

**JOB DESCRIPTION AND POSITION CLASSIFICATION**

CLASSIFICATION <b>Engineer, Water Resources</b>		DWR POSITION NUMBER <b>1730-3137-013</b>	SAP POSITION NUMBER <b>50001310</b>	MCR <b>1</b>
APPOINTEE <b>Vacant</b>		SAP PERSONNEL NO.	DIVISION/SECTION <b>DSOD/Design Engineering Branch/Des. Section 4</b>	
COLLECTIVE BARGAINING IDENTIFIER Management Related BU: <input type="checkbox"/> Supervisory Related BU: <input type="checkbox"/> Confidential Related BU: <input checked="" type="checkbox"/> Rank and File BU: <b>R09</b>				
RESPONSIBILITIES EXERCISED <input type="checkbox"/> Supervisory <input type="checkbox"/> Lead Person		IMMEDIATE SUPERVISOR (Print) <b>Zhuo (George) Hu</b>	SUPERVISOR'S CLASSIFICATION <b>Supervising Engineer, Water Resources</b>	
APPROVED BY (Personnel Analyst's Name) <b>Marissa Arriaga</b>			DATE <b>5/21/26</b>	
<i>Percent of Time</i>	<i>Activity</i>			
	<b>POSITION SUMMARY</b> Under the direction of a Supervising Engineer in the Design Engineering Branch, the incumbent performs difficult and complex engineering assignments regarding the design and evaluation of dams and appurtenant structures. Dam safety design review includes, but is not limited to; seismic analyses, hydrology and hydraulic studies, foundation evaluations, geotechnical analyses, structural analyses, embankment stability evaluations, material testing, seismology, preliminary planning, constructibility, and dam performance monitoring.			
	<b>ESSENTIAL FUNCTIONS</b> This position requires the incumbent to have good communication abilities, technical skills, maintain consistent predictable attendance, and adhere to the Division's policies and procedures. The incumbent must interact well with Division staff, dam owners, consulting engineers, and the general public. Assignments require site visits, sometimes in remote areas. This position requires the incumbent to drive a vehicle under difficult driving conditions on public roadways and or in the field on uneven terrain. The specific essential duties are:			
<b>35%</b>	Review and analyze complex plans, specifications, and technical reports for the construction, enlargement, or modification of dams and their appurtenant structures. Develop conclusions and recommendations supported by independent engineering analyses of the submitted design. Dam safety analyses require the use of routine office software and specialized engineering software to conduct hydrology and hydraulic studies, seismic analysis, soil and rock slope stability, structural analysis, and earthquake engineering.			
<b>25%</b>	Prepare complex engineering calculations, memoranda, presentations, briefings, database input, and correspondence. Prepare technical comments on plans, specifications, and reports incorporating engineering analysis results and input from other branches. Represent the Division and assist in conducting meetings with dam owners and their consulting engineers regarding the design, construction, and re-evaluation of dams.			
SUPERVISOR'S STATEMENT:		<b>I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE.</b>		
SUPERVISOR'S NAME (Print) <b>Zhuo (George) Hu</b>		SUPERVISOR'S SIGNATURE ➤		DATE
EMPLOYEE'S STATEMENT:		<b>I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT.</b>		
EMPLOYEE'S NAME (Print) <b>Vacant</b>		EMPLOYEE'S SIGNATURE ➤		DATE

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<i>Percent of Time</i>	<i>Activity</i>		
<b>20%</b>	<p><b>Review and comment on exploration proposals and conduct field inspections to ensure appropriate design information is obtained. Observe drilling, sampling, and testing of dam and foundation materials. Review material testing proposals and laboratory results. Participate in on-site inspections of construction in progress and provide technical feedback to field engineers.</b></p>		
<b>10%</b>	<p><b>As needed, perform duties associated with other engineering branches, which may include but are not limited to maintenance inspections, construction inspections, design reviews, risk assessments, re-evaluations, and inundation mapping reviews.</b></p>		
<b>5%</b>	<p><b>Update project status and other data using the Division's customized Microsoft Access database. Maintain dam files with current project and correspondence documentation.</b></p>		
<b>5%</b>	<p><b>Review and prepare documentation necessary to meet the requirements of the California Environmental Quality Act (CEQA). Evaluate proposed and existing dams for potential state jurisdiction pursuant to the California Water Code and Code of Regulations.</b></p>		
	<p><b>OTHER RESPONSIBILITIES</b></p> <p><b>This position provides necessary support to the Divisions of Flood Management, Safety of Dams, Operations and Maintenance, Engineering and/or 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 CalOES and FEMA in disaster work, including performing fieldwork to complete damage survey reports for droughts, flooding, earthquakes, and other emergencies. This position may serve in one of the sections as established in the Incident Command System to assist the Department in performing its emergency response functions. These functions are established in the California State Emergency Plan and the Department's Administrative Orders.</b></p>		

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	<p><b>SPECIAL REQUIREMENTS</b></p> <p><b>Incumbent must possess a valid driver's license and be able to travel by airplane and/or vehicle to different areas of California with some overnight travel, as required. This position requires the ability to inspect dams following appropriate safety protocols, which includes walking sloped dam faces, climbing steep abutments, climbing ladders, and similar physical activity. Must maintain training, certification, and the ability to inspect excavation trenches and confined spaces.</b></p> <p><b>This position requires that the incumbent possess general knowledge of, and ability to learn, current design practices of dams including; geotechnical, hydraulic, hydrologic, and structural engineering using computers and computer software. Typical programs used are Powerpoint, Word, Excel, Access, and technical engineering software such as HEC-RAS, HEC-HMS, SLOPE/W, SEEP/W. Advanced software may include FLAC, SAP2000, and LS-DYNA.</b></p> <p><b>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.</b></p> <p><b>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.</b></p>		