MOJAVE WATER AGENCY
Job Description

Job Title: Water Resources Data Analyst II
FLSA Status: Non-Exempt
Salary Range: 33
Prepared By: Koff & Associates
Prepared Date: April 2002
Revision Date: October 2016

SUMMARY

Under general supervision or direction of the Water Resources Principal Hydrogeologist or Department Head, responsible for managing or assisting with system administration, and disaster and system recovery for the Water Resources Department’s data systems; performs systems analyst activities related to the creation, operation, and archival of the Water Resources Department’s relational and spatial database systems; and performs related work, as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision or direction from the Water Resources Principal Hydrogeologist or Department Head. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This is the journey-level classification in the Water Resources Data Analyst series. Positions at this level are distinguished from the I-level by the performance of the full range of duties as assigned, working independently, and exercising judgment and initiative. Positions 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.

Positions in the Water Resources Data Analyst I/II class series are flexibly staffed and positions at the II-level are normally filled by advancement from the 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.

This class is distinguished from the Senior Water Resources Data Analyst in that the latter provides technical and functional direction to lower-level support staff and is responsible for the more complex work that differ in the scope and variety of work, which has an Agency wide impact.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS

The following statements are intended to describe the general nature and level of work being performed by an individual assigned to this job. Other duties may be assigned.

- 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 review 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, map 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.

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 related duties and responsibilities, as assigned.

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

Knowledge of:

- Spatial and relational database structures and systems.
- Cartographic principles and methods.
- General principles and practices of water resources management and reporting.
- Map reading; survey and geo-referencing techniques; well construction and design.
- 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.
- Various methods and techniques to reach mutually agreeable solutions and outcomes.
- 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 time 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.
- Solve practical problems and deal with a variety of concrete variables in standardized situations.
- Assist in the production of standard reports and business correspondence.
- Gain cooperation through discussion and persuasion.
- Establish, maintain, and foster effective team spirit and collaboration between departments and employees.
- 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, MWA’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:

Bachelor’s degree in computer science, engineering, hydrogeology, urban planning, geology, geography, environmental studies, or a related field, and two (2) years of progressively responsible water resources information systems experience.

Licenses and Certifications:

- Valid California Driver’s License, Class C, and current automobile insurance.
- GIS Certification preferred.
PHYSICAL DEMANDS
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. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk, hear and use hands to finger, move between offices and field sites, reach with hands and arms, stoop and lift items up to 60 pounds. The employee may be required to drive a standard passenger or 4-wheel drive vehicle. Specific vision abilities required by this job include close vision, color vision, depth perception, and the ability to adjust focus.

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

While performing the duties of this job, the employee’s work environment ranges from a typical office setting to a field setting (i.e., ground truthing), such as different properties and well sites. The employee is occasionally exposed to outside weather conditions. The employee is frequently exposed to dust and dirt. The employee is occasionally exposed to fumes, odors, vibrations, poor lighting, and hazardous or toxic chemicals. The noise level can range from moderate to loud.