

**MOJAVE WATER AGENCY**  
**Job Description**

**Job Title:** Data Analyst I  
**FLSA:** Non-Exempt  
**Range:** 35  
**Prepared By:** Gallagher – Formerly Koff & Associates  
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**SUMMARY**

Under immediate supervision, responsible for managing and/or assisting with system administration, and disaster and system recovery for the Agency's data systems; performs system analyst activities related to the creation, operation, and archival of the Agency's relational and spatial database systems; assists with the preparation of and analyzes data for a variety of research programs, water resource studies and special projects to support Agency plans and operations; create and present visual representations of data and analyses; and performs related duties as assigned.

**SUPERVISION RECEIVED AND EXERCISED**

Receives immediate supervision from assigned supervisory/management personnel or Department Head. Exercises no direct supervision over staff.

**CLASS CHARACTERISTICS**

This is the entry-level classification in the Data Analyst series. Initially under immediate supervision, incumbents learn and perform routine water resources research and analytical duties. As experience is gained, assignments become more varied, complex, and difficult; close supervision and frequent review of work lessen as an incumbent demonstrates skill to perform the work independently. Positions at this level usually performs most of the duties required of the positions at the II level but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern.

Positions in the Data Analyst I/II class series are flexibly staffed and positions at the II-level are normally filled by advancement from the Data Analyst I-level, after gaining the knowledge, skill, and experience which meet the qualifications for and after demonstrating the ability to perform the work of the higher-level class. Progression to the Data Analyst II level is dependent on (i) management affirmation that the position is performing the full range of duties assigned to the classification; (ii) satisfactory work performance; (iii) the incumbent meeting the minimum qualifications for the classification including any licenses and certifications; and (iv) management approval for progression to the Data Analyst II level.

**EXAMPLES OF TYPICAL JOB FUNCTIONS** *(Illustrative Only)*

*Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations where appropriate so that qualified employees can perform the typical functions of the job. The following statements are intended to describe the general nature and level of work being performed by an individual assigned to this job.*

*Positions at the Data Analyst I level may perform some of these duties and responsibilities in a learning capacity.*

- Performs and assists in entry to journey-level professional, analytical, and administrative duties for assigned department and/or Watermaster and/or hydrogeology activities and operations.
- Performs administration of the spatial data library, which includes data design, organization, conversion, metadata preparation, and maintenance activities as directed.
- Performs research and implementation effort required to support Geographic Information System (GIS)/Database/modeling projects, which involves evaluating and identifying hardware, software, and vendors.
- Coordinates the design and maintenance of the Agency's QA/QC (quality assurance/quality control program), dealing with data preparation, handling, review, error correction, data cleansing and approval prior to entry into the Agency's databases (relational and spatial).
- Assists with QA/QC data review for data download into the Agency's database (both relational and spatial) and data upload and export to other governmental agencies.
- Designs program applications, tools, and user interfaces for the management of geographic information, data analysis, ap production, and enhancements to existing applications.
- Develops GIS and relational database applications in an integrated environment.
- Designs and generates cartographic products and performs related spatial analyses in direct support of Agency mandated reports, studies, and responses to information requests.
- Coordinates with Agency staff on water resource data entry, and data transfer issues.
- Collects data, performs statistical/spatial analyses, evaluates results to generate tables, graphs, maps, and prepares fact sheets, technical reports, and compliance reports.
- Create visual representations of data, analyses, and findings; presents such information to a variety of audiences.
- Performs data exploration and analytics including the application of principles of statistical methods, pattern identification, trending/regression analysis, and various computational methods.
- Works with other entities to collect and disseminate water resource related data.
- Responds to regulatory, public, and water purveyor inquiries regarding water resource data related issues as directed.
- Assists the department with compiling, summarizing, and updating regularly published Agency publications and reports.
- Performs other duties as assigned.

### **QUALIFICATIONS**

*To perform this job successfully, an individual must be able to perform each typical duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodation may be made to enable individuals with disabilities to perform the typical functions.*

### **Knowledge of:**

- Spatial and relational database structures and systems.
- Cartographic principles and methods.

- General principles and practices of water resources research and reporting.
- Map reading; survey and geo-referencing techniques; well construction and design.
- Methods of data exploration and analytics including the application of principles of statistical methods, pattern identification, trending/regression analysis, and various computational methods.
- Techniques for storage and access of data in structured or unstructured databases.
- Applicable federal, state, and local regulatory agencies requirements and guidelines.
- Customer service methods and techniques.
- Project management principles and concepts.
- Technical software such as Arc GIS.
- Agency and mandated safety rules, regulations and protocols.
- Record keeping principles and procedures.
- Various methods and techniques to reach mutually agreeable solutions and outcomes.
- Software utilized for reports and presentation purposes.
- Effective and engaging public speaking skills.
- Various equipment including, but not limited to, maximum/minimum thermometers, precipitation gauges, pressure transducers, evaporation measuring pan, hygrothermograph, global positioning system unit, and digital camera.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions as well as program, project, and task coordination.
- Computers and software programs (e.g., Microsoft software packages) to conduct research, assess information, and/or prepare documentation.

**Ability to:**

- Conceptualize, design, construct, operate, and distribute, for practical use by a wide spectrum of operators, spatial and relational databases typically used in the management of water resources.
- Adapt to dynamic changing priorities.
- Manage competing priorities with strong attention to detail and quality assurance, meet strict tie schedules and work on multiple tasks routinely.
- Research, analyze, and evaluate new service delivery methods, procedures, and techniques.
- Perform mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry.
- Create visual representations of data and analyses; develop associated reports, presentation materials and deliver information in a way it can be understood by both technical and non-technical audiences.
- Performs data exploration and develops analytics including the application of principles of statistical methods, pattern identification, trending/regression analysis, and various computational methods.
- Solve practical problems and deal with a variety of concrete variables in standardized situations.
- Assist in the production of standard reports and business correspondence.
- Interpret and apply policies, procedures, laws, codes, and regulations pertaining to geology

and hydrogeology programs and functions.

- Actively listen and discern common interests to reach mutually agreeable solutions and outcomes.
- Work in a fast-paced, professional office environment and balance multiple projects and deadlines.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Prepare clear and concise administrative and management reports.
- Effectively present information and respond to questions from Agency employees, the general public, other water agencies, WA's Board of Directors, and regulatory agencies.
- Establish and maintain cooperative working relationships with those contacted in the course of business, including member agencies, city and other government officials, community groups, and the public.
- Effectively use computer systems, applications, and modern business equipment to perform a variety of work tasks.
- Perform work in accordance with specific safety procedures to minimize potential for injury.

**Education and Experience:**

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

Equivalent to a bachelor's degree from an accredited college or university with major coursework in computer science, engineering, hydrogeology, urban planning, geology, geography, environmental studies, or a related field; and one (1) year of progressively responsible data analysis experience or closely related experience.

**Licenses and Certifications:**

- Valid California Class C driver's license and current automobile insurance.

**PHYSICAL DEMANDS**

*The following physical demands described are representative of those that must be met by an employee to successfully perform the typical functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Must possess mobility to work in a standard office setting. When working in an office setting, one must possess mobility to use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone. Occasional standing in and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. While in a standard office setting, this classification will occasionally bend, stoop, kneel, reach, push and pull drawers open and closed to retrieve and file information and occasionally lift and carry reports and records that typically weigh up to 15 pounds. Employees must possess the mobility to operate a motor vehicle and visit various Agency sites.

**WORK ENVIRONMENT**

*The following work environment characteristics described are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.*

Employees work in an office environment with moderate noise levels, controlled temperature conditions and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental/agency policies and procedures. May travel between Agency office locations.