cartography, and spatial data management.
- ESRI ArcGIS software suite, including ArcMap, ArcGIS Pro, and ArcGIS Online.
- GPS data collection methods and mobile GIS applications.
- Water utility infrastructure and terminology.
- Microsoft Office applications (Word, Excel, Outlook).
- Imagery formats commonly used and the ability to manipulate imagery as required.

Ability to:

- Accurately perform basic GIS duties using the District's GIS System; perform technical research; prepare maps, graphs, and reports, interpret and analyze technical information based on District and Regulatory guidelines.
- Read and interpret engineering drawings, utility maps, and legal descriptions.
- Perform accurate data entry and quality control.
- Communicate effectively both verbally and in writing.
- Work independently and collaboratively in a team environment.
- Prioritize tasks and manage time efficiently.
- Understand basic principles of water technology and infrastructure.
- Perform highly detailed work on multiple concurrent tasks.
- Maintain confidentiality of highly sensitive information.

Minimum Qualifications

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Education: A Bachelor's degree in GIS, Geography, Engineering Technology, Computer Science, or a related field from an accredited college or university is required.

Substitution: In lieu of a bachelor's degree, candidates must have:

- A GIS Certificate from an accredited academic institution or recognized professional organization (e.g., ESRI), and
- A minimum of two (2) years of GIS work experience in a public utility environment.

Experience: One (1) year of experience working with GIS Software and spatial data, including mapping and database updates, preferably in a public utility or municipal environment.

Licenses, Certificates; Special Requirements:

Must possess an appropriate valid Class "C" Driver's License issued by the California State Department of Motor Vehicles, and a good driving record.

In accordance with California Government Code Section 3100, West Valley Water District employees, in the event of a disaster, are considered disaster service workers and may be asked to protect the health, safety, lives, and property of the people of the State.

PHYSICAL DEMANDS AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the incumbent is regularly required to use hands to finger, handle, feel or operate objects, tools or controls; perform repetitive movements with hands, and reach with hands and arms. Incumbent frequently is required to walk and stand, talk or hear; sit or balance, stoop, kneel, crouch or crawl. The incumbent must occasionally lift and/or move up to twenty-five (25) pounds. Performs fieldwork in varying weather conditions and terrain. Operates a motor vehicle to travel to field sites and District facilities. Work is performed in both office and field settings. Exposure to outdoor elements including heat, cold, dust, and uneven terrain. May be required to wear personal protective equipment (PPE) during field activities.

THIS POSITION MAY BE ELIMINATED, OR THE DUTIES, QUALIFICATIONS AND TRAINING REQUIRED CHANGED BY THE BOARD OF DIRECTORS AND/OR THE GENERAL MANAGER, WHEN IN THEIR JUDGEMENT, IT IS CONSIDERED NECESSARY AND PROPER FOR THE EFFICIENT OPERATION OF THE DISTRICT.