



California Department of Forestry and Fire Protection (CAL FIRE)  
SRAFPF/TM Grant Project FY 2016-17  
Scope of Work

**Project Name**

**Project Tracking Number**

El Dorado County Tree Mortality Project

16-AEU-0005

**Project Description Summary:** Please provide a paragraph summarizing the proposed project including the location, habitable structures, acres treated, number of trees to be removed, etc.

El Dorado County proposes to provide a Tree Mortality (TM) project for private property owners living in County Responsibility Area High Hazard Zones, who have dead trees on their property within 300 ft of their dwelling (that meet the requirements established in the Application Procedural Guide section entitled Tree Mortality) and who are also not being served by any other TM efforts. Countywide, TM projects are currently underway through efforts made by PG&E and through County efforts funded through the California Disaster Assistance Act Program. However, most of the current efforts fail to allow funding for dead tree removal on private property. While local Fire Safe Councils and Fire Districts are currently applying for funding through this program, these local entities have defined service areas unique to their jurisdiction. Many residents in El Dorado County live in unincorporated townships and areas without a local entity conducting TM services. Further, El Dorado County's population over the age of 65 encompasses approximately 18.6% of the county population, many of whom own land and have limited or no incomes. As a result, a need exists for TM services for those who will not be served as a result of the efforts of a local district; there needs to be a countywide last resort to help the senior population.

El Dorado County proposes to establish an eligibility criteria based on income and age that will identify property owners in High Hazard Zones with dead trees in close proximity to their dwellings and then remove these trees as a part of the program, to the extent funding is available.

With the cost of the removal of dead trees that are close to homes being significantly higher, El Dorado County projects the removal of approximately 42 trees from the

## **A. Project Description**

This item is broken into project specific criteria depending on the type of project being proposed: planning, education and tree Removal. Please **only answer the one set of questions** in this section that pertain to your project.

### **Removal of Dead or Dying Tree Projects**

1. Describe the geographic scope of the project, including an estimate of the number of dead/dying trees that will be removed or specific activity in support of dead and dying tree removal.
2. Describe the goals, objectives, and expected outcomes of the project, this could include, but is not limited to number of homes treated, number of trees removed, or number miles of roads treated, etc.
3. Provide a clear rationale for how the proposed project will identify dead or dying trees that pose an threat to public health and safety.
4. Identify any additional assets at risk to wildfire and tree mortality that will benefit from the proposed project. These may include, but are not limited to, domestic and municipal water supplies, power lines, communication facilities and community centers, residences and neighborhoods.
5. Is the scale of the project appropriate to achieve the stated goals, objectives and outcomes discussed in Item 2 above?

### **Fuel Reduction Projects**

1. Describe the geographic scope of the project, including an estimate of the number of habitable structures in the SRA and the names of the general communities that will benefit.
2. Describe the goals, objectives, and expected outcomes of the project.
3. Provide a clear rationale for how the proposed project will reduce the risks associated with wildfire to habitable structures in the SRA.
4. Identify any additional assets at risk to wildfire that will benefit from the proposed project. These may include, but are not limited to, domestic and municipal water supplies, power lines, communication facilities and community centers.
5. Is the scale of the project appropriate to achieve the stated goals, objectives and outcomes discussed in Item 2 above?



## **A. Project Description Continued**

### **Planning Projects**

1. Describe the geographic scope of the project, including the communities that will benefit, and an estimate of the number of structures within the project area.
2. Describe how the project will assess the risks to residents and structures in the SRA and prioritize projects to reduce this risk over time.
3. Does the proposed plan add or build upon previous wildfire prevention planning efforts in the general project area?
4. Identify a diverse group of key stakeholders, including local, state, and federal officials where appropriate, to collaborate with during the planning process. Discuss how the project proponent plans to engage with these targeted stakeholders.
5. Describe the pathways for community involvement that will be incorporated in the planning process.

### **Education and Training Projects**

1. Describe the specific message of the education program and how it relates to reducing the risk of wildfire to owners of structures in the SRA.
2. Describe the target audience of the education program and how information will be distributed to this audience.
3. Will the education program raise the awareness of homeowner responsibilities of living in a fire prone environment?
4. Identify specific actions being advocated in the education material that are expected to increase the preparedness of residents and structures in the SRA for wildfire.
5. Describe the expected outcome of the education in terms of increased or changed public awareness about wildfire.

## **B. Relationship to Strategic Plans**

Does the proposed project support the goals and objectives of the California Strategic Fire Plan, the local CAL FIRE Unit Fire Plan, a Community Wildfire Protection Plan (CWPP), County Fire Plan, or other long term planning document?

### **C. Degree of Risk**

1. Discuss the location of the project in relation to areas of moderate, high, or very high fire hazard severity zone as identified by the latest Fire and Resource Assessment Program maps. Fire hazard severity zone maps by county can be accessed at:  
[http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_zones\\_maps.php](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.php)
2. Describe the geographic proximity of the project to structures at risk to damage from wildfire in the SRA.
3. Describe the projects geographic location related to the latest tree mortality Aerial Detection Survey and Tree Mortality High Hazard Zones.

### **D. Community Support**

1. Does the project include any matching funds from other funding sources or any in-kind contributions that are expected to extend the impact of the proposed project?
2. Describe any cooperating entities in the dead and dying tree removal along with this project being part of a larger tree removal project (if applicable).
3. Describe plans for external communications during the life of the project to keep the effected community informed about the goals, objectives and progress of the project. Activities such as planned press releases, project signage, community meetings, and field tours are encouraged.
4. Describe any plans to maintain the project after the grant period has ended.
5. Does the proposed project work with other organizations or agencies to address fire hazard reduction at the landscape level?

### **E. Project Implementation**

1. Discuss the anticipated timeline for the project. Make sure to take seasonal restrictions into account.
2. Verify the expected timeframes to complete the project will fall under the March 15, 2019 deadline.
3. Describe the milestones that will be used to measure the progress of the project.
4. Describe measurable outcomes (i.e. project deliverables) that will be used to measure the project's success.
5. If applicable, how will the requirements of the California Environmental Quality Act (CEQA) be met?



## **F. Administration**

1. Describe any previous experience the project proponent has with similar projects. Include a list of recent past projects the proponent has successfully completed if applicable. Project proponents having no previous experience with similar projects should discuss any past experiences that may help show a capacity to successfully complete the project being proposed. This may include partnering with a more experienced organization that can provide project support.
2. Identify who will be responsible for tracking project expenses and maintaining project records in a manner that allows for a full audit trail of any awarded grant funds.
3. Describe partnering entities for the tree mortality work and existing projects that this proposed grant will assist or compliment.

## **G. Budget**

A detailed project budget should be provided in an Excel spreadsheet attached to this grant application. The space provided here is to allow for a narrative description to further explain the proposed budget.

1. Explain how the grant funds, if awarded, will be spent to support the goals and objectives of the project. If equipment grant funds are requested, explain how the equipment will be utilized and maintained beyond the life of the grant.
2. Are the costs for each proposed activity reasonable for the geographic area where they are to be performed? Identify any costs that are higher than usual and explain any special circumstances within the project that makes these increased costs necessary to achieve the goals and objectives of the project.
3. Is the total project cost appropriate for the size, scope, and anticipated benefit of the project?
4. Identify any administrative expenses and describe why they are necessary for successful project implementation. Administrative expenses to be paid must be less than 12% of the total grant request.

## **A. Project Description Response**

The geographic scope of this project encompasses all High Hazard Zones within El Dorado County's local responsibility area (excluding the SRA), less any project areas already provided TM services through a local entity. We estimate based on the availability of funding, we will be able to remove approximately 42 dead trees from private property on multiple different parcels located throughout the service area. The residential properties to be served will be determined based on age and income requirements established by the county (over the age of 60 with an income limited to 60% of the State median income), in order to prioritize the removal of hazards from property where the landowner lacks the capacity or ability to reduce the danger. The goal of this project is to provide a last resort for aged and low-income County residents, and reduce the TM dangers that would otherwise be left. As a result, we anticipate an outcome of having approximately 42 fewer dead trees threatening homes.

As indicated in the County's Tree Mortality Hazard Removal Plan, trees targeted for removal will be identified by a Registered Professional Forester and/or licensed Arborist, upon notification from an eligible landowner that the hazard(s) exists. Only after confirmation from the Forester or Arborist (along with verifying environmental and regulatory issues have been resolved), will TM efforts commence.

Given TM efforts will be focused specifically on private residences, additional assets and infrastructure may benefit from these efforts (power lines, adjacent roads, etc.), to the extent the infrastructure services each residence.

By limiting the scope of this project to approximately 42 TM hazards on private property in high hazard zones, the project defines a readily achievable measure, of which the successfulness of the efforts will be relatively easy to evaluate. The scope of work we have defined limits operations to clearly identifiable activities that will be performed on a targeted basis.



## **B. Relationship to Strategic Plans Response**

The proposed project supports the California Strategic Fire Plan goal of "Establishing fire resistance in assets at risk, such as homes and neighborhoods." The project supports the CALFIRE Amador-El Dorado Unit Plan objective number 4, "Continue to support the implementation of fire safe clearance around structures." The project also directly supports the El Dorado County Tree Mortality Hazard Tree Removal Plan, which identifies right-of-entry permit process granted by land owners for authorizing government representatives to remove dead trees. The County plan also specifically supports any efforts to identify and apply for opportunities, such as this, that can fund projects designed to assist private landowners. Additionally, the project meets the Management Objective "Provide for public health and safety of persons and property in identified high hazard zones, identified by the Tree Mortality Task Force.

### **C. Degree of Risk Response**

As a part of determining the eligibility of property owners who may benefit from project activities, El Dorado County will identify whether or not the potential tree removal site exist in a High Hazard Zone. This project will remove trees only from residential properties identified as a Tier 1 or Tier 2 High Hazard Zone as identified by the Tree Mortality Task Force.

All activities performed as a result of this project will remove dead trees from private property, where the dead tree is within 300 feet of a habitable dwelling and poses a structural threat to the residence. All trees removed will be greater than 10" in diameter and 20 feet in height. The project will also only serve those residents with no means to remove the hazard on their own.

The geographic location of all TM removal sites served as a result of this project will be within the Tier 1 or Tier 2 High Hazard Zones within the County area of responsibility, in El Dorado County. USFS 2016 Flown Area maps provided through the Tree Mortality Task Force indicate large areas of dead trees throughout the county, in areas across the identified spectrum of less than 5 dead trees per acre to 15 - 40 dead trees per acre. Many of the dead trees identified within the county that lie within the High Hazard Zones within the County's area of responsibility are East of Highway 49, with large clusters found near the communities of Coloma, Placerville, Chili Bar north of Highway 50, and very large clusters found east of Diamond Springs/ south of the City of Placerville, to the northwest of the town of Somerset. Additional large areas identified to have large groups of dead trees are found in the southern portion of the County, along Farnham Ridge, along Indian Diggins Rd, just west of Omo Ranch Road, in the area near Barney Ridge, and along Coyote Ridge, just east of Coyoteville. While much of the southern portion of the County is sparsely populated, there are significant communities including residences and wineries in the area surrounding Coyoteville, Fair Play, and Mt. Aukum, most of which resides within the Tier Two High Hazard Zone.



#### **D. Community Support Response**

The El Dorado County Board of Supervisors declared a Local State of Emergency due to drought conditions on October 21, 2014, and has renewed the declaration every 30 days as required by the California Emergency Services Act, Article 14, Section 8630 (c). On March 28, 2016, the Board of Supervisors proclaimed a Local State of Emergency due to extensive tree mortality throughout the County of El Dorado, and has renewed it every 30 days as required by the California Emergency Services Act, Article 14, Section 8630(c). On August 2, 2016, the Board of Supervisors approved the submission of an application for funding from California Disaster Assistance Act, for Tree Mortality efforts aimed at protecting County infrastructure. For the purposes of this project, the County will contribute matching funds in the form of project management activities and any road closure activities that need to be performed as a result of project related activities. The county contribution will be made as an effort to maximize the amount of trees that will be removed as a direct result of project funding.

The TM project described for this proposal is part of a larger effort to remove dead trees within the county. The County Tree Mortality Hazard Tree Removal plan include CAL FIRE, Cal OES, USFS, El Dorado County Fire Safe Council, the Georgetown Divide Resource Conservation District, Caltrans, PG&E, among others. Each of these entities is playing a role within the county to identify and remove fire hazards. As a result of these coordinated efforts, the County created a public webpage for external communications to county residents ([www.edcgov.us/Living/Tree\\_Mortality.aspx](http://www.edcgov.us/Living/Tree_Mortality.aspx)), which contains contact information for Caltrans, the California Forest Stewardship Helpline, and links to other resources for county citizens. This webpage will serve as the primary communication method for activities related to the project. However, the County also plans to take out advertisements in local papers as well as distribute program information via information flier to high hazard zone neighborhoods.

The County will be continuing its efforts to identify fund sources that can assist private property owners with TM projects after the end of the award period. The extent to which these resources can be secured is unknown at this time as it is largely contingent on the availability of funding. That being said, the County is dedicating significant fiscal resources and planning efforts to address what has already been declared as a local emergency.



## **E. Project Implementation Response**

Due to the broad scope of the project, it is anticipated the TM efforts will be on-going until available funding is depleted. Due to the large volume of dead trees on private property, the critical time line elements in removal operations will be 1) Identifying eligible residents residing within the County Responsibility Area, that meet age and income requirements established by the County, who live in a Tier 1 or Tier 2 High Hazard zone and have a qualifying dead tree within 300 feet of their homes, 2) Verifying the TM hazard meets the requirements of the project through the use of Professional Registered Foresters or Arborists, and then 3) Completing any necessary environmental impact forms, including Report of Waste Discharge, Lake and Streambed Alteration Agreement, and/or Incidental Take permit, as necessary. The purpose of this project is to accomplish the TM efforts on a case by case basis as quickly as possible. It is for this reason the County will be only targeting residential property in High Hazard Zones, so as to make the best use the suspension of CEQA in said zones. With that in mind, the County will need to work directly with landowners to ensure Department of Fish and Wildlife concerns are addressed, and forms are completed, including any relevant documents related to Lake or Streambed Alteration Agreements. It is anticipated the environmental component of the project will be the most lengthy and management intensive, given this project may take place on up to 42 different parcels. With those considerations noted, given a commencement date somewhere in the early Spring of 2017, the County will have approximately just under 2 years to overcome the hurdles mentioned and remove the identified trees. Milestones for the project will include: 1) Identification and validation of approximately 42 eligible trees and the total cumulative cost of removal, with the actual number of removals to be contingent to per tree costs and fund availability. This process will include filing for CEQA exemption as needed. It is anticipated this process will be complete well within 1 year for all identified parcels. 2) On the ground TM efforts to remove the 42 trees including the removal of debris and slash. It is anticipated the tree removal work will be contracted and removal efforts will take place as soon as all other concerns have been addressed at each parcel. These efforts will begin at each property as soon as feasible, but will be complete no later than March 15, 2019. Measurable outcomes are easily identifiable: Approximately 42 eligible dead trees will be removed from residential properties in High Hazard Zones located within the County Area of Responsibility. CEQA requirements will be met by certification of exemption, as the project will take place only within areas where CEQA requirements have been suspended, and in accordance with the Tree Mortality Taskforce's Guidelines for High Hazard Zone Tree Removal.



## **F. Administration Response**

El Dorado County has a wealth of experience identifying and removing dead trees in high hazard zones; the County is currently in the commencement phase of a TM project to remove dead trees that threaten county buildings and infrastructure. While the county lacks extensive experience in addressing TM projects on private property, the County's Tree Mortality Hazard Tree Removal Plan has already laid the groundwork for how removal from private property will take place. This process includes obtaining right-of-entry permits from the landowner for County representatives and contractors, as well as an agreement by the owner to waive any and all rights, actions, claims, in law or equity as to the value of the trees in exchange for the TM services provided.

The County is also in the process of hiring a full-time Timber Administrator, who will provide multiple TM projects and funders for the projects, with a central point of contact for all TM efforts across multiple projects on-going and in development. The Timber Administrator will be within the Chief Administrative Office of the County, and as a result, project expenses and records will be tracked and maintained through the fiscal department of the CAO's office.

The County is already working with Caltrans, PG&E, CALFIRE, Cal OES, and various local fire consortium in the development of actionable plans for addressing TM hazards throughout the county. Recently the County applied for California Disaster Assistance Act funds to further the efforts of removing dead trees; the TM project funded through this application will compliment those activities, whereas CDAA funds are not able to benefit private property owners. This TM project will supplement other dead tree removal efforts by filling the gap in current projects.

## G. Budget Response

The bulk of the funds, \$168,000 would go to actual tree removal activities; estimates place the removal cost of dead trees that are close to homes at \$4,000 per tree for trees close to homes. While a 100' tall tree with a clear drop zone not close to a home may cost \$2,500, the fact that we are targeting trees in close proximity to homes increases the level of difficulty and the amount of rope and rigging needed to safely drop the tree within a limited fall zone. As a result, we anticipate each high-difficulty tree costing somewhere between \$3,750 and \$4,250, with an average cost of \$4,000. That being said, not every tree that will be felled as a result of these efforts will be of the highest level of difficulty, and may represent some cost savings on a tree-by-tree basis. We anticipate \$168,000 of funding directly for costs associated with removing trees will result in approximately 42 trees being removed. However, should actual costs of removal be lower per tree, we would anticipate removing as many trees as grant funds allow.

Ideally, were funds unlimited, the County would be able to target every dead tree on private property within a designated high hazard zone for removal. However, the real world circumstances being what they are, the County is using funds to prioritize the removal of trees for landowners who are aged and low income, as these trees are likely not to be removed as the landowners lack the capacity.

The budget also proposes \$10,000 for Environmental Compliance and Permits; the exact cost of the permits is difficult to establish as conditions on each property may warrant different permits. The budget has also provided for some public advertising costs, and the costs associated with printing 5000 fliers, to be distributed at neighborhoods within high hazard zones. A portion of the printing costs associated with the fliers as well as all of the staff time to distribute the fliers will be assumed by the County.

The indirect costs (administrative expenses) associated with this project are limited to 12%, which is far below the actual administrative costs assumed by the County for implementing this project. These costs are being budgeted to help cover the costs associated with the day to day administrative of all county efforts, including finance, human resources, facilities costs, etc.

Matching funds will be contributed based on hours worked on project related activities by the Timber Administrator (estimated value factoring 2 hours per tree), and the Road Maintenance Personnel necessary for road closures during tree removal (estimated