

**RANCHO CALIFORNIA WATER DISTRICT
POSITION DESCRIPTION**

DATE: July 1, 2019

POSITION TITLE: **WATER SYSTEMS ANALYST**

GRADE LEVEL: M7

SUPERVISOR TITLE: Water Operations Manager

FLSA STATUS: Exempt Non-Exempt

BARGAINING UNIT: RCWDEA RCWD MPCEA

DEFINITION

Under general direction plans and organizes the activities related to the operation and maintenance of water supply, conveyance, treatment and distribution facilities, water supply planning, and replenishment management.

This position will exercise significant independence and is expected to exercise initiative and sound judgment in developing relevant information and resources, coordinating work activities with other departments, and in the selecting of analytical methods and techniques appropriate to assisting the managers in formulating and developing unit goals and objectives. This position will perform highly technical and specialized analytical duties associated with energy efficiency in support of the Districts energy efficiency goals and objectives; coordinate water supply management activities with other staff within RCWD and with outside agencies; and perform other related work as required.

CLASS CHARACTERISTICS

This is a professional advanced-level classification with responsibility for performing, a wide range of functions with relation to the District water supply and energy efficiency. Duties may include performing the most difficult and complex tasks assigned to the work unit. Assignments are broad and complex in scope and allow for a high degree of administrative discretion in their execution. This is an exempt classification and is represented by the Rancho California Water District Managers Professional Confidential Employees Association (RCWD MPCEA) bargaining unit.

EXAMPLE OF DUTIES (Duties may include, but are not limited to, the following):

- ✎ Performs data collection, interpretation, econometric and trend forecasting, and other technical analysis and research in support of water operations planning, water production and water supply management.
- ✎ Analyzes data and prepares a variety of routine and special reports; prepares charts, maps, graphs and flow diagrams in support of such reports; prepares data input and develops programs for computer processing and analysis of various data concerning water production and energy use.
- ✎ Assists in preparation, review and assessment of field reports and other monitoring data to determine impacts of activities within the watershed and, where applicable, verifies these activities to assure protection of the District's water supply operations.
- ✎ Reviews proposed regulations for impacts on the District's water and reclamation operations; recommends changes in order to comply with new regulatory requirements
- ✎ Utilizes appropriate data and analytical resources where they exist, including but not limited to, site visits, financial records, customer billing records, geographical information systems, hydraulic modeling studies, supervisory control and data acquisition records, facility performance data, historical maintenance and work order records, engineering construction records, topographical maps, and engineering standards.
- ✎ Develops data resources as needed to support analysis where existing sources are not available including supporting formats, quality assurance, procedures for collection and maintenance.
- ✎ Participates in the evaluation of key departmental performance indicators; develops and assists in the maintenance of departmental performance monitoring methods.
- ✎ Performs energy cost analysis
- ✎ Analyze pump efficiency data to identify deficiencies or opportunities for energy improvement
- ✎ Analyze production meter and customer meter data to determine water loss
- ✎ Analyze rate schedules and energy usage
- ✎ Maintains and update rate schedule within the SCADA system
- ✎ Performs specialized energy analysis utilizing power recording and analysis devices
- ✎ Prepares analysis and reports recommending cost-effective measures for energy improvements
- ✎ Research energy efficiency programs along with the ability to employ energy conservation measures
- ✎ Analyze and interpret various data sources to provide staff with information regarding operating efficiency, equipment performance, energy management and optimum rate schedule utilization
- ✎ Performs related duties as assigned

QUALIFICATIONS

Knowledge of:

- ✎ Basic principles of budget development
- ✎ Advanced mathematical principles related to water measurement, distribution systems, pump efficiencies, pump selection, fluid hydraulics, energy rate calculations
- ✎ Terminology and concepts relative to water supply and water resources management
- ✎ Principles and practices of groundwater and surface water resources management
- ✎ Trends, approaches and problem-solving techniques used in water supply, operations analysis and regulatory compliance.
- ✎ Basic principles and practices of computer modeling techniques; basic principles and practices of database development and maintenance.
- ✎ Trends, approaches and problem-solving techniques used in waterworks operations analysis, regulatory compliance and energy management.
- ✎ Motor and pump efficiency testing
- ✎ Pump curves and pump selection
- ✎ Electricity rate structure
- ✎ Electricity rate analysis
- ✎ Energy cost analysis
- ✎ Demand response programs
- ✎ Alternative energy sources
- ✎ Applicable laws, codes and regulations as they pertain to energy, water supply and water resource management.

Ability to:

- ✎ Diagnose advanced problems and provide effective solutions
- ✎ Research, analyze, summarize, develop conclusions and make sound independent recommendations regarding operational and financial data both manually and using computer analysis software.
- ✎ Analyze technical operational and water supply problems, evaluate alternatives and recommend effective solutions.
- ✎ Prepare clear visual displays, such as maps, graphs and illustrations.
- ✎ Communicate complex technical ~~energy-use~~ concepts to non-technical and non-financial people
- ✎ Understand utility rates and structure
- ✎ Write/compose in a clear and concise manner
- ✎ Coordinate assigned duties with other departments and/or agencies

SELECTION GUIDELINES

The appropriate knowledge, skills, and abilities can be achieved through a variety of combinations of experience and training. A typical example is:

Experience: Three years of experience in water operations, water resources or civil engineering.

Training: Bachelor's degree in engineering, water resources, hydrogeology, biology, environmental science, or a closely related field or an equivalent combination of training and experience within the water industry.

Licenses/Certificates:

- ✎ A valid California Driver's License, Class C with appropriate endorsements, and the ability to maintain insurability under the District's Vehicle Insurance Policy.
- ✎ Water Technology Certificate, preferred
- ✎ Grade D2 Water Distribution Certificate, preferred
- ✎ Grade T2 Water Treatment Certificate, preferred

PHYSICAL REQUIREMENTS/WORKING CONDITIONS

The essential functions of this position may require the employee to perform the following physical activities:

- ✎ Operate a District vehicle to travel between job sites and test repairs
- ✎ Carry, push, pull, reach and lift equipment and parts up to 60 lbs
- ✎ Stoop, kneel, crouch, crawl and climb during regular duties
- ✎ Regular attendance
- ✎ Communicate orally with District staff and customers in group and one-to-one settings
- ✎ Stand and walk for extended periods
- ✎ Hearing and vision within normal ranges
- ✎ Regularly use a telephone or radio for communication
- ✎ Regularly use a PC computer to access and communicate with SCADA systems

OTHER REQUIREMENTS

This position is classified as exempt from state and federal overtime pay provisions, because the duties and responsibilities meet the requirements for exemption under the Fair Labor Standards Act. The position will be required to work varying hours, weekends, and holidays as the day-to-day job duties may require.

Employee Signature

Date

Supervisor/Manager Signature

Date