

DUTY STATEMENT

DFW 242A (REV. 07/18/22)

Department Statement:

California is one of the most biodiverse places on the planet. As such, the Department of Fish and Wildlife (CDFW) values diverse employees working together to protect nature for all Californians. CDFW is committed to fostering an inclusive work environment where all backgrounds, cultures, and personal experiences can thrive and connect others to our critical mission.

INSTRUCTIONS: A duty statement and organizational chart must be submitted with each Request for Personnel Action, Form 242	EFFECTIVE DATE
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DFW DIVISION/BRANCH/REGION/OFFICE Water Branch	POSITION NUMBER (Agency-Unit-Class-Serial) 565-038-0765-054
UNIT NAME AND LOCATION SWP Modeling, West Sacramento	CLASS TITLE Senior Environmental Scientist (Specialist)
INCUMBENT Vacant	CURRENT POSITION NUMBER (Agency-Unit-Class-Serial) 565-038-0765-054

BRIEFLY DESCRIBE THE POSITION'S ORGANIZATION SETTING AND MAJOR FUNCTIONS
Under the direct supervision of an Environmental Program Manager (Managerial) and as a member of the California Department of Fish and Wildlife's (Department) State Water Project (SWP) Modeling Unit, the quantitative ecologist will be leading data analyses and modeling efforts pertaining to Central Valley fish species listed as threatened or endangered under the California Endangered Species Act (Longfin Smelt, Delta Smelt, Winter-Run Chinook Salmon, and Spring-Run Chinook Salmon) and Bay-Delta ecology to better understand ecological effects and species-specific impacts associated with water operations. The incumbent will also collaborate with Department scientists, Department engineers, and outside experts (including non-governmental organizations (NGOs), stakeholders, and state and federal agencies) by participating in and leading technical teams, analyses, and modeling efforts. The Specialist will publish their results in technical reports and peer-reviewed publications as well as assist with the preparation, review, and implementation of California Environmental Quality Act (CEQA) documents and Incidental Take Permits (ITP). Specific duties and responsibilities are as described below.

PERCENTAGE OF TIME PERFORMING DUTIES	INDICATE THE DUTIES AND RESPONSIBILITIES ASSIGNED TO THE POSITION AND THE PERCENTAGE OF TIME SPENT ON EACH. GROUP RELATED TASKS UNDER THE SAME PERCENTAGE WITH THE HIGHEST PERCENTAGE FIRST. (USE THE REVERSE SIDE IF NECESSARY.)
35%	<p><u>ESSENTIAL FUNCTIONS:</u></p> <p>ANALYSIS, SYNTHESIS, and MODELING: As part of the State Water Project Modeling Unit and in collaboration with Department scientists, Department engineers, and outside experts, the incumbent conducts literature reviews; statistical analyses; research; synthesis of diverse, multi-disciplinary, and disparate datasets; time series analyses; modeling; and development of conceptual models on topics of fisheries and ecosystem management concern in a responsible and rigorous manner to ensure useable scientific information for decision makers and stakeholders to effectively and collaboratively implement the State Water Project (SWP) Incidental Take Permit (ITP) and biological opinions for long-term operations of the SWP and Central Valley Project. The incumbent will use statistical coding software (such as R or Python) to perform advanced analyses, which potentially include machine learning and lifecycle models. The incumbent will follow appropriate aspects of data science (e.g., data generation, management, quality control, storage, visualization, archiving, and sharing) as consistent with State of California programs.</p>
25%	<p>PUBLICATION AND PRESENTATION: The incumbent will prepare timely publications in the form of effects analyses and appendices, technical reports, and peer-reviewed journals pertaining to the implementation of the SWP ITP and biological opinions for long-term operations of the SWP and Central Valley Project. The incumbent will give presentations at interagency meetings, interagency collaborative working teams, or other conferences or panels convened for the purpose of sharing information with the broader scientific community and to help inform policy makers, high-level managers, or review committees.</p>

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15%	<p>COLLABORATIVE TECHNICAL ENGAGEMENT: The incumbent will contribute as a collaborator in efforts to identify analytical, modeling, and research needs and make recommendations to senior Department Water Branch staff and leadership, interagency policy makers, high-level managers, or review committees regarding the implementation of the SWP ITP and biological opinions for long-term operations of the SWP and Central Valley Project. The incumbent will help identify feasible underlying science questions and information gaps related to the implementation of the SWP ITP and biological opinions for long-term operations of the SWP and Central Valley Project. The incumbent will review and provide constructive comments as a technical expert on draft manuscripts, proposals, or reports for which the incumbent is not leading that are related to the SWP ITP and biological opinions for long-term operations of the SWP and Central Valley Project. Review times are very short and require excellent organizational skills and communication skills to resolve differences in perspectives that may arise during the coordinated review processes with other agencies, stakeholders, and NGOs.</p>
10%	<p>TECHNICAL LEADERSHIP AND COORDINATION: The incumbent will actively participate in or lead formal trainings and developmental outreach to Department personnel and collaborative partnerships (including NGOs, stakeholders, and state and federal agencies) relating to the implementation of SWP ITP and biological opinions for long-term operations of the SWP and Central Valley Project. The incumbent will promote and support training to further the development of analyses, statistical models, mechanistic models, and conceptual models to advance the understanding of the Delta ecosystem and Central Valley listed and candidate species fish species (Longfin Smelt, Delta Smelt, Winter-Run Chinook Salmon, Spring-Run Chinook Salmon, and White Sturgeon).</p>
10%	<p>SCIENCE MENTORING, SUPPORT, AND DEVELOPMENT: The incumbent will act as a scientific mentor and provide quality control and analytical support for Department environmental scientists conducting work relating to the implementation of SWP ITP and biological opinions for long-term operations of the SWP and Central Valley Project. The incumbent will keep informed on new technologies or analytical capabilities to support analytical, modeling, and synthesis efforts. The incumbent may provide backup for senior staff when necessary.</p>
5%	<p><u>NON-ESSENTIAL FUNCTIONS:</u></p> <p>The incumbent will perform administrative duties such as preparing and submitting monthly time expenditure reports, expense claims, vehicle usage logs, annual Individual Development Plan, and annual work plans. The incumbent will maintain and increase professional qualifications and expertise through training, conferences, workshop attendance, professional/scientific committee participation, reviewing scientific literature, and by conducting on-site habitat assessments and species surveys in coordination with Department staff, other agencies, and professional biologists. Participate in the response and development of bill analyses.</p> <p>Special Experience: Graduate or post graduate fisheries-related work in statistics; numerical, theoretical, and conceptual modeling; experience with lifecycle models, mixed effects modeling, machine learning; and/or Bayesian modeling.</p> <p>Special Personal Characteristics: Detail oriented with a demonstrated ability to act independently and with open-mindedness, flexibility, and tact. Specifically, a high degree of personal initiative, dependability, professionalism, and integrity is expected. The incumbent is open to feedback on performance, can adapt to changing challenges, and demonstrates empathy and understanding of stakeholders' interests.</p>

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	<p>Interpersonal Skills: Able to work independently and in a team setting; communicate politely, tactfully, and firmly as necessary with members of the public; demonstrate excellent listening skills and effective negotiation skills; and work effectively in a diverse work environment.</p> <p>WORKING CONDITIONS: The position requires the use of a computer for several hours each day, the completion of office tasks that require sitting, standing, and walking to other locations; attendance at meetings and participation in conference calls. The position may require travel throughout the state including overnight travel, early mornings, late nights, hiking over uneven and possibly steep or wet terrain, use of 4-wheel drive vehicle (including all-terrain vehicle), and work in inclement weather. The position may require the incumbent to wear a uniform identifying the employee as Department staff.</p>	
<p>SUPERVISOR'S STATEMENT: I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE.</p>		
<p>PRINT SUPERVISOR'S NAME Jereme Gaeta</p>	<p>SUPERVISOR'S SIGNATURE</p>	<p>DATE</p>
<p>EMPLOYEE'S STATEMENT: I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT. I HAVE READ AND UNDERSTAND THE DUTIES AND ESSENTIAL FUNCTIONS OF THE POSITION AND CAN PERFORM THESE DUTIES WITH OR WITHOUT REASONABLE ACCOMMODATION.</p>		
<p>PRINT EMPLOYEE'S NAME</p>	<p>EMPLOYEE'S SIGNATURE</p>	<p>DATE</p>