

EL DORADO IRRIGATION DISTRICT
Class Specification

Class Title: GIS Analyst

DEFINITION

Under direction performs a variety of professional level data gathering, analysis, implementation, maintenance and quality assurance activities in support of the District's Geographical Information System (GIS); designs, creates and maintains databases; and produces a variety of maps and graphical presentations.

DISTINGUISHING CHARACTERISTICS

This is a single level class where employees within this class perform the full range of duties as assigned including planning, developing, organizing and maintaining the District's GIS. Employees 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.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from an assigned manager or supervisor. May exercise technical and functional supervision over assigned technical and administrative support personnel.

EXAMPLES OF ESSENTIAL DUTIES: *the duties specified below are representative of the range of duties assigned to this class and are not intended to be an inclusive list.*

Participates in the development and implementation of goals and objectives related to assigned section; establishes schedules and methods for drafting and mapping development, analysis and document control and the preparation of maps, drawings, charts, and legal descriptions; implements policies and procedures.

Participates in the data conversion to GIS and manages highly complex GIS Projects; coordinates with other Departments on resolutions of AutoCAD/GIS system issues.

May participate in evaluating the activities of staff, provide or coordinate staff training, recommend improvement and may work with staff to correct deficiencies in coordination with assigned manager or supervisor. Reviews work products of other technical staff.

Participates in budget preparation and administration; prepares cost estimates for budget recommendations; submits justifications for equipment, materials and supplies; monitors and controls expenditures.

Under direction, prioritizes and responds to mapping, exhibit and legal description data requests from internal and external customers; coordinates projects between District departments and divisions.

Participates in the planning, coordination and direction of GIS data acquisition and maintenance project in support of the District's GIS program.

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Participates in providing technical direction, control, and assistance in the development of short- and long-range plans for facility system maps and GIS.

Participates in the planning for conversion of existing geographic data to other automated systems, including implementation of procedures and standards.

Participates in making recommendations for acquisition, installation, and modifications of GIS hardware.

Participates in the preparation of written specifications for the development and acquisition of software and hardware that support GIS, AutoCAD and other programs utilized by the mapping unit.

Performs advanced analysis of spatial data using GIS Technology and generates reports based on the results. Uses Computer Aided Design and Drafting (CADD) methods; implements and monitors CADD projects.

Answers questions and provides information to the public; responds to public complaints and recommends corrective action as appropriate.

Trains and provides technical advice to users on the use of equipment and software used to manipulate and extract GIS information. Communicates with internal and external data users.

Creates and maintains geographic data sets using a variety of databases; enters data using geometry and cadastral mapping standards; retrieves and evaluates data.

Coordinates the procurement and distribution of spatial data.

Develops and assists with the development of requirements and design of GIS mapping layers; develops and maintains proper and accurate documentation.

Creates and manages online tools using spatial data. Serves as database administrator for spatial data. Troubleshoots hardware and software problems; provides or recommends appropriate solutions.

Builds and maintains positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Performs related duties as assigned.

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QUALIFICATIONS

Knowledge of:

Practices of database design, maintenance and administration. Principles and practices of Geographic Information Systems, including architectures, functions and capabilities, programming languages, standards, limitations and implementation. Spatial and geographic data, cartographic principles, geographic data analysis and techniques, and GIS software operations and products. Principles and practices of the development and maintenance of maps, specifications, legal descriptions and related graphic documentation. Algebra, geometry and trigonometry, especially in computation of distances, angles and areas. Computer aided drafting and mapping tools and programs, including AutoCAD software, ESRI-based GIS software and its applications and other relevant software, programs and databases and their uses, as well as other computer aided drafting and mapping tools and programs. Principles and practices of project management and workflow analysis. Process analysis, testing, and troubleshooting/problem solving. Modern office procedures, methods and computer equipment. Pertinent local, State and Federal laws, rules and regulations. Principles and practices of technical and functional supervision and training. Principles and practices of budget monitoring. Principles and practices of safety management.

Skill/Ability to:

Organize, implement and oversee mapping, drafting and GIS operations/activities. Interpret and explain pertinent District and department policies and procedures. Prepare graphic illustration in support of District documents, presentation, and displays. Make arithmetical calculations with speed and accuracy. Assist in the development and monitoring of an assigned program budget. Develop and recommend policies and procedures related to assigned operations. Communicate clearly and concisely, both orally and in writing. Provide indirect supervision over assigned staff. On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures. On a continuous basis, sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 10 pounds or less.

Experience and/or Education:

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Four years of increasingly responsible experience in Geographic Information Systems, computer-aided drafting and map development; including two years in a lead position providing technical and functional supervision over assigned personnel.

Education:


Equivalent to a Bachelor's degree from an accredited college or university with major course work in GIS, computer science, geography or a related field is preferred.

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SPECIAL QUALIFICATIONS

License and Certificate:

Possession of, or ability to obtain, a valid California driver's license at the time of appointment. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

 _____ Human Resources Manager	<u>8/19/2014</u> Date
Established: 08/18/2009 Revised: 07/03/2014 FLSA: Exempt Unit: Non-Safety	