

MOJAVE WATER AGENCY
Job Description

Job Title: Database Administrator I
FLSA: Non-Exempt
Range: 33
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SUMMARY

Under immediate supervision, performs a variety of professional duties related to the management of data resources in support of Agency operations; assists with scientific and administrative analysis of resource issues and administration of department data systems, which include database administration, data warehousing, security, and operations; assists in analyzing complex systems and datasheets related to the creation, operation, and archival of Agency database systems and associated information products and assists with technology integration/utilization and data administration issues; 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 Database Administrator series. Initially under immediate supervision, incumbents learn and perform routine operational aspects of the Agency's technology environment, its multiple systems and associated hardware and software, and the specific operations of the technology program area and/or department to which the position is assigned. 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 perform 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 Database Administrator class series are flexibly staffed and positions at the II-level are normally filled by advancement from the Database Administrator 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 Database Administrator 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

Database Administrator 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 Database Administrator I level may perform some of these duties and responsibilities in a learning capacity.

- Participates in the development and implementation of goals, objectives, and policies for assigned projects and programs.
- Assists with the development of standard and physical database designs, recommending physical storage parameters, index storage requirements, and performance tuning protocols; participates in the physical designs of database formats for user front-end entry and inquiry.
- Assists in the administration of the Agency databases, which includes data design, organization, conversion, metadata preparation, and maintenance activities.
- Performs research, development/test, evaluation, and implementation activities required to support GIS/database/modeling projects.
- Participates in the design and maintenance of the Agency's resource information quality assurance (QA)/quality control (QC) program.
- Performs database management and administration tasks; creates and maintains user accounts, roles, and access privileges; troubleshoots database and data administration problems to identify the source of problems and performs or requests fixes or repairs; provides database infrastructure support in data warehousing and transaction processes; ensures database capacity.
- Provides direct support to end users; receives, reviews, investigates, troubleshoots, and diagnoses issues such as performance problems, data corruption, connectivity errors, or application integration challenges; evaluates resolution options; escalates resolution to Agency management as needed.
- Reviews and designs program applications, tools, and user interfaces for the management of geographic information, data analysis, map production, presentation design, and enhancements to existing applications.
- Participates in the development of project specific GIS and relational database applications in an effective and cohesive integrated environment.
- Designs, develops, and administers standards, protocols, system documentation, and procedure manuals for all Agency data collection, analysis, archival, and release.
- Develops responses to regulatory, public, and water purveyor inquiries regarding Agency data related issues as directed.
- Assists with budget preparation; recommends hardware/software and specialized equipment related to the analysis of Agency data.
- Assists with compiling, summarizing, and updating regularly published Agency publications and various reports.
- Keeps abreast of advances in information system and computing technologies and their capabilities; provides technical information, guidance, and support to all departments as

needed.

- Attends meetings, conferences, workshops, and training sessions; reviews publications and audio-visual materials to become and remain current on principles, practices, and new developments in database administration and related technology areas.
- Prepares training materials for end users related to database usage, best practices and data management techniques; conducts training either in groups or one-on-one with the end user, or coordinates training classes through outsourced vendors.
- Observes and complies with Agency and mandated safety rules, regulations, and protocols.
- Performs related 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:

- Principles and practices of database administration and functionality.
- Spatial and relational database structures and systems.
- Technical software such as Microsoft SQL Server, Microsoft SharePoint Server, Microsoft Access, and ESRI Arc GIS.
- Database management policies, practices and emerging technologies, hardware, and software architecture and environment.
- Principles, techniques, methods, and terminology of geography, cartography, geographic information systems, and cartographic composition.
- Principles and techniques in programming, and programming languages used in database administration.
- Principles and practices of identifying technology needs and issues; researching and evaluating technology solutions and applications, identifying the most effective course of action, and implementing solutions.
- Principles and practices of database code security.
- Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Agency staff.
- 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:

- Provide support to a diverse range of Agency-wide and department-specific databases used throughout the Agency.
- Perform modeling, mapping, database maintenance, and other GIS professional-level tasks.
- Analyze, design, code, test, and implement GIS/database and related application software.
- Adapt and perform in a dynamic environment with changing priorities.
- Manage competing priorities with strong attention to detail and quality assurance, meet strict time schedules, and work on multiple tasks routinely.
- Instruct both technical and non-technical user staff in the operation of new or revised GIS and other database applications, system modifications, or database structure, including explaining system concepts to non-technical users.
- Understand, interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, and regulations; technical written material; and Agency policies and procedures.
- Analyze situations and identify pertinent problems/issues, collect relevant information, evaluate realistic options, and recommend/implement appropriate course of action.
- Assist in the production of standard reports and business correspondence.
- Apply mathematical concepts such as Boolean logic, probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry.
- Actively listen and discern common interests to reach mutually agreeable solutions and outcomes.
- Prepare and present clear and concise correspondence and reports.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish and maintain cooperative working relationships with those contacted in the course of business, including other employees, managers and executives, vendors, consultants, contractors, and the public.
- Effectively use computer systems, applications, and modern business equipment to perform a variety of work tasks.

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, information technology, or a related field; and one (1) year of experience providing analytical support to database systems, including database analysis and querying, 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 25 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.