

**RANCHO CALIFORNIA WATER DISTRICT
POSITION DESCRIPTION**

DATE: July 1, 2022

POSITION TITLE: **WATER SYSTEMS OPERATOR ANALYST**

GRADE LEVEL: E37

SUPERVISOR TITLE: Water Systems Supervisor

FLSA STATUS: [] Exempt [X] Non-Exempt

BARGAINING UNIT: [X] RCWDEA [] RCWD MPCEA







DEFINITION

This position will operate, maintain, and perform preventative maintenance on the District's transmission, and distribution systems, water storage facilities, and will independently perform highly technical and specialized analytical duties associated with energy efficiency in support of the Districts energy efficiency goals and objectives.

CLASS CHARACTERISTICS

This is an advanced journey level position to independently perform highly technical and specialized distribution, treatment and maintenance duties along with analytical responsibilities. This job classification is represented by the Rancho California Water District Employees Association (RCWDEA) bargaining unit.

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

-  Operate three distinctive, separate water distribution systems, including untreated, potable and recycled systems, using state-of-the-art electronic Supervisory Control and Data Acquisition systems (SCADA)
-  Analyze and interpret various data sources to provide staff with information regarding operating efficiency, equipment performance, energy management and optimum rate schedule utilization
-  Coordinate the monitoring of the transmission and distribution systems in conjunction with Water Quality; assist in identifying potential problems and coordinate system changes with Water Quality
-  Interpret SCADA, gauges, meters, charts and graphs; operate pumps, valves, motors and related equipment; inspect reservoirs, booster pump stations and wells
-  Perform preventive and predictive maintenance to automatic control valves and related components; report the need for major or specialized repairs to equipment, valves, machinery and electrical and electronic systems
-  Prepare analysis and reports recommending cost-effective measures for energy improvements

- ✎ Acknowledge, interpret and respond to alarms from pump stations, wells and distribution system; take corrective action as required
- ✎ Perform Water Quality functions, such as sampling for chlorine and ammonia residuals, turbidity, and nitrification
- ✎ Perform Emergency Hazardous Materials Response to District facilities; implement the District's emergency response plan; respond to releases or potential releases; function within an assigned role in the Incident Command System; use proper specialized chemical personal protective equipment.
- ✎ Maintain control valves throughout distribution systems including wells, pump stations, altitude valves, PR stations, relief valves; operate, exercise, and inventory mainline valves
- ✎ Flush water mains to ensure safe clean water is delivered to the customer, including the cleaning of mains after a shutdown and/or repair
- ✎ Conduct accurate calculations for Metropolitan Water District (MWD) flow increases and decreases
- ✎ Respond in a timely manner to computer generated calls and failures by remote access or physical inspection
- ✎ Perform mainline and facility shutdowns of system as needed for emergencies or planned maintenance
- ✎ Maintain the reclaimed distribution system
- ✎ Perform energy cost analysis
- ✎ Perform pump efficiency testing and analyze data to identify deficiencies or opportunities for energy improvement
- ✎ Assist in design and selection of pumps
- ✎ Perform testing and calibration of production meters
- ✎ Analyze rate schedules and energy usage
- ✎ Maintain and update rate schedule within the SCADA system
- ✎ Perform specialized energy analysis utilizing power recording and analysis devices
- ✎ Research energy efficiency programs along with the ability to employ energy conservation measures
- ✎ Available to be on-call
- ✎ Perform related duties as assigned

Knowledge of:

- ✎ District rules, regulations, policies and procedures
- ✎ Basic principles of budget development
- ✎ Advanced mathematical principles related to water measurement, distribution systems, pump efficiencies, pump selection, fluid hydraulics, energy rate calculations
- ✎ Pump testing equipment
- ✎ Motor and pump efficiency testing
- ✎ Pump curves and pump selection
- ✎ Meter testing and calibration techniques
- ✎ 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
- ✎ Advanced computerized water distribution system capabilities

Ability to:

- ✎ Diagnose advanced problems and provide effective solutions
- ✎ 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: Two (2) years of experience as a Senior Water Systems Operator or Five (5) or more years of increasingly responsible experience at a public water utility as a Water Systems Operator.

Training: Equivalent to completion of the 12th grade, supplemented by extensive specialized training in water distribution.

Licenses and Certificates:









- ✎ Water Technology Certificate, required
- ✎ Hazardous Materials Technician Certificate-OSHA 1910.120, required
- ✎ Grade D5 Water Distribution Certificate – CDPH, required
- ✎ Grade T3 Water Treatment Certificate – CDPH, required
- ✎ Valid California driver's license, required

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
- ✎ Regular Attendance
- ✎ Carry, push, pull, reach and lift equipment and parts up to 60 lbs
- ✎ Stoop, kneel, crouch, crawl and climb during regular duties
- ✎ 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
- ✎ Heavy exertion of energy
- ✎ Regularly use a telephone or radio for communication
- ✎ Regularly use a PC computer to access and communicate with SCADA systems
- ✎ Certified to wear a self-contained breathing apparatus (SCBA)

The essential functions of this position may expose the employee to the following working conditions:

-  Inclement weather
-  Toxic materials/gases
-  Electrical hazards
-  Heights
-  Confined spaces
-  Potentially dangerous tools and equipment
-  Traffic hazards
-  Potential earth cave-ins

OTHER REQUIREMENTS

-  Willingness to work nights, weekends, and overtime, as necessary
-  Must reside within a 30-minute response time to the District headquarters

_____	_____
Employee Signature	Date
_____	_____
Supervisor/Manager Signature	Date