



**GIS Administrator**

Department/Division:	Engineering
Reports To:	Director of Engineering
Provides Direction To:	N/A
FLSA Exemption Status:	Exempt
Date Prepared:	12/19/2024

**GENERAL PURPOSE**

Under general direction, plans for and implements all aspects of the District’s Geographic Information Systems (GIS)-related projects including facilitating project teams, identifying resources, and establishing project objectives, timelines and milestones and developing standards for GIS deployment and use; and to perform other related duties as required.

**DISTINGUISHING CHARACTERISTICS**

This is a single-incumbent class. Under general supervision, the incumbent performs the full range of assigned duties. Assignments vary, may encompass a variety of tasks, seldom require detailed instructions, and necessitates making sound judgments.

**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.*

- Ensures the timely implementation of GIS-related projects.
- Assists in the development and management of GIS project plans including defining requirements, tasks, and resource assignments, ensuring that approved quality levels and deadlines are met.
- Prepares GIS project plans and schedules to include coordinating resources, tasks, and work assignments.
- Manages GIS-related teams of District staff and vendors to ensure that GIS project objectives and timelines are met.
- Develops standards for GIS deployment and use within the District.
- Receives and formats data records and/or facilitates transfer of electronic files into GIS from AutoCAD.
- Generates a variety of specific, presentation-quality maps for meetings and reports; produces system atlas maps.
- Coordinates and collaborates with other departments to ensure the District’s GIS goals and objectives are met.
- Coordinates integration of GIS with other District functions/databases.
- Provides GIS-related technical guidance and assistance to project teams.

- Serves as a liaison with GIS vendors for the proper acquisition, installation, operation, and maintenance of GIS-related resources.
- Maintains expertise in GIS-related software and technologies.
- Provides the District's Permitting, Planning, and Asset Management systems with the most recent and accurate GIS data available.
- Ensure that Permitting, Planning, and Asset Management systems must have the latest GIS data.
- Ensure that District staff using GIS has training and technical support as needed.
- Interfaces with other departments or outside agencies regarding future GIS projects.
- Provides support to the District's Emergency Operations Center in terms of mapping and staffing.
- Maintain prompt and regular attendance.
- Perform field survey of assets using GPS equipment.
- Perform other related duties as assigned.

## **QUALIFICATIONS GUIDELINES**

### **Knowledge of:**

- GIS mapping software products including ESRI ArcGIS, and Autodesk AutoCAD Map 3D;
- Data requirements and discrepancies of each system;
- System and data requirements for maintenance connection of Asset Management Software;
- Practices and standards required for maintaining GIS Permitting, Planning, and Asset Management data;
- Commercial database systems;
- Imagery formats commonly used for municipal government applications and the ability to manipulate imagery as required;
- SQL and its usage to create and modify data sources for the District's GIS;
- GPS data capture techniques.
- Safe work practices.

### **Ability to:**

- Interact with District officials, staff, management, vendors, contractors, auditors, the general public, and others during the course of work.
- Understand emerging GIS technologies and their application to improve District services;
- Make sound decisions concerning GIS technologies as they apply to the District;
- Analyze complex problems, evaluate alternatives, and make sound, well-structured recommendations;
- Prepare and present clear and well-organized written and oral reports to District's Board of Directors, District administration and other groups as required;
- Explain GIS-related technical issues and concepts to non-technical staff;
- Use the Internet, remote communications, and other advanced tools to increase productivity and perform job functions;
- Establish and maintain effective working relationships with subordinates, peers, superiors, vendor representatives and clients;
- Plan, manage, and implement GIS-related projects;
- Assessing progress and making appropriate corrections to keep projects on track;
- Assess the spatial needs of a District department and recommend solutions;
- Work with various staff from other departments or outside agencies;

- Read, analyze and interpret general business periodicals, professional journals, technical procedures, or governmental regulations;
- Write reports, business correspondence, and procedure manuals;
- Effectively present information and respond to questions from groups of managers, clients, outside agencies, and the general public.
- Set up and use GPS equipment.

**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, Earth Science, Engineering, Computer Science or a related field from an accredited college or university. Specialized training by ESRI in ArcGIS applications plus four (4) years of public utility GIS work experience may be substituted for the bachelor’s degree requirement.

**AND**

**Experience:** Five (5) years of experience as a GIS Coordinator in the water industry with professional-level experience in the design, development, implementation, and administration of geographic information systems, including analysis and database development and web development and integration. Water industry experience highly desirable.

**Licenses, Certificates, Special Requirements:**

Possession of a valid Class C California driver’s license, acceptable driving record.

Certified Geographic Information System Professional (GISP) is preferred.

Possession of a Certificate of Completion of a formal course of instruction in the use of ARCGIS software at a recognized college, university, or an accredited trade school or vocational school is desirable.

**PHYSICAL DEMANDS AND ENVIRONMENTAL CONDITIONS**

*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.*

**Physical Demands**

While performing the duties of this class, the employee is constantly required to sit and occasionally to stand and walk. Finger dexterity and light grasping is required to handle, feel, or operate computer hardware and standard office equipment; and reach with hands and arms above and below shoulder level. The employee occasionally bends, stoops, lifts, and carries records and documents, typically weighing less than 25 pounds.

Sensory demands include the ability to see within the normal range, talk, and hear, and use

electronic touch keypads.

### **Environmental Conditions**

The employee frequently works in an office environment with controlled temperature settings. The noise level is moderate, typically below 70 decibels.

The employee occasionally drives a vehicle to attend off-site meetings and functions and is exposed to traffic and variable weather conditions.

***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.***