



WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
is seeking qualified candidates for the following career opportunity:

ENGINEER

SALARY RANGE: \$95,056.17 - \$127,101.93 ANNUALLY

DEADLINE: OPEN UNTIL FILLED FIRST REVIEW OF APPLICATIONS: APRIL 12, 2019

Under direction of the Manager of Engineering, performs complex professional engineering work in the research and oversight of water resource projects; conducts research and analysis of specialized water resources and engineering issues; manages engineering design and construction work performed by outside contractors and consultants; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Engineer is the Professional Engineer class in the engineering series. An incumbent is responsible for performing complex engineering assignments requiring the use of judgment and initiative in developing solutions to problems, interpreting policies and determining work assignments. Incumbents are responsible for conducting studies of complex and specialized water resource issues and overseeing and monitoring engineering design and construction activities performed by consultants/contractors.

Engineer is distinguished from Senior Engineer in that incumbents in the latter class are responsible for planning, managing, overseeing and evaluating assigned engineering, capital construction and water quality programs/projects.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Plans and conducts specialized water resources studies, including recycled water research, wellhead treatment design, water rate analysis, groundwater basin management, saline plume mitigation and the development of alternative water supplies; evaluates the effectiveness of the District's efforts to combat seawater intrusion into groundwater supplies and the replenishment of groundwater at District spreading grounds and develops strategies to improve the effectiveness of these efforts; analyzes the effectiveness and efficiency of conjunctive use and groundwater storage programs; develops groundwater monitoring programs as needed.
2. Prepares specifications, requests for proposals and bid requests; analyzes bids and proposals; prepares estimates of costs for proposed projects and services; negotiates inter-agency contracts; manages and oversees the work of consultants and contractors performing advanced process water treatment plant design and construction; coordinates engineering work activities among professional, technical and support staff, contractors and other government agencies.
3. Oversees the drilling, installation, development and rehabilitation of District monitoring and production wells; oversees the testing of District aquifers.
4. Identifies and determines the scope of water resource engineering problems and recommends review by the Assistant General Manager & District Engineer; participates in the development of plans and solutions to problems identified by District management and/or the Board and identifies resource requirements; prepares agenda items and supporting materials for Board action; attends Board and committee meetings, prepares reports and makes presentations as assigned.
5. Performs other duties as assigned.

Knowledge of: Theory, principles and practices of civil engineering design and hydraulic engineering as applied to groundwater management operations; Principles of physics and mathematics applicable to civil engineering; Principles, modern techniques and equipment used in design, construction and maintenance of various capital construction projects; Principles, theories and practices of engineering, hydrology and water quality as applied to groundwater resources and availability in Southern California. Modern scientific methods and techniques used in the study and analysis of groundwater, seawater, surface water and aquifer characteristics; Modern developments, current literature and sources of information regarding engineering, water quality and water resources; Principles and practices of public administration, including contracting and maintenance of public records; Federal, state and local laws, regulations and court decisions applicable to assigned areas of responsibility; Research methods and statistical analysis techniques. 10. Principles and practices of sound business communication.

Ability to: Conduct and evaluate a variety of engineering and water resource studies; Perform difficult technical research and analyze complex engineering and mathematical problems, evaluating alternatives and recommending or adopting effective courses of action; Plan, organize and manage a full range of capital construction/maintenance projects; Collect, evaluate and interpret appropriate and applicable data, either in statistical, graphic or narrative form; Perform complex engineering and water quality analyses using scientific methods and computer equipment; Conduct independent research studies with a high degree of accuracy; Apply sound, creative problem solving techniques to resolve difficult program issues and problems; Understand, interpret, explain and apply laws, regulations, ordinances and policies applicable to program responsibilities; Perform accurate engineering calculations and cost estimates; Prepare clear, concise and comprehensive reports, correspondence and other documents appropriate to technical and non-technical audiences; Present conclusions and recommendations clearly, logically and persuasively to both internal and external program stakeholders; Ensure the maintenance of all required files, records and documentation; Communicate clearly and effectively, orally and in writing; and Establish and maintain effective working relationships with District management, staff, representatives of other agencies, external stakeholders, the public and others encountered in the course of work.

MINIMUM QUALIFICATIONS TO APPLY: Graduation from an accredited college or university with a bachelor's degree in civil engineering, hydrology or a closely related field; and five years of professional engineering experience, including experience in engineering or water quality research; or an equivalent combination of training and experience. **LICENSES; CERTIFICATES; SPECIAL REQUIREMENTS:** Current, valid registration as a Professional Engineer from the State of California. **APPLICATION AND SELECTION PROCESS:** The first review of applications will be April 12, 2019. To be considered for this opportunity please submit a (1) District application, (2) cover letter highlighting your applicable experience and (3) resume to Brandon Mims, Manager of Administration and Human Resources, bmims@wrdd.org by the first review date. The District is an Equal Opportunity Employer.



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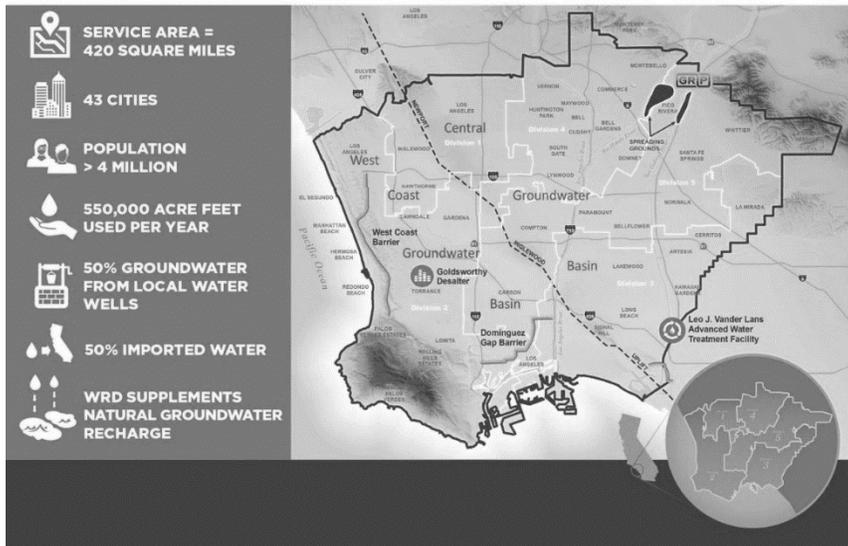
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The Water Replenishment District of Southern California (WRD) is the largest groundwater agency in the State of California, managing and protecting local groundwater resources for four million residents. WRD's service area covers a 420-square-mile region of southern Los Angeles County, the most populated county in the United States. The 43 cities in the service area, including a portion of the City of Los Angeles, uses about 250,000 acre-feet (82 billion gallons) of groundwater annually which accounts for approximately half of the region's water supply.



WRD SERVICE AREA IN SOUTHERN LA COUNTY



WRD ensures that a reliable supply of high-quality groundwater is available using recycled water and storm water capture. WRD is responsible for monitoring and testing groundwater throughout the region using effective management principles.

The Mission of WRD is "To provide, protect and preserve high-quality groundwater through innovative, cost-effective and environmentally sensitive basin management practices for the benefit of residents and businesses of the Central and West Coast Basins."

WRD was formed by a vote of the people in 1959 to protect the groundwater resources of the Central and West Coast Groundwater Basins. Prior to the formation of the District in 1959, unregulated and unmanaged over-pumping caused many water wells to go dry. Along the coastline, groundwater levels dropped below sea level, allowing the salty ocean water to seep into and contaminate the freshwater aquifers. Today, WRD protects the basins through artificial groundwater replenishment, ensuring that aquifers maintain healthy levels. WRD further protects the basins from seawater intrusion by injecting water into wells along the coastline to keep the ocean from further contaminating the fresh groundwater.

The major challenge to the District in more recent years has been the availability and cost of imported water for replenishment. Relatively low-cost imported water in the form of seasonal supply was a principal source of replenishment for 47 years. That water has not been readily available for the last eight years and its future availability is in doubt. The cost of uninterrupted imported supply continues to rise precipitously, making that alternative financially unattractive. As a result, WRD has revised its strategic approach to its mission in a major way. The District has adopted what is called the **Water Independence Now (WIN)** Program, whose purpose is to eliminate the use of imported water for replenishment and barrier injection. WIN is a suite of projects and programs designed to develop local supply alternatives in the form of increased recycled water and storm water capture to meet replenishment and barrier injection needs well into the future. The District anticipates completing WIN this year.

The **Albert Robles Center (ARC-AWTF)** is the cornerstone of WRD's WIN Program. The ARC project included installation of additional turnout structures to enhance operational and maintenance flexibility, which will increase recharge capacity significantly at the spreading grounds; as well as construction of a 14-MGD advanced water treatment plant. Upon completion in mid 2019, ARC will offset nearly seven billion gallons (21,000 acre-feet) of imported water, currently used to replenish the groundwater basins at the Montebello Forebay Spreading Grounds, with locally available recycled water (a combination of tertiary and advanced treated recycled water).

The District undertakes Clean Water projects to assist pumpers to treat and make productive use of contaminated water. Additionally, in 2001 the District built a significant groundwater desalter (known as "Goldsworthy Desalter") in Torrance to treat a portion of the saltwater plume that migrated inland before the seawater barriers were completed. The District recently worked with the City of Torrance to expand the Desalter's treatment capacity from 2.5 MGD to 5.0 MGD. Recent studies indicate that the saline plume is approximately 600,000 acre-feet in volume, presenting a significant water quality challenge and supply opportunity. A feasibility study is currently underway to potentially remediate and reuse all of this brackish groundwater. And, in 2013 and 2014, the courts approved amendments to the adjudications for the Central and West Coast Basins, setting forth a legal framework to store up to 450,000 acre-feet of water in the groundwater basins to help drought-proof the region. WRD was made the Administrative Body of Watermaster as part of the judgment amendments.