Aqueduct & Reservoir Keeper (5813)
Task List 2020

1. Operates water diversion and water regulating structures, such as gates, valves, and check structures, by manually or electronically adjusting controls, such as turning a wheel on a Waterman Gate or operating a pneumatic operator for a Roto valve, in order to adjust for delivery and usage of water.

2. Monitor levels and flows of water in aqueducts, reservoirs, canals, ponds, creeks, ditches, pipelines, and other bodies of water by reading water measurement devices, such as staff gauges, data loggers, piezometers, pressure meters, weirs, flumes, remote terminal units (RTU), and programmable logic computers (PLC), then referencing rating tables and performing mathematical computations when necessary in order to determine adjustments needed to maintain desirable operational levels or flows of water.

3. Opens, closes, and/or adjusts equipment, such as valves, gates, and check structures, manually or by using automated equipment and then locks and tags such equipment for the purposes of isolating equipment for maintenance and repairs in order to reduce risk of injury to personnel and others and minimize damage to equipment.

4. Reads weather measuring devices, such as rain gauges, temperature gauges, and anemometers, and records data manually on paper or electronically using a tablet, phone or computer, such as current temperatures, minimum and maximum temperatures for the day, 24-hour precipitation total, wind speed and direction in order to maintain a record for future reference.

5. Patrols aqueducts, reservoirs, dams, canals, and other Department of Water and Power property for the purpose of preventing trespassers, locating and reporting unsafe, incorrect or unsanitary water and property conditions, such as illegal water diversions, turbid water, leaks in water conveyance facilities, illegal dumping, illegal camping, vandalism, and encroachments, in order to protect the overall health of the watershed and provide a safe and clean water source to the City of Los Angeles.

6. Observes and inspects critical infrastructure, such as aqueducts, reservoirs, dams, canals, turnout structures, diversion structures, measuring stations, and remote facilities, for damaged or poor conditions, such as vandalism, structural damage, and unsanitary conditions, in order to protect and preserve the functionality and safety of Department of Water and Power property.

7. Performs routine vegetation removal and ground maintenance work around dams, aqueducts, reservoirs, creeks, ditches, canals, and other Department of Water and Power property, including brush cutting, weed control, tree removal, fence repair, road maintenance, and other measures related to erosion control and fire control, in
order to ensure the safety of dams, preserve the function of water conveyance conduits, reduce fire hazards, and reduce water conveyance losses.

8. Makes minor repairs to the aqueduct/reservoir system and Department of Water and Power facilities, including but not limited to repairing and replacing small valves, performing concrete repairs during aqueduct shutdown, and replacing damaged irrigation pipelines, in order to preserve the function of the facility.

9. Removes trapped debris, such as dead animals, tumbleweeds, refuse, and algae, from water boxes, culverts, and water-screening devices, including sand traps, traveling screens, grizzly's, and trash rakes/brushes, by using a hook fork or rake to manually clear the debris or by operating an automated or mechanical device in order to allow sufficient and clean water to be delivered to the appropriate location.

10. Records operational and maintenance activities in a hardcopy daily patrol log, such as condition changes and status of all water control and conveyance facilities, including adjustments to water flow and level, in order to maintain a record of such activities for future reference.