



## Senior GIS Analyst Engineering Department

Full-Time/Exempt  
Career Range: \$2,984.82 - \$4,394.96/pay period (DOQ)

Fort Collins – Loveland Water District

Revision Date: March 2024

Approved by General Manager: *CP*

Approved by Human Resources: *SD*

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### General Purpose:

The Senior GIS Analyst coordinates and manages the Fort Collins-Loveland Water District (FCLWD, the District) Geographic Information System (GIS). Leads and assists with modeling and data analysis and supports project management as required. Reports directly to the District Engineer.

### Essential Functions:

- Database Administration
  - Develops and maintain GIS mapping platform and geodatabases
  - Maintain GIS development and production database environments
  - Manages GIS web-development including AGOL and Enterprise systems
  - Manages GIS database user accounts and maintenance activities
  - Develop organizational GIS roadmap including development of system architect
  - Support software related issues, updates, and configurations
  
- Spatial Analysis
  - Analyze GIS data to identify spatial relationships and/or display results using maps, graphs, or tabular form
  - Perform advanced spatial analysis to support water right cases, water use analysis, rate studies, hydraulic modeling, asset planning, population and build out projections.
  - Integrates high-resolution imagery and DEM's into workflows and mapping applications
  - Support hydraulic model maintenance and analysis
  - Respond to specialized project mapping and analysis tasks from other departments
  
- Data Management & Integrations
  - Configure, deploy, and manage water utility assets in a spatial data model (ESRI's Utility Network)
  - Develop and maintain integrations with GIS-based and non-GIS, databases, tools, applications, and software including hydraulic models, work management, asset planning, billing software
  - Fulfills role as subject matter expert on GIS projects related to utility business
  - Train users in the application and use of ArcGIS software suite
  - Deploy and provide technical support for mobile/field data collection tools (Field Maps)
  - Implements new technologies and programs utilizing best practices of change management including planning, outreach, and engagement
  - Develops QA/QC processes to maintain data integrity of mapping system
  - Create geoprocessing models and scripts as necessary to facilitate tasks
  - Work with Larimer County, Cities/Town, and other agencies with data exchanges
  - Update geodatabase with public infrastructure as-built records and GPS surveyed features

- Project Management
  - Assists with special project management as assigned by the District Engineer
  - Supports full project management life cycle as needed including but not limited to scoping, vendor monitoring, budgeting, etc.
  - Maintain and keep organized project records including project charter, scoping documentation, meeting minutes, progress reports, and other project related documents
- Participate in emergency management efforts as part of the Engineering Department
- Other duties as required and necessary to ensure the success of the organization

**Supervisory duties:**

- None.

**Knowledge, skills and abilities:**

- Ability to consistently promote, support, work, and act with an expectation of agency in a manner in support of the District's mission, vision and values
- Experience with utility industry GIS and business practices, water preferred
- Exposure to ESRI's Utility Network data model
- Experience with database versioning
- Experience with database, creation, and maintenance
- Database experience with SQL, scripting experience with Python
- Experience with ArcGIS Enterprise Server Technology
- ArcGIS Enterprise and ArcGIS Pro development, deployment, and support
- Experience with ESRI's suite of mobile, browser and desktop applications
- Experience using ArcGIS software for spatial analysis
- Experience with high accuracy GPS and field data collection workflows
- Experience with administering an ArcGIS Online Organization Account
- Experience creating and configuring ESRI Web Maps and Applications
- Understanding of cartography in context of map production (hard copy, soft copy, and digital)
- Ability to use multiple tools and techniques to facilitate GIS data management
- Strong written and oral communication skills
- Ability to collaborate in a team environment and communicate effectively with company leaders, project managers, and other non-GIS professionals
- Strong MS Office skills with exposure to or experience with MS Office 365 (Outlook, Word, Excel, PowerPoint, SharePoint, OneNote, OneDrive)
- Ability to independently solve complex problems, provide accurate and error-free work under pressure and meet reasonable deadlines.
- Ability and maturity to perform assigned tasks unsupervised throughout an eight (8) hour day

**Additional Requirements/Licenses/Certifications:**

- Must have reliable transportation
- Must have a valid driver's license
- Professional GISP preferred

**Materials, software and equipment directly used:**

- This role routinely uses standard office equipment such as computers, phones, scanners, photocopiers, wide format scanner / plotter, servers, ArcGIS PRO, ArcGIS Enterprise, MS SQL, Microsoft Office Suite and ESRI's suite of mobile, browser, and desktop applications.

**Physical Activities:**

*The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.*

- While performing the duties of this job, the employee is regularly required to talk or hear. This is largely a sedentary role; however, some filing is required; it would require the ability to reach for and lift files, open filing cabinets and bend or stand on a stool as necessary. Specific vision abilities required by this job include close vision, distance vision, color vision, and ability to adjust focus.
- Work primarily involves a high degree of visual and/or mental concentration.
- Light physical effort may be required by moving and positioning objects up to 50 pounds occasionally and / or 20 pounds frequently.

**Education and Experience:**

- Bachelor's Degree in Geography, Computer Information Systems, Computer Science, or related field
- A minimum of five (5) years working experience with ArcGIS Suite in a GIS Analyst capacity
- An equivalent combination of education and experience may be substituted on a year for year basis

**Working environment:**

*The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.*

- Work is generally performed in an indoor professional office environment.

*Passing a driving record (MVR) and criminal history background checks will be required prior to the start of employment.*

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I have read this Job Description, asked for clarification of any items that are unclear to me, and agree to fulfill my duties as outlined. I understand that this is not all-inclusive, and that I will be responsible for performing other duties as assigned. I understand that this does not constitute a contract of employment and that either the company or I may terminate my employment at will, with or without cause.

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Printed Name

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Date

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Signature