



City of Phoenix

Water Systems Operator

Job Code:	50780	Job Function:	Utility Services
Salary Plan:	006	Grade:	350
FLSA:	Nonexempt	Labor Assign:	Unit 3 AFSCME 2960
Benefit Cat:	003	EEO-4:	Technicians
SOC:	51-8031.00	Last Revision:	June 2025

This description shall not be held to exclude other duties not specifically mentioned that are of similar kind or level of difficulty as the examples of typical functions of the classification. They are intended to describe the general nature and level of work being performed by individuals assigned to positions in this classification.

The fundamental reason this classification exists is to perform daily monitoring and control of staffed and non-staffed water works facilities through the operation of the Water Distribution Division's central computer system called Supervisory Control and Data Acquisition (SCADA). Incumbents routinely interact with project coordinators, water treatment plant and remote water facilities supervisors regarding current water demands, and determine daily plant and well production, as well as pumping and/or transmission requirements. Incumbents monitor City-wide water usage and communicate production and pumping needs among the City's surface water treatment plants and remote water facilities. Incumbents are also responsible for maintaining operational set points and alarm levels, as directed by a Water Facilities Supervisor. Work assignments are made by a supervisor(s), through written or oral instructions. Work is reviewed for results in meeting the operating requirements of the system.

DISTINGUISHING FEATURES OF THE CLASS:

This classification differs from the Water Systems Operator Senior in that the typical job functions listed below are performed under direct supervision and guidance.

SUPERVISION RECEIVED/GIVEN:

Supervision is received from a Water Systems Operator Senior*Lead or other supervisor.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only):

- Receives and assist with interpretation of real-time water system data for maintaining water service delivery and historical trending
- Adjusts water treatment plant production rates in response to daily water demands
- Orders via telephone or fax raw water for treatment plants
- Makes SRP weekly water order forecasts and water orders via direct computer modem hookup
- Turns wells on and off remotely
- Adjusts flow control valves remotely
- Under supervision and guidance responds to short-term emergency water supply situations
- Makes decisions regarding treatment plant productions based on short-term strategies as conveyed by the Superintendent



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- Maintains SCADA set points for computer-controlled wells, booster pumps, pressure control valves, storage tanks, and reservoirs
- Controls total water storage levels and pumping and plant production rates, in accordance with operational strategies developed by senior Water Services Department management
- Works with Instrumentation and Control Technicians and Operations & Maintenance Technicians in troubleshooting equipment failures and water system operation difficulties
- Notifies facility supervisors of equipment malfunctions
- Monitors chemical usages at remote (non-manned) facilities
- Updates ground water production database
- Inputs data to other water system databases not integrated with SCADA
- Initiates computer generated reports for management
- Documents daily water deliveries
- Diagnoses and identifies SCADA system malfunctions
- Communicates with other cities or governmental agencies regarding daily water orders and delivery schedules

REQUIRED KNOWLEDGE AND ABILITIES:

Knowledge of:

- City of Phoenix water distribution systems
- Computer applications with remote machinery or facility operations
- Mechanical procedures for activating or controlling a well, booster station, pressure reducing valve, reservoir, and storage tank operations

Ability to:

- Distinguish between the full range of colors in the color spectrum to work with alarm signal lights
- Operate keyboard devices such as calculators, PC, and CRT
- Determine the nature and urgency of a problem
- Establish priorities for own workload based upon such factors as need for immediate action, work objectives, and schedules
- Establish and maintain effective communications among superiors, subordinates, other departmental water operation personnel, and outside utility agencies
- Learn job-related material primarily through oral instruction and observation to effectively perform job duties. This learning takes place mainly in an on-the-job training setting
- Understand and follow oral and written instructions in the English language
- Communicate orally with other City employees and outside agencies using a telephone, in face-to-face, one-to-one and group settings in the English language
- Make decisions in accordance with the rules, regulations, and ordinances, pertaining to assigned organizational unit
- Work under pressure (i.e., handling significant problems and tasks which come up simultaneously and/or unexpectedly and approaching deadlines)
- Read, comprehend, and interpret written material in the English language.
- Comprehend and analyze spreadsheet reports



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- Work safely without presenting a direct threat to self or others

Additional Requirements:

- Must possess a Grade II Arizona Department of Environmental Quality Water Distribution Certification at time of hire and obtain a Grade III Water Distribution System Operator certification by the end of the probationary period
- Working irregular hours, shifts, weekends, holidays, and evenings will be required.
- Some positions will require the performance of other essential and marginal functions depending upon work location, assignment, or shift

ACCEPTABLE EXPERIENCE AND TRAINING:

Two years of experience in the operation of a large public water system (serving 50,000 persons or more) including experience with multiple pressure zones, pumping stations, large water storage reservoirs, transmission mains, well operation, elevated water tanks, metering stations, remote chlorination equipment, large diameter control valves, and personal computers.

Other combinations of experience and education that meet the minimum qualifications may be substituted.