



California Department of Forestry and Fire Protection
(CAL FIRE) California Climate Investments
Fire Prevention Grants Program
Project Scope of Work



Project Name: Monterey Pine Tree Mortality

Project Tracking Number: 17-FP-SLU-2042

Project Description Summary: Please provide a paragraph summarizing proposed project including the location, habitable structures, acres treated, etc.

Cambria is a tourist driven economy. The greatest WUI fire threat to Cambria comes from a wind driven fire in the dead and dying Monterey Pine timber stand that has greater than 75% mortality in stems over 6 inches DBH. The pines are dying due to drought, bark beetles, and flammable invasives.

A stand replacement fire in the Monterey Pine forest would be a catastrophic WUI fire. Stand is 2,000 acres of open forest plus 1,200 acres of forest densely subdivided into 4,500 home site parcels with more than 6,000 residents. Modeling shows a fire of 25 acres could easily involve 75-80 homes. Cambria's confusing network of narrow roads baffles tourists creating evacuation complications and slows of area responders. The 3,200 acre Cambria stand of native Monterey Pine (*P. radiata*) is on the world list of endangered forests.

Project will improve protection for 4,500 homes and businesses by removing 700 acres of dead and dying pines and eradicate invasive and flammable French Broom which will reinforce previous WUI fuel break work. Community involvement by citizens and agencies is very high. Forest landowners and citizens work regularly on community preparedness/prevention programs and materials that improve defensible space and structure ignition resistance.

A. Scope of Work

This item is broken into project specific criteria depending on the type of project being proposed: planning, education or hazardous fuel reduction. Please **answer one section of questions** that pertain to the primary activity type for your project.

Section 1: Hazardous Fuel Reduction/Removal of Dead or Dying Tree Projects

1. Describe the geographic scope of the project, including an estimate of the number of habitable structures 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 WUI.
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?
6. How will the project/activity utilize the left over woody biomass? Will the project/activity use a biomass facility to reduce greater greenhouse gas emissions?

Section 2: 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 WUI 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.

Section 3: Education

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 WUI.
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 is expected to increase the preparedness of residents and structures in the WUI for wildfire.
5. Describe the expected outcome of the education in terms of increased or changed public awareness about wildfire.

Answer only 1 set of questions from above, depending on your project; Fuel Reduction, Planning or Education.

1. Fuel Reduction project proposes to remove the final 700 acres of dead and dying Monterey pine and invasive French Broom which will reduce danger of catastrophic fire for the entire community.
2. Primary goal is to reduce fire hazard adjacent to primary commercial and residential districts of Cambria Village and reduce hazard of falling trees closing evacuation routes which serve as a crucial part of the fire defense system for the community safety.
3. By removing dead and dying trees will reduce hazard/risk from catastrophic WUI fire and danger of falling trees blocking road or hitting people or buildings.
4. Critical assets at risk include: Primary water storage and pumping facilities for the town of Cambria are at risk. US Post Office, regional ambulance station, historical site/museum, PG&E power lines; communications sites and facilities and entire retail/commercial district of Cambria including.
5. Roadside treatments will reduce fire intensity and risk of trees falling across roadway blocking the only access/egress route for the entire south side of the lake, which will make evacuations and responder access safer. Defensible space and fuel breaks in Oak Shores and Heritage Ranch will reduce fire intensity from drought caused dead trees and brush and protect adjacent homes.

Trees that are millable will be used for sawn lumber, unmillable will be chipped with use in a proposed small scale biomass gasification electric generation facility or chipped and left on site to decompose. Unfortunately, there are currently no biomass plants in reasonable distance to San Luis Obispo County.

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?

- **Yes:** This project is fully compliant with the current CAL FIRE-SLU Unit Fire Plan, current Countywide CWPP, County Fire Department Strategic Plan and San Luis Obispo County General Plan-Safety Element and Local Hazard Mitigation Plan.

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
2. Describe the geographic proximity of the project to structures at risk to damage from wildfire in the WUI.

1. Entire area is Very High or High Fire Hazard Severity Zone and SRA protection. The project area is in Tier 1 Tree Mortality area identified by Tree Mortality Task Force.
2. Project is immediately adjacent to 4,500 structures at risk.
3. Travel times for fire response support is extended due to isolation of Cambria and 20+ minute travel time for next closest fire stations.

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 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.
3. Describe any plans to maintain the project after the grant period has ended.
4. Does the proposed project work with other organizations or agencies to address fire hazard reduction at the landscape level?

There is widespread community support. The Cambria Fire Safe Focus Group (a branch of SLO County Fire Safe Council) meets every 2 weeks and represents the communities of Cambria and San Simeon; actively participates in public preparedness and fire safety training. Focus group is made up of representatives of community groups including county board of supervisors, CSD board of directors, fire department, sheriff's office, parks, CERT, Cambria Forest Committee, and citizens. County Grand Jury report required action due to severity of fire problem.

1. Matching funds are from Cambria CSD, homeowners, and community member efforts. Cambria CSD spends in excess of \$25,000 per year on vacant lot and open space hazard abatement where PRC 4291 does not apply (\$75,000 during life of this grant). The SLO FSC currently manages 2 grants to remove dead and dying trees in other areas of Cambria (Greenhouse Gas Grant and Western Forestry WUI grant), but there are insufficient funds to complete all the work. More trees are dying than there are funds to remove them.
2. External Communications
 - a. Monthly project status briefings/tours at SLO County Fire Safe Council meetings. Routine engagement with CAL FIRE, fire district, utility companies. Community outreach during project planning and implementation.
 - b. SLO Fire Safe Council (SLO FSC) meets with association groups periodically. SLO FSC has and will engage with all community associations and issue press releases on project scope timeline and activities on a regular basis.
 - c. We will post project signs.
 - d. Cambria Fire Safe Focus Group meets 2 times per month and adds fire safety articles to local newsletters and community events. The in kind value is \$360 per meeting (federal volunteer rates) or \$9,600 per year. They have also sponsored Fire Safe Fair and community preparedness brochures.
 - e. Property owners are removing trees where required by PRC 4291 and local weed abatement, but still do not go far enough to provide adequate buffer. Cost for residential tree removal averages \$1,000-1,500 per tree).
 - f. The County of SLO Road department and PG&E are aggressively removing dead trees within their right of way, but are not allowed to go outside those boundaries. This grant will enhance that work.
2. All organizations are currently actively working to reduce fire hazard, but due to tree and brush mortality from drought and bark beetles they cannot keep up. This project will return the area to maintenance status that land managers can handle with their own annual work and resources.
3. Other organization support
 - a. Project involves the entire forest stand with multiple ownership (public and private) and jointly supported by CAL FIRE SLU staff; CA State Parks; SLO County Fire Department, and the Cambria Community Services District. County Public Works supports effort along public road right of ways with staff time.
 - b. The 25 member San Luis Obispo County Fire Safe Council (SLO FSC) Board of Directors is made up of leaders of major organizations across the county including the County Board of Supervisors, Cattlemen's Association, Range Improvement Association, Farm Bureau, Environmental, Insurance, Construction, Real Estate, County Planning, PG&E, Cal Poly University, UC Cooperative Extension, Air Pollution Control District, Fire Agencies, and community representatives. These representatives volunteer their time. The collective value of their time exceeds \$650 per hour in match value. They will provide strategic guidance throughout the project timeline. Over life of grant SLO FSC Board time value is \$23,000.

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, 2022 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?

1. Begin: Fall-Winter 2018: Enviro review, complete THP; select timber operator/chipping/hand crew contractor(s). Notice of Exemption for roadside work initiated for French Broom eradication.

Conduct multiple community workshops along with Cambria Fire Safe Focus Group with information on project scope, fuel treatment, timeline, and Firewise Community status. Install 4x8 roadside signs identifying project.

Spring-Summer 2019: Begin roadside fuel reduction treatment with private crews in Highway 1, Cambria Pines Road, and Bridge street areas, and; initiate timber harvest salvage and sanitation operations.

Fall 2019: Wrap up timber harvest operations and initiate slash disposal.

Spring – Summer 2020: Review progress. Hold second series of community workshops. Complete any slash disposal and treat French Broom regrowth. fuel break work in Oak Shores and S Shore Village.

Fall-Winter 2020: Complete all harvest and slash disposal operations and roadside work.

End: Spring -Summer 2021: Fuel treatment work completed, grant concluded and final reports filed.

2. Project scheduled to be complete by Summer 2021; allows 9 months for adjustments to March 2022.

3. Milestones

- a) 2019: Community meetings held; Sanitation/salvage THP process complete and approved; Project road signs installed; Roadside French Broom pulled on Highway 1, Cambria Pines Road, and Bridge Street; Timber harvest initiated.
- b) 2020: All of 700 acres of sanitation/salvage timber harvest complete. All slash disposal complete. Cambria Pines road shaded fuel break complete. French broom in harvest areas treated. Second community workshop series complete.
- c) 2021: Final timber operations and slash disposal complete. Tree planting complete; fuel break and roadside French Broom eradication work complete; all final reports filed

4. Measurable Outcomes

- a. THP/CEQA complete
- b. Timber Operator contracted and working
- c. 700 acres timber harvest and slash disposal: (700 acres)
- d. Tree planting to meet stocking standards
- e. French Broom eradication; 500 acres
- f. Cambria Pines Road Fuel Break/Defensible space complete (10 acres)

5. Timber Harvest Plan by RPF and CEQA clearance for roadside work is expected to be through Notice of Exemption.

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.

1. SLO County Fire Safe Council Not for Profit 501 (c) (3) since 1999 with extensive experience managing fire safety grants. Achieved all objectives, for education, fire safe demonstration, chipping, fuel breaks, “Firewise” communities, WUI fire and evacuation guides, local CWPPs, research and work internships for Cal Poly students.

Recent Successful Similar Grant Projects:

- 2014 \$260,820 Western Forestry Leadership Coalition (WFLC) WUI grant for Lake Nacimiento area: Completed 12/2016. Community preparedness for three lakeside boating areas and residential communities. Established one official “Firewise Community”. Two fuel break projects, roadside access/egress clearance, public education, community open space hazardous fuel reduction.
- 2015 \$498,000 Cambria Forest Health (GHG Fund) grant; in progress until Dec 2019, Remove dead and dying pines in Cambria Monterey Pine forest.
- 2015 \$243,500 federal WFLC WUI grant for Atascadero area: Completed 2/2017. Community preparedness for Atascadero and critical comm infrastructure sites. Fuel break mastication and roadside access/egress clearance; chipping.
- 2017 \$260,000 federal WFLC WUI grant for Cambria area: Completed 5/2018. Community preparedness for Cambria. Fuel break harvest of dead and dying pines; mastication and roadside access/egress clearance; chipping.
- 2017 \$75,000 Parkhill Roadside Clearance (PG&E): Completed 10/2017. Roadside clearance on Parkhill area roads.
- 2016 \$152,152 County Hazard Tree (SRA Fee); In progress until March 2019 to remove dead and dying trees and hazardous fuel reduction countywide in San Luis Obispo County
- 2017 \$68,200 Hazard Fuel Chipping non-SRA (CA FSC); in progress until June 2019. Remove dead and tuing trees and curbside chipping in non-SRA areas of the county
- 2016 \$116,424 County CWPP/WUI Fire Plans update (SRA Fee): In progress until March 2019. Update existing countywide CWPP and WUI preplans in SRA
- 2017 \$67,100 CWPP/WUI preplans-NON-SRA (CA FSC); in progress till June 2019. Update existing CWPP and WUI preplans countywide in non-SRA areas

2. Dan Turner, SLO FSC Business Manager

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 all Indirect Costs and describe why they are necessary for a successful project implementation. Administrative expenses to be paid by the Fire Prevention Grants must be less than 12% of the total grant request (excluding equipment).
5. Explain each object category in detail and how that would support meeting the grant objectives.

1. Project Budget Breakdown:
 - a. Funds will be used for contract costs of: RPF for environmental approval; timber operator harvest of 700 acres of Monterey Pine; 700 acres of slash disposal, and eradication of 500 acres of French Broom (\$1,439,800).
 - b. Equipment rental, tree seedlings and supplies for field operations and replanting to stocking standards (\$115,000).
 - c. Excess liability insurance (\$10,000), long term monitoring of forest health and regrowth (\$40,000), and field supervision (\$10,800); mileage for field supervisor (\$1,100)
 - d. Grant indirect: 12% of expenditures (\$194,604);
2. Yes. These costs are reasonable and comparable to similar projects conducted by the SLO FSC. There are no Licensed Timber Operators nor logging industry infrastructure in SLO County, harvest per acre rates include LTO travel costs. Private hand crews are expensive however, cost per acre treated is excellent.
3. Yes. The project costs are similar to other projects conducted in the county.
4. Indirect costs include grant management, legal costs, accounting, contractor bidding, award, and payment, bill paying, insurance, and SLOFSC grant management staff expenses for 3.5 years.
5. Budget Category breakdown
 - Contractual (\$1,439,800) Licensed Timber Operators, hand crews. RPF
 - Travel (\$1,100) 2,000 miles @ \$0.55/mile for field supervisor
 - Supplies (\$115,000) Equipment rental, signage; small tools, fuel, tree seedlings
 - Other (\$65,800) Insurance, Field supervision; Mapping, monitoring
 - Indirect (\$194,604) 12% indirect of direct expenses
 - TOTAL PROJECT: (\$1,816,304) grant; Match Value; (\$80,000) SLO FSC & Cal Poly

H. California Climate Investments

The space provided here is to allow for a narrative description to further explain how the project/activity will reduce Greenhouse Gas emissions.

1. How will the project/activity reduce Greenhouse Gas emissions?
2. Is the project located in a Low-Income or Disadvantaged Community? If not, does the project benefit those communities. Please explain.
3. What are the expected co-benefits of the project/activity (i.e. environmental, public health and safety, and climate resiliency)?
4. When are the Greenhouse Gas emissions and/or co-benefits expected to occur and how will they be maintained?

1. Greenhouse gas emissions will be reduced by milling sound logs into lumber which will sequester carbon long term. Unmillable logs will be chipped for use in planned Biomass electric generation plant in Cambria. New growth in Monterey Pine (the fastest growing pine species) will sequester carbon in trees in the healthy forest.
2. Project is not in Low Income or disadvantaged community area, however, adjacent low income community residents in Morro Bay and Los Osos (20 miles from project area) may be hired by private hand crew company and do use area for recreation. Project is recreational area used by low income residents.
3. Restoring an endangered species forest to healthy status is a tremendous achievement. Fewer fire ignitions, reduced fire intensity, reduced burned acreage, and reducing the noxious greenhouse gas smoke emissions from burning structures and vehicles that occurs during WUI fires will reduce greenhouse gases. Reduced fire intensity will result in greenhouse gas benefits across entire SLO County area immediately, since wildfire smoke spreads across the county and water quality will have less impact.
4. Benefits should begin as soon as harvest operations begin. Forest area opened to sunlight by harvesting dead trees and understory will generate new growth rapidly sequestering carbon. Reducing fire impacting WUI areas will result in immediate avoidance of GHG emissions from WUI fire. Long term carbon sequestering will be monitored and measured by Cal Poly