JOB DESCRIPTION AND POSITION CLASSIFICATION

CLASSIFICATION	DWR POSITION NUMBER	SAP POSITION NUMBER	MCR
Engineer, Water Resources	**2064-3137-002**	**50099958**	**I**

APPOINTEE	SAP PERSONNEL NO.	DIVISION/SECTION
Vacant	**TBD**	**O&M/ADM-WM/WOPB/Supply Forecasting Unit**

COLLECTIVE BARGAINING IDENTIFIER

Management Related BU:	Supervisory Related BU:	Confidential Related BU:	Rank and File BU:
☐	☐	☐	☑ **R09**

RESPONSIBILITIES EXERCISED	IMMEDIATE SUPERVISOR (Print)	SUPERVISOR'S CLASSIFICATION
☐ Supervisory ☐ Lead Person	**Raymond Hoang**	**Senior Engineer, Water Resources**

APPROVED BY (Personnel Analyst's Name)	DATE
Taylor Marshall	**11/2/2026**

Percent of Time	*Activity*
	POSITION SUMMARY **Under the direction of the Unit Manager, as part of the Supply Forecasting Unit, the incumbent is responsible for planning State Water Project (SWP) operations while meeting the regulatory and environmental requirements in the Sacramento-San Joaquin Delta.**
	ESSENTIAL FUNCTIONS **This position requires that the incumbent work cooperatively and respectfully with others; maintain regular, consistent, and predictable attendance; and exercise good judgment. The incumbent must have excellent communication skills for maintaining productive planning activities as well as a congenial and respectful work environment. The specific essential duties include, but are not limited to, the following:**
30%	**Use modeling tools to access and analyze strategies to aid the coordination and account for operational alternatives associated with the Water Quality Control Plan update and Voluntary Agreements. Maintain and update SWP planning operations and hydrological data that are used for assessments and accounting for ecological water distributions as well as storing and supplying water. Maintain and improve systems for storing the aforementioned data using computer programs such as MS Excel and CALSIM III as well as computer languages such as Visual Basic for Applications, Python, Structured query language (SQL), and Water Resources Simulation Language (WRESL). With computer programs report projection analyses for State Water Project operations and storages.**
30%	**Perform engineering analyses for supply forecasts and operational planning decisions using SWP/Central Valley Project (CVP) operations models. These are data driven models accounting for hydrological conditions, requested water demands from the State Water Contractors (SWC), regulatory requirements in the rivers and Delta related to Water Rights Permits, Endangered Species Act, Clean Water Act, contractual/ inter-agency agreements, other flow/salinity objectives, and ecosystem benefits. Plan and coordinate activities related to model parameters and objectives among staff and stakeholders.**

SUPERVISOR'S STATEMENT: **I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE.**

SUPERVISOR'S NAME (Print)	SUPERVISOR'S SIGNATURE	DATE
Raymond Hoang	➢	

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)	EMPLOYEE'S SIGNATURE	DATE
Vacant	➢	

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Vacant	**TBD**	**O&M/ADM-WM/WOPB/Supply Forecasting Unit**

Percent of Time	*Activity*
15%	**With computer programs such as Microsoft Access, Excel, Word, and Power Point, prepare engineering reports, graphs, and tables for use in operations planning studies and meeting presentations. Develop and maintain metric reports to measure planning operations and strategies against daily operations and strategies utilizing business intelligence tools such as PowerBI, Tableau, and/or Excel. Assess, monitor, and report metric discrepancies and recommend possible strategies or planning adjustments. Present SWP operations data to a wide variety of audiences.**
15%	**Assist unit, section, and branch managers in formulating strategies, coordinating with other entities, and conducting engineering studies regarding issues that affect current and future SWP operations including, but not limited to, activities related to proposed water transfer and environmental mitigation activities.**
10%	**Assist with hydrology analysis with historical data acquisition, QA/QC, and pattern recognition. Assess impacts with climate change analyses and related data management projects. Assess alternative project operations and water supply impacts. Analyze outage and maintenance impacts to operations and deliveries at key facilities and reservoirs.**

SPECIAL REQUIREMENTS

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. Must be willing to sometimes work outside of normal business hours, travel, and stay overnight in various locations throughout the State of California. The Department of Water Resources is committed to its mission and employees, and we are grounded in our commitment to public safety. Regular, consistent, and predictable attendance is essential to the successful performance in this position.Employees are required to successfully complete all safety training related to the functions of the job.

KNOWLEDGE, SKILLS, AND ABILITIES

Incumbent must be able to utilize computers effectively to analyze extensive amounts of data and information accurately under tight time constraints. Communicate effectively both orally and in writing. Maintain good interpersonal relationships, whether working independently or in groups.

OTHER REQUIREMENTS:

This position provides necessary support to the Divisions of Flood Management, Safety of Dams, Operations and Maintenance, Engineering, and/or the Public Affairs Office during Governor declared emergencies, flood, dam, SWP, and other incidents and emergencies. Additionally, this position may participate in emergency operations in the capacity of area teams, field inspection, coordination, and assist agencies such as Cal OES and FEMA in disaster work, including performing fieldwork to complete damage survey reports for droughts, flooding, earthquakes, and other emergencies. This position may also serve in one of the sections as established in the Incident Command System to assist the Department in performing its emergency preparedness, response, recovery, and mitigation functions. These functions are established in the California State Emergency Plan and the Department's Administrative Orders.