

JOB DESCRIPTION AND POSITION CLASSIFICATION

CLASSIFICATION Senior Environmental Scientist (Specialist)		DWR POSITION NUMBER 1630-0765-013	SAP POSITION NUMBER 50099274	MCR 1
APPOINTEE Vacant		SAP PERSONNEL NO. TBD	DIVISION/SECTION DRA/Water Use Efficiency Branch/CIMIS Unit	
COLLECTIVE BARGAINING IDENTIFIER Management Related BU: <input type="checkbox"/> Supervisory Related BU: <input type="checkbox"/> Confidential Related BU: <input type="checkbox"/> Rank and File BU: <input checked="" type="checkbox"/> R10				
RESPONSIBILITIES EXERCISED <input type="checkbox"/> Supervisory <input checked="" type="checkbox"/> Lead Person		IMMEDIATE SUPERVISOR (Print) Ricardo Trezza	SUPERVISOR'S CLASSIFICATION Senior Environmental Scientist (Supv)	
APPROVED BY (Personnel Analyst's Name) C. Huber			DATE 07/16/2024	
<i>Percent of Time</i>	<i>Activity</i>			
30%	<p>POSITION SUMMARY Under the direction of the Senior Environmental Scientist Supervisor, the Senior Environmental Scientist Specialist conducts and develops plans of action for detailed scientific studies related to the functions of the California Irrigation Management Information System (CIMIS), manages contracts, and provides technical expertise for the advancement of efficient uses of California's water resources. Exercise a wide degree of independent professional discretion and judgment and serve as a technical expert and lead for a specific project, program function, or area of expertise. This position requires that the incumbent utilize advanced specialized expertise in Geographic Information Systems (GIS) concepts, remote sensing, statistical data analysis; identify and implement best practices for scientific data management; and work cooperatively with professionals in many disciplines and organizations.</p> <p>ESSENTIAL FUNCTIONS The position will focus on data analysis and provide expert GIS and data management support to the Program including spatial data analysis, data collection, technical research, and data mining and conversion. The incumbent must have extensive technical experience and knowledge to use and oversee the use of the Program's suite of specialized modeling tools and software including ESRI ArcGIS Pro, ESRI ArcGIS 10+, Python, R-Scripting, Statistical Packages, and Google Earth Engine. When necessary, the incumbent must be able to brief DWR management and make technical presentations at conferences on results of data collection and analysis. This position requires the incumbent to provide independent leadership, guidance, and technical expertise; work cooperatively with others at the State, local and federal levels; maintain regular, consistent, and predictable attendance. The specific essential duties are:</p> <p>Independently develop methodologies for refining ground-based and Spatial CIMIS reference evapotranspiration (ETo) methods to improve data accuracy and user interface; coordinate with Universities, Farm Advisors, Growers, and federal and state entities to develop information on crop coefficients (Kc) to be used with the CIMIS ETo data to support California agriculture.</p>			
SUPERVISOR'S STATEMENT: I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE.				
SUPERVISOR'S NAME (Print) Ricardo Trezza		SUPERVISOR'S SIGNATURE ➤		DATE
EMPLOYEE'S STATEMENT: I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT.				
EMPLOYEE'S NAME (Print) Vacant		EMPLOYEE'S SIGNATURE ➤		DATE

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<i>Percent of Time</i>	<i>Activity</i>			
30% Continued	<p>Plan, design and implement continued enhancements of the CIMIS program. As a lead person and expert on a technical panel consisting of the Division of Technology Services (DTS) and an IT development contractors, coordinate and lead the team on improving the Spatial CIMIS model, CIMIS data import procedures, CIMIS data quality control (QC) procedures, and CIMIS web portal upgrades.</p>			
25%	<p>Develop ArcGIS apps and user interfaces to improve visualization and distribution of ground-based and Spatial CIMIS data. Continuously monitor and analyze Spatial CIMIS data using ArcGIS and remote sensing tools. Work on the improvement of the ETo zones map. Conduct extensive and complex spatial data analysis using advanced scientific methods to improve spatial data accuracy and availability.</p>			
20%	<p>Work on improving processes that CIMIS uses to generate weekly reports to regional offices. Regularly evaluate and validate the sensors that CIMIS uses to measure weather parameters and implement changes as needed. Evaluate and improve sensor calibration procedures in coordination with other staff. Independently develop and manage projects that investigate and validate the scientific methods that CIMIS uses to estimate ETo and other intermediate parameters.</p>			
20%	<p>Serve as a technical expert in developing and presenting short courses, workshops, and training on the use of CIMIS data in irrigation scheduling and other related fields. Manage ETo related contracts and cooperative agreements with the public, local, and government agencies. Promote the advancement of efficient uses of water by presenting CIMIS workshops and short courses through local agencies for the farming and urban community. Represent the Water Use and Efficiency Branch at meetings, seminars, conferences, and workshops regarding CIMIS and other related Water Use Efficiency programs. Prepare reports, articles, and other promotional materials and provide technical assistance on CIMIS data use and other water use efficiency related programs to the general public and related advisory committees.</p>			
5%	<p>Perform special projects as assigned by the supervisor.</p>			
	<p>SPECIAL REQUIREMENTS</p> <p>This position requires some statewide overnight travels on uneven terrain or by air carriers. On occasions, overtime may be required. Incumbent must possess a valid California driver's license, and have computer skills in spreadsheets, word processing, and have good oral, written communication, and presentation skills.</p> <p>The Department of Water Resources (DWR) is committed to its mission and employees, and we are grounded in our commitment to public safety. DWR offers a hybrid workplace model that is designed to support a workforce of both office-centered and remote-centered workers. Regular and consistent attendance - whether office-centered or remote-centered - is essential to the successful performance in this position.</p> <p>All employees are responsible for contributing to an inclusive, safe, and secure work environment that values diverse cultures, perspectives, and experiences, and is free from discrimination.</p>			