**STATE OF CALIFORNIA**  
**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**  
**POSITION ESSENTIAL FUNCTIONS DUTIES STATEMENT**  
PO-199 (06/16)

**Working Title of Position**  
GIS Specialist I

**Division and/or Subdivision**  
Office of the State Fire Marshal/Community Wildfire Preparedness and Mitigation Division/

**Location of Headquarters**  
Sacramento

**Class Title of Position**  
Research Data Specialist I

**Position Number**  
543-063-5742-XXX

**Effective Date**  
August 2022

**INSTRUCTIONS:** The Director is required by Government Code Section 19818.12 to report (or to record) “…material changes in the duties of any position in his or her jurisdiction”. The Position Essential Functions Duties Statement is used for this purpose. Enter identifying information and effective date at the right. Enter brief description of each of the important duties and responsibilities of the position below. Group related duties in numbered paragraphs and indicate the percentage of total time occupied. Indicate the “essential functions” of the position by placing an asterisk (*) in front of those individual duties you determine to be essential to the job. Discuss the duties with the employee assigned to the position. Both the employee and supervisor sign the document where indicated. The supervisor retains the original document and provides a copy to the employee.

<table>
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<tr>
<th>Percentage of Time Required</th>
<th>Effective on the date indicated, the employee assigned to the position identified above performs the following duties and responsibilities.</th>
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<tr>
<td>30%</td>
<td>Under the general direction of the Pre-Fire Planning Deputy Chief, the Research Data Specialist I (RDS I) is responsible for providing expertise, in-depth analysis, support, and research relating to Geographic Information Systems (GIS) for Pre-Fire Planning. Responsibilities include providing training, guidance, and coordination to other staff that work with GIS within Pre-Fire Planning and the Community Wildfire Preparedness and Mitigation Division (CWPM). The RDS I will collaborate with other GIS personnel in the Department and other relevant federal, state, and local agencies to identify research needs, methodologies, and write research proposals that are within the scope of CWPM. The duties of the incumbent include, but are not limited to:</td>
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<td>*Provide technical guidance to the CWPM leadership in the adoption and implementation of new technologies (GIS and IT) relevant to the program’s success. Develop, maintain, and generate GIS data for Pre-Fire Planning, and other CWPM activities using digitizing, database development, cartography, and reporting. Determine solutions for data development and mapping needs, utilizing program processes and government regulations to ensure accurate and critical information for internal and external use.</td>
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<tr>
<td>25%</td>
<td>*Write authoritative guides, documents, and research papers to be published in peer reviewed research journals. Identify and utilize research methodologies that can be used to evaluate the impacts and effectiveness of codes and regulations on the survivability of homes during a wildland fire. Interact with research collaborators inside and outside the Department that specialize in similar Pre-Fire Planning work. Write research proposals and grant applications when needed. Conduct research on modeling techniques to evaluate the impacts and effectiveness of codes and mitigation during a wildland fire and provide information on findings to the Pre-Fire Planning program, CAL FIRE Units, and Contract Counties.</td>
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*These are the essential functions for this position. Essential functions are those functions that the individual who holds the position must be able to perform unaided or with the assistance of a reasonable accommodation.*

**Equal Employment Opportunity (EEO) Statement:** All CAL FIRE employees are expected to conduct themselves in a professional manner that demonstrates respect for all employees and others they come in contact with during work hours, during work related activities, and anytime they represent the department. Additionally, all CAL FIRE employees are responsible for promoting a safe and secure work environment free from discrimination, harassment, inappropriate conduct, or retaliation.

**Job qualifications and/or conditions of employment:** See next page.

"We have discussed this document in its entirety and understand the duties of this position."

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<tr>
<th>Employee Signature</th>
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<th>Supervisor Signature</th>
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**Personnel use only**  
☑ Posted to Directory  
Initials and date
Effective on the date indicated, the employee assigned to the position identified above performs the following duties and responsibilities.

**20%**

*Identify and develop data collection methodologies that utilize Field Maps, Survey123 and related ArcGIS applications in an Enterprise GIS including versioned editing; Implement, post, and reconcile quality assurance procedures, replication/synchronization strategies, and technical support of CAL FIRE staff utilizing these apps in support of CWPM, and other programs as directed. Maintain strong connections with the Environmental Systems Research Institute (ESRI) teams that develop the apps used by the program. Provide feedback and interact directly with ESRI development teams on new apps that may be used by the Department and Division.*

**15%**

*Develop and migrate authoritative CAL FIRE GIS services to both Arc Spatial Database Engine (SDE) Geodatabase(s) and ArcGIS Online environments. Write metadata to enhance discoverability of the data to outside users through federated portals and CAL FIRE managed ArcGIS Hub websites. *Develop map cache strategies and implement effective web map services, feature map services, geo-processing services and web map applications using ArcGIS Server (workgroup and enterprise), java script and/or html5. Conduct database queries, spatial overlays and other GIS analysis using ArcGIS, Oracle, Sequel Server, and other relational databases. Assist the Department’s eGIS committee with ArcGIS Online account management and serve as a technical resource.  

**5%**

*Respond to emergency incidents as required per Department policy. Maintain proficiency, qualification, and experience standards in accordance with applicable laws, rules, and Departmental policy.*

**5%**

*Other job related duties as assigned.*

**Desirable Qualification:**

- Strong customer service skills
- Bachelor’s Degree in related field
- Effectively handle high priority tasks and assignments simultaneously
- Experience with Microsoft Office Suite (Word, Excel, PowerPoint, Publisher)
- Experience with Environmental Systems Research Institute (ESRI) software
- Possession of Valid Driver's License issued by the Department of Motor Vehicles

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Job qualifications and/or conditions of employment: **Local and Statewide travel may be required up to 15% of the time and may include overnight stays.**

"We have discussed this document in its entirety and understand the duties of this position."