CLASSIFICATION: Postdoctoral Research Associate (Limited-Term Contract)  
Research & Development (R&D) Department, Field Research Laboratory (Anaheim)

JOB DESCRIPTION:

A Postdoctoral Research Associate position is available beginning January 2017 in the Field Research Laboratory (FRL) of the Orange County Water District (OCWD). Located in Anaheim near OCWD’s groundwater recharge operations and Field Headquarters (FHQ), the FRL is part of the Research and Development (R&D) Department. The mission of the R&D Department at OCWD is to conduct applied research that supports OCWD’s operational, regulatory, and water quality objectives. R&D scientists at FRL focus principally on enhancement of groundwater recharge, with respect to both quantity and quality of water.

Managed aquifer recharge is central component of OCWD’s mission as a groundwater basin manager. OCWD’s groundwater recharge supply portfolio is comprised of Santa Ana River water (both base flow and storm flow), imported surface water, and advanced treated recycled water, which are applied to over 20 individual recharge basins that cover in excess of 1,200 acres. At FRL, R&D scientists carry out applied research to maximize and optimize recharge, including activities such as sediment and water quality sampling, evaluations of monitoring and treatment technologies, instrumentation testing, experimental studies (e.g., soil column operation), and collaboration with universities and outside experts. Coordination with other OCWD departments is critical, including the Recharge Operations, Planning, Hydrogeology, and Water Quality Departments, as these staff help identify research needs and interpret study findings. FRL is currently staffed by one full-time R&D scientist and two student interns.

With oversight from the R&D Department Director, the Postdoctoral Research Associate will carry out applied research related to recharge optimization. The Postdoctoral Research Associate will be responsible for conducting field, office, and laboratory work, design and implementation of experiments, and managing project/task timelines and deliverables. Additional responsibilities include identification and pursuit of grant funding; assigning and coordinating tasks completed by interns; preparation of project reports; conducting literature reviews; and presenting at conferences and internal meetings.

Dependent on the candidate’s qualifications and interests, the Postdoctoral Research Associate will be directed to support various projects and identify other research projects, with the ultimate goal of providing operational recommendations and validating new methods/technologies, as well as publishing the findings. Examples of current FRL projects that the Postdoctoral Research Associate may support include: evaluation of fiber optic distributed temperature sensing (FODTS) for high-resolution measurement of basin percolation rates; soil column study to evaluate basin clogging during recharge of advanced treated recycled water; performance assessment of a demonstration-scale engineered riverbed filtration system for total suspended solids (TSS) removal; and evaluation of constructed wetland open water treatment cells. Future projects under consideration could include soil column studies to evaluate conveyance pipeline integrity enhancement to reduce basin clogging; other basin clogging minimization studies; use of geophysical methods and drones for data collection and operational monitoring; soil aquifer treatment during recharge; benefits and methods for basin sidewall cleaning; enhanced monitoring to assess basin cleaning techniques, and quagga mussel measurement, occurrence, and treatment.
Application Deadline: November 22, 2017
Preferred Start Date: January 2017

Applicants must provide a resume, a 1-2 page research statement/cover letter (highlighting research accomplishments, current research interests and goals, research experience relevant to OCWD and this job description, and long-term career aspirations), and the names, emails, and phone numbers of three references.

QUALIFICATIONS:

Applicants should have a strong interest in applied scientific research; excellent communication skills (presenting and writing) and organizational skills; strong quantitative skills; the ability to work both independently and within collaborative teams; experience designing and conducting scientific studies, experiments, and modeling; experience with field, laboratory, and computational modeling work; knowledge of safe field and laboratory practices and procedures; the ability to prepare clear and concise written project reports and publications. Note: OCWD does not sponsor work visas for international candidates.

A PhD in Hydrogeology/Hydrology, Earth Sciences/Geosciences/Geology, Geophysics, Soil Physics/Science, Geological/Civil/Environmental/Agricultural Engineering, or a related scientific/engineering discipline is required, with experience in topics such as hydrogeology, hydrogeophysics, soil physics, vadose zone hydrology, groundwater recharge, related instrumentation and monitoring, etc.

TERM:

The term of the Postdoctoral Research Associate position will be a one-year appointment via a limited-term (at will) contract, with the possibility of up to two annual renewals contingent on satisfactory performance, availability of funds, and project life.

SCHEDULE:
M-F (8:00am - 5:00pm)

Salary Range: $24.64 - $29.57 per hour

You must submit an OCWD online employment application to be considered. Please visit www.ocwd.com to complete an application.

Pre-employment drug screening is conducted for DOT Program positions. A valid California driver’s license and proof of automobile insurance is required.

Applications will be accepted until a sufficient number apply. EOE