

MERCED IRRIGATION DISTRICT WATER RESOURCES ENGINEER

FLSA Status – Exempt

DEFINITION:

Under general direction, perform professional work related to the operation, design, construction, and maintenance of water storage, control, pumping and distribution systems. Represent the District in local, regional, and state wide activities including coordination, planning, and management of such activities. Perform work related to water balance plans, water management plans, and administer reports related to water rights, consumption, and water quality.

ESSENTIAL FUNCTIONS OF THE POSITION:

- Design and utilize computer models for reservoir operations and downstream flow regulation and scheduling.
- Participate in the development and utilize surface/groundwater resources model for planning, operations and forecasting.
- Participate in coordinating and reporting reservoir releases within the District and with local, state and federal agencies.
- Manage all aspects of engineering studies and capital projects, including the preparation and monitoring of feasibility studies, technical studies, project budgets, and management of staff, consultants and vendors, acquisition of required permits, contracts and agreements.
- Prepare reports related to water consumption and compliance with established licenses.
- Work with a wide variety of stakeholders on a regular basis, including farmers and local, state and federal agencies.
- Make public presentations to the MID Board of Directors, and local, state and federal agencies as required.
- Represent the District at various water resource agency/entities forums and meetings (e.g. Regional Water Quality Control Board, East San Joaquin Water Quality Coalition etc.).
- Exercise leadership, authority, and management tactfully and effectively.
- Negotiate agreements with various entities.
- Work with the general public to answer questions and provide general or technical information pertaining to District Water Resources functions.
- Compile and maintain records and cost reports pertaining to various District operations.
- Review and understand complex groundwater reports or studies involved with both the extraction and recharge of groundwater resources throughout the extended MID service area and region.
- Assist in Water Resources Budget preparation.
- Supervise and participate in the collection and compilation of water use records, flow records and reporting.
- Continue to manage the development of the water resources components of the District's Enterprise Data Management System (EDMS), including an integration of the water delivery database, the Supervisory Control and Data Acquisition (SCADA) System, the Geographical Information System (GIS) and the water records database, as well as other related custom databases.
- Supervise all hydrography and SCADA functions, including stream flow measurements, grower delivery flow rate verification and associated data management and analysis.
- Provide technical support and direction to MID engineering staff and other district department staff on an as needed basis or as directed by MID management.

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- Prepare a variety of design, planning, construction and operations reports on the water distribution system and related facilities.
- Interact with management to develop strategic plans and formulate and implement policies.
- Perform other duties as requested, directed or assigned.

QUALIFICATIONS:

Any combination of experience and education that would prepare the candidate for the duties and responsibilities of the position is acceptable.

Education:

- Bachelor's Degree from an accredited college or university with major course work in areas such as civil engineering, agricultural engineering, hydrogeology or a related field.
- Master's Degree desirable.

Experience:

- Eight – (8) years of professional level experience, including management and supervision of employees, with a background in water resources related activities, such as reservoir operations, groundwater management, water balance calculations, water management plans etc.
- Experience in effectively participating in or leading local and regional water resources related groups.
- Experience with data management systems is highly desirable.

Ability to:

- Work closely with District Management, other department managers, staff, constituents, consultants, contractors, other governmental agency representatives and the general public.
- Exercise leadership, authority, and management tactfully and effectively.
- Negotiate agreements with various entities.
- Represent the District at various water resources agencies and entities (e.g. Regional Water Quality Control Board, East San Joaquin Water Quality Coalition etc.)
- Interact effectively with City and County governments and represent the District's interests
- Solve problems and recommend changes in standards, procedures, and policies to best serve the District.
- Ensure prompt and proper response to public concerns and complaints.
- Communicate effectively both orally and in writing. Work cooperatively with staff, employees, and employee organizations.
- Handle confidential information appropriately.
- Effectively utilize various engineering software programs, spreadsheets, word processing software and other typical office software programs.
- Maintain records, analyze data, compile comprehensive technical reports and recommendations concerning various aspects of water resources management
- Represent District policies, programs and services effectively with employees, contractors, representatives of other agencies and the public.
- Operate a desktop computer to access varied databases and applicable software.
- Understand and carry out oral and written instructions
- Deal tactfully and courteously with the public.
- Initiate and maintain effective safety practices that relate to the nature of the work.
- Supervise, train and evaluate assigned staff.

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- Organize, schedule and coordinate work.
- Operate a vehicle observing legal and defensive driving practices.
- Establish and maintain effective relationships with those contacted in the course of work.

Knowledge of:

- Water conveyance, infrastructure design and hydraulics.
- Project initiation, CEQA requirements, design and construction.
- Bid and contracting processes and applicable laws.
- Research and analysis methodologies.
- Technical report preparation
- Supervisory skills to effectively manage assigned staff and consultants.

Necessary Special Requirements:

- A valid California registration as a Civil Engineer or ability to obtain such certification within twelve (12) months.
- Must file a Statement of Economic Interests in compliance with Government Code Section 8100.
- Must complete a two hour Ethics training course every two years in compliance with California AB 1234.
- Must complete two hours of Sexual Harassment training every two years in compliance with California AB 1825.
- A valid California Class C Driver License and the ability to maintain insurability under the District's vehicle insurance program.
- Abide by all District policies, guidelines and rules.

ENVIRONMENTAL FACTORS:

- Exposure to the sun: 30% or less work time spent outside a building and exposed to the sun.
- Irregular or extended work hours: Occasionally required to change working hours or work overtime.
- Work performed in an office or hydro plant environment.

The mental and 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:

ESSENTIAL MENTAL ABILITIES:

- Exercise independent judgment.
- Self-directing and organized.
- Reason objectively.
- Assess, project and plan work activities on a daily and weekly basis.
- Interpret state/ federal/agency regulations.
- Document concisely, accurately and timely.
- Handle a variety of duties which may be interrupted or changed by immediate circumstances.

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TYPICAL PHYSICAL DEMANDS:

- Communicate orally and in writing with District management, co-workers, outside auditors, customers, and the public in face-to-face and one-on-one settings.
- Transport, set-up and removal of promotional equipment and materials at various public functions.
- Use of office equipment such as computer, copiers, scanners, and fax machines.
- Capable of negotiating stairways and uneven ground from time to time.

Sitting: Remains in a seated position for up to eight (8) hours per day
Hands/Arms: Operates computer for up to eight (8) hours per day
Lifting: Raises and lowers boxes and supplies up to twenty-five (25) pounds.
Stooping: Bends body downward and forward by bending at the knees or waist
Talking: Expresses ideas and shares information by means of spoken work in person and by telephone.
Hearing: Hears well enough to receive communications in person and by telephone.
Vision: Reads written and video messages for up to eight (8) hours per day. Operate vehicles and office equipment.

SUPERVISION:

The position receives general supervision from the Deputy General Manager, Water Rights/Supply.

I have reviewed this Job Description with my Supervisor and agree with its contents.

Employee Signature/Date

Supervisor Signature/Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.